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Instructional Designers as Project Managers: A Phenomenology

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by

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We hereby certify that this dissertation, submitted by LaKeshia Nall, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the dissertation requirements for the degree of Doctor of Philosophy.

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An Abstract of a Dissertation Submitted to Nova Southeastern University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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The ability to effectively manage learning design projects, consult with stakeholders (such as sponsors, subject matter experts, and learners), and direct projects to completion is a vital part of an instructional designer's role. Although the need for project management education and experience is reiterated in the literature and in cross-industry instructional designer (ID) job postings, it was unclear how these professionals acquired and used project management skills and tools in their profession because project management is not a focus in many higher education programs intended to prepare instructional designers.

The goal of this phenomenological study was to understand the lived experiences of practicing instructional designers as project managers. Results describe how instructional designers practice project management and the best practices, models, methods, tools, and technologies that they use to acquire and apply project management knowledge and skills in their learning design projects. Five themes emerged from the analysis: ID/Project Management (PM) Background, PM Role Characteristics, PM Challenges, PM Insights, and PM Recommendations. During the analysis process, 14 codes (each corresponding to a theme) were exposed. The ID/PM Background theme consisted of ID/PM-related Experience, PM Preparation, and PM Competencies. PM Role Characteristics included Primary Responsibilities, Models Used, and Tools Used. PM Challenges encompassed the PM Challenges and Avoid/Overcome PM Challenges codes. PM Insights comprised PM Preparation Feelings, PM Experience Feelings, and PM Models/Tools Feelings. The theme, PM Recommendations, included codes for PM Preparation Recommendations, PM Model/Tool Recommendations, and PM Recommendations. An examination of themes that emerged from the instructional designers' stories, along with an exploration of the research questions yielded important findings. The study offers recommendations for academia and industry for preparing instructional designers to manage their projects in professional practice.

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Many individuals who I have no blood relation to assisted me in the journey to writing this dissertation. I am truly blessed to have some great educators and I must express my appreciation to each one of you. You give so much of yourself to others. Your sacrifices and dedication help to form the educational bedrock for the lives of many. Thank you.

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with me. Their willingness to share their stories, ideas, and examples allowed me to capture the essence of what it means and how it feels to serve as an instructional designer managing learning design projects. Their stories also helped me understand what recommendations to suggest and what implications to offer for higher education and industry regarding instructional design project management.

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Chapter 1

Introduction

Background

Before describing the research details, it is important to define instructional design and explain how project management and instructional design are related. For the purposes of this study, instructional design was defined as a process for planning and designing learning solutions guided by systematic learning design models and principles focused on establishing and maintaining effective human performance (Williams van Rooij, 2011). Examples of learning solutions include online courses, instructor-led courses, webinars, and blended courses as well as job aids, reference guides, and other performance support tools. Learning design and instructional design are used interchangeably in this paper as learning design is the process of designing effective learning experiences for a variety of contexts (MacLean & Scott, 2011). Project management complements the instructional design process by offering a set of repeatable processes with which to describe, organize, and complete each phase of a learning design project life cycle (Williams van Rooij, 2013). Pan (2012) described the complementary, symbiotic relationship between project management and instructional systems design and proposed an integrated view of instructional design and project management. Instructional design project management involves executing processes that drive the initiation, performance, and completion of learning design projects. According to Williams van Rooij (2013), specific instructional design project management skills include the ability to lead a project team, estimate project requirements, and develop processes and standards for the completion of educational/training

projects. A project manager's expertise consists of initiating, planning, executing, delivering, changing, controlling, communicating, and closing projects (Pan, 2012).

A significant portion of an instructional designer's time is focused on designing and developing various types of online, classroom, and hybrid learning solutions, learning materials such as facilitator and participant guides, and performance support tools including learning websites/portals, online help, job aids, and reference guides. However, the ability to effectively manage projects to completion and consult with stakeholders such as sponsors, subject matter experts, and learners in order to keep learning design projects moving forward to completion is also a vital part of an instructional designer's role (York & Ertmer, 2011). Williams van Rooij (2013) reported that the ability to plan and manage educational/training projects is listed among the International Board of Standards for Training, Performance, and Instruction's (IBSTI) advanced competencies for experienced instructional designers. Competencies represent the capabilities necessary to effectively perform a role in an organization (Klein & Jun, 2014). Therefore, attaining project management competencies can significantly help instructional designers be more efficient and successful in guiding learning projects to completion.

Being a successful instructional designer involves successfully fulfilling a complex combination of responsibilities that include performing analysis, design, development, implementation/delivery, and evaluation processes (Klein & Jun, 2014). In addition, instructional designers must serve as trainers, consultants, administrators, and more. Similar to formally educated/trained project managers in other fields, instructional designers tend to work on multiple projects simultaneously, often at different phases in the life cycle of a learning design project. Some training/educational organizations employ formally trained or educated project managers whose entire role is to manage learning projects. Other learning-centered

organizations do not employ project managers at all and the instructional designers manage all of their projects. Even in training organizations that employ project managers, instructional designers are often expected to manage smaller projects or assist a project manager in bringing the learning solutions to fruition on time, within budget, and successfully (Williams van Rooij, 2013). For the purposes of this investigation, a successfully managed project was defined as one that meets stakeholder needs (e.g., learners, managers, business requirements) and is delivered on schedule and within budget.

Because project management is not a focus in many instructional design-related higher education programs, it was suspected that instructional designers may feel ill-prepared to successfully manage training projects – especially those new to their professional instructional design roles (e.g., recent graduates/hires or individuals who have recently been promoted or transitioned to the instructional design role). With project management being reiterated as a critical success factor in the literature and in practice and with project management not being a significant part of instructional design-related education, it made sense to investigate how instructional designers acquire and use project management skills and tools in their profession.

Problem Statement

Research was limited on the experiences of practicing instructional designers regarding how they acquire and manage learning design projects. Instructional design can be a complex field, regardless of the industry or sector. Preparing for and executing the dynamic and challenging responsibilities of the role requires a unique mixture of education and experience (i.e., competencies) which can span from knowledge of learning theories, adult learning principles, curriculum and instruction, business and requirements analysis, instructional planning and design, assessment and evaluation, teaching/training/facilitation, and project management to

educational technology, graphic design, web design, content management, online learning environment design/management, learning management system (LMS) administration, and more (Klein & Jun, 2014; Ritzhaupt & Kumar, 2015; York & Ertmer, 2011). However, there was little insight as to how instructional designers were preparing for and executing the project management responsibilities of the role, nor how they should be preparing for the project management aspect (Williams van Rooij, 2013). Project management is often not sufficiently covered in higher education programs focused on preparing instructional designers. For example, Williams van Rooij (2011) reported that there are 765 educational technology graduate programs in the U.S. focused on preparing students for careers in instructional design. Yet, higher education instructional design curricula generally do not include formal courses in project management and the course descriptions often do not give any indication that project management is addressed as a topic in any of the program courses. Therefore, instructional designers are plausibly being inadvertently set up to fail in the project management aspect of their role. Or, they may not even be able to acquire positions in certain learning-oriented organizations because they lack the project management education/experience that is required to obtain the position.

As Williams van Rooij (2011) explained, although instructional designers are expected to know how to manage projects, there is limited guidance on how instructional designers should acquire project management skills, what those skills consist of, and what successfully managing learning/training projects looks like from the instructional designer's perspective. The literature begs questions such as, "How are instructional designers actually managing learning design projects on-the-job and how well is the project management process going for them?" The literature indicates that instructional designers are using various models that range from

ADDIE/waterfall methods to agile methods to guide their project management processes (Cocco, Mannaro, Concas, & Marchesi's, 2011; Damian, Lassenius, Paasivaara, Borici, & Schröter, 2012; Da Silva, Martin, Maurer, & Silveira, 2011; Pan, 2012; Willeke, 2011). But, how successful are the associated outcomes and how do the instructional designers feel about these models, processes, and outcomes? What suggestions, best practices, or examples could practicing instructional designers provide? Williams van Rooij (2011) pointed out that, although the instructional design literature is clear about the need to be able to effectively manage educational/training projects, most models of instructional design view project management as embedded within the instructional design process. However, project management is a distinct and evolving discipline, with its own methodologies, body of knowledge, and professional standards and practice. Therefore, a possible discrepancy in the models that instructional designers are being asked to use to guide the management of their learning projects was revealed. It was believed that practicing instructional designers could best answer the before-mentioned questions and provide valuable insight into how to bridge the gap between how instructional designers are being trained to manage projects (or the lack thereof) and what project management skills they actually need on-the-job.

Dissertation Goal

The overarching goal was to capture and describe the lived experiences of practicing instructional designers as project managers, to confirm factors that influence how instructional designers manage projects, and to identify factors that influence how they feel about managing their projects and their preparation to do so. The idea was that by gaining a better understanding of how instructional designers are managing their projects, recommendations for preparing instructional designers to work in industry could be offered. These recommendations include

how instructional designers can successfully prepare to manage learning design projects (e.g., suggested educational preparation such as project management courses within instructional design curricula, on-the-job learning activities, or other recommendations) and how they can effectively manage learning design projects (e.g., shared lessons learned, identified best practices, and proven models). Achievement of the goal was measured by the offering of recommendations for the preparation and practice of instructional design project management, based on the experiences reiterated by the study participants.

Research Questions

The central question was, "How are instructional designers managing their learning design projects?" The following research questions guided the inquiry:

1. What project management responsibilities do instructional designers have?
2. How are instructional designers prepared to manage projects?
3. What models, methods, tools, and technologies do instructional designers use to manage their projects?
4. What challenges to instructional designers face with regard to managing their projects?
5. What best practices in instructional design project management can be offered?

Relevance and Significance

Little was known about how practicing instructional designers manage their projects, how they acquire project management knowledge and skills, what challenges they face in managing learning design projects, and what suggestions or examples they could offer for success. However, studies such as those of Williams van Rooij (2011, 2013), Córdoba and Piki (2012), and Pan (2012) indicated that this may be an emerging area of study.

Results of this study are relevant to those who are interested in preparing instructional designers for practice such as higher education institutions and training organizations. In addition, there are implications for the instructional design field of practice. For example, instructional designers that are new to the field of practice and those who have recently acquired project management responsibilities could benefit from the insight of instructional designers with more seasoned project management skills. The sharing of ideas, experiences, challenges, best practices, examples, and models from their peers can provide a foundation upon which other instructional designers may build their knowledge through application.

It was also very possible that the benefits of addressing this research problem would reach even further. From a practical perspective, instructional designers could be better prepared to manage their projects – leading to improved project outcomes (and possibly even improved learning outcomes because as instructional designers manage their projects more efficiently, they may be able to devote more time to their design responsibilities). From a higher education perspective, reporting on this problem may raise awareness of the gap between how instructional designers are being educated and what they are expected to know in practice. It was thought that interviews with instructional designers could provide evidence of why change is needed in educational preparation.

Williams van Rooij (2011) explained how instructional design and project management are actually complimentary fields and highlighted the gap between the way instructional designers are educated in higher education institutions and what they are expected to know and do on-the-job. Pan (2012) described the same disconnect and illustrated the symbiotic relationship between instructional systems design and project management. These researchers and others, including Tennyson and Sisk (2011) and Córdoba and Piki (2012), helped to pave the way for the subject

of this study in that they provided foundational connections between instructional design competencies and project management competencies.

Williams van Rooij (2013) expanded higher education literature by helping to identify the relevant competencies of an instructional design project manager. She explained that, although well-documented competency standards existed for instructional designers and project managers as individual occupations, the interplay between the two sets of competencies along with the depth and breadth of educational and work experiences required of instructional design project managers was unclear. She helped to address this gap by investigating the competencies put forth by internationally-renowned instructional design and project management standardization and credentialing organizations such as the IBSTI and Project Management Institute (PMI), comparing the competencies within the fields, seeking input on the competencies from experts, and presenting the competencies that emerged as themes from both fields into a framework of *must have* competencies for instructional design project managers. Her research helped to address uncertainties about the competencies needed for an instructional design project manager. However, questions around how instructional designers are managing their projects, what their experiences and outcomes are, what suggestions, examples, and models they can offer, and how they feel about this phenomenon remain unanswered. It was believed that practicing instructional designers themselves could provide the best ideas, examples, models, and other insight as well as vital suggestions for higher education instructional design preparation. The idea was that practicing instructional designers are critical in helping to bridge the described research gap.

From a practical standpoint, the results may help new instructional designers understand what their project management-related learning needs are, how to acquire the knowledge they need to

effectively manage their projects, and provide examples and models for managing training projects. For experienced instructional designers that have recently been given more project management responsibilities or simply need additional project management guidance, the results could help them better understand what they need to learn and do to successfully manage their projects and meet the needs of their learners and business in a timely, efficient, and effective manner. In addition, the results could be generalizable to others such as individuals interested in pursuing a career in instructional design – they could benefit from knowing how to best prepare themselves for success before they decide to actively pursue the endeavor.

Barriers and Issues

The described research problem was challenging to address for several reasons. First, the contextual subject matter is multifaceted. Both instructional design and project management can be characterized as complex fields of practice, with a multifarious mixture of education and experience required to be effective in either field (Ahlemann, El Arbi, Kaiser, & Heck, 2013; Córdoba & Piki, 2012; Klein & Jun, 2014). Both fields have their own body of higher education literature and their own professional organizations that seek to provide established/documented competencies and standards of practice (Ahlemann et al., 2013; Williams van Rooij, 2013). In addition, both fields continue to evolve and necessary competencies continue to emerge.

Second, educational preparation for both fields often requires advanced studies and usually separate educational programs are offered for each field (Williams van Rooij, 2013). Higher education literature has acknowledged that there is a gap between what instructional designers are expected to be able to do with regard to project management and how they are actually prepared to manage projects (Pan, 2012; Williams van Rooij, 2013). Although requirements for project management skills can be found in most instructional design job postings, it was not clear

how instructional designers are expected to acquire these skills. Nor was it sufficiently reported in the literature how they are actually acquiring these skills. Not unlike professionals practicing in other fields, contemporary instructional designers often must do more with less and attaining competencies pertaining to project management can significantly help instructional designers be more efficient and successful in bringing learning projects to completion. In addition, with organizations being increasingly cognizant of resource expenditures, it is becoming more and more important that projects are managed effectively.

With the identified lack of project management subject matter in higher education programs focused on educating instructional designers, it was thought to be likely that instructional designers were gaining project management skills through self-learning and on-the-job experiences. In other words, it is probable that many instructional designers face trials-by-fire in which they are expected to manage their learning design projects effectively but have not received sufficient preparation to do so. Although trial-by-fire can be the reality in any profession and one can learn from such high-pressure situations, negative consequences can arise such as un/under-documented project scopes, poorly planned projects, missed deadlines, or generally poorly run projects in which the stakeholders are unhappy. The study results could help address this problem by allowing instructional designers to benefit from the knowledge of those who have already gained the ubiquitous desired project management skills and experience.

Another challenge was a lack of interaction and engagement between instructional design higher education and instructional design practitioners. How many practicing instructional designers pursue post-graduate studies in their field (after they have received a master's degree and engaged in practice)? Of those who do pursue doctoral or other advanced degrees, how many focus their studies on the project management aspect of their work and report their

findings? These questions were pertinent because there are probably not many people who can bridge the gap between academia and practice and are able to communicate with peers in instructional design higher education and peers in instructional design practice simultaneously. Although pursuing such a study required a significant amount of time and effort (e.g., identifying participants, conducting interviews, transcribing and analyzing the data, identifying themes, reporting, etc.), gaining the insight of peers in practice and sharing this information with peers in academia could produce rewarding results and compelling implications for academia and professional practice.

Assumptions, Limitations, and Delimitations

Assumptions

It was assumed that instructional design practices are similar across different types of organizations. In other words, although specific subjects and projects may vary, instructional design-related project management is similar regardless of whether it is being practiced in academia or industry and is also similar across different types of industry. In addition, the following were assumed:

1. The instructional designers would respond truthfully to interview questions.
2. The instructional designers would share openly and respond completely to interview questions.

Limitations

As previously described, there was a lack of project management study in instructional design-related higher education. Therefore, it was possible that some of the instructional designers who were interviewed would not be sufficiently prepared to answer some of the research questions (e.g., they may have been inadequately or insufficiently trained on-the-job).

However, this limitation was countered by focusing the sample on experienced instructional designers (who were likely to have acquired project management skills over time through various methods). In addition, the following limitations applied:

1. The study was limited to a certain timeframe (six months).
2. The study was limited to a small sample size (eight participants).

Delimitations

The major delimitation of the study was focusing on experienced instructional designers. Although new instructional designers could have offered a different perspective, especially since the challenge of gaining project management acumen is fresh, they were excluded from the study in order to limit the scope and gain recommendations from a more seasoned perspective. Specifically, the target audience was limited to professional instructional designers who have formal education in instructional design (or a related field of study), at least one year of instructional design practice, and experience managing projects.

The series of open-ended interview questions focused purposefully on the project management aspect of instructional design. Although some of the interview questions might not appear to focus specifically on project management, the intent of the questions was still to gather information about how the instructional designers manage their projects, how they feel about managing their projects, and what recommendations they would offer for learning to manage projects and project management best practices.

Definition of Terms

The following definitions will apply for the specific purposes of this research:

Training – Training is intended to teach a specific skill to improve job performance (Author).

Educating – Educating is about helping others further their knowledge and is intended to develop intellect – it is not focused on a specific skill or job (Author).

Instructional Design Competencies – The knowledge and skills required to fulfill the role of an instructional designer (Author).

Instructional Design Models – Represent the lifecycle or phases for producing a learning solution or instructional product (Author).

Learning Theories – Conceptual frameworks that describe how information is absorbed, processed, and retained during learning (Author).

Learning Methodologies – How interventions (i.e., learning solutions) are deliberately planned and undertaken to facilitate the learning process (Author).

Learning models – Illustrated and or practical examples of how to plan and execute a learning intervention (Author).

List of Acronyms

ADDIE – A linear instructional design model consisting of Analysis, Design, Development, Implementation, and Evaluation phases

ASTD – American Society for Training and Development

IBSTI – International Board of Standards for Training, Performance, and Instruction

ID – Instructional design or instructional designer

PM – Project manager

PMBOK – Project Management Body of Knowledge

PMIM – Project management implementation maturity

Summary

A phenomenological study was conducted to address the problem of a lack of adequate project management preparation for instructional designers. The lived experiences of instructional designers in managing learning design projects was captured and described along with resulting recommendations and examples. The goal was to take the project management-related lessons learned from experienced instructional designers and translate them into helpful information for current and future instructional designers so that they can better prepare for the project management aspect of their role. In addition, the study sought to offer valuable changes in academic and professional practice regarding preparation to manage learning design projects. Chapter 2, reviews research studies and other scholarly literature that is relevant to the research problem.

Chapter 2

Review of the Literature

Overview of Topics

Research studies and other scholarly publications that are relevant to the research problem and goal are presented here. The following literature review is organized into the following sections: instructional design competencies, project management and instructional design, and project management methodologies. First, it was important to consider what competencies are necessary to perform the instructional design role. ID competencies elucidate not only what is required to be an instructional designer but also shed light on what it is like to be an instructional designer – describing the competencies was the first step toward capturing the lived experiences of individuals serving in the role. Then, it was necessary to take into consideration how instructional design and project management are related. In other words, a review of the literature provided some insight into how project management is practiced by instructional designers, why project management is an important aspect of an instructional designer's role, and how instructional designers prepare to manage their learning design projects. Examining project management methods and models, especially those tied to instructional design, was also essential because instructional designers may use the same types of established project management methods and models that other fields use. Not including a review of the methodologies used would have missed a big piece of how instructional designers are managing projects and what kinds of models they follow in doing so.

Justification of Criteria for the Literature Review

Investigating how instructional designers manage their projects required an understanding not only of instructional design and project management but also how instructional designers feel about their preparation to manage projects, how successfully instructional designers perceive they are executing their project management-related responsibilities, what theories, methodologies, and models instructional designers use to guide them through the project management process, what changes instructional designers think are needed in the way they were prepared to manage projects, and what changes in learning design project management processes would instructional designers propose. The three topics that are covered in the literature review, instructional design competencies, instructional design and project management, and project management methodologies, set the foundation for further study. However, it was necessary to first present a review of the literature, which revealed the gap in the literature regarding how instructional designers are managing projects. Substantiating the gap in the literature provided impetus for investigating the topic through study. Answering the research questions helped address the gap in the literature and pronounced the issue of instructional designers feeling-ill prepared to successfully manage projects by providing specific recommendations and solutions regarding project management preparation, processes, best practices, and models.

Instructional Design Competencies

In order to fulfill the various aspects of their role, instructional designers must be able to perform analysis on their target audience, identify learning gaps and needs, and devise viable learning solutions to help address learning-related problems (York & Ertmer, 2011). Instructional designers must also be able to effectively plan, design, develop, implement, and evaluate learning solutions (Klein & Jun, 2014; MacLean & Scott, 2011; York & Ertmer, 2011).

It is also essential that instructional designers demonstrate creativity and effective communication skills (Clinton & Hokanson, 2012; Ritzhaupt & Kumar, 2015). These instructional design-related skills are necessary for instructional designers to competently facilitate learning and help improve performance. In addition, instructional designers also serve as trainers, consultants, and project managers.

York and Ertmer (2011) focused on instructional design competencies through exploring heuristics. Their exploratory study employed the Delphi technique to identify a set of heuristics that participating instructional designers reported are important during the design process and to explore the relationship between the identified heuristics and the core competencies of instructional design. In a previous study, York and Ertmer (2009) had gathered stories about solving complex or challenging instructional design-related problems from 16 experienced instructional designers. They conducted qualitative analyses on the stories, from which 59 heuristics (such as *know your learners/target audience* and *involve the right people at the right time*) were identified. The follow-up study increased the number of participants (from 16 in the preliminary study to 31 in the follow-up study) in order to verify the initial list of heuristics, identify the importance of each heuristic during the instructional design process, and examine the extent to which the heuristics related to core instructional design competencies (York & Ertmer, 2011). A series of questionnaires were used to gather the collective feedback of the instructional designers – including their rankings of the heuristics. They were able to rank 61 heuristics in order based on their mean rating of agreement as to their importance during the instructional design process. Knowing your learners, determining what learners need to know after their learning experiences, identifying the criterion for successful performance, and client interaction-related heuristics were at the top of the list (York & Ertmer, 2011). Project management-related

heuristics were ranked in several locations within the ordered list including *negotiate the scope of the project* and *figure out who all the stakeholders are in the room*. In addition, the relationships between the heuristics and IBSTPI instructional design competencies, which are divided into four categories including professional foundations, planning and analysis, design and development, and implementation and management, were examined. It was found that the heuristics were fairly evenly distributed across the four categories, which suggested that the categories of competencies were considered equally important to the success of the instructional design process. Therefore, the results of York and Ertmer's (2011) study provided further evidence that the heuristics practitioners believe to be important in the instructional design process are relatively well aligned with established instructional design competencies. In addition, the instructional design competencies confirmed in the study coincided with those put forth in Klein and Jun's (2014) study.

Klein and Jun (2014) surveyed 82 experienced and degreed instructional designers to validate the capabilities required for competency. These instructional designers practiced in various settings including higher education, consulting, and government. The survey included questions about 28 instructional design/project management skills that were identified based on a content analysis of the competencies for instructional designers advocated by the IBSTPI such as *align objectives, interventions, and assessment*, *apply learning theory*, and *determine resources and constraints*. Respondents were asked to rate the importance of each skill. In addition, open-ended items allowed respondents to list other skills and performance interventions that were not on the list. The results showed that most of the skills listed on the survey were rated as important or very important by the respondents (Klein & Jun, 2014). These results confirmed the list of competencies that were identified. Discussion of the findings focused on the top five themes

including: interpersonal communication, consulting skills, interviewing skills, teamwork skills, and designing for emerging technologies. In the resulting list of instructional design skills rated by importance, project management was number six on the list of the 28 competencies. Another theme that Klein and Jun (2014) highlighted was the continuing significance of training and learning solutions as performance interventions. These findings offered implications for instructional designers and training organizations. Resulting implications included the need for instructional designers to continue building their technology skills and for managers to know what competencies to look for when hiring instructional designers.

Also recognizing the importance of instructional design competencies, MacLean and Scott (2011) explored the field of learning design, described what they learned, and proposed a learning design competency framework based on the results of their study. They performed a series of one-day focus group sessions to inform the research project design. Then, interviews and questionnaires (regarding how learning designers in different parts of the world have been educated and trained and what they regard as good working practices) were conducted. The researchers also employed a comparative survey of education and training opportunities for learning designers in the UK and North America. MacLean and Scott (2011) identified competencies for learning designers and the organizations throughout the world that establish and support the competencies (e.g., Association for Talent Development (ATD), IBSTPI, Association for Learning Technology, International Society for Performance Improvement (ISPI), Department for Education and Employment (DfEE) report on technology-based learning, etc.). Then, they created a framework in which DfEE was used as a benchmark against which the other frameworks could be compared. Finally, they compared the competency frameworks and found that the standards for instructional design produced by IBSTPI most accurately

matched the desired key skills in their framework. The ASTD (now ATD) model was found to be the least suitable because it focused more on high-level, managerial tasks (MacLean & Scott, 2011). The resulting learning design competency framework consisted of a set of generic skills including communication, teamwork, and project management and a set of learning design skills consisting of performing needs analysis, writing learning outcomes, and creating learning designs. These findings are consistent with the instructional design competencies established in other studies, even though they had a global participant pool.

Congruent with other investigations of instructional design competencies, Ritzhaupt and Kumar (2015) explored the knowledge and skills needed by higher education instructional designers to be effective in their roles. They employed a semi-structured interview protocol that included 15 open-ended questions aimed at capturing the essence of what instructional designers do in their daily practice and what skills and knowledge they need to be able to do their job. A constant comparative qualitative procedure was used in which the questions represented categories and the codes from the various categories were compared and integrated to form a set of themes such as *communication skills* or *educational theory*. The overwhelming majority, seven out of the eight participants, believed that their backgrounds (all participants had at least a master's degree in an instructional design-related field) had prepared them for their roles. Five of the eight participants emphasized the value of prior teaching experience for instructional designers. Knowledge of learning theory, soft skills, and the willingness to learn were important factors. Instructional design skills, including the ability to apply learning principles, organize information for the learner, and assess learning, were emphasized. The need for technical skills and communication skills were also reiterated by the instructional designers. These instructional design competency themes are consistent with other instructional design-related higher education

literature. Most of the study participants used a combination of models such as ADDIE, Gagne's events of instruction, and the Dick and Carey model in their design process. Learning theories employed by the instructional designers included constructivism, Malcom Knowles's adult learning theory, and Clark and Mayer's multimedia principles (Ritzhaupt & Kumar, 2015). Successful instructional strategies reiterated in the findings centered on student collaboration and group work. In addition, a common thread was the responsibility of instructional designers to support online, face-to-face, and hybrid course development, improvement, and teaching. Ritzhaupt and Kumar's (2015) work not only focused on necessary instructional design skills and knowledge but also considered how the instructional designers' educational backgrounds had prepared them for their roles (from a learning design perspective, not from a project management perspective).

Others approached their research on competencies from the perspective of how instructional designers acquire the knowledge and skills necessary to perform their learning design role. For example, Tracey and Boling's (2014) descriptive study sought to answer the question of how to prepare instructional designers to fulfill their role. They proposed that traditional preparations of instructional designers in college programs, which include the use of instructional design models and processes, could use further consideration. Although they acknowledged the efficacy of traditional models such as ADDIE and traditional approaches to instructional design preparation (e.g., focusing on established competencies, learning theories, and principles), they also espoused the importance of practical experience and problem solving. Tracey and Boling (2014) pointed out how other fields, such as graphic design and engineering, also emphasize real-world application and focused their study on three main areas: the evolving views of designers/designing, studio-based education, and emerging concepts of design education. There

is a debate in the instructional design community about the art versus science of instructional design. Some researchers, such as Tennyson and Sisk (2011) and Paquette (2014), look at instructional design from a systems perspective, others from the designer's perspective (e.g., Clinton & Hokanson, 2012), while others focus on the nature of design situations (Tracey & Boling, 2014). Due to the constructive learning opportunities that it affords, Tracey and Boling (2014) supported studio-based education for designers and highlighted several studies that support it. The importance of practical and collaborative learning opportunities is another theme that is reiterated throughout the instructional design literature (Córdoba & Piki, 2012; Păun, 2013).

Emerging trends related to instructional design competencies are also discussed in the literature. For example, Tennyson and Sisk (2011) discussed how an emerging fourth-generation model of instructional systems design employs qualitative and quantitative features of dynamic systems theory. They presented a fourth-generation instructional systems design (ISD) model, which illustrated ISD as a complex entity that proposes a solution to a given performance problem/need based on the conditions of the situation. The dynamic feature of their approach is the continuous interaction between the problem/need and the instructional design solution path. Like Tennyson and Sisk's (2011) study, Paquette (2014) also investigated emerging trends in instructional design. Paquette (2014) described technology-based instructional design, the evolution of instructional design, and emerging trends in the field. He described instructional design as a form of engineering aimed at improving educational practice. Paquette's (2014) study illustrated the life cycle of a learning environment, which is comprised of creation/design, production, delivery, and delivery/maintenance or improvement (which closes the loop and starts a new cycle). He also described paradigms in the field of instructional design and provided

examples that exemplify each paradigm shift. These paradigms included authoring tools and languages, expert systems and intelligent tutoring systems, automated and guided instructional design, knowledge-based design methods, eLearning standards, and social/semantic web environments. Whereas other research emphasizes current instructional design competencies, Paquette (2014) described how the history of the evolving instructional design field has facilitated emerging and future instructional design competencies. He went on to explain that instructional design competencies will need to continue to evolve to reflect emerging trends including: a shift from tutoring/instruction to open learning design; a shift from automating to supporting instructional design; a shift from individual to distributed and collaborative instructional design; and a shift from information-based to knowledge-based instructional design. Both Tennyson and Sisk's (2011) and Paquette's (2014) research have implications for instructional design and learning design project management.

The first focus of this literature review was on instructional design competencies because understanding instructional design competencies provided foundational insight into the field of instructional design and began to shed light on the shared experiences of practicing instructional designers. The next step was to investigate how project management and instructional design converge.

Project Management and Instructional Design

Project management (PM) is prominently identified as a critical success factor in the instructional design field because it is so necessary during the instructional design process and for the successful delivery of learning solutions (Williams van Rooij, 2013). However, a review of the literature revealed that there are few studies in higher education that focus on both instructional design and project management. Nevertheless, examining the literature provides

insight into how these two fields of practice merge and what challenges they face in doing so.

Williams van Rooij (2011) explored the extent to which training/educational organizations are using established project management methodologies. She aimed to answer research questions regarding how much project management methodology do organizations purport to be using in their training projects, as measured by project management implementation maturity (PMIM) levels. She also wanted to gain insight into the extent to which PMIM affects organizational expectations of an instructional designer's skill/competencies versus the skills/competencies of a project manager as documented by the Project Management Institute (PMI). Data was collected using an anonymous web survey of 103 respondents from public and private sector organizations. A series of data analyses were performed and it was found that nearly two-thirds (61%) of participants reported low PMIM levels (Williams van Rooij, 2011). When asked whether the project management and instructional designer roles are fulfilled by the same individual, 40.2% of the respondents answered that the roles are fulfilled by the same individual. The percentage of respondents reporting that the project managers and instructional designers were fulfilling separate roles was significantly higher in organizations characterized by medium or high levels of PMIM. Medium and high-level PMIM respondents tended to utilize flexible arrangements based on project size and complexity. Low PMIM respondents focused on organizational business models. Both low and medium/high PMIM respondents mentioned education and experience in managing training projects as the means of acquiring the knowledge necessary to lead project teams – educational and practical experience is crucial both in project management and in instructional design – which is another theme that is reiterated in literature. Overall, Williams van Rooij's (2011) study revealed that no significant differences exist between

the low and medium/high PMIM segments on the skills/competencies expected of an instructional designer practicing project management versus an officially titled project manager.

Taking a different perspective on project management maturity, Pasian, Sankaran, and Boydell (2012) examined the limitations of project management maturity models with a critical eye toward the management of undefined projects (where the definition, repeatability, and predictability of processes cannot be reasonably expected). Acknowledging that process control is a foundational principle of quality management, Pasian et al. (2012) discussed how project management maturity models emerged reflecting the view that tightly defined, repeatable, and predictable processes directly contribute to the maturity of project management capability. However, the process-oriented view brought about issues that they aimed to address. One issue was that as project management environments expanded beyond manufacturing, questions arose about the need to achieve certain efficiencies and the feasibility of doing so in other types of organizations. The other related issue was that assessing maturity based on process definability and control made sense in highly defined projects such as in architecture, engineering, and construction, but not for other types of less-defined projects. A multi-method research design was used that included content analysis of two maturity model collections (one of project management models and another representing a cross-section from various types of organizations) and a case study (including interviews) of two university teaching and learning development departments. They created a four-node conceptual framework – which consisted of defined processes (an instructional design process was used), customer involvement, adaptable variants, and dynamic non-events – as their primary data collection instrument. It was found that multiple non-process factors can contribute to a mature project management capability. These factors indicate that customers must be involved in defining project goals, adaptable cultures

must be fostered in the organization, human factors (such as leadership, trust, attitude, creativity, and motivation) must be respected, and providing/supporting defined processes uniquely applicable to the project in question are important (Pasian et al., 2012). Their findings espoused the need for practitioners to consider these and context-specific factors when assessing the maturity of project management capability, called for additional research on non-process factors, and advocated the expansion of project management theory.

Also recognizing a gap in higher education, Pan (2012) aimed to build a case for integrating project management as a distinct course in a graduate instructional systems design program. His argument was that instructional systems design (ISD) and project management should form a symbiotic relationship in the curriculum that reflects the symbiotic relationship that exists in the real world. He described ISD using the systems perspective of the ADDIE model and explained how it is used as a guide for instructional designers as they work through each phase. The research problem centered on a disconnection between theory and practice – although project management is a key part of an instructional designer's responsibilities, it is not included in many curriculums intended to prepare instructional designers for successful practice. As previously noted, this contention is reiterated in the literature (Klein & Jun, 2014; MacLean & Scott, 2011; Tracey and Boling, 2014; Williams van Rooij, 2013; York and Ertmer, 2011). Espousing the need to address the disconnection between higher education and in practice, Pan (2012) offered an integrated view of how marrying project management, ISD, and ISD education would help better prepare instructional designers. For example, project management skills help instructional designers in creating the project charters or project plans upon which learning design projects are directed. An educational and practical foundation in project management helps instructional designers be more efficient and effective in delivering learning solutions.

Like Pan (2012), Córdoba and Piki (2012) took a systems design perspective of project management and focused their study on project management education. Córdoba and Piki (2012) recognized the value of exposing project management students to real project situations and allowing project management learners to use, develop, and reflect on their skills individually and with their peers. They presented a group-based approach to project management education in which the group represents a system that allows students to develop their individual awareness of and abilities to deal with expected and unexpected project situations and also allows students to learn from each other. Similar to themes in instructional design education and literature, project management education continues to shift focus to practical/real world application, collaborative learning (group-based activities), and reflective thinking. From a systemic thinking perspective, groups of students can be viewed as systems in that, given the appropriate learning environment, they can behave as two or more interacting parts that are dynamic and represent more than the sum of their parts (Córdoba & Piki, 2012). The researchers put their strategies to facilitate project management education into practice in courses at UK higher education institutions. Applying their approach to cohorts and offering feedback along the way yielded more motivated learners (students were especially motivated by their perceived future job prospects), a shift toward group leading roles (improved shifts in team responsibilities and roles), more effective self-organization of the groups, increased flexibility and adaptability (which made the groups more cohesive), increased learner engagement, and improved perceived relevance to real life. The benefits observed through applying Córdoba and Piki's (2012) approach to project management education could ultimately lead to improved outcomes.

Also recognizing the symbiotic relationship between instructional design and project management, Williams van Rooij (2013) examined the career path to becoming an instructional

design project manager. She investigated and reported key competencies that are essential for instructional designers to advance in their careers to instructional design project managers. Competency standards are established and documented for instructional designers and project managers as individual occupations. However, the interplay between the two sets of competencies along with the necessary educational and work experiences required to hold the instructional design project manager position were not clearly documented (Williams van Rooij, 2013). Therefore, an expert study approach was employed to identify the combination of competencies, experiences, and candidate attributes necessary to qualify for the instructional design project manager role. A modified Delphi technique was used in which a sequence of questionnaires interspersed with summarized information and feedback on opinions were derived from earlier responses. Content analysis was also used to identify the salient characteristics pertaining to each research question. The participants consisted of Chief Learning Officers (CLOs) or equivalent titles from the largest subsectors of the professional services sector. Twenty-six experts met the established criterion for participation in the study and eight completed all three rounds of data collection. The results included a set of *must have* instructional design competencies (e.g., keen knowledge of how people learn, ability to effectively used subject matter experts), project management competencies (e.g., ability to keep projects moving forward, strong client relationship skills), a set of work experience and education/training (e.g., experience managing complexity, undergraduate degree plus CPLP or PMP), and a set of important organizational factors/conditions (e.g., atmosphere of trust, organization that empowers employees). The results of Williams van Rooij's (2013) study mapped to competency standards put forth by IBSTPI, International Society for Performance Improvement (ISPI), ATD, and PMI and represented the necessary combination of hard and soft

skills that is reiterated in the instructional design and project management literature for each field. However, the study focused on CLOs (leaders in the organizations), not the instructional designers themselves and did not explain how the instructional designers are managing their projects or how they feel about the associated processes and outcomes.

A review of the literature provided awareness of how the instructional design and project management fields merge and complement one another. However, interviewing practicing instructional designers provided a much more insightful understanding of how they are actually managing their learning design projects.

Project Management Methodologies

In order to get a true sense of the experiences that instructional designers face in managing their projects, it was necessary to consider the project management methodologies that they use. Two methodologies that are in widespread use are waterfall/waterfall-like methods and agile methods. Although these methods originated in other industries (e.g., manufacturing) and are applied to other types of projects (e.g., software development), they are also applicable to instructional design project management. It was important to understand these methodologies, how they may apply in the project management component of an instructional designer's role, and how they can either present challenges or help improve the project management process for practicing instructional designers.

Recognizing inconsistencies in the project management literature, Cervone (2011) aimed to clearly define agile project management, overview agile project management methods (with a focus on Scrum), and highlight how this methodology facilitates effectively managing and completing projects. Agile project management emphasizes minimizing risk by focusing on short iterations of clearly defined deliverables and direct communication with partners in the

development process – which helps project teams adapt quickly to unpredictable and rapidly changing requirements. Cervone (2011) focused on Scrum because it is the most often used agile project management method. Scrum is an agile, lightweight process for managing and controlling software and product development (such as an online course) in rapidly changing environments. Scrums are intentionally iterative, incremental processes that are predicated on a team-based approach. The Scrum model is built on three major components: roles, process, and artifacts. The Scrum Master represents the project manager or team leader and is responsible for enacting Scrum values and practices and removing impediments. The Scrum process consists of five primary activities: the kickoff, the sprint planning meeting, the sprint, the daily Scrum, and the sprint review meeting. Each meeting has specific purposes such as defining the project backlog/requirements and determining the sprint goals/desired outcomes. The purpose of the daily Scrum is to track progress of the team and allow team members to make commitments to each other. Unlike in traditional project management, Scrum intentionally focuses on work done through the use of burn down charts. The advantages of agile project management and the Scrum-based approach center on simplicity and flexibility (Cervone, 2011). In addition, project team roles are clearly defined, ownership of the project is spread amongst the team, and communication is enforced. When properly executed, utilizing the agile methodology can lead to improved productivity.

Whereas Cervone (2011) focused on defining and describing the agile methodology in general, Willeke (2011) described her experiences in applying the agile methodology to instructional design at a university. She focused on adult online learners as the target audience and described the nuances that come with online accelerated adult education. In response to these nuances, agile tools such as Kanban and Scrum were adapted to identify and eliminate

waste in the curriculum development process and to give curriculum designers increased productivity and improved motivation. For example, personal Kanban boards were combined into one view so that each member could improve productivity because tasks became more efficient with real knowledge of the task relationships (as opposed to team members being told to perform a task without context). Sharing and contributing in an open environment created the ability for production to become more effective while providing a sense of value to each team member. After experimenting with ADDIE, just-in-time (JIT), and rapid prototyping methods, Willeke (2011) and her team utilized an adaptation of agile that consisted of four stages: framework, fulfillment, completion, and support. Each stage included the two-week Scrum iteration. Employing agile resulted in quantitative improvements including increased supplier satisfaction, time savings (in the development of curricula and learning materials), and saved internal communication time. Utilizing the adapted agile methodology resulted in a multiple month-long process (depending the subject matter expert's motivation) being reduced to an 8-10 week structured process. In addition, Willeke (2011) described resulting improvements in the culture of the university – including increased transparency and creativity – as well as other qualitative improvements that evidenced the success of applying agile methods to instructional design in an academic setting.

An interesting area of instructional design that is discussed in the literature relevant to project management is user-centered design (UCD). Da Silva et al. (2011) presented the results of a systematic literature review on the integration of agile methods and user-centered design approaches. The aim of their systematic review was to provide empirical support for a methodology that integrates UCD and agile and to identify the most common practices and artifacts used. Research questions guided the selection of search keywords such as *agile*, *scrum*,

user-centered design, and *usability* (Da Silva et al., 2011). Digital libraries including IEEExplore Digital Library and Elsevier ScienceDirect were queried. Using a set of inclusion and exclusion criteria, a categorization process that delineated between descriptive and content-related information, and a data extraction process, the researchers were able to record details of the articles under review and specify how each article addressed the research questions – 58 articles were ultimately analyzed. The analysis evidenced a growing trend of interest in agile methods and usability-related concerns as the number of papers written was consistently significant between 2001 and 2010. Da Silva et al. (2011) concluded that the focus of integrating agile methods and UCD should be on design (using personas and low fidelity prototypes) as well as on usability evaluation. Although there were a significant number of papers on the integration of UCD and agile, none of them were validated with controlled experiments. Most of the evidence existed in the form of lessons learned and experience reports – therefore, more research is needed in this area. Da Silva et al. (2011) also presented a high-level framework illustrating the UCD-agile integrated process and the associated artifacts that support collaboration between designers and developers.

Instructional design and teaching go hand-in-hand because good instructional design supports successful teaching/facilitation. Similarly, effective project management supports successful instructional design. Damian et al. (2012) studied the agile Scrum method from a teaching perspective. They described the initial lessons learned in teaching a globally distributed, project-driven collaborative software development course. In modern times, software engineering is often done in globally distributed teams and higher education curricula need to respond to the dynamic environment that students work in (or will work in) by providing opportunities to learn that closely match the real world. Desired learning outcomes for the course included working on

a real project with a real client and using the agile development process with frequent iterations – the need for learners to have collaborative, real-world learning/ application opportunities is a parallel theme in project management literature that is also reiterated in instructional design literature. Twenty-five students (16 Canadian and nine Finnish students), divided into three globally distributed Scrum teams worked with a product owner on a project to extend Agilefant, an open-source backlog management system (Damian et al., 2012). The teams followed the Scrum process, including sprint planning, meetings, and daily scrums. Synchronous and asynchronous virtual war rooms were used for intra-team and inter-team collaboration and communication throughout the project. Damian et al. (2012) described the challenges that students encountered in the first six weeks of the course including cultural, technical, and time zone differences as well as incongruent syllabi and discrepant curricular activities between the two participating universities. Despite the challenges, the researchers reported that the course was progressing as expected and that they were receiving positive feedback from students on the experiences of developing a real product and working collaboratively in a global context.

Although agile methods such as Scrum are becoming more prevalent, how do they compare to other methodologies such as the waterfall method? Balaji and Murugaiyan (2012) presented a comparison of waterfall, agile, and the V-model in order to help organizations make the best choice as to which method is best for their projects. Waterfall involves a sequential development process. The V-model is an extension of the waterfall model. The researchers explained that the waterfall method is a sequence of stages in which the output of each stage becomes the input for the next. Agile is described as a group of software development methodologies based on iterative and incremental development in which requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. They also explained that before

deciding which model to use, organizations should ask certain questions including: (1) How stable are the requirements? (2) Who are the end users? (3) What is the size of the project? and (4) Where are the project teams located? They presented a website development scenario that included requirements given by a client in order to illustrate how to make the optimal choice. According to Balaji and Murugaiyan (2012), the waterfall model is best used when the requirements are clear before going to the next phase. In other words, requirements – as a result of analysis – are set before moving to design. The benefits of using a waterfall model are: each phase is completed in a specified period of time and then the process moves on to the next phase; the model is easier to implement because it is linear; the amount of required resources are minimal; and, for each phase, proper documentation is followed. The negatives of using waterfall methods are that many problems in a particular phase arise after the phase is signed off, which can result in a badly structured system. In addition, if the client wants to change requirements, the changes may not be implemented in the current development process. Benefits of using the agile method include the ability to respond to the changing requirements of a project and the fact that there is no guesswork between the development team and the customer because there is face-to-face communication and continuous inputs from the client (Balaji & Murugaiyan, 2012). One negative of using agile is that if the projects are smaller using the method is profitable – however, if it is a large project, then it becomes difficult to judge the efforts and the time required for the project in the development life cycle. Another negative is that senior developers are in a better position to make the decisions necessary for agile development, which leaves fewer opportunities for new developers until the development efforts are combined with senior resources. Therefore, the best model to use depends on the characteristics of the

organization and the project (Balaji & Murugaiyan, 2012). Cocco et al. (2011) findings were consistent with Balaji and Murugaiyan's (2012) findings.

Cocco et al. (2011) aimed to build and simulate a software development process model in order to highlight similarities and differences between Scrum and Lean-Kanban (both of which are agile process tools based on incremental development), and to compare them with a predictive waterfall process. The waterfall model is sequential, each phase must be completed before moving on to the next, and a stable set of requirements must be defined upfront. Feedback on previous phases is not easily introduced. Both Scrum and Lean-Kanban use pull scheduling, emphasize delivering releasable deliverables often, and aim to quickly adapt the process by using feedback loops. However, Lean-Kanban feedback loops are shorter and work does not flow through time-boxed iterations, but flows continuously and smoothly (Cocco et al., 2011). Kanban is also less prescriptive than Scrum and is able to release anytime, while Scrum will release new features only at the end of the iterations. In Scrum it is also not possible to change the requirements in the middle of a sprint. Cocco et al.'s (2011) descriptions of the waterfall and Scrum methods are consistent with Balaji and Murugaiyan's (2012) descriptions as well as those found in other higher education literature. In order to compare the relative benefits of the processes, Cocco et al. (2011) started with a paradigmatic project with fixed requirements and utilized a system dynamics model. They used analysis of feedback loops among the components of the processes (e.g., requirements, iterations, releases) to design a conceptual model and simulated the processes using a commercial tool. It was found that in waterfall methods, projects may fail to complete due to the difficulty to correct errors, including errors in requirements. The amount of rework at the end of iterations was found to be lower in Scrum than in the waterfall approach. Although they acknowledge that Lean-Kanban has not been

investigated in-depth in research works, Cocco et al. (2011) found that the Lean-Kanban approach is the most efficient of the processes.

It was interesting to follow up on the literature review and learn directly from the study participants which project management methodologies they are using and what successes and challenges they encounter in using them. The instructional designers shared insightful stories and even had suggestions as to which methods work best for them under certain circumstances.

Strengths and Weaknesses of Existing Studies

The studies that focus on instructional design competencies describe what an instructional designer needs to know in order to perform the instructional design aspects of the role – with very little emphasis on project management (if any). Likewise, research on project management methods and models are usually very specific to the field of project management and rarely focus on instructional design project management. In other words, adequate research is available related to instructional design and project management as individual fields but research focused on the intersection between these two related fields is not nearly as prevalent.

Although studies specific to instructional design project management are few, it was important to identify and review research that actually pursued the intersection of instructional design and project management. The primary research that the study expanded upon is that of Williams van Rooij (2011, 2013). Although all of the studies that were included in the literature review were relevant, Williams van Rooij's line of research ties into the study most directly. As a pioneer in this research area, her studies include a balanced focus on project management and instructional design, utilization of established research methods, thorough data analysis, and eloquent descriptions of findings (which are grounded by her experience in the field and her academic studies).

For example, Williams van Rooij's (2011) study, which examined the extent to which educational and training organizations are committed to project management, used project management implementation maturity to measure the organizations' commitment levels. This method comes from the project management literature and associated models such as Thomas and Mullaly's (2008) five-level model of project management maturity in organizations and Humphrey's (1992) Capability Maturity model for software development. Williams van Rooij also frequently refers to established project management organizations such as the PMI. Similarly, her studies utilize information published by established instructional design organizations such as the IBSTI, ISPI, and ASTD – as were referenced in her study that focused on the skills necessary to become an instructional design project manager (Williams van Rooij, 2013). Williams van Rooij references established and tested project management methods (e.g., the PMBOK® Guide) and instructional design methods including linear models (e.g., ADDIE) and iterative models that are more leaner-centered.

Williams van Rooij utilized survey instruments and questionnaires to collect data in both of the previously described studies. She also employed sound data analysis methods that are reiterated in the literature. For example, her 2011 study collected data using an anonymous web survey of 103 respondents from public and private educational/training organizations. Data validation was conducted to test the presences of data anomalies. Frequency distributions and crosstabs were run to obtain descriptive statistics. The collected data, which included an attribute list of instructional design and project management competencies, were subjected to an item reliability analysis via Cronbach's Alpha in order to measure the extent to which the items were related to one another and obtain an overall index of the internal consistency of scale (Williams van Rooij, 2013). In addition, a principal component factor analysis was conducted to

examine the validity of the measurement characteristics of the competency scales and principal factor analysis was used to detect structures within the item ratings. Williams van Rooij's (2013) study utilized a set of sequential internet-based semi-structured questionnaires, a modified Delphi method. Content analysis, the application of meaning to information through the identification of patterns in the data, was used to identify the salient characteristics pertaining to each research question (Williams van Rooij, 2013).

Williams van Rooij explained her findings in a way that is rare in the literature because it is obvious that she is well grounded in both project management and instructional design. Another attribute of her studies is that she presents findings in ways that both academics and practitioners outside of instructional design and project management are likely to understand, which is not always the case in higher education research. For example, Williams van Rooij's (2011) study presented findings as they related to each research question, with supporting tables and associated information. The unit of analysis was the respondent and the unit of measurement was project management implementation maturity (Williams van Rooij, 2011). The accompanying discussion explained the findings and their implications based upon how the organizations measured against PMIM. Results of Williams van Rooij's (2013) study included a list of *must have* instructional design competencies ranked in mean order, a list of *must have* project management competencies ranked in mean order, and a description of *must have* organizational factors and conditions to support instructional design project management – all with accompanying tables presenting the information in summary. She then discussed the findings and implications in terms of how they relate to CLOs, instructional designers, project managers, educators, and researchers.

As is customary, Williams van Rooij described the weaknesses of her research within both of the previously discussed articles. However, the primary weakness of her research (as perceived by the author) centers on the samples (i.e., study participants) that were used. Williams van Rooij's (2011) study of the extent to which various organizations were committed to project management included project managers, instructional designers, and organizational decisions makers (i.e., leaders such as CLOs, Directors of Training, etc.). Although it is a good thing that instructional designers were included in the study, their voices were lost to a certain extent because the results were not broken out by roles. Therefore, it was difficult to attribute the findings to the instructional designers themselves. The sample for Williams van Rooij's (2013) study of the career path to instructional design project management consisted solely of organizational leaders (i.e., CLOs and equivalents) – instructional designers were not queried at all. However, it is important to note that neither of these studies was phenomenological and the samples used allowed Williams van Rooij to answer her research questions. For this particular study, capturing the project management-related experiences directly from the instructional designers was paramount.

Summary

Topics were chosen that would provide foundational information for the study and begin to shed light on the project management-related experiences of instructional designers. These topics included instructional design competencies, project management and instructional design, and project management methodologies. Articles were then selected and reviewed based on the identified topics. These articles substantiated the importance of project management in the field of instructional design, explained the competencies required to serve as an instructional designer (from both project management and design perspectives), and described the methods and models

that are being used to manage projects (both in instructional design and other industries). These articles also exposed a gap in the literature regarding how instructional design and project management converge and how instructional designers can better prepare themselves to manage their projects. Finally, the review of literature underscored the need to hear the voices of instructional designers, understand their lived experiences, and translate their shared experiences in managing projects into actionable recommendations.

Chapter 3

Methodology

The goal was to capture and describe the lived experiences of practicing instructional designers as project managers, to confirm factors that influence how instructional designers manage projects, and to identify factors that influence how they feel about managing their projects and their preparation to do so. Gaining a better understanding of how instructional designers are managing their projects allowed recommendations for preparing instructional designers to work in industry to be offered.

Research Design

A transcendental phenomenological research approach was used to capture the lived experiences of practicing instructional designers. Creswell (2013) explained that a phenomenological study describes the common meaning for a group of individuals of their lived experiences of a phenomenon. Transcendental phenomenology is a study of the appearance of things, or phenomena, as they appear to us in our consciousness (Moustakas, 1994). The phenomenon of focus was the instructional designers' lived experiences in managing their learning design projects. The study was descriptive. According to Sekaran and Bougie (2013), descriptive studies seek to: (1) understand the characteristics of a group in a given situation, (2) think systematically about aspects/factors in the situation, (3) offer ideas for further probe or research and (4) help make certain decisions or recommendations. The research aimed to capture and describe the lived experiences of instructional designers in managing projects and identify or confirm factors (e.g., education, training, experiences, models, methods, or other resources) that influence how they manage their projects and how they feel about managing

projects. In other words, in addition to experiences and perceptions, relationships between factors are described. The research design (as illustrated in Figure 1) was based on the conceptual background, the research goals, and the research questions.

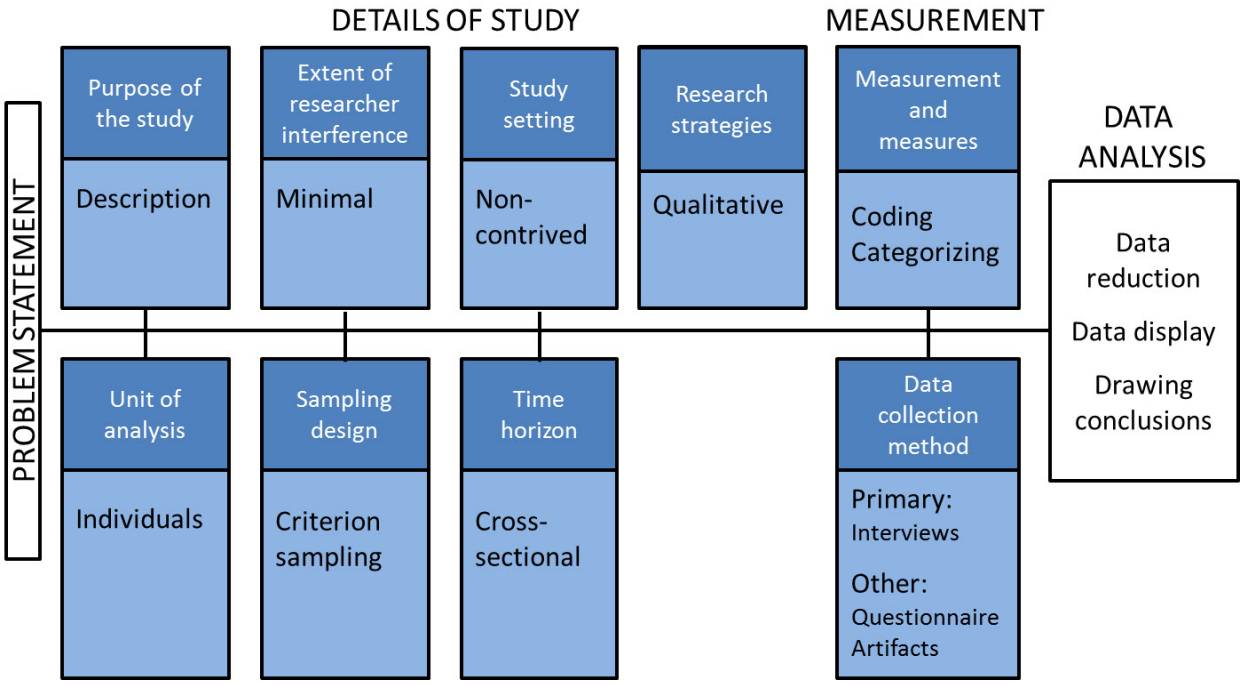

Figure 1. Research Design

Instrumentation

Two instruments were used including a questionnaire (Appendix A), which aided in the identification of study participants, and in-depth interviews (Appendix B), which were used in data collection. The research strategy centered on the in-depth interviews that were conducted with the study participants. The questionnaire provided some preliminary data but its primary purpose was to help identify and recruit participants that met the study criteria. A 45-120 minute interview was conducted with each participant (depending on the flow of the interview and the availability of each participant). In addition, the researcher requested other sources of data to accompany the study participants' stories such as scope documents, project plan examples, and

images. Both the questionnaire and the interview guide were pilot tested and modifications were made based upon the experts' feedback (Appendix C). The group of pilot testers included an expert in instructional design, an expert in project management and survey/research design, and an expert in both instructional design and project management. The pilot testers included the following:

Constance A. Harris, Ph.D., Assistant Director for Instructional Design Office of Digital Learning, George Mason University Online

Manon M. Schladen, MSE, PMP, Ed.S., Ph.D., Assistant Professor, Department of Rehabilitation Medicine, Georgetown University Medical Center; Senior Research Associate, MedStar Health Research Institute at Med Star National Rehabilitation Hospital; Project Manager, The MyHealtheVet Project

Shahron G. Williams van Rooij, Ph.D., PMP, Associate Professor and Academic Program Coordinator, Instructional Design and Technology Program Learning Technologies Division, College of Education and Human Development, George Mason University

Procedures

The following general research procedures were employed, which are based on Creswell's (2013) phenomenological research procedural steps and the transcendental research process (Moustakas, 1994).

1. Determine whether the research problem is best addressed through a phenomenological approach.
2. Bracket one's experiences and presuppositions. Known as epoché, the researcher must consciously consider any possible presuppositions or prejudgments and plan how to avoid letting them impact perceptions. The researcher takes the time to self-reflect throughout the research process.
3. Obtain consent from participants.

4. Collect data.
5. Analyze data.
6. Describe the phenomenon. The process of reduction, imaginative variation, and synthesis is used to produce the "essence" of the phenomenon.

The following sections describe each of these general procedures in more detail.

Justification

Moustakas (1994) explained that the aim of empirical phenomenology is to determine what an experience means for the persons who have had the experience and are able to comprehensively describe it. General or universal meanings (i.e., essences) are derived from the individual descriptions of the phenomenon. Transcendental phenomenology adheres to what can be discovered through reflection on subjective acts and their objective correlates (Moustakas, 1994). In other words, transcendental phenomenology requires that experiences are looked at openly and be described as they are. Meanings and essences are understood through intuition and self-reflection. Capturing the voices of those closest to the phenomenon and using a transcendental phenomenological approach facilitated understanding of the participants' shared lived experiences. This gained understanding enabled describing the lived experiences of instructional designers practicing project management.

Epochė and the Role of the Researcher

An inherent challenge of phenomenology is the elimination of presuppositions or prejudgments and the need for self-reflection (referred to as epoché) so that things are seen as they are, meanings are truly understood, and the essence of the phenomenon can be accurately described. Epochė allows phenomena to be "revisited freshly, naively, in a wide open sense, from a vantage point of a pure or transcendental ego" (Moustakas, 1994, p. 33). Understanding

that the transcendental approach to phenomenology requires epoché, it was necessary to bracket personal and professional experiences and to allow time for reflection throughout the research process. Bracketing was especially essential considering the researcher's professional background.

The researcher has 15 years of experience as an instructional designer, supporting corporate training and development in three different industries. Amongst other things, this support has consisted of analyzing learners and learning needs and designing, developing, implementing, and evaluating instructor-led, online, and hybrid courses. In addition, she has designed and taught online and instructor-led courses in academia. A significant part of her role includes managing learning design projects and she has benefited from a MBA program that required coursework in project management.

In the initial stages of her instructional design career, it was more common for IDs to be supported by training project managers. Instructional designers focused more on writing and design and even had more support in other aspects of the role such as development (e.g., developers and programmers would take the ID's designs for online courses and use them as blueprints for development). However, similar to other professions, it is now expected that instructional designers handle multiple roles, including that of project manager, on their own. The researcher has worked with numerous instructional designers in various industries and has witnessed first-hand the struggles that many IDs face in learning to manage projects (while successfully designing and delivering learning programs) due to inadequate academic and or professional preparation. Therefore, the researcher admitted that her extensive experiences of the phenomenon could create bias. Yet, these experiences both in academia and in industry also

conceivably allowed for a clearer interpretation of different perspectives and created a unique opportunity to truly understand and describe the phenomenon from the perspective of others.

The aim was to capture the voices of the instructional designers participating in the study–not the researcher's perspective. Therefore, the plan to offset potential researcher bias involved remaining objective, asking open-ended questions based on an interview protocol, allowing the instructional designers to tell their stories, recording and transcribing the interviews, and identifying the themes and categories that emerged for what they were. The participants were asked to review their transcripts for accuracy. In addition, the dissertation advisor was asked to review the identified themes derived from the transcripts to promote authenticity. It was also important to review the interview questions for potential bias and to self-check during the interviews for objectivity. The researcher took time to reflect on the data that were gathered and on the information processed at each stage of the research so that the findings and descriptions would reflect the phenomenon in a transcendental manner. An important part of reflection was considering how the researcher's own experiences might impact the part of the research process that was underway at the time and continuously challenging oneself not to let potential bias impact the study.

Participants and Obtaining Consent

Criterion sampling was used. In criterion sampling, individuals must meet certain criteria for participation in the study. Creswell (2013) explained that criterion sampling works well when all individuals studied have experienced the phenomenon. As previously explained, participation in the study required that individuals had formal education in instructional design (or a related field of study) at the undergraduate and or graduate level, at least one year of instructional design practice, and experience managing their projects. The participants consisted of instructional

designers across different industries as they provided valuable insight into the essence of their shared learning design project management experiences before and during practice. Instructional designers from various organizations such as the ATD, PMI, colleges/universities, corporations, and those who participate in social media forums like LinkedIn and conferences such as the Online Learning Consortium were invited to participate. Achieving this type of sample was critical in the transcendental phenomenological process of imaginative variation–varying the frames of reference and perspectives of the participants (Moustakas, 1994). The researcher made contact with individuals who met the criteria through her work with other instructional designers, pursuit of higher education, presence on social media, and participation in academic conferences. The executed plan involved reaching out to these individuals through email and social media messaging to get a preliminary feel for their interest and availability. If they were interested and available, the participant questionnaire (Appendix A), which was recreated online using SurveyMonkey®, was emailed to them. All potential participants had to complete the questionnaire in order to be considered. The benefits of participation were explained to potential participants (e.g., helping to contribute to their field, learning more about project management specific to instructional design, helping provide evidence of the need for additional project management preparation in academia and or professionally) using the participation letter. During the process of identifying participants, most communication was conducted through emails and social media. The questionnaire aided in ensuring that participants met the criteria for participation and had the interest and availability that was needed to complete the study.

Moustakas (1994) also noted that it is important to maintain ethical standards when conducting research with human subjects. Approval from Nova Southeastern University's Institutional Review Board was obtained (Appendix D) prior to conducting the study. During

the informed consent process, the study was described to participants and they were asked to sign informed consent forms. Participant anonymity was maintained throughout the study.

The researcher used minimal interference in the natural (non-contrived) setting. Although the in-depth interviews required a limited amount of time away from the instructional designers' schedules, every attempt was made to have the least amount of researcher interference possible so that the instructional designers could proceed normally with their responsibilities. The setting was non-contrived as the initial questionnaire was conducted online (where potential study participants could complete it from virtually anywhere) and the in-depth interviews took place via teleconference. The researcher set up, conducted, and recorded all interviews using GoToMeeting™ and submitted the audio recordings to Rev.com for professional transcription.

Research Questions and Methods

The described research procedures were used to answer the research questions. Table 1 maps the research question to the method(s) used.

Research Question	**Method(s)**
1. What project management responsibilities do instructional designers have?	Review of the literature conducted to identify types of project management responsibilities as described in the literature. In-depth interviews (Interview Protocol Questions 1, 2, 3).
2. How are instructional designers prepared to manage projects?	Review of the literature conducted to understand how instructional designers are being prepared to manage projects as described in the literature.

	In-depth interviews (Interview Protocol Questions 1, 4, 5, 6, 7).
3. What models, methods, tools, and technologies do instructional designers use to manage their projects?	Review of the literature conducted to identify models, methods, tools, and technologies that instructional designers use to manage their projects as described in the literature. In-depth interviews (Interview Protocol Questions 9, 10).
4. What challenges to instructional designers face with regard to managing their projects?	In-depth interviews (Interview Protocol Questions 5, 7, 8).
5. What current and best practices in ID project management can be offered?	In-depth interviews (Interview Protocol Questions 6, 8, 9, 10).

Table 1. Research Questions and Methods

Data Collection

The primary source of data collection was semi-structured interviews. Based on the interviewing process described by Creswell (2013), the following steps were taken to collect data through interviewing:

- Decided on the final set of research questions, which were open-ended.
- Identified the interviewees through purposeful sampling (a questionnaire was used to assist).
- Determined the type of interview – interviews were held via teleconference.
- Employed appropriate recording procedures – the teleconferences were recorded (with participant consent) using GoToMeeting™ technology and a headset was used.
- Designed an interview protocol. An expert review was conducted on the instruments.

- Refined the interview questions and procedures through the pilot testing process.
- Determined the best place to conduct the interview (e.g., a quiet office).
- Obtained informed consent prior to conducting each interview.
- Used good interviewing procedures during the interviews (i.e., stuck to the point and interview questions, was respectful of time and the participants in general).

Interview Process

A series of in-depth interviews were conducted via teleconference. The interviews ranged from approximately 45 minutes to two hours in duration. Prior to the meetings, participants were asked which type of teleconference technology they had access to and if they were comfortable using GoToMeeting™. All of the interviewees were comfortable using the GoToMeeting™ technology and consented to being audio recorded. Schedules were coordinated via email and arrangements were made to meet with the participants at a time that was convenient for them in order to have as little impact on their work responsibilities as possible. Each interview was recorded using the recording feature of the teleconference technology. The next step was to send the interview audio recordings to Rev.com for professional transcription. After Rev.com had created the transcripts, the researcher asked the participants to review their transcripts for accuracy.

As previously described, an online questionnaire (Appendix A) was developed in SurveyMonkey® and was emailed to a pool of individuals for the purpose of identifying study participants that met the necessary criteria. The study participation requirements included: a formal education background in instructional design or a related field (either at the undergraduate or graduate level), practicing instructional designers who manage at least one or more of their learning design projects, and a minimum one year of experience as a titled

instructional designer (or similar title) in a corporate, industrial, or educational organization. An instructional designer who had recently retired or moved into a different position would also qualify for participation if she or he met all of the other requirements.

Prior to conducting the study, it was anticipated that approximately eight to ten individuals would be interviewed. Polkinghorne (as cited in Creswell, 2013) recommend interviewing between 5 and 25 people who have experienced the phenomenon. The study actually included eight participants. The identities of all participants are anonymous and this was communicated with participants during the informed consent process.

In order to answer the research questions, an in-depth interview protocol (Appendix B) was be used. It was explained to the participants during recruitment that it might be necessary to participate in a follow-up interview in order to gain adequate depth in responses. However, no second interviews were needed because all of the participants preferred to complete the series of questions in one setting. The interview transcripts were analyzed to identify themes reflecting how the instructional designers manage their learning design projects. These themes were used to describe the phenomenon (a part of the transcendental research process referred to as synthesis) and to identify recommendations for preparation and practice of learning design project management.

Time Horizon

This field study was cross-sectional. The study participants represented a cross section of the instructional designer population and were questioned (using the interview protocol as a basis) during a specific point in time.

Data Analysis

The data analysis process was based on a combination of Creswell's (2013) and Moustakas's (1994) guidelines for qualitative analysis in transcendental phenomenological studies. The epoché process (i.e., a description of the researcher's personal and professional experiences with the phenomenon and bracketing of potential bias) was conducted before analysis, as recommended by Creswell (2013).

Unit of Analysis

Sekaran and Bougie (2013) explained that the unit of analysis is the level of aggregation of the data collected during the subsequent data analysis. The unit of analysis for this study was the individual instructional designer. In other words, the data collected from each instructional designer (i.e., study participant) represented an individual data source.

Analysis Process

A general description of the analysis process that was employed follows. Note that the process was not necessarily as linear as presented–it actually took a more spiral path:

- Created and organized the data files
- Reviewed the text, took notes, and formed initial codes
- Described the essence of being an instructional designer who manages projects
- Developed a list of significant statements from the interviews
- Grouped statements into meaning units or themes
- Wrote a description of *what* the participants experienced (using verbatim examples)
- Developed a structural description of *how* the phenomenon was experienced, including the setting and context
- Further developed the essence

- Presented the essence of the experience by describing the phenomenon, using accompany tables, figures, or other items as appropriate, and providing examples and recommendations

This approach requires an illumination of the phenomenon (a phase referred to as phenomenological reduction) in terms of its constituents and possible meanings so that an understanding of the essence of the experience can be achieved (Moustakas, 1994). Reduction methods were used in the data analysis process. These methods included selecting, coding, and categorizing data (Sekaran & Bougie, 2013). Coding and categorization of the data helped in displaying the data accurately and in drawing conclusions and implications.

In order to interpret and describe phenomenological research in an accurate and reliable manner, Creswell (2013) and Moustakas (1994) suggested that researchers utilize: (1) epoché, (which facilitates freedom from presuppositions and pre-judgments) and bracketing "in which the focus of the research is placed in brackets and everything else is set aside so that the entire research process is rooted solely on the topic in question" (p. 97), (2) reduction using horizonalization, (3) imaginative variation, and (4) synthesis processes. Following these methods aids the researcher in reducing individual experiences to a description of the universal essence of the phenomenon (Creswell, 2013).

Reduction. Moustakas (1994) explained that the reduction process "involves a pre-reflective description of things just as they appear and a reduction to what is horizontal and thematic" (p. 91). Phenomenological reduction involves describing in textural language what you see as it appears, revisiting the experience free of presuppositions, and describing it again and again (Moustakas, 1994). This process, characterized by Moustakas (1994) as having unlimited possibilities for discovery, is called horizonalization. During analysis, the researcher identifies

statements that relate to the phenomenon and treats each statement with equal value. Then, statements irrelevant to the topic and question and those that are repetitive or overlapping are removed from the list (Creswell, 2013; Moustakas, 1994). Next, the horizon statements are used to develop units of meaning, which are clustered into themes. These themes are used to write textural descriptions for each participant.

***Imaginative Variation*.** Imaginative variation follows reduction. The aim of this step is "to seek possible meanings through the utilization of imagination, varying the frames of reference, employing polarities and reversals, and approaching the phenomenon from divergent perspectives, different positions, roles, or functions" (Moustakas, 1994, p. 98). Imaginative variation allows the researcher to derive structural themes–descriptions of the experience for each participant–from the textural descriptions achieved through phenomenological reduction. The identified themes are also used to write a description of the context or setting that influenced how participants experienced the phenomenon (Creswell, 2013). Through this process, the researcher may truly appreciate that there is not a single inroad to truth, but countless possibilities that are connected with the meanings of an experience (Moustakas, 1994).

Synthesis. The final step is the synthesis of meanings and essences. During the synthesis process, the textural and structural descriptions are combined to convey an overall essence or final truth of the shared experience (Creswell, 2013; Moustakas, 1994). For this study, the researcher wrote a descriptive passage that explains how the instructional designers experienced the project management phenomenon as a group.

Validity and Reliability

Both internal validity and external validity are important considerations. Internal validity refers to the extent to which the research results accurately represent the collected data. External

validity reflects the extent to which the research can be generalized to other contexts. Potential threats to validity center on not accurately interpreting or representing the collected data and not describing the study and results in a way that is generalizable in other contexts. Therefore, methods were taken to address these potential threats. Triangulation is associated with reliability and validity in qualitative research (Sekaran & Bougie, 2013). Triangulation is a validation strategy that uses different sources, methods, investigators, and or theories to provide corroborating evidence (Creswell, 2013). Although the main method of data collection was the in-depth interviews, the researcher requested other artifacts to corroborate the identified themes, categories, and results. The participants were asked to share project plans, scope documents, feedback that they received, or other examples to accommodate their stories (but doing so was optional). These additional sources of data were meant to help to validate the findings.

Strategies to Promote Trustworthiness

Creswell (2013) suggests that "researchers employ accepted strategies to document the accuracy of their studies" (p. 250). These validation strategies help to promote trustworthiness in qualitative research. Creswell (2013) encourages the use of at least two validation strategies. This research utilized member checking and writing rich, thick descriptions. As previously described, participants were offered copies of their transcripts and time to review their statements for accuracy. Participants were asked to correct any inaccurate details, clarify their comments as needed, and add additional information when it was deemed necessary. Member checking was conducted on the interview transcripts. Writing rich, thick descriptions allows readers to make decisions regarding transferability (Creswell, 2013). Performing reduction and synthesis facilitated writing the detailed descriptions. A thorough description of the research is provided in this paper so that the study could be duplicated or expanded upon in other contexts.

Resource Requirements

In order to complete the research and dissertation, certain resources were needed including:

- A personal computer (laptop or desktop) with internet access
- Office supplies including paper, pens, highlighters, and organizational tools such as binders and folders
- Access to practicing instructional designers who manage learning design projects, for example:
    - Training organization(s)
    - Relevant LinkedIn group(s)
    - ATD
    - PMI
    - Colleges/universities
    - Conference participants
- LinkedIn.com access
- Software including the Microsoft (MS) Office Suite (i.e., MS Word, PowerPoint, Excel)
- Software/program to create and disseminate an online questionnaire (SurveyMonkey®)
- Access to teleconference technology (Go-to-Meeting™)
- Professional transcription service (Rev.com)
- Email
- Recording device to be used to record interviews (Go-to-Meeting™)
- A tool to help with qualitative analysis (Word was used to hand code)

All of the resources included in the list were successfully acquired and utilized.

Formats for Presenting Results

Using the previously described thematic analysis process, codes and then categories were identified from the data. The finalized categories were organized into tables in a matrix fashion to show how the results correlate. It was necessary to accurately identify and classify the data and define the categories appropriately. Experts, including the dissertation advisor and other research supporters, also reviewed the data. A comparison was made between the codes and categories identified amongst the experts to identify the degree to which they are in agreement with the coding decisions. In other words, efforts were taken to ensure category and inter-judge reliability (Sekaran & Bougie, 2013).

The results are presented using a variety of formats, two of which comprise the major results of the study–written descriptions and accompanying tables and figures. The study background, details, methods, results, and implications are described in the past tense and are presented in Word format. Anonymous direct quotes from the participants' stories are also incorporated. Accompanying tables and figures show the results in meaningful ways based on the data and information that is being presented. Matrix table formats allow for comparisons and provide an opportunity to show correlations. Supporting materials such as examples and figures are also included.

Summary

This chapter described the details of the transcendental phenomenological approach used to capture and describe the lived experiences of instructional designers in managing their projects. The methodology employed identifying and interviewing a sample of instructional designers, noting their stories and answers to the research questions, conducting thematic analysis using reduction methods, and describing the essence of the participants' shared lived experiences in managing projects including examples, recommendations, and implications. A detailed

description of the research and results, including textural and structural descriptions, was written and accompanying tables support the written description. The results of this analysis are presented in Chapter 4.

Chapter 4

Results

The purpose was to capture and describe the lived experiences of practicing instructional designers as project managers, to confirm factors that influence how instructional designers manage projects, and to identify factors that influence how they feel about managing their projects and their preparation to do so. In-depth interviews were conducted with eight professional instructional designers who are responsible for managing their learning design projects. The participants graciously shared their stories about how they learned to manage projects and how they feel about their preparation, how they manage projects and how they perceive the processes and tools they use, and what recommendations they have for current and future instructional designers and academia. A phenomenological approach was used to examine the instructional designers' stories in order to capture their shared lived experiences. The question central to the inquiry was: "How are instructional designers managing their learning design projects?" The following research questions guided the inquiry:

1. What project management responsibilities do instructional designers have?
2. How are instructional designers prepared to manage projects?
3. What models, methods, tools, and technologies do instructional designers use to manage their projects?
4. What challenges do instructional designers face with regard to managing their projects?
5. What best practices in instructional design project management can be offered?

Chapter 4 overviews the results of employing a transcendental phenomenological analysis approach focused on the lived experiences of instructional designers in managing learning design

projects. The chapter is organized as follows: (a) Data Analysis, (b) Findings, and (c) Summary of Results.

Data Analysis

The data analysis process was based on a combination of Creswell's (2013) and Moustakas's (1994) guidelines for qualitative analysis in transcendental phenomenological studies. As previously described, the epoché process was conducted before analysis, as recommended by Creswell (2013). The process of reduction, imaginative variation, and synthesis was used to produce the essence of the phenomenon. The horizonalization step of the phenomenological reduction process involved describing in textural language what was seen as it appeared during each of the in-depth interviews, revisiting the experience free of presuppositions, and describing it again and again (Moustakas, 1994). During analysis, statements were identified that related to the phenomenon and each statement was treated with equal value. Then, statements irrelevant to the topic and question and those that were repetitive or overlapping were removed from the list. Next, the horizon statements were used to develop units of meaning, which were clustered into themes. These themes were used to write textural descriptions for each participant. The next step, imaginative variation, allowed the researcher to derive structural themes–descriptions of the experience for each participant–from the textural descriptions achieved through phenomenological reduction. The identified themes were also used to write a description of the context or setting that influenced how participants experienced the phenomenon. The final step was the synthesis of meanings and essences. During the synthesis process, the textural and structural descriptions were combined to convey an overall essence of the shared experience of the instructional designers in managing learning design projects. A descriptive passage was

written that explains how the instructional designers experienced the project management phenomenon as a group.

Reduction

The in-depth interviews were conducted using GoToMeeting™, which has a built-in audio recording feature. Rev.com, a third-party transcription service, professionally transcribed the audio files. The transcriptions were sent to the participants who agreed to review their transcripts for accuracy. No significant modifications were made. Then, the review and analysis process began–starting with horizonalization.

First, each transcript was printed and read multiple times in order to get an overall feel for the participant's individual story as well as a general perception of the group. After initially reading each transcript, comprehensive notes were taken during the subsequent readings. Then, each transcript was hand-coded using Microsoft Word review features including highlighting and comment boxes. Moustakas (1994) described going through the data and highlighting significant statements that provide an understanding of how each participant experienced the phenomenon. As I reviewed each transcript, I identified significant statements and labeled them, later refining the labels into categories and the significant statements into themes. For each transcript, I followed a five-step process that involved reviewing the transcript and:

1. Identifying the unique horizons
2. Conducting reduction and elimination within the data
3. Clustering and thematizing the invariant constituents
4. Identifying the invariant constituents by application
5. Writing the individual textual description, which was organized by the identified themes

Mari is used here as an example to describe this process in more detail. After reading the transcript, I reviewed the transcript again, creating a listing and preliminary groupings. The initial review resulted in identifying these 24 unique horizons:

1. Preparation to Become an ID (education and training)
2. Experience as an ID (roles held)
3. ID/PM Competencies
4. Current Title
5. How Many ID Positions (progression in ID roles)
6. Primary Responsibilities
7. Audience
8. Industry
9. ID Tools
10. How They Receive Projects
11. Project Management-related Tasks
12. ID Model
13. PM Tools
14. ID/PM Best Practice/Recommendation
15. PM Preparation (education, training, and or mentoring)
16. Feelings about PM Experience
17. Feelings about PM Preparation
18. Recommendations for PM Preparation (for others)
19. Plans for additional PM Preparation (for his or herself)
20. Common PM Challenges
21. Important PM Factors
22. Help PM Challenges
23. PM Model
24. Feelings about PM Tools

These horizon statements helped to provide an initial understanding of how Mari experienced the phenomenon.

Then I combined and eliminated overlapping and redundant statements. Reduction and elimination resulted in these 16 horizons, which were considered the invariant constituents:

1. Preparation to Become an ID (education, training, and or mentoring)
2. Experience as an ID (ID roles held, progression in ID career, and current title)
3. ID/PM Competencies
4. Primary Responsibilities (PM responsibilities and those ID responsibilities tied to PM)
5. ID Tools
6. ID Model
7. PM Tools
8. ID/PM Best Practice/Recommendation
9. PM Preparation (education, training, and or mentoring)
10. Recommendations for PM Preparation (for others)
11. Feelings about PM Experience
12. Feelings about PM Preparation (for his or herself)/Plans for additional PM Preparation
13. Common PM Challenges
14. Important PM Factors that Help to Avoid or Address PM Challenges
15. PM Model
16. Feelings about PM Tools

I re-read the transcript and horizons again and clustered the invariant constituents into 13 themes. Each of the original 24 unique horizons was clustered under one of the themes:

1. ID/PM Preparation (IPP)
2. ID/PM Experience (IPE)
3. ID/PM Competencies (IPC)
4. Primary Responsibilities (PR)
5. Tools Used (TU)
6. Models Used (MU)
7. PM Recommendations (PMR)
8. PM Preparation Recommendations (PPR)
9. PM Preparation Feelings (PPF)

10. PM Experience Feelings (PEF)
11. PM Challenges (PC)
12. Avoid/Address PM Challenges (AC)
13. PM Tools/Models Feelings (PF)

Once I categorized each of the invariant constituents into one of the 13 themes, I read the transcript again to determine whether the invariant constituents and themes were expressed explicitly in the transcript. However, no constituent or theme was found to be irrelevant. I reflected on the transcript several times along with the identified themes. This reflective process helped me write the individual textual description.

Creswell (2013) explained that the significant statements and themes are used to write a textural description of what the participant experienced. I used the 13 themes to write a textual description of Mari's lived experience in learning to manage and in actually managing learning design projects. The textual description was organized around the four overarching themes: ID/PM Background, PM Role Characteristics, PM Challenges, and PM Insights. The PM Recommendations tie to all of these four overarching themes. The lessons learned through ID/PM preparation and experience heavily influenced what the participant recommended for educational preparation and or training and experience, what she saw as central to the PM role, her perception of challenges, and the insights that she shared.

I used the exact same analysis process as described for Mari for each of the eight participants. Once I completed the five-step data analysis process for each individual transcript, I went back and weighed all of the participants' significant statements equally. It was critical that all of their stories be given equal weight in order to arrive at an accurate description of their shared live experiences (Moustakas, 1994). I reexamined all of the data analysis results from the participants and reflected upon each. I then compared the results of each participant's analysis to

determine the commonalities and connections amongst them and to identify the common themes. I also shared the eight analysis reports, which detailed the analysis process that was followed for each participant, with my dissertation advisor for her review and validation. Table 2 illustrates the number of themes and meaningful units by participant. The names shown in the table are pseudonyms.

Themes	Mari	Eve	Sandra	Ann	Jean	Kay	Israel	Anthony	**Totals**
ID/PM Background	17	13	7	12	14	14	16	19	112
PM Role Characteristics	32	13	18	11	8	14	18	18	132
PM Challenges	5	4	6	3	6	5	9	4	42
PM Insights	9	11	11	5	9	6	20	6	77
PM Recommendations	10	13	20	14	8	8	18	12	103
Totals	73	54	62	45	45	47	81	59	466

Table 2. Themes and Meaningful Units (Codes) by Participant

The layers of review, reflection, and analysis further revealed the strong similarities in the participants' unique horizons and invariant constituents. Although the unique horizons varied slightly and the invariant constituents varied even less amongst the participants, the four overarching themes (ID/PM Background, PM Role Characteristics, PM Challenges, and PM Insights) as well as the undercurrent theme, PM Recommendations, were very consistent amongst the data analysis results. Figure 2 illustrates the four overarching themes, which

resulted in the PM recommendations expressed by the participants. Figure 2 also presents the final 14 codes, each code falling under a theme.

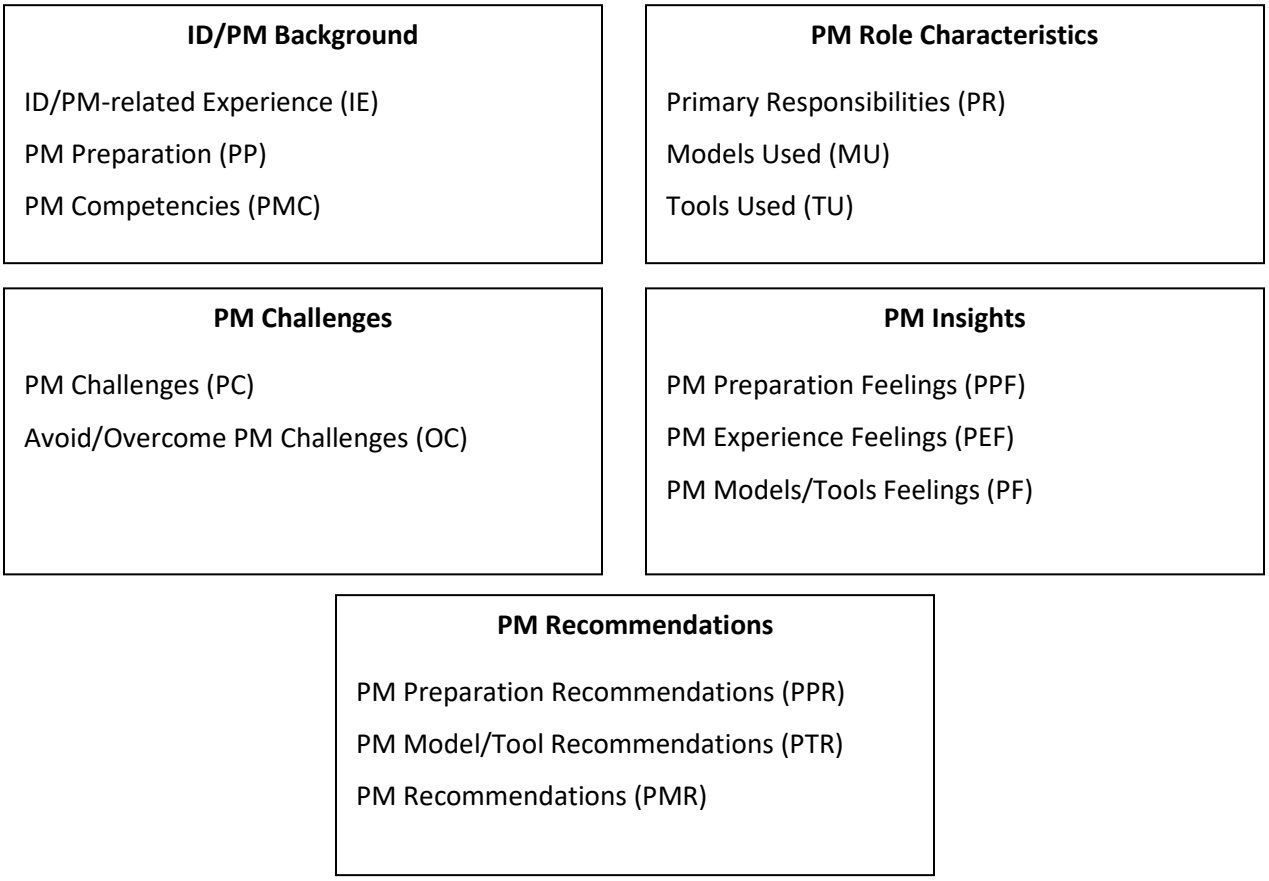

Figure 2. Illustration of How PM Recommendations Resulted from the Four Overarching Themes: ID/PM Background, PM Role Characteristics, PM Challenges, and PM Insights

Creswell (2013) described different ways in which authors bring the voices of the participants into a study by directly quoting them and that doing so is a crucial aspect of qualitative research. I used the identified themes to write textual descriptions of the participant's lived experience in learning to manage and in actually managing learning design projects. Each textual description was organized around the four overarching themes shown in Figure 2. All of the participants were very gracious in sharing their stories, feelings, and insights. The following are two textual descriptions. These textural descriptions serve as examples. However, all of the participants'

textual descriptions are included in Appendix E. Sticking with the same participant that was used to exemplify the qualitative analysis process, Mari's first-person textural description is the first example.

Textural Description of Mari's Lived Experience

I have always had an interest in education and worked in the field for several years before deciding to pursue a M.Ed. in Curriculum and Instruction. I even taught in my graduate program while working toward the M.Ed. Then, I ended up taking a hiatus for several years to start a family, although I still worked part time teaching. After my hiatus, I joined the university four years ago as a learning designer. I would describe learning design as my second career because I was teaching, earned my master's degree, took a hiatus, and started my current career.

I really like being a learning designer because I enjoy working with other people. I get to collaborate with so many different faculty in our college as well as other learning designers. Being a part of a community was something that I was looking for so that I could work on projects and collaborate with others. My primary responsibilities involve creating and maintaining about 25 different courses affiliated with my college. These courses are delivered online, in the classroom, or are hybrid. My audience is primarily adult learners who are a part of the program that I support. In addition to collaborating with professors, a big portion of my role involves consulting and project management.

My project management-related responsibilities include initiating the project by setting up the kick-off meeting and subsequent meetings to continue the progress of the project. I plan the project and help to design the course blue print. I schedule periodic meetings, check in with the faculty member, assist with writing the learning objectives, help to plan the course, and keep the project on pace. I also consult with the faculty on things like accessibility, copyright issues, and overall design, offering best practice recommendations and solutions.

Some of the tools that I use in the project management aspect of my role are my calendar, Google Docs, and MS Excel. My calendar is huge for me and I live by it. I put my project dates in the calendar and set reminders for project milestones and deliverables. I also use my calendar to set up the project meetings. I use Google docs to share many things with faculty and I keep a spreadsheet that is also accessible by the faculty to keep up with the project dates and deliverables. I use a spreadsheet to keep up with issues that we are working on and things that we need to revisit as we move through the design project. My design assistant and I have also used Trello to manage tasks, create a board for the course, and manage what needs to be done and who's responsible for those tasks.

My group has been discussing the possibility of adopting some type of project management software that would help everyone in the group feel more aware of how each project is moving through the design process because currently everyone is doing their own thing and we need consistency. Another thing my group does not have in place is a standard model for how we manage projects. We have talked about different models but I end up using models depending on the project. It depends on the person you are working with, the type of content, and the timeline.

I have no formal training in project management at all, but I think that would be highly valuable. So far, everything that I have learned has been on the job, just figuring things out and seeking suggestions from my colleagues. Although I do not have a formal education in project management, I feel like there were some transfers from my background in education. Planning a school year or semester takes significant planning and so does curriculum and instruction. I did not know it at the time, but I was practicing project management. The skills that I needed as an educator and that I used as a graduate student helped prepare me to be able to manage projects. With that said, honestly, there are times when I have thought, "Oh my gosh, I wish I had some more formal project management training." That's why I occasionally try to attend workshops and conferences to help me fill in the gaps.

Knowing that managing multiple learning design projects at one time can be overwhelming, I would highly recommend having formal training in project management to other learning designers and, if I could go back, I would pursue it myself. I have heard this from other instructional designers as well. I have had many conversations with other designers and we discuss having so many projects, working with so many people, and having a lot of moving targets at the same time. Finding effective ways to get a grip on all of this is important. You have to be able to figure it all out because it's such an important part of what we do. I am not sure you would have a job if you cannot do that. I have been successful at this part of my job because I had skills that transferred over [from other roles], but I still have room for growth.

Project management brings its own challenges beyond the design aspect of my role. One common challenge that I face is depending on the people I am working with to ensure that we meet deadlines. It is one thing to get my end of the job done, but if the other person in the relationship is not creating, delivering, or reviewing content when they need to it becomes very challenging. That is why communication is so important in this role. When we are establishing timelines or benchmarks it is super important that all parties have a say in when those dates are and what the deadlines are going to be so that at least we all enter into an agreement with everyone feeling positive about what the expectations are. I try to incorporate reminders as much as possible so if we have a meeting approaching and there is a specific deliverable that is supposed to be ready, I can send a friendly reminder. Building relationships is very important. I feel like if you have really

> worked on the relationship and you and that person have a connection that helps with communication and accountability. I have heard this same thing from other designers – communication, building relationships, and collaboration all help in managing our learning design projects. One more thing that helps, and we don't effectively have this in my group right now, is having a quality assurance (QA) process in place. This also ties back to accountability and having support from project stakeholders.
>
> I am comfortable in the project management aspect of my role now because I have the experience but I can offer some recommendations to other learning designers, especially those new to the role. Using tools such as Excel and Trello helps me keep track of all of my courses and using Google Docs allows me to collaborate with the other people working on the project. Regular communication – whether in person, over the phone, via email, or in meetings is critical. In addition, utilizing your calendar to schedule meetings and set reminders is helpful. I feel that using these tools has helped me be successful in managing my projects and I would recommend them to others.
>
> In addition to using the tools that I shared earlier, I have some preparation and best practice recommendations. In preparing to manage projects, I recommend that new instructional designers have an onboarding program that focuses on project management as a major part of their role. Helping people who are joining the team to understand what the expectations are for project management, the tools that we are expected to use, and other project management suggestions that their colleagues have would be very valuable. Therefore, I recommend formal education or training in a related field, an onboarding program that has a focus on project management, using standard tools and processes, and helping designers understand the expectations of them early on.

Second Textural Description Example

Israel was very passionate and enthusiastic about sharing his story. He was also the longest running instructional designer and shared some great wisdom. His textural description follows.

> *Textural Description of Israel's Lived Experience*
>
> I have served as an instructional designer for 30 years and I am very grateful for my career. Back when I was in college, I started pursuing a business degree but I wasn't interested in taking some of the classes that were required. I figured out that I liked my psychology courses a lot more so I decided to change my major to psychology. I ended up taking some upper level psychology courses. One of those courses was Industrial Organizational Psychology and the professor taught the class like a training session. I did not know exactly how at the time, but his class was very different from the others that I had taken. He would present the objectives and explain what we would learn, we would work through the material, and he would summarize and review the objectives at the end.

I remember being impressed with how organized his class was and, because I myself am an organization freak, I thought it was really cool. I struck up a conversation with him and he became my closest professor. He would offer me life and career advice. He asked me if I had ever thought about going into training. He explained to me that his class was structured based on training as a model. After that, I decided to consider a career in training.

In my personal life, I wanted to be engaged to a young lady that lived in Houston and I needed a job so that I could ask for her hand in marriage. I went to an Expo and took a copy of my resume and writing sample to almost every booth in the room but I skipped one booth because the company was based in Illinois and I wanted to get to Houston. The person stopped me and asked why I skipped her booth and I explained that I needed to move to Houston where my future fiancé lives, not Illinois. She said that they had offices near Houston and I ended up getting hired by the company. The person that ran that company had been doing computer-based training since the beginning of computer-based training when the military was trying to see if they could use computers to train. This man took me under his wing and taught me all about instructional design for six and a half years. Being an apprentice with him is how I became an instructional designer–he essentially gave me my career. The company was small so everyone had to take on multiple roles. The instructional designers were also responsible for managing their projects.

Throughout my career, I have had different iterations of being an instructional designer, project manager, or both so my foundation with that company served me well. I have had the attitude–who else is going to manage the project better than I am? I am the one closest to the process. I am the one meeting with the clients. I provide the specifications on what to build. My formal titles have included Instructional Designer, Project Manager, Project Lead, and Program Manager. Currently my title is Learning Design Specialist, which is a combination of instructional designer and project manager. This is a new position for me so I am still learning what all of my responsibilities are going to be. The person who serves as the Program Manager here tracks the portfolio of projects, but I am responsible for managing the projects that are assigned to me.

I do not have any formal training in project management and I am really not sure how I have somehow made it through my long career with no PMP certification. I have learned project management along the way. I tend to use the ADDIE model. I believe that if you don’t do the A and the D, you will only end up with the DIE. I have used other models over the years, such as Agile, but I am not a fan of Agile to be honest. As far as tools, I use Excel to track my projects and that has worked fine for me. I have also used MS Project but it is overwhelming and I don’t like to use it. I mean it is a great tool, if you know how to use it. I have had clients ask me to use it, however. I remember one project when I was using an Excel spreadsheet and the client was always coming back to me

asking for a Project Gantt chart. Well, you can have your Gantt chart or you can have your program. It is your choice. It became a running joke.

As far as project management, following a specific PMP-ish best practice was far more important to internal constituents than external ones and it is more important to me to please my clients than my team. Now, I wouldn't give that advice to anyone else in his or her career! I intended to go back to school and earn an MBA and I intended to take classes in project management. I also intended to get my PMP but I was too busy doing the work for my clients. However, I think that I am an anomaly. I would recommend more training for others. I believe that it is important for instructional designers to have a background in project management. The worse profile for me is having a project manager on an instructional design project that has no background in instructional design. Instructional design is a different animal and if you don't understand it, you cannot manage it.

My education provided no help in preparing me to manage projects. It was all on-the-job learning for me, starting with the awesome mentor that I began my career with 30 years ago. I have felt successful in managing my projects and don't intend to pursue any further education at this time. I am an old dog now. I continue to learn more about instructional design but I do not have as much interest in learning more about project management. However, in hindsight, I probably should have spent time earlier in my career learning more about project management techniques and tools. I would recommend to others interested in becoming an ID to go ahead and get your PMP certification in addition to an education in instructional design or a related field of study. Do this if for no other reason than the fact that people are going to expect you to have it. Even instructional design certifications are becoming more important, like the CPLP. I think the only reason that I am able to get away with not having these things is my experience. If you don't have that, you will probably need a master's degree in instructional design or possibly even a CPLP. If you have the educational background and the PMP certification, you will probably be ready to rock.

I think it would be helpful for people studying instructional design at the college-level to have some project management topics included in their studies. Just to bridge the gap between learning instructional design concepts, adult learning theory, and project management. The programs should help people make the connection between project management and instructional design and make it clear how managing instructional design projects is different. I do not know if it would require a whole set of courses– maybe just one course where they have to manage a project. Another scenario would be for them to work with a project manager, even one that knows nothing about instructional design because they would have to be the voice of reason for that person who thinks you can crank out a storyboard in an hour. Either way, practical experience would be a necessary component.

Instructional designers face challenges in the different aspects of their role, both related to the design and project management. One challenge that I deal with all the time is a lack of specificity. Everything is squishy. Do you want this? Do you want that? Should we do it this way or that way? We aren't provided enough detail to offer an accurate estimate of how long it is going to take to complete a project. That, along with the fact that we are not given enough time to think things through, creates issues. IDs need time to be creative, to plan, and to do the work. This is a common problem in the ID field. There is no time built in to be smart or creative. There's no time for coming up with better solutions for our customers or better ways to do things. There is only time to get it done.

How do we overcome this challenge and others? It is education. We have to educate stakeholders on the ID process and the metrics. Then you have to communicate and collaborate well with your SMEs and stakeholders. You have to communicate so that people understand contingencies are necessary in project plans, for example. You really need contingencies on top of contingencies! Discuss with them and decide the sort of things you're going to agree and not agree to. Education and communication are what help to resolve these types of challenges. One thing that you hear about project managers is that they do not like dealing with people. That is a problem. We have to remember the humanity behind what we do. We are working with people to create learning experiences for people. We have to be respectful of other peoples' skills, knowledge, input, and time. Build rapport with the project team. Humanity is an aspect of ID and PM work that we should keep in mind. Educating people on the process of instructional design and project management, communicating and setting expectations all go together and are important for the success of a project. Another aspect is customer focus, which has been important to me in my entire career. Focusing on the needs of the customers, whoever they are, also promotes success. Honesty goes along with customer-focus. For example, be honest when you provide ETAs or estimates on how long a deliverable or project will take. Doing so helps to build trust and rapport with the project team.

I mentioned the importance of building in time for thoughtfulness and creativity. My philosophy is that your book of work should be 70% utilized. You should have 20% capacity to take on additional projects. The last 10% is for the unknown and unplanned. If I only had some time, I could come up with a new design document format or a new welcome letter for participants. These are just a couple of examples to illustrate my point. Using the 70, 20, 10 utilization ratio allows time for continuous improvement. That is one of my recommendations for others. I have a couple of other recommendations for instructional designers and those interested in the career and I have already mentioned them both but they are worth repeating. One is for preparation and the other is for practice. First, get an experienced mentor early on. I thank my original mentor for giving me a chance and essentially giving me a career. Second is to collaborate well with SMEs.

> SMEs are your bread and butter for the crucial content that you need to do your work. I think these are my keenest recommendations.

Structural Descriptions

Moustakas (1994) explained that following phenomenological reduction, the next step in the research process is imaginative variation. The aim of imaginative variation is to arrive at structural descriptions of the experience, to describe how the experience of the phenomenon came to be what it is. "We imagine possible structures of time, space, materiality, causality, and relationship to self and to others" (Moustakas, 1994, p. 99). Creswell (2013) also described how the significant statements and themes identified during the analysis process are used to write a description of the context or setting that influenced how the participants experienced the phenomenon. Employing the process of imaginative variation, as described by Moustakas (1994), revealed the structures - the conditions that must exist for something to appear - of the participants' experiences. Imaginative variation was used to describe the essential structures that influenced how the instructional designers came to experience the instructional design project management phenomenon. This process included a reflective phase in which many possibilities were examined and explicated reflectively (Moustakas, 1994).

I reviewed and carefully reflected upon each of the textural descriptions of the participants, considering the various possible structures. Through consideration and reflection, it became increasingly clear that the pervasive structures were relationship to self and others, time, space, and materiality. These structures revealed how the instructional designers experienced learning to manage projects, how they experienced managing projects in practice, and how they felt about their project management-related experiences. I will continue to use Mari and Israel as examples to illustrate how these structures made their experiences of the phenomenon possible. However,

the other participant's structural descriptions can be found in Appendix F. Excerpts from the participants are included in the examination of the research questions, exploration of the identified themes, and explanation of the research findings.

Mari's Structural Description

Mari's lifelong pursuit of learning, both for herself and for others, reflects the materiality structure that made it possible for her to experience the phenomenon of instructional design project management. Her relationship to self and others is a structure exemplified in her passion for design and her love of working with and educating others. These two structures were prominent in how her experience of instructional design project management came to be.

Mari is a lifelong learner and educator who pursed a M.Ed. in Curriculum and Instruction. She has taught in higher education and has supported faculty as a learning designer for several years. It was important for her to be a part of a community so that she could work on learning design projects and collaborate with others. This interest in working on projects and collaborating with others made her experience managing learning design projects possible. The structure relationship to self and others is demonstrated in Mari's collaboration activities, which are also a crucial part of her project management responsibilities. Mari described how she uses Google Docs to share collaborative ideas and work with faculty and keeps a spreadsheet that is accessible by the faculty to keep up with the project dates, tasks, resources, and deliverables. Although her department uses Trello, she expressed an interest in pursuing project management software that allows for collaboration and follows the design process because, at the time, everyone on her team was doing their own thing and they needed consistency. Mari described how, in addition to collaborating with professors, a big portion of her role involved consulting and project management.

Although she has no formal training or education in project management, the knowledge that she gained from her career in education transferred over to her project management role. She explained how the skills that she needed as an educator and that she used as a graduate student helped her prepare to be able to manage projects. This is also a reflection of the materiality structure–transferability of skills from other roles along with possessing higher education and work experience were the materials that made her work as a project manager possible. Mari is able to plan, organize, educate, collaborate, and communicate well–all of which are made possible by the materiality and relation to self and others structures. Review and reflection on the textural descriptions revealed that all of these skills (planning, organizing, educating, collaboration, and communication) are also imperative in project management.

Time and space are two other important structures that made Mari's lived experience possible. Both the time and space structures influenced her experiences in multiple ways. First, it takes time, effort, and practice (space) for an individual to gain the skills that it takes to successfully design learning materials and to manage projects. All of the participants, including Mari, alluded to this point when they shared their stories. It also takes time and space to learn to manage projects and to manage projects. It takes time and effort to learn to use and to actually use project management models and tools and to determine which tools and models work well for different projects. Mari did not have formal education or training in project management and admits that she could have benefited from formal education and or training earlier in her career. However, it was the structures of time and space that allowed her to learn crucial project management skills and tools and apply them on-the-job.

Some of the tools that Mari used in the project management aspect of her role were her calendar, Google Docs, Trello, and MS Excel. She explained that her calendar is huge for her.

She lives by it because it helps her plan projects, set up meetings and reminders, and stay organized. For example, she puts project dates in the calendar, sets reminders for project milestones and deliverables, and uses the calendar to set up project meetings. Time and space to practice building the necessary skills are big factors in instructional design project management and are also important structures that made her experiences possible.

Although Mari is not new to instructional design or project management, she still feels that she has room to grow in the project management aspect of her role. She explained that project management brings its own challenges beyond the design aspects of her role. One common challenge that she faces is depending on the people that she works with to ensure that deadlines are met. Mari reiterates that communication, which goes back to the relationship to self and others structure, is very important in project management. For example, when establishing timelines or benchmarks it is essential that all parties have a say in when the dates are and what the deadlines are going to be. She utilizes reminders as much as possible so that, if there is an upcoming meeting where a specific deliverable is supposed to be ready, she can send a friendly reminder. Mari also explains why building working relationships is vital (made possible by the relationship to self and others structure). Mari believes that having an established working relationship where you and that person have a connection helps with communication and accountability.

Mari offered some best practice recommendations to other instructional designers. These recommendations also reflect the structures that made her project management experiences possible. In preparing to manage projects, Mari recommended that new instructional designers have an onboarding program that focuses on project management as a major part of their role. Her position is that helping people who are joining the team understand what their expectations

are for project management, the tools that they are expected to use, and providing other project management suggestions from their colleagues would be very valuable. Her general recommendations for those interested in instructional design to gain formal education or training in a related field, experience an onboarding program that focuses on project management, use standard tools and methods/processes, and learn what the project management expectations of them are in their specific role reflect the knowledge that she has gained in managing learning design projects and the relationship to self, materiality, time, and space structures that allowed her to do so.

Israel's Structural Description

Israel's lived experience was made possible by the relation to self and others, materiality, time, and space structures. Israel was able to reflect on how he came to be interested in training and instructional design, how he was able to learn from a great mentor, and how his career progression was closely tied to different aspects of his life. Having served as an instructional designer for 30 years, his story was extremely shaped by the materiality structure and he displayed profound knowledge, wisdom, and insight into instructional design project management. Israel reiterated how grateful he was for his career and how he was indebted to his first professional mentor for having such an interesting profession. His willingness to be molded 30 years ago and his seasoned perspective on how he both learned from others and helped others learn along the way was a very strong indicator of the relation to self and others structures.

Back when Israel was in college, he started pursuing a business degree but changed is major when he realized that he was more interested in the psychology courses that he was taking. As a part of his new study concentration, Israel eventually took an Industrial Organizational Psychology course in which the professor taught the class like a training session. The professor

would present the objectives and explain what the students would learn, they would work through the material, and he would summarize and review the objectives at the end. Israel was so impressed with how organized that particular class was that he struck up a conversation with the professor. Israel and the professor developed a friendship and the professor offered him life and career advice. Because he was so intrigued with how the class was organized and run, the professor asked Israel if he had ever thought about going into training. The professor explained that his class was structured based on a training model. After that discussion with his professor, Israel decided to consider a career in training.

Around the same time, in Israel's personal life, he wanted to become engaged to a young lady who lived in Houston, TX. He wanted to obtain a job so that he could ask for her hand in marriage. Israel decided to attend a job expo and took copies of his resume and writing sample. He came across the booth of a company that had offices near Houston and ended up getting hired by that company. He learned that the man running the company had been doing computer-based training since the beginning when the military was trying to see if they could use computers to train. That man took Israel under his wing and taught him all about instructional design for six and a half years. Israel's materiality structure was being built while his relation to self and others structures were the foundation for his learning and growing in that role. The time and space structures were also at play in understanding how his career as an instructional designer and project manager came to be. The six and a half years that he spent as an apprentice gave him time and space to practice and build his knowledgebase. Israel described how being an apprentice was essentially how he became an instructional designer and credited his first mentor with giving him the career.

Because the first company where he worked as an instructional designer was small, everyone had to take on multiple roles. Therefore, the instructional designers were also responsible for managing their projects. Throughout his career, Israel had different iterations of being an instructional designer, project manager, or both. He felt that the foundation that he had built at the first company served him well for the rest of his career. As far as the project management aspect of his role, he felt best prepared to manage projects (as opposed to other members of a project team) because he was the closest one to the process. He met with the clients, provided the specifications on what to build, communicated expectations, and more. Israel's formal titles had been Instructional Designer, Project Manager, Project Lead, and Program Manager. At the time, his title was Learning Design Specialist, which was a combination of instructional designer and project manager. He was new to the position and was still learning what all of his responsibilities were going to be. He explained that the Program Manager on his team tracked the portfolio of projects, but he was responsible for managing the projects that were assigned to him.

Israel had no formal training in project management and was not sure how he had made it through his long career without a PMP certification. He had learned project management along the way through on-the-job experiences and mentorships. The time and space structures had made it possible for him to build project management skills in practice, without a formal education. Israel tended to use the ADDIE model. He believed that "if you don't do the A and the D, you will only end up with the DIE." He had used other models over the years, such as Agile, but was not a fan of Agile. He used Excel to track his projects and felt that the tool worked well for his purposes. He had also used MS Project but deemed it overwhelming to use and, therefore, did not like using the tool. He admitted that project team members had requested

that he use MS Project but Israel's focus was more on pleasing his clients than his internal team. However, he did not promote that mindset for other instructional designers.

Israel had intended to go back to school at some point, earn an MBA, and take classes in project management. He had also intended to get PMP certified but "was too busy doing the work for my clients." Israel perceived himself as an anomaly in the world of instructional design. He recommended formal project management training for other instructional designers and those interested in becoming instructional designers. Israel believed "that it is important for instructional designers to have a background in project management." He explained that the worst-case scenario was having a project manager on an instructional design project that had no background in instructional design. Israel articulated that "instructional design is a different animal and, if you don't understand it, you cannot manage it. The materiality structure was evident in his story as his experiences had led, not only to knowledge building, but also to wisdom building. He also had the insight to understand that he was privileged to have made it so far in his career and for so long without formal project management education or training. However, he recognized the need and definitely suggested it for others. Israel's relation to self and others structures mad his experience, insight, and recommendations possible.

Israel's project management experience began with the "awesome" mentor he had started his career with 30 years ago. Although he felt successful in managing projects later in his career, he reflected that, in hindsight he probably should have spent time earlier in his career learning more about project management techniques and tools. He recommended that individuals interested in becoming an instructional designer earn a PMP certification in addition to an education in instructional design or a related field of study. "Do this if for no other reason than the fact that people are going to expect you to have it." Israel thought that the only reason he was able to get

away with not having the project management education or training was his experience. He explained that those interested in the field (with very little or no experience) will probably need a master's degree in instructional design and a PMP certification.

Israel also thought it would be helpful for people studying instructional design at the college-level to have some project management topics included in their studies to bridge the gap between learning instructional design concepts, adult learning theory, and project management. He was not necessarily suggesting an entire set of required courses – perhaps just one course where students actually have to manage a project (because practical experience is also crucial).

Practical experience is important because instructional designers face challenges in the different aspects of their role, both related to design and project management. One challenge that Israel described was dealing with a lack of specificity. He described how the instructional designer is often not provided enough detail to offer an accurate estimate of how long it is going to take to complete a project. He overcomes this challenge with education. He educates stakeholders on the ID process and the metrics. In addition, "you have to communicate and collaborate well with your SMEs and stakeholders." For example, IDs have to communicate so that people understand why contingencies are necessary in project plans. Israel reiterated that education and communication are what help to resolve these types of challenges. The relation to self and relation to others structures explain how he works to overcome challenges through communication. Israel suggested that "we have to remember the humanity behind what we do." IDs work with people to create learning experiences for people. Therefore, instructional designers must be respectful of other peoples' skills, knowledge, input, and time. It is important to build rapport with the project team. "Humanity is an aspect of ID and PM work that we should keep in mind."

Israel also recommended a utilization ratio that allows for continuous improvement. His philosophy was that an instructional designer's book of work should be 70% utilized. You should have 20% capacity to take on additional projects and 10% for the unknown and unplanned. The materiality structure makes this kind of insight possible. Israel had a couple of final recommendations that he wanted to reiterate for instructional designers and those interested in the profession. First, he recommended getting an experienced mentor early on. The second recommendation was to collaborate well with SMEs. He pointed out that "SMEs are your bread and butter for the crucial content that you need to do your work." The wealth of insight that Israel shared in his story was made possible by the materiality, relation to self and others, time, and space structures. These structures explained the how of his lived experience as an instructional designer and project manager.

Synthesis

The next step in the analysis process entailed reflection on the textural and structural descriptions and a synthesis of the meanings and essences. As described by Moustakas (1994), from the individual textural-structural descriptions, a composite description of the meanings and essences of the experience was developed, representing the group of participants as a whole. The following composite description passage "focuses on the common experiences of the participants" (Creswell, 2013, p. 82). It was written in such a way that others will understand what it is like for an instructional designer to learn to manage and to actually manage instructional design projects.

Composite Description

Instructional design was not my childhood career choice. In fact, I came into the profession in an unplanned way. Nevertheless, I am very passionate about what I do because I love to learn

and I desire to help others learn. I appreciate how instructional design allows me to use my creative, technical, and analytical skills all at the same time. Instructional design involves wearing many hats, one of which is that of a project manager. My project management responsibilities are just as important as my design responsibilities because I can plan and design the learning materials and activities but, if I do not manage the project well, then the learning intervention may be delayed or never come to fruition.

Having such a complex set of responsibilities requires adequate preparation, both from an education and training perspective. I do not believe that I would be where I am today as a professional instructional designer with several years of experience under my belt if I had not pursued a higher education. My formal education helped to set a foundation for me to learn instructional design. In addition, on-the-job training and practical experience as well as having the benefit of seasoned mentors were invaluable for my career progression. Although my educational background helped set the base for me to be a successful instructional designer, it did not help me in handling my project management responsibilities nearly as much. Neither my undergraduate or graduate education included a significant focus on project management or how to manage learning design projects. Fortunately for me, I had prior knowledge that transferred from previous positions that I had held in education and in business. Organizational abilities and skills such as time and resource management, lesson planning, and meeting deadlines that I learned in college and on-the-job helped me learn to successfully manage projects. That, along with having great mentors such as senior instructional designers and project managers along the way, allowed me to manage learning design projects without the benefit of a formal education that focused on project management. Without my multifaceted educational and professional background, I could have easily fallen flat on my face in managing projects.

I have been an instructional designer for several years now so I am much more comfortable with both the design and project management aspects of my role. However, it was not easy for me in the beginning. I often felt overwhelmed and underprepared to manage my projects effectively. Therefore, I strongly recommend certain things for other instructional designers or those interested in entering the field of instructional design. These recommendations are intended to help others be prepared for the challenges that instructional designers face. (I will provide an example of the challenges a little later.) I will start with recommendations to help others learn instructional design and project management. Then, I will move on to recommendation for the practice of instructional design project management.

First, I recommend a higher education in instructional design or a related field such as curriculum and instruction, adult learning, or educational technology. The next step is to get as much practical experience as possible. This could be practical experience during your graduate studies such as a capstone project, internship, contract work, or part-time work. Then, you should study project management either in the academic realm, through a certification program, or through a training program (this is especially vital if your previous education involved little or no focus on project management). Practical experience cannot be overstated. Put forth efforts to gain practical experience in project management as much as possible even as you build your acumen because there is no substitute for practice. Again, this could be through scenario-based learning, project work, or experiences on-the-job. Along this same vain, I would recommend that higher education programs consider including topics focused specifically on project management for their learners. It does not necessarily have to be a full credit course but it should include at least a few outcomes related to managing learning design projects so that students have a basic understanding of how instructional design and project management are

related and what expectations employers will have of them from a project management perspective in the workplace. It would also be helpful for higher education to teach the basics of the commonly used project management tools such as MS Excel and MS Project. Perhaps having a capstone project, for example, that requires an instructional design project be planned and executed (using a project management tool) would be helpful for learners.

Now, I would like to share a few recommendations for the practice of instructional design project management. The first and strongest recommendation is to communicate well and often. Communication is one of the most, if not the most, important aspect of project management. Instructional designers must be able to communicate and collaborate with subject matter experts (SMEs) and other project stakeholders. SMEs, in particular, are your bread and butter in that they will help provide the learning content necessary to build courses and curricula. Communication allows everyone to be on the same page about requirements, plans, timelines, priorities, deliverables, expectations, and contingencies. Having empathy and expressing compassion for others such as your project team members and learners also helps in both the design and project management aspects of the role. Of course, empathy and compassion are expressed through communication. Second, educate others such as the project team on the instructional design process and what the process involves so that they understand how much time and effort it takes to create and deliver an online course or an instructor-led course (just as a couple of examples). Educating others on the process helps in setting and managing expectations for what type of learning can be delivered and in what timeframe. Next, learn how to use project management models and tools and discover which models and tools work best for your situation (i.e., your specific project or project team). Following a model such as ADDIE or Agile gives you a process to follow, which is even more helpful when you are new in the

profession. Also, using tools that help you communicate, plan, collaborate, and execute is vital. Tools such as MS Excel and online collaboration tools such as Google Docs are just a couple of examples. Document everything from your requirements and project scope to your project plan and quality assurance. It is also important to document things such as notes from meetings with your project team and emails requesting a date or requirement change. Documentation can be a saving grace and a lack of documentation can bite you later. My final recommendation is to plan for contingencies. Build time and alternatives into your project plan because unforeseen changes are inevitable in project management. As a general rule, managers of instructional designers should allow time for creativity and continuous improvement for their instructional designers. Doing so benefits the projects, instructional designers themselves, and the learners that are being served.

The recommendations and best practices that I have already shared are meant to help other instructional designers and those interested in instructional design prepare for and perform the project management aspect of their role. However, they are also intended to help prevent or overcome common challenges that instructional designers encounter in managing projects. One common challenge is relying on others such as SMEs for input and feedback. When an instructional designer is working with a faculty or business member to pull together learning content that can be designed and developed into a learning program, they both have deadlines to adhere to. However, the instructional designer must influence the SMEs to return information and feedback in a timely manner so that they can fulfill the project management component of their role. An instructional designer must not only meet their own deadlines, they must help the project team meet the established timeline. It is one thing to make sure that you meet all of the deadlines. It is a completely different thing to make sure that others do so. Being able to work

with others from a position of influence, not power, is critical. Another common challenge for instructional designers is setting and managing expectations for the project. In other words, ensuring that everyone on the project team understands what is required to meet the goals of the project, when those goals need to be met, and by whom. It is often necessary for an instructional designer to educate others on the instructional design process including what it entails, how the process flows, and what the timelines look like for each type of deliverable. Both of these challenges that I just described are overcome through communication and collaboration. Communicate with the project team from the beginning of the design life cycle to the end and even beyond, if necessary. Have regular meetings to discuss project requirements, status, possible bottlenecks, contingencies, and any other topics that affect the project. Also, collaborate effectively with the project team. Emphasize that you are undergoing a joint effort and that everyone has the same goal – to meet the needs of the learner. Use your available tools to communicate and collaborate. All of this may seem like a lot to do and remember but if instructional design was an easy job, everyone would do it! However, being an instructional designer/project manager is as rewarding as it is complex. Seeing your work come to fruition and helping others learn and grow is invaluable.

Theme Exploration

The phenomenological analysis process uncovered four overarching themes: ID/PM Background, PM Role Characteristics, PM Challenges, and PM Insights and an undercurrent theme, PM Recommendations. Components of these themes are reiterated throughout the stories of the study participants and all of the unique horizons and invariant constituents tie back to the themes. The stories of the instructional designers as project managers revealed important aspects of their shared lived experience, including how they came to be instructional designers who

manage projects, how they feel about managing learning design projects, what tools and methods they use, what common challenges they face and how they work to avoid or overcome the challenges, and what project management-related recommendations they have for others. Therefore, it is necessary to explore and describe the identified themes in detail. Textural and structural excerpts are included in the detailed descriptions in order to illuminate the themes with the voices of the participants.

ID/PM Background

There were numerous commonalities in the stories of the instructional designers, including the academic and professional backgrounds that had brought them to where they were in time–managing learning design projects. They even shared similar interests, perspectives, and insights. It was as if they were singing in harmony. There were three common codes identified for the ID/PM Background theme, including: PM preparation, PM competencies, and ID/PM-related experience.

First, all of the instructional designers possessed a formal undergraduate and, in most cases, a graduate education. This point is not surprising because having a formal education was a requirement for participation in the study. However, the point is important because the participants emphasized how having a formal education helped them not only be able to learn instructional design, but also to learn the organizational and time, resource, and people management skills that they would need in managing projects. Having to manage coursework along with the other responsibilities of life, plan accordingly, communicate and collaborate with others, and meet deadlines were some of the earliest instrumental structures for their future profession.

Another retold story was their career interests and progression. None of the instructional designers had planned to be an instructional designer. Ann shared, "I wasn't like a little girl saying I want to be an instructional designer." However, their educational, creative, technical, analytical, and organizational interests led them to the field. All of the participants had held positions as a teacher, tutor, instructor, trainer, and or in an instructional support role. They also showed a passion for learning and for helping others learn. Eve said, "I was a facilitator, an online tutor, and then I was a program coordinator, and then I moved to instructional designer, then I moved to project manager, but at the same time I was an instructional designer." Through these experiences, the instructional designers learned to be organized, plan lessons, communicate and collaborate, overcome challenges, and use tools such as software and templates. These prior roles were pivotal in that they helped the participants be able to transition into the instructional design field, and to ultimately manage learning design projects. Mari described:

> I have always had an interest in education and worked in the field for several years before deciding to pursue a M.Ed. in Curriculum and Instruction. I even taught in my graduate program while working toward the M.Ed. Then, I ended up taking a hiatus for several years to start a family, although I still worked part-time teaching. After my hiatus, I joined the university four years ago as a learning designer. I would describe learning design as my second career because I was teaching, earned my master's degree, took a hiatus, and started my current career.

The participants had also held multiple titles related to instructional design and project management, often going back and forth between the titles and or showing a progression in their career from more junior roles to senior roles. It seemed that as there instructional design responsibilities increased, so did their project management responsibilities. These varying roles also helped the instructional designers build project management acumen, as they continued to build knowledge and skills that transferred over to managing learning design projects. For example, one of the transferable skills that the instructional designers restated as a project

management competency was communication. Kay explained that, "I think it is really the communication skills I have picked up that have helped me in being a better project manager."

The ways in which the instructional designers learned to manage projects were also very similar. In addition to applying transferable skills, the IDs emphasized several ways in which they learned to manage projects: through self-study and taking project management training (outside of academia), mentorship, on-the-job application, and through using PM methods and tools. It was affirmed by an overwhelming majority of the participants that their academic education did not directly contribute to their project management knowledge. In other words, project management was not a part of their instructional design-related academic coursework. Only one of the eight instructional designers had taken a class in project management in academia and that was for her previous career as a computer programmer. As Kay described:

> I think it was a 100% on-the-job training. Just from being in college you learn to manage deadlines and timelines and multiple initiatives right, but as far as the experience and understanding, this should take about this amount of time so I'm going to plug this in from the beginning, that just came from being on the job and seeing what the more senior people were using, things what worked for them and then adopting that into my work…

In order to be successful in managing projects, the IDs had to take the initiative to learn the necessary skills. Sandra explained that, "it started as self-study, and part of the courses that I would have taken over the past five to six years. I always look for courses that would have a built-in project management bit." Mentorship and using project management methods and tools were two additional important factors in preparing to manage projects. However, both mentorship and using PM methods and tools took place in the on-the-job environment. Therefore, it can be summarized that the two primary ways in which the instructional designers learned project management were through self-study and on-the-job experience.

PM Role Characteristics

The PM Role Characteristics theme comprised aspects of the participants' stories that expressed their specific project manage responsibilities and the models and tools that they used to manage projects. Three codes emerged from the analysis that fell within the PM Role Characteristics theme: Primary Responsibilities, Models Used, and Tools Used. There were numerous responsibilities reiterated amongst the instructional designers that were only related to instructional design. Only those specifically related to the project management aspect of instructional design were considered and are discussed.

The instructional designers shared that their primary project management responsibilities included creating project plans (which includes the project schedule), scheduling and hosting regular meetings, checking in with SMEs in between meetings, keeping the project on schedule, and making adjustments (e.g., to the timeline or resources) as needed. Jean shared, "I was responsible for creating the project timeline, making sure that we stayed on time, making sure that if there were any adjustments that needed to be made they were communicated to all the various stake holders, and making sure that we delivered something in a timely fashion so that we could get feedback and move forward." Communication and collaboration were emphasized as important components of their project management responsibilities. Sandra explained:

> I am responsible for managing what happens during the training process, and the development process. I take responsibility for that. I'm in there every day. I am posting, encouraging, guiding, indicating when deadlines are, when they are to post. I am also responsible for having weekly meetings with my curriculum development specialists.

Anthony also described the importance of communication, sharing: "Building up a relationship, a good customer's skills built relationship with the client is essential, and that requires regular communication with them." Contingency planning and issue resolution was another key point related to project management responsibilities. Sandra said, "I am able to track how many persons are far behind, how many persons are at risk of not finishing their project on time, and

how many persons are on-time." In planning and issue resolution Sandra would ask, "What are the bottlenecks? What are the issues? What are the risks?" Knowing which questions to ask in order to effectively plan and manage a project was mentioned by several of the instructional designers as a critical success factor and something they learned to do over time. Their backgrounds, which included higher education and years of practical experience, had allowed the instructional designers to build project management-related competencies. These competencies allowed them to fulfil their project management responsibilities such as project planning and monitoring, communication, issue resolution (including knowing which questions to ask), and contingency planning.

The instructional designers also expressed how tools had impacted both their learning and practice of project management. These tools included MS Office products such as Excel and Project, collaboration tools such as Google Docs, One Note, and other online collaboration tools, project management tools such as Apollo, AVANA, Intervals, and Trello, calendars, and templates. Project management tools like Intervals helped the instructional designers learn to manage projects specific to their team's processes. For example, Ann described how she learned to manage projects for her team, "I think Intervals helps because there's due dates, and that lays out the timeline of the project and the sequence of the project." Ann further explained that, "All of those tasks are outlined in that project management software, and then you are the one managing that project, and ensuring that those tasks are completed, and instructors understand what their expectations are, and communicating with the various stakeholders involved in the process."

Many of the instructional designers conveyed the importance of using their calendars to plan and schedule project meetings, set project reminders, block out time for project work, and help to manage tasks. For example, Mari explained:

> My calendar is so huge for me. I live by my calendar as far as putting in reminders and putting in dates. I do a lot with Google Docs so I'll share a lot of things with faculty that way. I'll typically keep a spreadsheet there that's accessible by both of us that will keep track of issues that we're working on and things that we need to revisit as we're moving through…

Using standard templates, such as a project plan template, also helped the instructional designers complete their project management responsibilities in a variety ways. Following the process outlined in a project plan template, for example, allowed the instructional designers to follow and learn the project planning process employed by their team. Kay explained that, "Once we were able to get our project plans with these best practice timelines in play, I think that helped a lot."

The instructional designers also shared that they utilized methods/models such as ADDIE and Agile to assist in the project management aspect of their role. These models allowed them to plan their projects either in a phased approach (such as with ADDIE) or in an iterative approach such as with Agile. ADDIE was the clear favorite method amongst the instructional designers. Four participants reported preferring and using ADDIE extensively. Israel's structural description stated:

> Israel tended to use the ADDIE model. He believed that "if you don't do the A and the D, you will only end up with the DIE." He had used other models over the years, such as Agile, but was not a fan of Agile.

Two of the participants reported using Agile regularly. One participant did not use a model at all – the projects were planned based on internally created templates. Another participant reported that she and her team used different models depending on the project.

PM Challenges

Having a complex profession (that requires performing multiple roles within one) such as that of an instructional designer can bring challenges. The instructional designers graciously discussed some of the common challenges that they faced in the project management aspect of their role. These challenges, and how they worked to avoid and overcome them, can provide valuable lessons for others. Two codes emerged from the analysis, PM Challenges and Avoid/Overcome PM Challenges, that fall under the PM Challenges theme.

The most relayed challenges were receiving information, materials, and or feedback at the last minute, managing time, and managing people and expectations. It is important to step back and explain that instructional designers are not necessarily (and usually are not) subject matter experts on the topics that they are tasked with designing learning experiences for. Therefore, they rely on subject matter experts such as faculty members and business people to provide accurate and timely information that can be designed into learning units. This is where the most predominant challenge that instructional designers described comes in. They often cannot perform their project management (or instructional design) duties without the input of SMEs, sponsors, learners, reviewers, and or other stakeholders. When they get materials late, for example, this can throw the project off schedule. Eve explained that:

> We receive materials at the last time and sometimes it's impossible to manage and design and deliver on time. We do as we can. Sometimes we depend on someone else to give us the content and then to review the content, to make the corrections, and then deploy the project without errors. That's a big challenge, managing time...

When the instructional designers receive the necessary content past schedule, the instructional designers have to influence others to help them meet the established deadlines and keep the project moving to completion. Ann explained:

> “I think the most common challenge is faculty responsiveness. You can have a strategic plan, and you can have expectations, and you can have all of these things very efficiently communicated, and laid out, but ultimately, you're not in control of what faculty do.”

The learners, whether they are college students or business learners, are depending on them to get the learning materials completed in a quality and timely manner. Also, college and business leadership have their own expectations – and being behind schedule is not one of them.

Kay helped to explain the challenge of managing expectations and educating others, "So a lot of times it is customer management and education…they don't understand or they don't yet know all of the work that goes into creating a five-minute e-learning or a classroom or anything like that so their expectations are you can turn this around in two weeks or less." The instructional designers must rely on others in order to do their jobs (this is true for both the design and project management aspects of their role) and this is where having project management skills really comes in handy. In order to avoid and overcome these challenges, they must know what to do and how to do it. The instructional designers shared strategies that they use to proactively avoid and even overcome the challenges that they often encounter in directing learning design projects to completion.

Communication, communication, and more communication was the chorus that the instructional designers sang with regard to addressing project management challenges. In addition to communication, setting and managing reasonable expectations and building relationships and trust were also emphasized. However, none of these other things can happen without communication. Ann summarized the needs for avoiding and overcoming project management-related challenges nicely:

> First and foremost, it's setting reasonable expectations for your faculty, and for yourself, and realizing what the limits and what the boundaries of your job include. I think that's helpful. I also think effective communication with faculty members, and with program chairs and the organizational level people that do have a little bit more decision-making and influence over faculty is really important. Keeping them in the loop on progress, and issues, and building relationships with them to support what you're trying to do is essential.

The instructional designers pointed out that getting to know the people that you work with, including your project teams, builds trust and rapport. Open communication and establishing relationships built on mutual respect and trust allows for a positive and productive working relationship, which promotes collaboration and project success. That is what Sandra was referring to when she explained the importance of meeting with her SMEs and project teams, "I would spend about half an hour conversing, getting to know them, getting to know what issues and challenges they face." Building relationships also helps the instructional designers with the project management aspect of their role in that it allows them to lead from a position of influence. Anthony shared his insight on in-person communication, "Stakeholders are not meeting face-to-face very often, and I know, I'm all for web conferencing and teleconferencing and things like that, but there needs to be some face-to-face where you get down and you really hash out a lot of these things and deal with expectations up front and go in there prepared, and then develop a social relationship so that when you go back you can talk to them." The participants eagerly described how the critical pillars of communication, building relationships and trust, and managing expectations helped them successfully avoid and overcome project management challenges.

PM Insights

The PM Insights theme encompasses the participants' feelings about how they were prepared to manage projects, how they perceived their project management experiences (in practice), and how they felt about the project management models and tools that they used. Three codes surfaced during the analysis process that fall under the PM Insights theme: PM Preparation Feelings, PM Experience Feelings, and PM Models/Tools Feelings. PM Preparation Feelings portrays how the instructional designers felt about their educational and professional

backgrounds and how their backgrounds prepared them to manage learning design projects. The participants' preparation to manage projects included higher education as well as self-study, on-the-job training, and mentorship. PM Experience Feelings describes how the instructional designers perceived their experiences in managing projects, including how they felt managing projects earlier in their profession and how they felt more recently. PM Models/Tools Feelings represents how the instructional designers felt about the models and tools that they used in managing projects and the effectiveness of the models and tools from their perspectives.

The amount and quality of education, training, and guidance that they received early in their careers impacted how the instructional designers felt about their preparation. The instructional designers almost unanimously acknowledged that their higher education preparation did not include courses in project management. However, their experiences in gaining higher education helped them prepare for project management indirectly. They gained valuable planning, time management, resource management, and prioritization skills that would help them in their future profession. Several participants mentioned that they had planned to go back and learn more about project management earlier in their careers because they received very little (if any) formal education through their academic studies. Mari shared, "Honestly there have been times where I've thought, oh my gosh, I wish I had some more formal management training." Mari further explained:

> Definitely no formal training in project management at all…I think that would be highly valuable. No. Everything that I have learned has been just on-the-job, figuring things out, suggestions from colleagues.

Israel thought that he could have benefited from project management education earlier in his career. He explained, "I think I intended to go back to school and get a MBA, and I intended to take classes on project management." Mentorship was reiterated as an effective way to learn

instructional design and prepare to manage projects. Israel was very thankful for his mentor, who had helped him learn instructional design and project management. Speaking of his mentor, Israel restated, "Yeah, it's been an awesome ride … I'm so thankful for that guy for taking a chance on me and given me a career." An excerpt from Israel's textural description highlights the impact of mentorship on his experience:

> This man took me under his wing and taught me all about instructional design for six and a half years. Being an apprentice with him is how I became an instructional designer – he essentially gave me my career. The company was small so everyone had to take on multiple roles. The instructional designers were also responsible for managing their projects… Throughout my career, I have had different iterations of being an instructional designer, project manager, or both so my foundation with that company served me well.

Ann shared a similar perspective:

> Thinking back to my first job where I had to manage projects, I was not offered any formal project management training. However, I was paired with a very good mentor. She taught about project management and strategic planning.

Eve had benefited from some project management training early in her career, which probably helped her have a positive perspective on her preparation. Eve shared:

> I think the program that I took was really well designed. I didn't feel bad about how to manage a project. I know that it's different from theory to practice but I don't remember that I didn't feel competent on doing that. I really learned a lot through my job experience.

The participants also imparted how they perceived their experiences managing projects in practice. Sandra expressed that, "Early on I was like a headless chicken." Because she had no formal education or training in project management, she felt overwhelmed and unprepared to effectively manage her learning design projects. Sandra went on to explain:

> In the beginning I felt crazy because there were a number of things that had to be done. I could not keep all of it in my head, and I could not do it in the way that I wanted to, so I felt really crazy…There were days when I felt really frustrated because I knew I was not managing my projects in the way that they should be. I always felt that there must be a better way to do this. This is where the self-study came in, and once I was able to get a

> handle on things, I recognized the need to do some training in the area so that I could further enhance my skills.

There was a clearly discernable difference between how the instructional designers perceived their practical experiences in managing projects at the beginning of their careers versus how they felt about managing projects after they had gained more experience. The benefits of having the time and space to enhance their skills through application were obvious. Eve described her perspective:

> I feel confident in my ability to manage projects but I do face challenges in doing so. One challenge that I face often is receiving materials at the last minute and sometimes it is impossible to design and deliver on time. It is a challenge having to depend on others and managing time for yourself and stakeholders. I hear this from other instructional designers as well. To help combat this challenge, I helped to create some policies and guidelines for my team. For example, I ask to have the content for an online module four weeks in advance. If we are creating an exam, I ask for the content three days in advance. We work to implement these guidelines knowing that we will still get special requests to get things turned around quicker and we will do our best to accommodate those requests.

The knowledge that Eve had built over her career allowed her to recognize, anticipate, and even prevent a challenge that she encountered in managing projects. She was able to implement policies and guidelines to help deter possible issues. Being seasoned in their careers also helped the instructional designers identify best practices such as the need for communication and setting expectations. Anthony described:

> When instructional designers get into their professional positions, they will face challenges. Having practical experience before-hand will help them be prepared to design and manage design projects. For example, one of the biggest challenges that I have faced as an ID is getting client or SME reviews back on time. I can't think of a project where that hasn't been at least somewhat of an issue and I think this is common in the ID field. You have to be able to communicate well to overcome this type of challenge. You also have to set and manage expectations, which also require communication.

The models that the instructional designers used in managing projects, and how they felt about them, seemed to be a factor in their perception of project management. These models were

especially important earlier in their careers, when they were learning to manage learning design projects. Methods like ADDIE and Agile provided them with a model, such as a phased, waterfall, or iterative approach, which helped them learn project management processes. Seven of the eight participants used ADDIE, Agile, or alternated between the models. Only one person reported that she did not use a model at all. However, she used templates to help her plan projects (and often templates are based on established models). Some of the participants expressed preferences for one model over the other. Most of them preferred to use ADDIE. For example, Israel shared, "I've done Agile before. I'm not the biggest fan to be honest."

The tools that the participants employed in managing projects also impacted their feelings and perceptions. The instructional designers expressed how the tools helped them to learn project management and how the tools continued to help them plan and manage projects. The instructional designers seemed to generally have positive feelings about the tools that they used but preferred some tools more than others. They also shared which tools are better in different scenarios. Jean offered, "I think MS Project was good from a director's standpoint and as an admin but I don't think it was good for necessarily communicating with my team." Jean explained that online project management programs were better for communication. Ann shared a similar view, "I do think a project management software, or some sort of electronic support software is necessary. If you are just an individual designer and the process is less detailed, I think Excel..." Even when they did not like the tools, the instructional designers admitted that they were necessary. Although Ann did not like to document things, she knew the importance of documentation. She shared her perspective on using features of the Intervals tool:

> Yeah, I have a love-hate relationship with them because I don't like recording stuff. I generally just feel like I can remember it and it takes more time to record it than I would actually spend doing it. But, there has been different parts where Intervals has really kept me on track and led me down the correct development path.

Generally speaking, the instructional designers used tools on a daily basis to help them in planning and managing projects. Tools such as project management software, those within the MS Office suite, templates, and calendars were instrumental in the project management process– whether they enjoyed using them or not. The instructional designers were continuously seeking improvements in the way they did things, including managing projects and even in the tools that they used. The instructional designers' recommendations, which are described in the next section, also reflected their feelings about their lived experiences in managing learning design projects.

PM Recommendations

The four overarching themes that were previously described, ID/PM Background, PM Role Characteristics, PM Challenges, and PM Insights, resulted in an undercurrent theme: PM Recommendations. These recommendations were made possible through the lived experiences of the instructional designers in managing their projects and each recommendation ties back to an overarching theme. Three codes arose that fall under the PM Recommendations theme: PM Preparation Recommendations, PM Model/Tool Recommendations, and PM Recommendations.

PM Preparation Recommendations represent suggestions that the instructional designers offered to others interested in becoming instructional designers and to academia and industry. These recommendations advise individuals how to prepare themselves to manage projects and suggest how higher education or industry can help prepare instructional designers to manage projects. The instructional designers' recommendations for preparation centered on: (1) learning organization skills and how to manage time and resources, (2) building communication skills, (3) learning from a mentor and your more experienced colleagues, (4) gaining as much practical experience as possible, and (5) learning to use models and tools that will help you in managing

projects. The instructional designers suggested that individuals pursue a higher education in instructional design or a related field (such as curriculum and instruction or educational technology) and a project management certification (PMP) or similar. The instructional designers also repeatedly emphasized the need for practical experience. Even if people have the opportunity to learn fundamentals of project management through their academic studies or through certification, they will still need to seek opportunities to gain experience. Students may learn how to follow a project management model or process and that is a good start. However, as Sandra described, "You don't really have that experience of doing it that gives you that insight on the things that you need to look out for, and that you may need to be aware of in order to do your job better." For example, those endeavoring to enter the field could pursue internships, part-time work, or contract work that allows them to practice instructional design and project management. On-the-job training in project management was also recommended because it helps instructional designers learn the specific project management processes and tools used by their teams. Eve explained, "I think training during the job, it's very important." Sandra's thoughts summed up this recommendation:

> I think there's this need to become PMP certified. But, I think that they must have some experience. They must try to build in some experience whether it is a part of their projects. Even while they are pursuing the certification there are a number of part-time positions that are available.

The instructional designers shared that they learned a lot of instructional design and project management through self-study. Several of them expressed that when they first became interested in instructional design and when they first started practicing project management, they had to do a fair amount of self-study. Even later in their careers, self-study is important for instructional designers because it is beneficial to be able to research best practices and learn new ideas that will help them continue to hone their project management skills.

For higher education, the main recommendation was that colleges and universities should offer some basic project management education through their instructional design (and related programs) coursework. The objective is to help set a foundation for the project management aspect of their future responsibilities. The instructional designers were not necessarily suggesting a full three-credit course in project management but to at least include some subject matter and outcomes to help instructional designers prepare to manage projects. For example, students could be required to plan a learning design project and document how they would do so. Sandra described, “Something like a design project, I think should be built in to any training like that. It could be a course, where the participants have to be engaged in designing a particular project...” Israel explained that the coursework should help people make important connections in their minds between instructional design and project management. He explained that important questions would be answered such as, “What is the connection between project management and the instructional design?" Referring to project management coursework, Jean said:

> Project Management should be an overview or [provide] a general understanding so that the people who are completing can understand how it can add value to their project. But I don't think they should delve deep into it because I don't think it will stick… Basically, just provide a foundation, maybe, in how it's interwoven into what they're going to be doing when they actually get a job.

Ann shared, “Depending on what type of instructional design position you're interested in, I do think that some type of formal project management training would be beneficial. I also think that educational technology coursework for education is helpful because that's essentially how you potentially communicate with faculty.” In other words, instructional designers should also learn how to work with tools used in project management that will help them plan projects and communicate with their project teams. A combination of education, training, and practical experience is crucial.

In industry, it would be helpful for companies and other entities employing instructional designers to offer project management training–especially for hires new to instructional design or project management. The instructional designers emphasized mentorship even more than on-the-job training. Pairing employees with colleagues more seasoned in project management helps them grasp important ideas, concepts, practices, and strategies. Ann relayed, "My first job, I did have a really good mentor who was a dean at the college…She really taught me a lot about strategic planning."

The instructional designers also expressed their PM Tools/Model recommendations. Overall, they recommended using a standard model to manage projects, whether it is ADDIE, Agile, or some other method. Jean described why using a model is helpful when you are new to project management or are in a new project management role. She said, "Particularly getting started to make sure, until you've built your knowledge and you understand the nuances of things that's change, base everything on a model that you're familiar with. You can adjust, find another model as necessary, but in order to start…so that the stake holders trust you and believe you have a foundation, start with a solid model that they can refer to or research."

Several of the instructional designers used online project management software that included ticketing tools and workspaces to share and collaborate. They tended to prefer the online project management tools over MS Project. However, they felt that MS Excel worked well for most projects if they were small enough in scope. For example, Jean thought that MS Project worked fine for project scheduling, but believed online project management systems were better for communication and collaboration. The instructional designers definitely leaned toward tools that allowed for collaboration. That is a major reason why Anthony liked Google Docs. He explained, "Personally I found when we were working with scrum that Google docs really was

handy at a very initial level before we got into things that we couldn't have risked being seen." The instructional designers were also generally open to change when it came to tools and technology if they perceived that it would improve the project management process. For example, Eve wanted to move from the current project management tool that her team was using, Trello, to Asana. She said, "Right now I'm using Trello but I'm probably going to move to Asana in the near future so I can document every step of my projects and share the progress with them so they don't have to ask me by email…" One tool that several of the instructional designers reiterated as helpful in project management was their calendars, which helped them in time management, organizing meetings, and project planning. Kay's structural description best illustrated the instructional designer's universal perspectives on project management models and tools:

> Kay and her team relied on the ADDIE model for project development. They embraced the model and had become increasingly precise in how they followed it. They had built templates and developed processes to help guide the team through the different phases of ADDIE. Kay's team also used a variety of tools to help them manage projects. They created project plans in Excel and used Outlook emails and their calendars. Her team "put things on people's calendars and sent many emails." They also used One Note as a communication and collaboration tool. Both Outlook and One Note helped her communicate and collaborate with the project team.

Project Management Recommendations offered by the instructional designers were suggested specifically for the practice of instructional design. These recommendations focused on the importance of communication, collaboration, and building relationships, as well as the need for setting and managing expectations, contingency planning, and documentation. Eve stated, "I think communication, it's a big key." Communication is vital in building rapport and strong working relationships where people work well together to accomplish common goals. Meetings were reiterated as an important aspect of communication that brings people together to work toward creating learning programs. Sandra shared that in managing projects, "You have to be

having those meetings. You're constantly in meetings trying to get people back on track, and you have to be supplementing the work that they do in order to meet the quality standards." Setting and managing expectations was another recommendation and, of course, communication is a part of managing expectations. Communication, managing expectations, and building trust all go hand-in-hand. For example, being honest with customers helps instructional designers build trust. That is why Israel shared, "I don't like to play games. I like to be honest with my clients and say you're probably looking at this taking you four to six months." Customer/stakeholder education was another important part of setting and managing expectations. Eve shared that, "When I started to work here I felt that the people that I work with didn't know the effort and time that it takes to produce anything online. I think they need to know how the process works, like how many people are involved in a project, how long does it take to produce a video, who needs to be involved…" In other words, you cannot successfully manage expectations without educating others on the instructional design/project management process. People have to know things like what is involved in the instructional design life cycle and how long does a certain type of learning deliverable typically take to develop in order to have realistic expectations. Contingency planning involves having back-up plans for when the unexpected occurs in a project. The unexpected could be something like getting content too late from a SME, receiving feedback late from a sponsor, a person on the project becoming unavailable, or a system being deployed later than planned. Having a Plan B and C allows the project to keep moving forward more smoothly. This is evidenced by an excerpt from Anthony's textural description:

> Contingency planning was another important aspect of my role. When we had a deadline coming up and only had 49% of the content developed and didn't have enough time to finish, we had to have backup plans.

Finally, the significance of documentation could not be overstated by the instructional designers. Documentation provides a reference for what was going on at a specific point in a project and

may provide necessary proof of why a project went off track, recorded opportunities for improvement/lessons learned, or project successes. To Eve's point, "You have to have everything documented."

Kay's description summarized the instructional designer's recommendations for the practice of project management: "If you communicate clearly with your customers and you can learn to communicate clearly with your leaders, with your manager, and so once you have that what does success look like in my job – it is just making sure that you hit that mark and that we're exceeding it and it just goes back to that clear communication of what is expected and also where are things and if they slipped why did it happen and just being I guess honest." Therefore, based on the recommendations shared by the instructional designers, successful project management involves communication, building relationships, managing expectations, organization and planning (which models and tools assist), collaboration–helping others execute in order to meet project goals, and documentation.

Answers to Research Questions

The research questions guided the inquiry into the instructional designers' experiences in managing learning design projects. In fact, all of the questions in the interview protocol were based on the research questions. The main query of the study was, "How are instructional designers managing their learning design projects?" However, the specific research questions aimed to examine the participants' lived experiences from various angles and capture the overall meanings and essences within them. Therefore, the remainder this chapter details each research question, with accompanying explanations of the findings and some supporting excerpts from the interviews.

1. *What project management responsibilities do instructional designers have?*

The instructional designers' primary project management responsibilities included: (1) creating project plans – which required gaining an understanding of the learning needs, timing, and other project requirements, (2) regular communication – which included stakeholder education, managing expectations, scheduling and hosting regular meetings and checking in with SMEs in between meetings, (3) keeping the project on schedule – which involved facilitating collaboration and the development of deliverables, and (4) making adjustments – which comprised implementing contingency plans, as needed. It is important to reaffirm that communication facilitated the promotion of fruitful working relationships and the building of trust amongst their project teams. Establishing rapport helped the instructional designers positively influence project teams to stay focused on their shared learning delivery goals.

2. *How are instructional designers prepared to manage projects?*

There was no one way in which the instructional designers prepared to manage projects. There were a variety of ways and it usually involved a multi-dimensional approach to learning project management. First, the instructional designers obtained a higher education. Gaining a higher education helped them in multiple ways. For example, higher education may have helped them to learn the science of instructional design, understand communication, or how to employ educational technology. Regardless of their specific area of study, earning a higher education helped them gain planning, organization, prioritization, and overall time management skills that they believed helped them later in managing learning design projects (even though their coursework most likely did not include a focus on project management). Second, the instructional designers pursued work opportunities in related fields such as education and business. These work experiences allowed them to build relevant knowledge and skills that

eventually progressed into instructional design and project management positions. Mari explained this part of the phenomenon very well:

> I feel like there were a lot of transfers that I could make from my background in education. When you're planning out a school year and you're planning out units you're going to teach, and lessons you're going to teach, and how you're going to prepare students for a concept that's six months away, there's a lot of project management involved in that.

The instructional designers explicitly described how project management skills transferred from their experiences in higher education and or from previous work experiences. Working in instructional design or related fields also put them in close proximity to work with seasoned instructional designers, project managers, and other professional roles, which also brought them into valuable mentor-mentee relationships. A couple of the designers benefited from on-the-job project management training programs, which they would never had been able to take advantage of if they were not working in the field. One could say that making the most of opportunities leads to more opportunities. The instructional designers were also more than willing to pursue self-study opportunities, doing their own research on project management and taking advantage of workshops and other forums. More than anything, the instructional designers emphasized experience. Most of them had no formal education or training in project management so they truly learned through experience, which means they had to learn from both successes and mistakes along the way. As Eve pointed out:

> Nothing has prepared me better than my work experience. I do feel that what I have learned has helped me be successful in managing projects. Yet, I intend to pursue more education and training in project management because I know I can get better at it, because it is an interest of mine, and because I want to obtain a project management position here in the states.

3. *What models, methods, tools, and technologies do instructional designers use to manage their projects?*

The most critical project management-related responsibilities, including facilitating communication and collaboration, creating project plans, maintaining project schedules, and holding meetings, could not have been done without the benefit of established models and methods or commonly used tools and technologies. For example, several of the instructional designers mentioned using forms and templates to help them with managing their projects. These documents were utilized for anything from project planning templates, to communication templates, to project evaluation templates. Many of these documents (e.g., project plans and scope documents) are based on established models like ADDIE. Although ADDIE describes the phases of an instructional design and development life cycle, some instructional design teams also use ADDIE as a project management model because it aligns with the instructional design life cycle. Therefore, they plan their project phases based on analysis, design, development, implementation, and evaluation. Eve explained how using forms helped her to learn aspects of project management:

> I remember that they had to create these forms for the whole team so we need to fill out those forms every Friday. I learned from them since I wasn't a project manager, but I learned from them what I needed to complete every stage of my project. When I was moved to a project manager then I think I ... I [had] learned from them.

Tools and technologies were also instrumental in helping the instructional designers manage projects. These tools provided the mechanisms by which the instructional designers were able to plan and execute their project management responsibilities. As previously described, the instructional designers used MS Office products such as Excel and Project, collaboration tools such as Google Docs, One Note, and other online collaboration tools, project management tools such as Apollo, AVANA, Intervals, and Trello, calendars, and templates. It was also mentioned

that project management involves a fair amount of writing, so other software products including MS Word and PowerPoint and Adobe Acrobat are also employed, especially during project planning. Certain tools also help with the communication aspect of project management. Most of the participants described how important their calendars and email tools were in managing projects. The instructional designers would send reminder emails when milestones and deadlines were approaching and they would calendar meetings and block out work time prior to due dates. They also used teleconference tools such as WebEx, Skype, and Go-to-Meeting to host team meetings, which helped in their project planning and in helping to keep projects on track. Collaboration tools such as Google Docs and One Note allowed for the sharing of ideas, templates, examples, and other documents. Content management and learning management systems and allowed shared access to learning content and deliverables. Eve provided an example of a tool, Slack, that integrated a communication tool with project management software:

> We use Slack. It's more like a messaging ... It's not a Skype, it's more than a Skype because it integrates with Trello so you can create tasks from Slack. For example we are in a chat with our team and we are discussing this new project so we're just brainstorming. From there you can create alarms and tasks that go to Trello. That really is pretty neat because it talks with your project management software.

These tools helped to facilitate the free flow of vital information needed for project management and were the conduits for collaborative efforts between instructional designers, SMEs, and other project stakeholders.

4. *What challenges to instructional designers face with regard to managing their projects?*

The challenges that the instructional designers commonly encountered in managing projects and how they worked to avoid or overcome them was a topic of significant discussion during the interviews. The instructional designers consistently described challenges associated with

receiving information, materials, and or feedback later than planned, managing their time and the time of others, and managing people and their expectations. The main way that they tried to avoid and overcome these types of challenges was through communication. Communication in the context of managing learning design project means working with stakeholders such as clients to determine learning and timing requirements, getting buy-in on scope documents and project timelines, holding meetings to discuss project status and contingencies, providing regular emails or status reports to keep everyone updated, sending and receiving input and feedback, and discussing many other project considerations and tasks. Building relationships and providing education, which are not possible without communication, were also reiterated as important ways to avoid and overcome project management challenges. Anthony explained that the primary challenge he faced was not getting client feedback on time, which he resolved through stakeholder education and managing expectations. Anthony voiced:

> Probably the most common is not getting client review back on time. Not ... it's basically client performance or SME performance because as a manager you can control your own team, or you should be able to, you know? To a reasonable extent. But you've got outside variables and that is the client, and if they have the subject matter experts that are going to review things, well you're at their mercy. Take managing expectations, for example. A crucial part of managing expectations was educating SMEs and other project stakeholders on what the instructional design process entails and providing a general idea of how long it takes to create different types of learning materials.

As previously explained, instructional designers do not work in a vacuum. In order to successfully manage learning design projects they must collaborate with and depend on others from the beginning of a project to the end. They rely on SMEs for content input. They rely on other instructional designers for quality assurance feedback. They rely on SMEs, sponsors, and managers for reviews. Their position often requires that they lead a project from a position of influence, not power. Hence their need for finesse: the ability to work on their own learning

deliverables while encouraging and helping others do their part (all with a ticking clock over their heads). Jean also described a dilemma requiring customer education:

> There were a couple of times where staff or team members would just say, "Just do it. Write the measurable objectives. Tell me what's a good question for this particular learning…Just do it – tell me what it is." And I'd say, "That's not the process. If I do it, and when you go to your next course, you're gonna ask me to do it again. We need to go through this process so you understand it." So it was more understanding my role as the instructional designer on the project and them understanding that, yes, they were subject-matter experts, but because of culture at the university, it was not just... They also had some responsibility for building the course. It's not just, "you provide me the content, I build it, and you teach it."

All of the challenges described by the instructional designers had a common thread – the ever present need for communication. Yes, the instructional designers had models, tools, and other resources to help them navigate through achieving their project management responsibilities. However, they needed a substantial amount of competence in a multitude of areas to be able to effectively use these models, tools, and other resources. They also needed the practical understanding to apply their hard-earned knowledge and to take advantage of their well-earned relationships in managing projects.

5. *What best practices in instructional design project management can be offered?*

The instructional designers' stories offered best practices for learning design project management. These best practices were revealed in the positive stories that they shared, the challenges that they described, and the recommendations that they offered. First, it is necessary to pursue a background in education and work experience to become prepared to successfully manage projects. This path is not the same for everyone. However, just having a higher education and work experience in a field such as education, business, technology, and or instructional design helps to build a foundation of prior knowledge that can be built upon. Having an education and work experience also helps in acquiring skills that are transferable into

project management including time and resource management, organization skills, and communication skills. Gaining training in project management or a certification can be even more beneficial. Second, once you are an instructional designer charged with managing projects, rely on established project management models to help you learn the general processes involved in project management. Learn the specific models, processes, and tools that your team uses. It is very common for teams to employ project planning templates and other documentation such as project charters and scope documents. Use the templates and documents as tools to facilitate your learning and project management success. Communicate well and communicate often in planning and managing projects. Communication was the unanimous idea expressed by the instruction a designers. Ann said, "I think effective communication with all the parties involved is the whole key to project management." Meet face-to-face, when possible, and use modern teleconference or videoconference technologies to help everyone get and stay on the same page about the projects. Be willing to educate others on the instructional design process and to explain what and how long it takes to create different types of learning materials. Collaborate with your SMEs and other stakeholders. Understand that you will have to rely on others from the start to finish of your projects. It will not be possible to complete every task, milestone, or deliverable on your own. Build relationships with people so that they trust you and you trust them. Encourage others to meet their project goals and be an example by doing the same. Demonstrate your knowledge and do what you say you are going to do. Again, use available tools and technologies (e.g., One Note, Google Docs) to promote collaborative efforts. Set contingency plans for when the unexpected happens during the course of a project. Communicate the need and implement those plans when necessary. Finally, respect the importance of documentation. Kay shared, "Make sure that you're smart with your

documentation." Get sign off from the appropriate people at each phase of your project. Document your timelines, contingency plans, and even meeting notes. Document when changes are needed. Document everything.

Summary

Chapter 4 presented the results of the in-depth interviews conducted with the eight instructional designers. The results were derived using a data analysis process based on a combination of Creswell's (2013) and Moustakas's (1994) guidelines for qualitative analysis in transcendental phenomenological studies. The purpose was to understand and capture the lived experiences of instructional designers in managing learning design projects and describe the essence of their shared lived experience. The qualitative data analysis process was thoroughly detailed and the resulting codes and themes were described. Examples of first-person textural descriptions of the interviews were presented. In addition, structural descriptions (based on the interviews) were provided. Synthesis of the meanings and essences was conducted, resulting in a composite description. The composite description, which represented the group of participants as a whole, captured the essence of instructional designers managing learning design projects. An exploration of the five identified themes was offered along with accompanying quotes and excerpts from the participants' interviews. Finally, responses to the research questions were presented. Responses to the research questions focused on the expressed lived experiences of the instructional designers, and also included their quotes and excerpts.

Chapter 5

Conclusions, Implications, Recommendations, and Summary

This chapter expands the findings of the investigation into the lived experiences of instructional designers in managing projects. The chapter presents conclusions, implications, recommendations, and a summary of the phenomenological study. A comprehensive conclusion is provided based on the analysis performed and the results achieved. The conclusion includes a discussion of the strengths, weaknesses, and limitations of the study. Then, the impact of this study on the field of instructional design is discussed, including implications on potential future research. Next, recommendations for changes in academic and professional practice are offered. Finally, a comprehensive summary of the dissertation is presented.

Conclusions

The goal of the study was to capture and describe the lived experiences of practicing instructional designers as project managers, to confirm factors that influence how instructional designers manage projects, and to identify factors that influence how they feel about managing their projects and their preparation to do so. In order to achieve profound insight into their lived experiences, phenomenological interviews were conducted with eight instructional designers who were engaged in project management. Employing the detailed phenomenological analysis process revealed important themes from within the instructional designers' stories. The identified themes were ID/PM Background, PM Role Characteristics, PM Challenges, PM Insights, and an undercurrent theme – PM Recommendations. Multiple levels of reflection upon the themes facilitated a deeper understanding of the phenomenon and allowed conclusions to be drawn.

First, appropriate preparation is the foundation for the practice of instructional design project management. The path to being able to successfully fulfill the role and execute its multifarious responsibilities is not the same for everyone. However, certain prerequisites were reiterated by the instructional designers. A background that includes higher education, preferably at the graduate level, is desirable. The reason why is two-fold. Knowledge is gained in the subject matter (e.g., instructional design or educational technology) and that is critical. In addition, earning a higher education helps individuals set the foundation for future learning and allows them to start building basic project management skills such as time and resource management, organization and prioritization, communication, and documentation. Colleges and universities may facilitate the development of project management skills for their students pursuing instructional design (and similar studies) by including pertinent topics in their coursework. However, higher education is only a part of the equation. Of all of the ideas that they shared, the participants emphatically expressed the need to acquire experience the most. Again, there are a variety of ways to gain experience – even for those new to the field. Scenario-based learning at the college level that allows learners to plan and execute a learning design project, pursuing internship opportunities, and working part-time are just a few examples.

Once individuals have entered the field of instructional design, there are various ways to build upon their prior knowledge and grow their project management skills. Self-study can start to bridge the gap between what was taught in college (or what was learned in previous positions in other fields) and the knowledge and skills needed to manage instructional design projects. Mentorships are another avenue that allows individuals to build their project management abilities. Even an informal mentorship, working under the leadership of a more seasoned instructional designer or project manager, is beneficial. On-the-job project management training

and pursuing programs such as a PMP certification helps individuals form sound project management proficiencies. Finally, it is important to reiterate that experience is critical. Gaining practical experience takes time and effort but it helps instructional designers learn the methods, processes, tools, and technologies used by their teams. The more experience they gain, the better they may get at planning, organizing, avoiding common challenges, and overcoming project management-related issues in order to keep their projects moving to completion.

The instructional designers' primary project management responsibilities included identifying project resource and timing needs, creating project plans, scheduling and hosting regular meetings, collaborating on deliverables, staying in communication with the project team and other stakeholders in between meetings, being an example and encouraging others to keep the project on schedule, and implementing contingency plans as needed. Communication is the most critical factor in project management. Everything from determining requirements, to creating project and contingency plans and obtaining sign-off, to getting feedback on created deliverables requires communication. Closely tied to communication is building trust and relationships with project team members. The instructional designers stressed the need for constant communication and the building of relationships because rapport helps people work better together, which drives project success. The importance of contingency planning was also expressed by some of the instructional designers because projects can be as unpredictable as people. Having options to move the project forward when something unforeseen occurs (like getting input from a SME much later than expected, an unforeseen change in the requirements, or the departure of a team member) helps the project continue to move forward. Building extra time into a project plan, for example, allows projects to run smoothly when content is received a few days behind schedule. Documentation was also reiterated as a crucial aspect of the participants' project management

responsibilities. It was necessary for them to document at every stage of the project – from initiation and planning of the project through design and development of deliverables to implementation and evaluation.

The instructional designers described common challenges that they confronted in managing their projects. These included receiving information, materials, and or feedback later than expected, managing time and other resources, and managing people and their expectations. Addressing these persistent challenges involved a combination of communication efforts, proper planning and organization, and stakeholder education. Educating customers, project team members, and other stakeholders on the instructional design life cycle helps those not as familiar with the process better understand what time and efforts are necessary to develop different types of learning solutions. It is a means for setting expectations and managing them later on. Meeting with academic or business leaders early in the life of a project helps to facilitate shared understanding of project needs, build communication channels, and foster positive working relationships that help projects be successful. Communication is probably the biggest aspect of overcoming project management challenges. Therefore, it is important to hold regular meetings, send project status updates, and just pick up the phone or chat with project team members. The instructional designer shared examples from their experiences of how communications looks in real life. Meet in-person with the project stakeholders early on to discuss learning needs. Encourage a SME to block out time on their calendar to work on providing content or feedback. Hold working meetings to collaborate on a task. Use available collaboration tools to review deliverables and provide feedback. These are just a few examples but the point is that communication is essential to avoiding and overcoming project management challenges because

it facilitates planning and collaboration – and project management is all about planning and collaboration.

The instructional designers relied on models such as ADDIE and Agile to help in planning and executing their projects. They tended to favor ADDIE-like methods. However, a couple of the designers expressed a preference for Agile methods. The instructional designers also relied on tools and technologies to help them in various aspects of their project management responsibilities. For example, they used their calendars to help them in planning and in setting up meetings. They used email, instant message, and teleconference technologies to aid in communication. They utilized MS Excel and Project and online project management software to manage tasks, milestones, and deliverables. The instructional designers also employed programs such as MS Word and PowerPoint to create their project charters, scope documents, design plans, and other documentation. The instructional designers' insights provided valuable descriptions, examples, and best practices for academia, industry, and individuals.

Gaining understanding of how instructional designers were managing their projects (and how they were prepared to do so) paved the way for project management-related recommendations to be offered. These recommendations included how instructional designers can successfully prepare to manage learning design projects and how they can effectively manage learning design projects in practice. Achievement of the goal of the study was measured by the ability to offer recommendations for the preparation and practice of instructional design project management. All resulting recommendations were based on the experiences reiterated by the study participants during their interviews. As previously described, recommendations for preparation to manage projects focused on gaining organizational skills, learning how to manage time and resources, building communication skills, working with a mentor and other more experienced colleagues,

gaining as much practical experience as possible, and learning to use models and tools that aid in managing projects. Recommendations for instructional design practice emphasized the importance of communication, collaboration, and building relationships, as well as the need for setting and managing expectations, contingency planning, and documentation. No one says it better than the instructional designers themselves and Sandra offered an excellent précis:

> I know that I have shared a lot, but it really boils down to a few things. First, be prepared – the more prepared the better. Education is important and practical experience is paramount. Keep everyone informed of what is going on in a project. Meet as needed. Communicate and build rapport with people. Delegate and collaborate with your team. Use your tools effectively because they can help you successfully manage projects. Finally, follow an established and proven QA process. All of these things have helped me immensely.

As with any in-depth inquiry, the investigation into the lived experiences of instructional designers managing learning design projects had its strengths, weaknesses, and limitations. The next section describes these characteristics.

Strengths, Weaknesses, and Limitations

The greatest strength of this study lies in its concentration on the instructional designers and their stories. It was believed from the inception of the study that their voices would provide the most profound insight into the phenomenon. Learning about their backgrounds and how they came to be instructional designers managing learning design projects; hearing the resounding commonalities that they shared such as shared passions for education and learning and interests in creativity, organization, and technology; absorbing their feelings about their backgrounds and experiences; and discovering the scenarios, examples, practices, and recommendations that they shared was an extremely meaningful and memorable experience. One that offers a tremendous amount of vision into what it takes to be an instructional designer managing learning design projects and what it feels like to be one.

There are a couple of noteworthy weaknesses of the study. First, there were only eight participants, which is a small sample size. Creswell (2013) recommended using a small number of participants ranging from three to five participants at the low end to 10 or 15 participants at the high end. Phenomenological research requires probing deeper into understanding the lived experiences of each participant with a goal of capturing the essence of their shared lived experience. The quantity of participants is not the focus because it is more important to utilize the in-depth interviews and the detailed analysis process to get to the main goal – the essence. Therefore, the aspiration of this study was to have between five and 10 participants. Although employing a larger sample size could have provided additional insight, having eight participants was a good number to be able to dig deeper into each participant's story and capture the essence of the phenomenon.

The study was limited by criteria. Participants had to possess a formal education in instructional design (or a related field of study), at least one year of instructional design practice, and experience in managing projects. Broadening the criteria might have brought additional perspectives. However, that was not the point of the study. In order to respond to the research questions, for example, it was necessary to have individuals that had actually managed projects. If they had limited experience in managing projects, they would not have been able to answer questions related to managing projects. Even focusing on instructional designers with a least one year of experience allowed for the type of perspective that was sought for the study. The researcher wanted people to be able to reflect back on their educational and professional backgrounds and share their thoughts and feelings on both. What would they change if they could go back? What would they recommend for others who are interested in pursuing a career

in instructional design? The participants needed to possess the criteria in order to answer important questions.

Implications

The instructional designers' interviews were rich with insights, scenarios, examples, and straightforward recommendations ranging from accounts of their academic studies, previous positions outside of instructional design, experiences in managing projects, and how they used various methodologies and tools. Therefore, implications of this study reach academia, professional practice, and future research. In addition, no other known study has endeavored to describe the phenomenon of instructional designers managing projects based solely on the shared lived experiences of practicing instructional designers.

It was reiterated in the literature that project management is a competency for instructional designers. For example, Klein and Juns' (2014) research listed project management as number six on a list of 28 competencies for instructional designers. Although project management is a sought after skill for instructional designers, higher education programs aimed at teaching instructional designers often do not include a focus on project management in their curricula. As previously explained, Williams van Rooij (2011) reported that there are 765 educational technology graduate programs in the U.S. focused on preparing students for careers in instructional design. However, higher education instructional design curricula generally do not include courses in project management and the course descriptions often do not give indication that project management is a topic in the program coursework. The instructional designers shared that academic programs aimed at teaching instructional designers do not have to require full-credit courses in project management. Incorporating a few project-management related outcomes in the coursework would help learners start building basic project management skills.

Including a capstone project that requires the planning and execution of a learning design project would expose students to project management methodologies and tools and impart the need for organization and communication.

Institutions employing instructional designers could also benefit from heeding the wisdom shared by the study participants. Both new instructional designers entering the workforce as well as those transitioning from other positions into instructional design roles benefit from onboarding, mentorship, and on-the-job training. The instructional designers underscored the need for practical experience but one has to get there first. Incorporating project management skill building opportunities into the onboarding process exposes new instructional designers to those practices and tools used specifically by the organization. Pairing new designers with more seasoned employees and fostering mentor-mentee relationships amongst employees gives them guidance and allows them to ask questions and take advantage of examples. Several of the study participants represented how learning by example is powerful. Finally, providing on-the-job training or offering employees supported opportunities to take project management training (along with practical experience) helps them hone their skills into proficiencies.

It is also important to note that instructional designers (and those interested in instructional design) must take personal accountability in learning and growing their project management skills. Self-study is an important method of learning project management, as was expressed by the study participants. Self-study is not just a means of learning project management. It is also a way to advance project management skills and knowledge. Also, pursuing opportunities to learn and progress project management skills outside of an organization – either through higher education, certification programs such as the PMP, or various training options is advantageous. Continuous improvement efforts are vital in instructional design and project management.

This study yields implications on future research as companies, government agencies, and other entities continue to invest in training their employees. Professionals, including instructional designers, are expected to take on an increasing amount of responsibility in their roles, which makes training employees more important and lucrative. Companies may consider investing in additional research and development on the impact of effective project management on their training projects. Companies may also want to study the influence of onboarding and mentoring new instructional designers in project management on the success of their training programs. As academia continues to improve their programs to prepare students to practice instructional design, colleges and universities may be interested in considering the effects of including project management outcomes in their coursework and incorporating a learning design project into their curricula. Williams van Rooij's research (2011, 2013) was instrumental in calling attention to the study and practice of instructional design project management. The results of this study, which highlight some of the common challenges that instructional designers face in their preparation to manage projects and the challenges they face in practice, are an impetus to learn more about this phenomenon.

Recommendations

Future research may focus on instructional designers new to the field and get their perspectives on how they feel about their educational preparation and how they perceive their successes and opportunities. The research might also ask the instructional designers what they would do differently in their studies (if anything), what their experiences in managing projects have been like so far, and what recommendations they would offer others interested in pursuing an instructional design career. Participants in this study had instructional design years of experience ranging from four years to 30 years, with an average of 13.5 years of experience.

Because this study focused on seasoned instructional designers, a study that targets new instructional designers would offer a fresh perspective on the phenomenon, which would provide additional insight for academia and industry.

Recommendations for changes in academic and professional practices have previously been described in this paper. For higher education, the central recommendation was that colleges and universities include fundamental project management education through their instructional design-related programs. In addition to adding project management outcomes, the recommendation is that they offer opportunities for practice. Examples include incorporating scenario-based learning of project management in which students are presented with questions, examples, or challenges that they will face in practice and are allowed to offer solutions. In addition, requiring students to plan and execute a learning design project using tools such as MS Excel, PowerPoint, or Project would provide them with opportunities to practice employing project management principles and applying common tools to project management. Planning an instructional design project could even be a part of their capstone coursework. It would also be beneficial for students to work on a learning design project in teams, as doing so is very common in professional practice.

For professional practice, the foremost recommendation was to include project management training as a part of the onboarding process. Providing training on the organization's specific project management practices helps new instructional designers make the transition from what they learned in college or in previous professional positions to what they will be doing in their new role. In addition, it is extremely beneficial to promote opportunities for mentorship. Allow instructional designers to work with seasoned members of the team and to receive support and guidance from their peers. For example, the instructional designers might shadow senior-level

colleagues who can help them grow both their instructional design and project management skills. Alternatively, they may work with project managers (within the training organization or outside of it) if they need more guidance on project management. Companies should also foster opportunities for practice – especially for instructional designers new to the field. One way to foster practice opportunities is offering internships to college students that allow them to practice both instructional design and project management by working on smaller or lower-stakes projects in a team environment. As in other professions, experience is a must. The instructional designers participating in the study stressed that point very well. However, people have to put in the work to get there and they have to be given the time and space to gain the experience.

Summary

Instructional design requires the demonstration of a sophistacated set of competencies including learning and needs analysis, scope documentation and project planning, learning solution design and development, program implementation, and learning evaluation. Not only do instructional designers need to be able to deliver on their various responsibilites, they must be able to effectively use the tools that allow them to do so. A large portion of an instructional designer's time is focused on designing and developing various types of online, classroom, and hybrid learning solutions, learning materials such as facilitator and participant guides, and performance support tools including learning websites/portals, online help, job aids, and reference guides. However, the ability to effectively manage projects to completion and consult with stakeholders such as sponsors, subject matter experts, and learners in order to keep learning design projects progressing to completion is a crucial part of an instructional designer's role (York & Ertmer, 2011). The project management aspect is vital because instructional designers do not work alone. They rely on others such as SMEs, learners, leaders, and sponsors to help

bring the learning content to life. Instructional designers must influence others to keep up with the responsibilities of their roles on the project while also designing and developing the learning program and moving it to implementation and evaluation of the learning. As Williams van Rooij (2013) explained, project management complements the instructional design process by offering a set of repeatable processes with which to describe, organize, and complete each phase of an instructional design project life cycle. Therefore, in order for their learning projects to be successful, it is essential that instructional designers acquire project management skills. A project manager's expertise consists of initiating, planning, executing, delivering, changing, controlling, communicating, and closing projects (Pan, 2012).

The literature has established the need for instructional designers to possess solid project management skills (Pan, 2012; Williams van Rooij 2011, 2013; York & Ertmer, 2011). However, project management is not a significant focus of many instructional design-related higher education programs. Previous research was limited on the experiences of practicing instructional designers regarding how they acquire and manage learning design projects. Williams van Rooij (2013) confirmed that there was little insight as to how instructional designers were preparing for and executing the project management responsibilities of the role, nor how they should be preparing for the project management aspect. In other words, there is a likely gap between how instructional designers are being educated to manage projects and what they are expected to know and do in practice. The problem does not only stem from academic preparation. It also lies in a lack of on-the-job preparation to manage projects. As Williams van Rooij (2011) explained, although the expectation is that instructional designers know how to manage projects, there is limited guidance on how instructional designers should acquire project

management skills, what those skills consist of, and what successfully managing learning/training projects looks like from the instructional designer's perspective.

The aim was to describe the lived experiences of practicing instructional designers as project managers, to confirm factors that influence how instructional designers manage projects, and to identify factors that influence how they feel about managing their projects (and their preparation to do so) with the goal of offering recommendations for priming instructional designers to practice project management professionally. Those closest to the phenomenon, the instructional designers, were best suited to provide the sought-after insight into instructional design project management. Therefore, the researcher conducted in-depth interviews with eight professional instructional designers and recorded the stories about their experiences in learning to manage and in managing learning design projects. The central question that guided the inquiry was, "How are instructional designers managing their learning design projects?" A transcendental phenomenological approach was used to examine the instructional designers' stories in order to capture their shared lived experiences. Analysis of the resulting transcripts revealed meaningful themes amongst the participants. In addition, expressed and implied recommendations for preparation to manage learning design projects along with valuable best practices in learning design project management were uncovered.

Moustakas (1994) explained that transcendental phenomenology entails studying the appearance of things, or phenomena, as they appear to us in our consciousness (Moustakas, 1994). Phenomenology aids in capturing the common meaning of the lived experiences of a phenomenon for a group of individuals (Creswell, 2013). The phenomenon of focus for this study was the instructional designers' lived experiences in managing learning design projects. The research process, based on Creswell's (2013) phenomenological research procedural steps

and the transcendental research process (Moustakas, 1994), involved multiple steps. First, the researcher determined whether a phenomenological approach would best address the research problem. The next step was to bracket the researcher's experiences, consciously considering any possible prejudgments, planning how to avoid letting presuppositions impact perceptions (i.e., epoché), and exercising self-reflection throughout the research process. Then, the researcher obtained consent from the identified study participants. Following was the collection of data through the semi-structured, in-depth interviews with the eight instructional designers. A professional service transcribed the electronically recorded interviews. Then, the researcher analyzed the data through a rigorous phenomenological analysis process to identify codes and themes. Multiple layers of pondering the themes facilitated writing textural and structural descriptions for each participant. The final step of the process was to synthesize a description of the phenomenon–to compose a composite description of the essence of the phenomenon that represented the group of participants as a whole. Implementing the reduction, imaginative variation, and synthesis processes facilitated producing the essence of the phenomenon.

Exploration of the identified themes and research questions supported the findings and the recommendations offered by the instructional designers. The first recommendation is to seek preparation to manage projects, which may involve a combination of higher education, on-the-job mentorship and training, and practical experience. For example, colleges and universities may facilitate the development of project management skills by including project management topics and outcomes in their coursework. It would be even more impactful if education programs offered experiences for practice–such as a project requiring the planning and execution of a learning design project. Córdoba and Piki (2012) recognized the value of exposing project management students to real project situations and allowing project management learners to use,

develop, and reflect on their skills individually and with their peers. Education is only the beginning, however. Instructional designers must continue to build upon their prior knowledge and grow their project management skills. Self-study can help to bridge the gap between what was taught in college (or what was learned in previous positions in other fields) and the knowledge and skills needed to manage instructional design projects. In addition, pursuing learning programs such as the PMP certification or those offered through other academic and professional organizations can help individuals build project management proficiencies and are sometimes a requirement to obtain employment. Mentorships allow individuals interpersonal opportunities to build their project management abilities through shadowing seasoned professionals. On-the-job project management training is also helpful. Building project management training into onboarding experiences helps instructional designers grasp the responsibilities, methods, and tools used in their specific organization. More than anything, experience is paramount. The more experience instructional designers gain, the better they get at planning, organizing, avoiding common challenges, and overcoming project management-related issues in order to keep their projects moving to completion.

The instructional designers' primary project management responsibilities included identifying project resource and timing needs, creating project plans, scheduling and hosting regular meetings, collaborating on deliverables, consistent communication with project team members and stakeholders to keep the project on schedule and implementing contingency plans as needed. The instructional designers reiterated that communication is crucial in project management. Building trust and positive working relationships with project team members also helps projects progress more smoothly. Contingency planning is another important element. Successful project managers build contingencies into the project plan, communicate them with the project

team, and apply them as necessary. Documentation is another reiterated project management requirement. The recommendation is to document at every stage of the project.

The instructional designers described common challenges that they faced in managing their projects. These included receiving content and or feedback later than planned, managing time and other resources, and managing people and their expectations. Avoiding these common challenges involved effective communication, appropriate planning and organization, and stakeholder education. Two things helped the instructional designers with communication and collaboration: models and tools. The instructional designers relied on models such as ADDIE and Agile to help in planning and executing their projects. They also used tools and technologies such as email, calendars, collaborative tools, and online project management software to help them fulfill the various aspects of their project management responsibilities.

Gaining the instructional designers perspectives allowed for the sharing of insightful recommendations. Most of the recommendations came straight from their expressions. Others were strongly implied. Recommendations for preparing to manage projects focused on developing organizational skills, learning time and resource management, honing communication skills, learning from mentors and other colleagues with advanced proficiencies, acquiring practical experience, and learning how to apply project management-related models and tools. Recommendations for the practice of instructional design underscored how communication, collaboration, and building relationships help learning design projects move forward–they are instrumental in bringing learning programs to fruition. In addition, the participants recommended setting and managing expectations (achieved primarily through communication and education), contingency planning, and documentation. Based on their lived

experiences, the instructional designers offered these recommendations as essential aspects of project management.

Appendix A

Instructional Designers as Project Managers Potential Participant Questionnaire

(Recreated as a SurveyMonkey® Online Questionnaire)

Instructional Designers as Project Managers Potential Participant Questionnaire
Principal Investigator: Keshia Nall, Doctoral Candidate
College of Engineering and Computing, Nova Southeastern University

Introduction:
The ability to effectively manage learning design projects, consult with stakeholders (such as sponsors, subject matter experts, and learners), and direct projects to successful completion is a vital part of an instructional designer's role. Although the need for project management education and experience is reiterated in the literature and in cross-industry instructional designer job postings, it is unclear how these professionals acquire and use project management skills and tools in their profession because project management is not a focus in many higher education programs intended to prepare instructional designers.

The goal of this study is to describe the lived experiences of instructional designers in learning to manage projects and as project managers and identify or confirm factors that influence how they manage their projects and how they feel about managing projects.

You are receiving this questionnaire because you have been identified as an instructional designer and have expressed interest in potentially participating in the study.

I appreciate your help in completing this brief questionnaire, which will help me determine your eligibility to participate in the study. It should take no longer than 10 minutes to answer the questions.

If you have any questions or concerns, please contact Keshia Nall at (ln371@nova.edu) or 281-389-2783.

Instructional Designers as Project Managers Potential Participant Questionnaire
Principal Investigator: Keshia Nall, Doctoral Student
College of Engineering and Computing, Nova Southeastern University

Instructions:
Thank you for interest in my research study about instructional designers as project managers. This questionnaire should take you no more than 10 minutes to complete. Select the applicable answer for each question or fill in the blank with your answer.

1. Do you have an undergraduate or graduate degree in instructional design or a related field (such as curriculum and instruction, adult learning, distance education, educational technology, or similar)? Yes or No

   Select your instructional design-related degree type from the list. If you have multiple degrees, select the highest degree level.
   - Bachelors
   - Masters
   - Doctorate

   Please type in the title of your specific degree(s): _____

2. Do you have **at least one year** of practice as an instructional designer in a professional environment (e.g., K-12, higher education, corporate, industry)? Yes or No
   How long have you been practicing instructional design?
   Select from the drop-down list below:
   - 1-3 years
   - 3 to 5 years
   - More than 5 years

3. What type of organization do you work in (e.g., private sector such as manufacturing, retail, or professional services firm; public sector such as federal, state, or local government; education sector such as higher education or K-12; military; non-profit such as a charity or foundation; or other)?

   Please enter a description of your organization: _____

4. Do you manage any of your instructional design projects? Yes or No

   On average, about how many projects do you manage at one time? _____

   Which of the following levels would you say represents the scope of most of your projects?

   Select from the drop-down list below:
   - Individual (small projects)

- Group/Team (medium projects)
- Business Unit or Enterprise-Wide Level (large projects)

5. Are you available for two 45 to 60 minute interviews? (Note that it may only take one interview and the interview may be shorter in duration.) Yes or No

6. Which type of teleconference technology are you most comfortable with using?

   Select from the following drop-down list:
   - Skype
   - GoToMeeting™
   - WebEx
   - Other (enter the name of the tool) ☐
   - None

   If you do not have access to teleconference technology or are not comfortable with using it, are you comfortable with being interviewed over the phone? Yes or No

7. Are you open to being audio-recorded during the two interviews? Yes or No

8. Are you open to reviewing your two interview transcripts for accuracy and providing any necessary changes or clarifications? Yes or No

9. Are you comfortable with discussing challenges that you have faced in learning to manage projects or typical challenges that you currently face in managing your projects? Yes or No

10. Are you comfortable with discussing the tools that you use and sharing project management-related examples, ideas, and recommendations with your peers? Yes or No

*Please provide your contact information. Your contact information will not be shared with anyone and your anonymity will be maintained throughout the study. No identifying information will be included in the research report. This information will only be used to contact you.

Name: _____

Email Address: _____

Phone Number: _____

LinkedIn contact information (optional): _____

Thank you for taking the time to complete this questionnaire.

Appendix B

Instructional Designers as Project Managers Interview Protocol

Instructional Designers as Project Managers Interview Protocol
Principal Investigator: Keshia Nall, Doctoral Candidate
College of Engineering and Computing, Nova Southeastern University

Time of Interview:

Date:

Medium (e.g., Skype, WebEx, Go-to-Meeting, Phone):

Interviewer:

Interviewee:

Description of the Study:

This study aims to investigate the project management-related experiences of practicing instructional designers to gain insight into their common experiences and identify themes from their stories.

Questions:

1. How long have you been an instructional designer? How did you become an instructional designer? What life experiences, education, etc. led you to the career field of instructional design? How long have you been practicing instructional design (i.e., are you a junior instructional designer, instructional designer, senior instructional designer, instructional design project manager, instructional design consultant, or other)? Have you had more than one instructional design position?
2. Describe your current role as an instructional designer. What are your responsibilities? What types of design projects are you currently working on?

3. What are your responsibilities specifically relating to managing your learning design projects? Describe how you manage a project from beginning to end. What processes and procedures do you follow?
4. How did you learn to manage your design projects? For example, did you learn project management as a part of your degree program? Did you take a separate class or course on project management? Did you read certain books, learn on-the-job, etc.?
5. When you first started managing projects, how well do you feel your education prepared you for managing learning design projects? Did you feel that you had adequate preparation on-the-job? At the beginning of any of your instructional design positions, did you feel that you had adequate project management preparation on -the-job? If you could go back what, if anything, would you change in your preparation (either during your academic studies or after) to manage learning design projects?
6. What preparation (academic and or practical) specific to project management would you recommend for individuals considering or planning to pursue instructional design as a career? What types of courses or programs, if any, would you suggest that colleges offer to help prepare instructional designers to manage projects?
7. Now that you have project management experience, do you feel that your experiences have prepared you to successfully manage projects to the expectations of your managers and business? Are you considering pursuing additional training or education in project management? If so, what additional education or training are you considering pursuing?
8. As an instructional designer, what are the most common challenges or dilemmas that you face in managing learning design projects and bringing them to fruition? How do you overcome these challenges? Do you feel that these challenges are common amongst

instructional designers? If so, how do you feel that these challenges could best be addressed holistically (e.g., changes in academic instructional design programs/curriculums, better on-the-job preparation, more support from project stakeholders, better project management methods or tools)?

9. What models, methods, tools, technologies, or techniques (e.g., waterfall, agile, and MS Project) do you use in managing your projects? And how do you use them? How do you feel about using these resources? Has using this method/tool/technology/technique helped you be successful in managing your projects? Would you recommend this method/tool/technology/technique (or another resource) to other instructional designers to help them be successful in managing their projects?
10. What other recommendations, best practices, or examples would you suggest to help instructional designers successfully manage learning design projects? What examples can you share from your experiences in managing projects (e.g., scope document, project plan, communication, etc.)?

Appendix C

Potential Participant Questionnaire Pilot Test and

Interview Protocol Expert Review Documents of Revisions (DoRs)

Instructional Designers as Project Managers Potential Participant Questionnaire
Pilot Test Document of Revisions (DoR)

Question:	Comments	Responses
GENERAL SURVEY FEEDBACK		
Instructions	**Expert 1:** At the risk of sounding pedestrian, stay away from scholar-speak. You are talking to practitioners, many of whom may have not have advanced degrees. Remember what the average reading level is in the US? Eighth grade per the National Center for Education Statistics (NCES). Moreover, your participant doesn't care about the fine details of your methodology. Just say "The goal of this study is …"	Replaced the word "phenomenology" with "study" in the instructions.
Instructions	**Expert 2:** Ok, so this comment is being written AFTER those in the rest of the body of the questionnaire. I think I see now that you plan to send potential participants an e-mail, with this introductory information, and a LINK to the questionnaire. Yes? "You are receiving this questionnaire…" is confusing because there is no apparent link – assuming I have it right.	To address the confusion, I will create an email with these instructions and hyperlink to the online (Survey Monkey) questionnaire.
Instructions	**Expert 2:** Putting myself in the position of the person who has received this link (I am reading this introduction in SurveyMonkey.), I remember that I said I was interested in your study but I am not really sure why I am answering this questionnaire. Are you screening me for eligibility? If so, it would be good to say that.	Changed the wording in the instructions to read: "I appreciate your help in completing this brief questionnaire, which will help me determine your eligibility to participate in the study." The word *questionnaire* will be a hyperlink to the online questionnaire.
Instructions	**Expert 2:** This paragraph seems redundant with information that is actually being gathered in the body of the questionnaire. I would omit it here.	Removed the following paragraph as it is redundant: "At the end of the questionnaire, you will be asked if you would be willing to participate in interviews via phone or Web conference (e.g., Skype, GoToMeeting™, WebEx, etc.). If you agree, you will be asked for

		your contact information (name, email and or phone number). This information will also remain anonymous and will only be used to contact you."
Questionnaire Title	**Expert 2:** Candidate, since this is your dissertation!	Changed the word Student to Candidate.
Questionnaire Instructions	**Expert 1:** You just said on the previous page that they were eligible. Just cut to the chase and start. **Expert 2:** Again, consider redundancy with text on the previous page. Suggest moving it back to your introduction and synthesizing with what is there. Here's your statement of purpose – determining eligibility.	To address Expert 1 and Expert 2's feedback, removed the sentence: "The purpose of this questionnaire is to determine whether you meet the eligibility requirements to participate in the study."
FEEDBACK ON INDIVIDUAL QUESTIONS		
1. Do you have an undergraduate or graduate degree in instructional design or a related field (such as curriculum and instruction, adult learning, distance education, educational technology, or similar)? Yes or No	**Expert 1:** Okay, if you want to get rid of the non-degree holders quickly, do this with a list: Bachelors, Masters, Doctorate, Do not have a college degree. You can then have your survey software take those who don't have a degree directly to the end/thank you message **Expert 2:** I am not sure which questions will "kick" your potential participant out, but it might be good to set the questionnaire up with skip logic (easy to do in SurveyMonkey) so that they only progress through the questions if they pass each screen. So in this instance, if a degree in ID or a related field is required, a "no" answer would take them to a "not eligible/thank you for your interest" page. **Expert 3:** Keshia, You might want to have them select the	Skip logic was suggested by Expert 1, Expert 2, and Expert 3. I will program the degree options into the online questionnaire as suggested using skip logic and directed users through the questionnaire based on their responses. To Expert 3's point, I will have them select their degree from a drop-down list and then type in the title of their degree. Added the following: Select your instructional design-related degree type from the list. If you have multiple degrees, select the highest degree level. • Bachelors • Masters • Doctorate Also added the word *title* here: "Please type in the title of your specific degree"

	degree, BA, MS, or PHD from a drop-down menu and then provide the title of the degree.	
2. Do you have at least one year of practice as an instructional designer in a professional environment? Yes or No How long have you been practicing instructional design?	**Expert 1:** Designers who work in K-12 consider themselves as working in a profession environment. It was not clear to me whether or not you would want to include designers working in school settings. If you don't, you'll have to make that clear here. Also, you really want to know how long they've been a practicing designer, so use a time range (e.g., less than on year, 1-3 years, etc.) to exclude those who have been designers for less than a year. **Expert 2:** Same as above. (Skip Logic) Again, this question would only trigger if the answer to 2 was "yes."	I revised the question to provide these examples: K-12, higher education, corporate, industry. I will program time ranges into the online questionnaire (e.g., 1-3 years, 3 to 5 years, more than 5 years). I will also use skip logic in developing the questionnaire in SurveyMonkey, as reiterated by Expert 2.
3. What type of organization do you work in (e.g., corporation, college or university, industry, military, other)? If you selected other, please enter a description of your organization	**Expert 1:** The industry standard for this is a list consisting of private sector (e.g., manufacturing, retail, professional services firm), public sector (federal, state, local government), education sector (higher education, K-12 if you want those folks), military, non-profit (e.g., charity, foundation) **Expert 2:** Do you want to capture the organization type if it is one of the ones you specified, i.e. not "other"?	Revised examples to read: private sector (e.g., manufacturing, retail, professional services firm), public sector (federal, state, local government), education sector (higher education, K-12 if you want those folks), military, non-profit (e.g., charity, foundation), other. Changed that part of the question to: "Please enter a description of your organization."
4. Do you manage any of your instructional design projects? Yes or No On average, about how many projects do you manage at one time? Would you say your projects are	**Expert 1:** [Referring to the third part of the question.] That's a meaningless question. No two respondents are going to interpret this question the same way. A much cleaner way is to either the size of the project budget (my personal favorite) or scope of audience. For project budget, I use under $10K $10K-$24.99K, $25K-$49.99K, $50K-	I revised the third part of the question to read: "Which of the following levels would you say represents the scope of most of your projects? Select from the drop-down list below: • Individual (small projects) • Group/Team (medium projects) • Business Unit/Enterprise-Wide

small, medium, or large in scale?	$74.99K, $75K-$99.99K, $100K or more. Then I ask for their best guess as to the average project budget. If you take the audience scope angle, ask if the projects are for learners at the individual, group/team, business unit, or enterprise-wide levels. **Expert 2:** These questions would seem to activate only if the answer to 4 was ”yes.” **Expert 3:** You might want to describe what you mean by the terms, small, medium, or large in scale (so that everyone has the same definition).	Level (large projects)” I will use skip logic.
5. Are you available for two 45 to 60 minute interviews? Yes or No	**Expert 1:** Okay, here they are going to ask why you need two interviews, so you’d better be ready for that. Also, think about those who may only want to do one interview. 45 minutes is a lot of time out of the workday.	I agree that this is a significant amount of time out of the workday, but I would rather allow for too much time than not enough. It is possible that only one interview will be needed or that either interview will be much shorter, but it will really depend on how the interview goes and how much the participants share. With that said, I added this to the question: Note that it may only take one interview and the interview(s) may be shorter in duration.
6. Are you comfortable with using teleconference technology? Yes or No Which type of teleconference technology are you most comfortable with using (Skype, GoToMeeting™, WebEx, other)? If other, please enter the name of the technology: If you do not have access to teleconference technology or are not comfortable with using it, are	**Expert 1:** Cut to the choice. Just ask if they would prefer to be interviewed by web conferencing system or telephone. If they say web conference, then only ask about the systems that you yourself have access to. All the web conferencing tools are pretty much the same – you send them a link, they log in. **Expert 2:** If you are open to any sort of communication that works for your participant (seems to be the case), then you don’t really need to ask this	I agree with Expert 1 and Expert 2, I am open to teleconference or phone so this is not an eligibility question. The purpose of me asking about the media is to make sure that I am on the same page with potential participants about the teleconference technologies that we are using. I removed the first part of the question and will create a drop-down in SurveyMonkey for them to select the type of technology that they are using. I will also create a comment box for *Other*. Question revised to read: “Which

you comfortable with being interviewed over the phone? Yes or No	question. You know they are online since they are answering the questionnaire in SM. You can negotiate the interview medium when you call them back, consent them, and schedule the first interview. **Expert 2:** It seems to me that if you are open to using either web conferencing or the phone for doing the interview, these media could all be combined in a single pick list. Perhaps a multiple choice question with "other" option as a write-in.	type of teleconference technology are you most comfortable with using? Select from the following drop-down list: • Skype • GoToMeeting™ • WebEx • Other • None"
7. Are you open to being recorded during the two interviews? Yes or No	**Expert 1:** Are you open to being audio-recorded during the two interviews? **Expert 2:** (Regarding questions 7 – 10) These questions seem more like informed consent questions than eligibility screening questions. Are you using them as part of the consent process? Personally, I would hold off and divulge these expectations when you DO informed consent. Being willing to be recorded is a make or break issue, but it sounds a bit more scary that it is when inserted in a questionnaire like this. When you present it in the IC, you also have to opportunity to describe the measures you will take to protect your participants' privacy. Finally, if some of your participants end up not being around to member check their interviews, you probably won't want to throw that data away, so no point in making that an issue in the eligibility screen.	I added the word "audio" before "recorded" in the question. I see where Expert 2 is coming from but I also want to make sure that they are open to being recorded before I move forward.
8. Are you open to reviewing	**Expert 1:** If they said no to the	I left this question as is. If

your two interview transcripts for accuracy and providing any necessary changes or clarifications? Yes or No	recording, you'll need to adjust this to read "interviewer notes" instead of "transcripts"	potential participants are uncomfortable with being recorded, I may not select them for participation. However, if participants are selected that don't feel comfortable with being recorded, I will change "transcripts" to "interviewer notes" where applicable. My preference is to have transcripts and not have to take detailed notes during the interview as to not interrupt the flow of the conversations.
9. Are you comfortable with discussing challenges that you have faced in learning to manage projects or typical challenges that you currently face in managing your projects? Yes or No	**Expert 1:** What's the point of these two questions. If they are not comfortable discussing their work they should not be working as designers.	I left this question as is. This is really more of a confirmation for participation.
10. Are you comfortable with discussing the tools that you use and sharing project management-related examples, ideas, and recommendations with your peers? Yes or No	**Expert 1:** What's the point of these two questions. If they are not comfortable discussing their work they should not be working as designers.	I left this question as is. This is really more of a confirmation for participation.
Please enter any additional comments you may have here	**Expert 1:** Comments about what? You're only asking if they are willing to participate. **Expert 2:** Do we care at this point?	Both Expert 1 and Expert 2 questioned me including a comment section. I am going to remove it.
Phone Number (optional)	**Expert 1:** This is not optional if they want a phone interview	Removed the word "optional."
LinkedIn contact information (optional):	**Expert 2:** Not sure why you are thinking this. Are you recruiting through LinkedIn? Interesting idea.	LinkedIn is a potential source for recruiting participants. Collecting LinkedIn information in the questionnaire optional provides an alternative way of contacting participants. Leaving it in for now.

Interview Protocol Expert Review Document of Revisions (DoR)

Question:	Comments	Responses
GENERAL FEEDBACK		
Interviewer	**Expert 2:** Will there actually be an interviewer besides you?	Leaving this field for now.
Description of the Study: This study aims to investigate the project management-related experiences of practicing instructional designers to gain insight into their common experiences and identify themes from their stories.	**Expert 2:** Do you intend to use this paragraph to re-cap the purpose of the study prior to interviews? I'm not sure this is a good thing to present in the interview guide (script). This is a list of hypothesized outcomes (themes) that will emerge from the interviews. In good phenomenological form, the researcher should bracket inevitable expectations, so communicating them to the participant is probably not helpful.	Updated the description. I will review the purpose of the study with the interviewees.
FEEDBACK ON INDIVIDUAL QUESTIONS		
1. How did you become an instructional designer? What life experiences, education, etc. led you to this career?	**Expert 1:** You definitely want to ask how they've been in the field. Also, even if they are junior level designers – a self-perception that you may also want to probe – they may have had more than one job so it would be good to know that as well. **Expert 2:** I see the first question as being the principal inquiry and the second question as the "prompt" if the person is at a loss. I know you said not to worry about format, but I think it might	I added another part of this question that says: "How long have you been practicing instructional design (i.e., are you a junior instructional designer, instructional designer, senior instructional designer, instructional design project manager, instructional design consultant, or other)? Have you had more than one instructional design position?" This protocol is just serving as a guide. It is very likely that I will pause between questions and sub-questions, may not ask all sub-questions, and new questions may

	help you, in the heat of the interview, to make some sort of visual note that allows you to pause and let the person think about Q1a before you prompt with Q1b. I'm not going to add comment clutter, but figure that this thought follows through the rest of the script. As interviews go forward, your participants will raise issues that you may want to add to the prompts or make into separate questions. **Expert 3:** This question might provide additional context on the strategies new and veteran instructional designers use in their practice: **"**How long have you been an instructional designer?" Keshia, I was thinking that maybe this question could be reworded: "What life experiences, education, etc. led you to the career field of instructional design?"	emerge from the flow of the conversation. However, I made a note to myself and pause after the first part of the question. I agree with Expert 3 that this is a valuable question. Added as a sub-question. I agree. Reworded the sub-question to read: "What life experiences, education, etc. led you to the career field of instructional design?"
2. Describe your role as an instructional designer. What are your responsibilities? What types of design projects are you currently working on?	**Expert 1:** Describe your current role as an instructional designer.	I revised the first part of the question to: "Describe your *current* role as an instructional designer."
3. What are your responsibilities specifically relating to managing your learning design projects? Describe how you manage a project from beginning to end. What processes and procedures do you follow?		
4. How did you learn to manage your design projects? For example, did you learn project management as a part of your degree program? Did you take a separate class or course on project management? Did you read certain books, learn on-the-job, etc.?		
5. When you first started managing	**Expert 1:** Make it very clear at	Changed the first part of

projects, how prepared did you feel by your education? Did you feel that you had adequate preparation on -the-job? If you could go back what, if anything, would you change in your preparation (either during your academic studies or after) to manage learning design projects?	the start of this question that your referring to educational preparation for the project management piece and not the learning designer piece. If the participant has had more than one job, consider tying this to first job, next job, etc.	the question to read: "When you first started managing projects, how well do you feel your education prepared you for managing learning design projects?" To address Expert 1's point, added a sub-question that reads: "At the beginning of any of your instructional design positions, did you feel that you had adequate project management preparation on -the-job?"
6. What preparation (academic and or practical) specific to project management would your recommend for individuals considering or planning to pursue instructional design as a career? What types of courses or programs, if any, would you suggest that colleges offer to help prepare instructional designers to manage projects?		
7. Now that you have project management experience, do you feel that you have been prepared to successfully manage projects to the expectations of your managers and business? Are you considering pursuing additional training or education in project management? If so, what additional education or training are you considering pursuing?	**Expert 1:** This is a little fuzzy. Are you asking them if experience has prepared them to meet manager and business expectations or whether any PM learning opportunities they may have undertaken (on their own or supported by their employer) have prepared them? If the former, then the sentence fragment should read "do you feel that you are successfully managing projects to the expectations of your managers and business", or "do you feel that that experiences has prepared you to successfully manage …"	I see where this is fuzzy. Modified the first part of the question to read: "Now that you have project management experience, do you feel that your experiences have prepared you to successfully manage projects to the expectations of your managers and business?"
8. As an instructional designer, what are the most common challenges or dilemmas that you face in managing learning design projects and bringing		

them to fruition? How do you overcome these challenges? Do you feel that these challenges are common amongst instructional designers? If so, how do you feel that these challenges could best be addressed holistically (e.g., changes in academic instructional design programs/curriculums, better on-the-job preparation, more support from project stakeholders, better project management methods or tools)?		
9. What models, methods, tools, technologies, or techniques (e.g., waterfall, agile, and MS Project) do you use in managing your projects? And how do you use them? How do you feel about using these resources? Has using this method/tool/technology/technique helped you be successful in managing your projects? Would you recommend this method/tool/technology/technique (or another resource) to other instructional designers to help them be successful in managing their projects?	**Expert 1:** ADDIE is not a project management tool; it's a generic ID model. That said, I know that instructional designers regularly conflate project management with instructional design processes, so you may want to consider asking participants – probably earlier in the interview – what they understand the difference to be. I'm not sure how valuable this information will be. Tools and resources are selected based upon project requirements and vary from project to project. A better approach would be ask to which tools, techniques they have used and for what types of projects. Actually, this might be the ideal to flesh out the extent to which they can differentiate project management methodologies from instructional design methodologies per my comment above. **Expert 3:** You seemed to be asking if there was a certain model, method, tool, or technology, or technique in use by the instructional designer. I am	Removed ADDIE from the examples. I don't know if I need to tie the resources to the specific types of projects, as that is out of scope for what I am aiming to capture. I agree that the wording is confusing. Reworded to: Has using these methods, tools, technologies, and or techniques helped you be

	not sure, because the first part of the question refers to the plural (models, tools, etc.), but the latter part of the question focuses on the singular (method/tool/technique).	successful in managing your projects? Would you recommend these resources to other instructional designers to help them be successful in managing their projects?
10. What other recommendations, best practices, or examples would you suggest to help instructional designers successfully manage learning design projects? What examples can you share from your experiences in managing projects (e.g., scope document, project plan, communication, etc.)?		

Appendix D

Nova Southeastern University Institutional Review Board Approval

NOVA SOUTHEASTERN UNIVERSITY
Institutional Review Board

MEMORANDUM

To: **LaKeshia Nall**

From: **Ling Wang, Ph.D.,**
Center Representative, Institutional Review Board

Date: **March 28, 2017**

Re: **IRB #: 2017-225; Title, "Instructional Designers as Project Managers: A Phenomenology"**

I have reviewed the above-referenced research protocol at the center level. Based on the information provided, I have determined that this study is exempt from further IRB review under **45 CFR 46.101(b) (Exempt Category 2)**. You may proceed with your study as described to the IRB. As principal investigator, you must adhere to the following requirements:

1) CONSENT: If recruitment procedures include consent forms, they must be obtained in such a manner that they are clearly understood by the subjects and the process affords subjects the opportunity to ask questions, obtain detailed answers from those directly involved in the research, and have sufficient time to consider their participation after they have been provided this information. The subjects must be given a copy of the signed consent document, and a copy must be placed in a secure file separate from de-identified participant information. Record of informed consent must be retained for a minimum of three years from the conclusion of the study.

2) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair and me (954-262-5369 and Ling Wang, Ph.D., respectively) of any adverse reactions or unanticipated events that may develop as a result of this study. Reactions or events may include, but are not limited to, injury, depression as a result of participation in the study, life-threatening situation, death, or loss of confidentiality/anonymity of subject. Approval may be withdrawn if the problem is serious.

3) AMENDMENTS: Any changes in the study (e.g., procedures, number or types of subjects, consent forms, investigators, etc.) must be approved by the IRB prior to implementation. Please be advised that changes in a study may require further review depending on the nature of the change. Please contact me with any questions regarding amendments or changes to your study.

The NSU IRB is in compliance with the requirements for the protection of human subjects prescribed in Part 46 of Title 45 of the Code of Federal Regulations (45 CFR 46) revised June 18, 1991.

Cc: Marti Snyder, Ph.D.
Ling Wang, Ph.D.

Appendix E

Participant Textural Descriptions

Textural Description of Eve's Lived Experience

I am from another country but I have lived in the United States for several years now. I started out working at a private university in my home country, which was a pioneer in online education. I have a Bachelor's degree in Communication Sciences and a Master's degree in Educational Technology that I earned from that university. Because I have a passion for education, I would like to study for a Ph.D. in the future but I have little kids to raise right now. I worked for the university in my home country for 10 years before moving to the United States. I have been working for a large U.S.-based university for three years now. I am an instructional designer and have been for 17 years in all but I have also worked as a project manager in the past.

During my undergrad studies in communications, I had a class called educational technologies that I really enjoyed. That's where I learned to love designing content for education. I decided to study for my Master's Degree in Educational Technology at that same university. While I was working on my master's degree, I worked as a facilitator and helped faculty design learning activities and materials for students. I have been hooked on ID work ever since. I have had multiple positions as a learning designer as well as a program coordinator and a project manager but I never stopped practicing instructional design. My formal title right now is learning design specialist.

My current responsibilities include creating online modules for faculty and students. With design comes project management responsibilities, which include creating project plans, monitoring projects, giving feedback and communicating, and making necessary corrections until we deploy the modules. I manage the whole life cycle including testing. I use the ADDIE model as my basis for managing projects and I use Trello to track and manage the projects. However, the project management process that I use is not necessarily a linear one. We use Trello as our project management tool. However, our team may be moving to ASANA, which is different project management software that our web team has just started using. ASANA has more of the project management features that we are looking for like the integrated calendar, built-in charts, the ability to assign projects and tasks to specific people, and to share projects with more people like faculty, program coordinators, or your supervisor.

Project management is a big part of what I do every day but I do not remember learning about it in school. The first time I remember learning about project management was when I helped develop an online course in project management. It was a big program and there were several modules to create but I learned a lot about project management in the process. I also learned a great deal of project management on the job. One of the things that helped me learn on the job was the forms and templates that the different teams used. I have also taken workshops focused on project management throughout my career. Therefore, I never felt incompetent in the project management aspect of my role. However, I do want to take some project management courses in the United States. I would like to have a project manager position here in the future. I sometimes wonder if my master's program should have focused more on project management.

Although I think having some kind of formal education in project management helps, I must say that on-the-job training is important as well. Especially to learn the specific processes that a team will use to manage projects. Nothing has prepared me better than my work experience. I do feel that what I have learned has helped me be successful in managing projects. Yet, I intend to pursue more education and training in project management because I know I can get better at it, because it is an interest of mine, and because I want to obtain a project management position here in the states.

I feel confident in my ability to manage projects but I do face challenges in doing so. One challenge that I face often is receiving materials at the last minute and sometimes it is impossible to design and deliver on time. It is a challenge having to depend on others and managing time for yourself and stakeholders. I hear this from other instructional designers as well. To help combat this challenge, I helped to create some policies and guidelines for my team. For example, I ask to have the content for an online module four weeks in advance. If we are creating an exam, I ask for the content three days in advance. We work to implement these guidelines knowing that we will still get special requests to get things turned around quicker and we will do our best to accommodate those requests. One of the reasons we are considering moving to ASANA is because we need to document at every stage of the project. I definitely recommend documenting every step of the process because this will help the projects move along more smoothly. I feel like these issues are common to other instructional designers because I have heard the same things from them.

Another thing is educating and communicating expectations. When I stated working here, it became obvious that people had no idea the effort and time it takes to produce an online course. I think they need to know how the process works, how many resources are needed on a project, how long it takes to produce a video (for example), and who needs to be involved in the process. Communicating and educating people on expectations, anticipated timelines, and the overall design and development process is important because it helps people be on the same page from the beginning of the project. You essentially have to educate others on the instructional design process. You can avoid many misunderstandings and setbacks that way. It is also common for stakeholders to have limited time to work on the content. They have busy careers and lives and working on the content is often not their top priority. We have to overcome these challenges as designers and project managers through communication and collaboration.

The proper tools can also be helpful in managing projects. I use MS Project and MS Excel just to lay out the due dates and plan the project in a mannerly form. We also use Slack. Slack is a messaging tool, similar to Skype, but it integrates with Trello. You can create tasks right from Slack. Say, for instance, you are chatting with a group brainstorming on a new project in Slack. From there you can create tasks and alarms that go into Trello. It is very helpful because it talks with your project management software. I mentioned communication earlier. Well, it is a communication tool that also helps with project management. I also try to follow the ADDIE model as I plan my courses and projects. It gives me guidance on each step of the process. I think

I need to learn more about the available models and tools. That would be helpful for me in the future.

As far as the tools, I do not think Trello is working exactly as we want so I would not recommend it to others but I am also not certain that changing the software will help. It may just be a matter of communicating better with stakeholders. I would recommend Slack because, as I mentioned before, it helps with both the communication and project management aspects of my work. MS Project and Excel are okay but I would recommend an online project management tool like ASANA instead. Online tools can better allow for collaboration.

Above and beyond the tools, however, my most important recommendation is communication. Communication is key. Get the entire team on the same page, define expectations, set due dates and timelines together, and communicate responsibilities early on. My other strong recommendation is to document everything. Documentation is another factor that helps make projects successful.

Textural Description of Sandra's Lived Experience

My practical experience as an instructional designer began about 15 years ago when I was teaching on faculty. I was asked to work with the Distance Education Center (DEC) to prepare an introduction to sociology online course. The way I planned the program allowed for an easy transition from a blended approach to online delivery. We rolled out the program and, even though I was still a faculty member, the DEC asked me to continue to work with them on a part-time basis to design courses. I started to research instructional design and instructional design theories on my own. After a while, the DEC asked if I would be interested in working for them full-time. I worked part-time for them for a few years and then I became a permanent staff member. Ever since then, I have worked either as an instructional designer or as a manager of instructional designers. After working as an instructional designer for four years, I was promoted to a program coordinator and a few years later, I was promoted again to head a department that was fully responsible for guiding the design and development of online courses. This was all a bit accidental because my background was not in instructional design. My Ph.D. is in Population Development and Demography.

My official title is not instructional designer but that is exactly what I do. As a program coordinator, I was responsible for working with course developers as an instructional designer. Now that I have taken on the headship of the course development department, I am still serving as an instructional designer. We have some very large projects and are responsible for developing 23 programs and 241 courses. With the number of staff that I have, I have to function as an instructional designer and have my own projects to work on while guiding the other instructional designers.

Not only am I responsible for instructional design support, I also help the instructional designers manage projects. My department requires designers to complete an instructional project management course where they learn how to design online courses and manage learning design projects. The program lasts five weeks and is very in-depth. It prepares them for success in designing online courses and managing the process involved in doing so. I was a part of the effort to design and deliver the program.

I am also very involved in the project management aspect of curriculum design. I initiate the projects and assign them to members of my staff. I mentioned that we have 23 programs. Well, I have 11 part time curriculum development specialists in my department. I have to map all of the programs to someone in my department. They may serve as lead on one project and co-lead on another, so that all of the programs are covered. Then, I make sure that they are trained in instructional design and project management. I am responsible for managing what happens during the training and development process. Then, I assist them with managing the projects. I communicate, guide, set deadlines, and keep my department updated on the deadlines (as far as when they need to post the courses) on a daily basis. I am also responsible for having weekly meetings status with my curriculum development specialists on the different projects we are

working on. During those meetings, I identify what issues are arising, where there may be bottlenecks, and where we need to do some additional sessions with course developers. Those meetings are really about monitoring and managing the projects. That is where my PM responsibilities lie for the most part – monitoring, tracking, finding the bottlenecks and issues, determining the risks, and keeping communication flowing. I spend a lot of time in the PM area. I also ensure that my people are using the appropriate templates in order to maintain quality. This process continues out to the end of the development life cycle. Once the development life cycle is complete, I will only sign off if I am satisfied that the courses have all required elements, that any issues have been addressed, and that the course has passed the quality assurance review.

As you have probably figured out, developing the units of learning is a total process. During this process, we use Apollo for project management. We use Apollo for tracking the project to be sure that the elements are on time. We also upload the units of instruction into the Apollo space. I am able to track how many persons are behind in their work, how many are at risk of not finishing their project on time, and how many persons are on time. I create a matrix, with the help of my production supervisor, to know whether our projects are on track or not. This information helps me prepare for those weekly status meetings with the content developers. I understand which additional meetings I need to organize and where I need to have interventions. Therefore, project management is another crucial part of my role – one that I had to learn early on in my career just as I was learning about instructional design.

I started learning project management largely as self-study, reading and studying. I took courses that had a built-in project management segment, even if the entire course was not focused on project management. I recognized that this was vital to my role. We have individuals trained in project management within my environment and that is helpful as well. Serving on the Strategic Management Committee as a representative of teaching and learning has also taught me a lot because I have had to engage in project management training and using tools such as balanced scorecards in order to manage output. All of these things have helped me grasp project management over the years but I must admit that I felt like a headless chicken in the beginning trying to manage my learning design projects. I felt crazy in the beginning because there were a number of things that had to be done and I could not keep it all in my head. I like to do things the right way and I could not do things the way I wanted to so I felt crazy. Even before I came to the university, when I was working at a community college, I was in research and planning and had a limited staff to do all of the work. There were days when I felt very frustrated because I knew I was not managing my projects the way they should be managed. I always felt that there must be a better way. That is when the self-study began and that is why I read a lot. I tried to teach myself about project management so that I could get better at it. Then I recognized that I needed some training in the area so that I could further enhance my skills.

Even to this day, although I have been doing this for a while now, there are still times when I feel that I missed something and that bothers me to no end. I tend to write everything down. I try to map out all of the steps that are needed and try to put appropriate timelines against them. Even

though I have Apollo here to help me with project management, I still put things down on paper so that I have more control over what I need to do and when I need to delegate something. I can determine where the bottlenecks are so that I can do such delegation. The problem is that sometimes when you delegate things are not done the way you would like. I try to manage my staff so that I can delegate because it is necessary but managing projects was frustrating in the beginning because I did not feel in control, and I like to be in control. I had to learn along the way and also take time to reflect on what I had learned and consider how I could do things better.

I think the path that I took has been good for me in the sense that I was able to see my own growth and development and was able to appreciate what I was doing. Although I may have been better off with some formal education and/or training in project management in the beginning, without having practical experience, I don' think I would be where I am now. There are people on my team that have PMP certifications but limited practical experience and the process is mechanical and route for them. You do this, then that but you don't have that experience of doing it that gives you the insight on things that you need to look out for and that you may need to be aware of in order to better manage projects. Therefore, while it was a struggle for me and very frustrating in the beginning, I think that the learning experience has helped me. I think I can say that I'm successful now as evidenced by the number of projects that I get. Projects just keep coming my way.

With that said, I think that people considering being an instructional designer and managing learning design projects should seek training, such as a PMP. However, they should have some practical experience as well. For example, while they are pursuing certification they could get a part-time or contract position because it's not enough just to say that you are PMP certified. Another idea is to have practical experience built into educational programs or certifications. It would be beneficial if colleges and universities that teach educational technology, curriculum and instruction, or instructional design could include a design project as a requirement - where the students have to engage in designing and managing a particular project. It could be something like a capstone. Alternatively, projects could be built into the curriculum along the way. However it is achieved, practical experience is important.

I myself am considering additional project management training, even with my years of experience. I have been looking at some training offered by the World Bank and I am considering getting PMP certified. One of the challenges that I face is managing people, relying on others to get their work done. I think this is common amongst instructional designers. Keeping the projects on track requires meeting frequently and communicating because we often have tight timelines. You are constantly in meetings trying to get people back on track and you have to supplement their work in order to meet quality standards. So managing people is the challenge for me. One thing that I recommend to other instructional designers is try not to take on too much that you cannot manage effectively. It may be hard to push back but you owe it to your stakeholders and yourself. Another thing that I recommend is communicating and building

rapport with people. I appeal to people on all levels and get to know the individuals that I am working with. I learn what issues and challenges they face.

As I mentioned before, preparation is also important in overcoming challenges. Not just my own preparation to manage projects, but also educating others on the project management and instructional design process so that they are aware of what they are getting into and what is expected of them. You may have the knowledge and experience to build an online course but they may have no idea what it takes to do so. Tools and resources are also helpful. I have used balanced scorecards, projects plans, QA models, and tools such as Apollo that help with the instructional design and project management process. I recommend Apollo for storage and project tracking and reporting. I also use Excel, Google drive, and Word. Google drive is a favorite because it is shared across the board amongst a working group. Everyone involved can access it and knows what is happening on the project. It is good for collaborating.

As far as model, my team has not formally looking into one. I think much of what we do falls into Agile learning design. We try to follow Agile as much as possible and I think it works for us. Having a quality assurance process is a must. I strongly recommend that people learn about quality assurance and implement a standard process. A number of QA models are available like the Quality Matters Day Force or something from the Commonwealth of Learning. We use Quality Matters, a QA rubric.

I know that I have shared a lot, but it really boils down to a few things. First, be prepared – the more prepared the better. Education is important and practical experience is paramount. Keep everyone informed of what is going on in a project. Meet as needed. Communicate and build rapport with people. Delegate and collaborate with your team. Use your tools effectively because they can help you successfully manage projects. Finally, follow an established and proven QA process. All of these things have helped me immensely.

Textural Description of Ann's Lived Experience

I officially became an instructional designer eight years ago. However, before that, I supported faculty in different ways. I was an Academic Specialist, providing overall faculty support including instruction, administrative support, and technology support. I have always known that I wanted to work in higher education. That was a career goal of mine. Becoming an instructional designer, on the other hand, was not intentional. I stated working in academic support at a community college and found that I had a natural inclination for technology. I started teaching myself some things in order to provide better support to faculty and that's when I became interested in teaching online, using technology to support instruction, and creating instructional activities using technology. These experiences led me down the path to becoming an instructional designer. I was not a little girl saying that I would be an ID one day but my experiences in academic support along with my interest in technology came together. Now this is my second positon as an instructional designer and I am working at my second university as an ID.

I work with faculty in helping them design and develop their online courses. My project management tasks are outlined in the Intervals project management software that we use. I am responsible for managing the project and ensuring that those tasks are completed, that instructors understand what their expectations are, and communicating with the various stakeholders involved in the process. Intervals has tickets and tasks. Tickets are opened for each project and you can track how much time is being spent on the tasks. Any project member that is working on the course development and revision process (including managers and the editorial team) has access to Intervals. The Course Development Manager assigns us the courses that we will be working on in a particular development cycle and we manage the project from there. I manage the entire lifecycle until it is handed back to the Course Development Manager and the course is distributed to the faculty who will teach the course.

I don't have any formal project management education, so Intervals has been helpful because we set the due dates and it lays out the timeline and sequence of the project. I am responsible for prioritizing and multitasking but I think those skills are transferable from other jobs that I have had and other experiences that I bring to the project management process. I learned project management largely on-the-job but I also brought skills from my education. I completed my master's degree 100% online while I was working full time. Just that process helped me with time management, strategic planning, setting timelines, and project management. I think that is why I have not been more overwhelmed in managing learning design projects. However, I have learned skills as I continue in my career that have made me a better, more efficient project manager. I hope that that has provided good experiences for the faculty that I work with.

Thinking back to my first job where I had to manage projects, I was not offered any formal project management training. However, I was paired with a very good mentor. She taught about project management and strategic planning. Every place that I have worked has had people that

were helpful. If there was a senior instructional designer, for example, a lot of skills and strategies were communicated to me through working with experienced people. I definitely recommend mentorships. If I could go back and change anything in my preparation, having more formal instructional design education to manage a course development cycle might have been helpful. Training on fundamental strategic planning and what the instructional design life cycle consists of is important. Instructional designers need to be able to identify what needs to be done and when it needs to be done. In addition, being aware of what questions to ask and understanding what the course development and revision process looks like is helpful. It is also important for people interested in going into instructional design to be transparent about their skill set and for organizations to understand and be clear about what they are looking for in candidates.

Although I did not have it, I do think that some type of formal project management education and training is beneficial. I would also recommend communication be a part of educational technology and instructional design programs because you have to be able to communicate with faculty and other SMEs. Educational technology training is also important because the tools help you in communicating. I use a lot of educational technology strategies and tools with the faculty that I work with in order to make the project development cycle more efficient and effective. It is important to be able to manage the project but you also have to be able to do the work because designers manage the project and work on the deliverables at the same time. You have to be able to do both. College and university programs focused on preparing instructional designers may not need to offer an entire three-credit course on project management but they definitely need to include an outcome or two about understanding basic project management. That would be helpful for people.

Like instructional design, project management can be challenging. One of the common challenges that I face is faculty responsiveness. You cannot control what faculty do or how and when they do it. You can have a project plan but you are not in control of what faculty do as far as when they submit content. In my current position, collaboration with faculty is essential because designers are not subject matter experts in many subjects. We rely on the faculty but they also have other responsibilities. That is probably the biggest challenge that I face in managing projects. I overcome this challenge by setting reasonable expectations for myself and with faculty, realizing the limits and boundaries. I also think effective communication with faculty members and others is very important. Keeping everyone in the loop on progress and issues is helpful.

Building relationships with them to support what we are trying to do is also essential. Building relationships is an important part of successful project management. If people like and respect you, they are more inclined to work well with you. Building a collaborative relationship from the beginning, instead of an arbitrary one, is always helpful. You want to position yourself not as demanding things, but as promoting a collaborative team effort. Communicate and demonstrate

that it is a partnership because you do not have authority over your SMEs. This is a common challenge for instructional designers.

It is also important for department chairs, deans, or whoever is selecting faculty for online course development to have a solid base of knowledge on course development and revision. These people make policies and procedures holistically that may not be the best for online course development. They need to understand what the online course development process is, what it involves, and how long it takes. Ideally, they would have gone through the process themselves. This also helps them in selecting faculty. Whoever is supervising, evaluating, and essentially offering teaching positions needs to have the background and the education to know whether the course development process is going well or not. Especially with designing and developing online courses – stakeholders need to have the right knowledge to hire and retain the right people.

One thing that helps me with the faculty is using our course outcomes alignment mapping worksheet and templates. We don't spend much time using instructional design models such as ADDIE, but we do use worksheets and templates. Within one worksheet, instructors have to define unit-level outcomes, lesson level outcomes, and then the assignments, activities, and assessments that are aligned to those specific outcomes. For the project management process, we use Intervals. I personally use Google docs and Google drive to communicate and collaborate with faculty. I have some template documents that I set up so that we can work together in a collaborative way. Meetings are also important. We have two planning meetings in the beginning and others along the way of each project.

I have a love-hate relationship with the tools that I use. For one thing, I hate having to document everything. I feel like I can remember things and it takes more time to record certain tasks than it takes to do certain tasks. However, there have been times when Intervals has really kept me on track and led me down the correct development path. Nevertheless, I still feel resentful that I have to spend time documenting everything. That's probably just a part of my personality! I do think that having project management software is necessary, especially when you have multiple courses and resources. If you are just one designer working on one course, you may be able to get away with Excel. If you have multiple deliverables, you need a project management tool like Intervals so that you can know where you are with each project, deliverable, and task in those course development processes.

Having the right tools and templates are beneficial for sure. However, effective communication with all parties involved is key to project management as a whole. Regardless of whether you use software or not, keeping all stakeholders informed and on-track is crucial. In addition, a certain level of planning and organization is important in successfully managing projects. You can learn those skills through education and experience.

Textural Description of Jean's Lived Experience

I worked on my first instructional design project 10 years ago. Since then, I have worked on courses and projects related to instructional design for my job, school, or side projects. I was working at a community college where we offered tutoring in math, science, and technology. Around the time I started working at the community college, I started graduate school. One of my first classes was Introduction to Instructional Design. We had a project in that class that was a requirement. Since the community college was interested in getting their training certified through a national organization, I took it on as my project to design a set of training courses for the tutors. That's how I got started in instructional design.

Many times, I am pulled into projects because people recognize my technical skills – I'm a formal programmer. I am often asked to either build training or teach technical skills. I saw my primary responsibilities as identifying needs or gaps in knowledge and comparing that to what the required objectives and outcomes were. I figured out how to make learning objects measureable and actually doable in the given timeframe. For example, I provided a translation between what the accrediting body or other outside body was saying, what the instructor wanted to achieve in the classroom, and what would actually be possible for the students based on their prior knowledge or who they were (i.e., the demographics of the students). I was responsible for the instructional design process from start to finish. My focus was on getting the best quality courses for the students. I spent a lot of time speaking with instructors, trying to get on the same page about requirements, and getting them to understand the Quality Matters Standard. It was a partnership, a collaborative effort between me and the faculty.

I have held different roles that ranged from requiring me to design and develop training to managing other instructional designers. However, my project management responsibilities generally included creating the project timelines, making sure that we all stayed on time, making any adjustments as needed in the project, communicating with the various stakeholders, and managing tasks to ensure that we delivered the project in a timely fashion so that we could get feedback and move forward. When I worked at the Learning Center with the tutoring program and when I was Director of the Office of Distance Learning, it was my responsibility to get the projects started, make sure that they progressed, and make sure that they ended well.

I based much of my design work on Gagne's Nine Events of Instruction and the project management aspect on the ADDIE model. Those are the two primary models that I learned and relied on. I also learned about the Zone of Proximal Development from one of the instructional designers that worked for me. We started including that as a model because it worked better for our faculty members and other stakeholders.

Having a background in computer programming, project management was already a part of what I did in order to ensure that the software, online systems, or apps were delivered on time. I also took a course in Project Management in graduate school, which was my formal training. I

learned project management over time through my education and career but when I first started working and had to manage projects, I did not feel adequately prepared to do so. It took preparation, experience, and time. You must learn project management through application and understand that the process will vary somewhat by project. You can learn theory or best practices but if you do not apply it soon you will not remember all of what you learned. I am a sink or swim learner. Put me in the middle of it, give me the resources I need to be successful, and let me run with it. However, if I had taken project management coursework early on, I think that would have been better for me. Then I could have added the practical application to make it stick. I recommend that people have formal education courses in instructional design and then project management. Once they have an instructional design job or something similar, then get project management training such as courses or a certification. That way, they can apply what they are learning and really grasp the concepts. For instructional design higher education programs, I recommend providing a foundation, a general understanding of project management, so that it is not foreign to instructional designers when they enter the workplace. I wouldn't dive too deep though if there is no opportunity to apply the learning.

I feel that I have been pretty successful in managing projects. People are so fickle sometimes it's hard to tell. I don't plan to pursue any more education in project management because I feel that what I have learned has served me well. That does not mean I do not face challenges because I do. One of the biggest challenges I face is explaining and making stakeholders understand expectations. I face this notion where people just expect me to do it [complete the project and create the coursework]. That is not the process, however. I have to explain the process of instructional design and their role as subject matter experts, for example. I help them understand that they also have some responsibility in building the coursework. That is a common challenge, just making sure everyone understands his or her roles and expectations. I think this is a common challenge for instructional designers in particular. However, what tends to help me with this challenge is communication and building relationships. I had weekly meetings with stakeholders such as faculty, deans, program chairs, and committee heads to build trust and rapport. I also had informal conversations, like at the water cooler, that didn't relate to the project so that people would know my heart and know it is not personal. We are all just trying to get the best for the students. Building trust and building relationships was vital. It is also important to understand that instructional design is a process and that we (i.e., everyone working on the project and the stakeholders) all have to accept that.

We used MS Excel and MS Project to manage our projects. We also tried some online project management tools, which were good because everyone would have access to everything and the updates would be more real than static. These tools were used to plan the timeline, milestones, and critical paths. They helped plan and communicate what we all needed to do in order to keep the project on track. Although MS Project was good from a Director's standpoint and for administrators, I don't think it was good for communicating with my team. The online tools were

better for communication and collaboration. I could assign a task, they could see the task, and then they could keep track of that portion of the project that was their responsibility.

Using project management tools is helpful. Being knowledgeable of instructional design and project management is important. Communication and building relationships makes a huge difference. I would reiterate these things to instructional designers. For a person interested in becoming an instructional designer, I say learn as much as you can about instructional design and project management from your education and from the people you work with. Until you have some experience, base your work on a proven model that you are familiar with, such as ADDIE. You can always adjust and find another model or tool as necessary. Work to build rapport and trust with people. It really boils down to these things.

Textural Description of Kay's Lived Experience

Like other instructional designers that I have met, I got into instructional design because I am a problem solver with a creative angle. I have been working as an instructional designer for six years now. As an undergrad, I took a couple of courses in Industrial Organizational Psychology, which piqued my interest in instructional design. From there, I started learning more about the craft as a corporate learning intern during my senior year in college. My first role was as a training coordinator and I eventually grew into the instructional design role. I like how instructional design is both analytical and creative at the same time.

My current title is Learning and Development Specialist II. It is a combination of an instructional designer and program manager role. I held a junior role ID at a different company before joining this company in the more senior role. My current responsibilities include working with Human Resource (HR) leaders to develop training intervention for HR initiatives. My other responsibilities include seeking continuous improvement opportunities such as reviewing our processes, templates, and tools and doing industry research on best practices. Then, I work with other senior-level IDs to sure those things up for the team. I also serve as a project manager, which is the third major component of my role. My project management role involves a lot of communication, status updates, etc. I also define timelines, make sure that other IDs working on the project are meeting those timelines, touch-base with them about the status, and keep up with my own deliverables. I also create surveys, perform analysis, and manage the Learning Management System (LMS). I mentioned before that my position combines the instructional designer and program manager roles. We use to have Program Managers, but the IDs are responsible for that aspect now. We provide status updates to business stakeholders and to the learning managers – following through on the work and making sure that deliverables are received on time.

Through the optimization of our processes, we have kind of gotten granular in how the team interprets the ADDIE model for project development. We now have templates and processes to help guide our team through the different phases of ADDIE. We use MS Word and Power Point documents for course outlines and templates. We create project plans in Excel – we don't use mind-boggling tools to do our work. Another important tool that we use is Outlook. We put things on people's calendars and send many emails. We all use One Note as well. These tools help us communicate.

Thinking back, my education did not prepare me directly to manage projects. I learned to manage projects almost 100% on the job. However, you learn to manage deadlines, timelines, and multiple intervals just from being in college. I also learned a great deal from my more senior colleagues. I used things that worked for them and adapted those for my projects. For example, working with change managers taught me a lot about project management. They are really good at managing projects and I learned ideas like being clear on when you need something back and setting contingencies. The communications skills that I picked up from working with senior

people helped me become a better project manager. The fact that my managers set clear expectations for me helped me to be more successful. That and templates – the examples that I received from using templates helped me grasp project management concepts as well. For example, when I needed to learn how to communicate status updates, using an email template helped me greatly.

I am successful in managing projects now but if I could go back, getting more exposure to actual project management tools would have been useful for me. Excel, for example, can take painstaking practice to learn how to do certain things in that tool. My route was more trial-and-error, trying to see what will work and what won't. However, if I had been taught how to write a learning objective, things would have been easier for me. A formal educational setting would be a good place to learn basic project management concepts as well as how to use project management tools. Then, it is necessary to get real world experience because there is nothing like practical experience. That is where you learn the different factors that affect delivery of a project.

Once you have your education and training, it is important to understand other factors that will help you be successful in managing projects. The first one that comes to mind for me is communication. If you communicate clearly with your customers and leaders, the rest is just hitting the mark on expectations. One challenge that I face all the time is customer management and education. So many times, they don't understand or yet know all of the work that goes into creating an e-learning or classroom training. Therefore, their expectations are unrealistic. That's a big challenge and I think it is a common one in the field. Getting our project plans with the best practice timelines in place helped a lot with this issue because it helps to set expectations and get everyone on the same page. Another thing that helps me communicate expectations is providing stakeholders with examples, such as from You Tube. I will send people a video on what instructional designers do to give them a basic understanding of the role to help them understand the relevant expectations.

In addition to communication, customer management, and education, I recommend that ID teams have a solid marketing plan. If you can successfully market to your organization internally, then they know who you are and they know what you do. Using a model such as ADDIE helps guide you and helps ensure that you're not skipping important steps. My final recommendation is to make sure that you are smart with your documentation. Write things down, document everything. If someone calls you and says they need you to move a deadline out, document it. Put it in an email confirming what was discussed and update your project plan. Scope documents, project charters, and other documents that are signed off on by your customers also help make the process run more smoothly. I suggest all of these things to other instructional designers.

Textural Description of Anthony's Lived Experience

I have officially been an instructional designer for 14 years. However, I was designing courses for about 15 years before that, but as a trainer. In total, I have been designing courses for almost 30 years. I got into the field by accident. After owning and managing several small businesses in different industries, I decided that I wanted to do something I really love. I moved to a warmer climate and, because I was very interested in scuba diving, I decided to make it a profession. I eventually became a dive instructor and later a dive instructor trainer. In other words, I trained dive instructors. The designing of courses started fairly soon after I fell under the mentorship of the lead dive instructor who became a very close friend. He got me involved in instructional design and helped me understand it.

When I studied for my master's, I was a graduate assistant to the chair of the instructional design department at the university. I also worked on contract projects on the side, because I wasn't making a lot of money as a graduate assistant. I got into designing online programs for students pursuing master's degrees in instructional design. After I graduated, the university kept me on for a couple of semesters as Director of E-learning. I learned a lot in that position – especially about learning management systems (LMSs), which were just starting to take hold in the field. I was hired for several positions in my career because of my background in creating higher levels of interactive online learning and my simulation experience. I have provided instructional design to support military contracts, higher education, and commercial initiatives. I have also held a position as an assistant project manager, where my primary responsibility was to be a bridge between the program manager and the staff of instructional designers. That position was my first foray into project management for instructional design. Therefore, I have held trainer positions, instructional designer positions, project manager positions, and management positions – most in support of learning design. My career progressed fairly rapidly – probably due to my background and good timing.

In my current role, I am responsible for front-end analysis for a government initiative. I serve as an expert in instructional design. I'm not doing a lot of project management in this role because the government employees must make those decisions. However, they do ask for my recommendations. In previous ID positions, I was responsible for analysis, scope definition, template creation, and process documentation. I also created the IMS, or integrated master schedule for my projects, which includes target dates and deliverables. My project management responsibilities centered on project planning and resourcing. I also spent a great deal of time communicating. With commercial contracts, for example, you really have to make sure that everybody's on the same page because there is nothing worse than having different ideas about what is expected. You can get into a lot of trouble economically, very quickly. You might go down the rabbit hole and never find Alice. You have to gather and define requirements and communicate them. Meetings were very important in maintaining communication with instructional designers and stakeholders. Weekly meetings, whether in-person, over the phone, or via teleconference, were crucial. Other project management responsibilities that I have had

included monitoring progress of the team against the IMS deliverable schedule. Contingency planning was another important aspect of my role. When we had a deadline coming up and only had 49% of the content developed and didn't have enough time to finish, we had to have backup plans. Being on the same page about expectations, monitoring the project, having contingencies, and communicating throughout the life cycle were critical. Having good working relationships with your clients and your team is also essential, but that goes back to communication. My undergraduate degree was in Communications and I believe that has helped me in both instructional design and project management.

I don't have any formal training in the project management aspect of my role. I think what helped me pick up those skills was managing several businesses years ago. That, coupled with my education and work experience, transferred over into managing learning design projects. It was kind of like by osmosis. I think my business management experience, my experience in managing schools, and my life experience prepared me well. The first projects that I managed (like at the college and when I was designing courses for the schools) were small in scope. They were one-person type efforts. The templates I used followed instructional design and project management techniques so they helped me get started. I wouldn't really change anything in my preparation to manage projects. Managing projects was kind of a next step, a natural progression in my career. I had a good enough background from business management and education to make smart decisions and ask the right questions.

I am a proponent of iterative design and have used the agile method several times. I have also used the waterfall method. My preference is agile, which goes along well with iterative design. The project that I am working on now is using an agile approach. We had a lot to accomplish and I don't think we could have done it without the agile approach. However, some customers want you to use the waterfall method.

I have a few recommendations for anyone interested in pursuing a career in instructional design. First, you need to have a good understanding of communication. You have to be able to build rapport with people and collaborate well with them. You have to be able to influence a team to work together, especially in project management. These things require excellent communication skills. You may come from a position of power and tell people what they need to do, but is that going to influence them to give you their best work? No. You must be able to communicate, express empathy, and still maintain the project schedule. Culture also plays into that, a shared culture and mutual trust help people work better together. I recommend that people seek practical experience, whether it's a part of their course work or not. They need experience in working with the concept of timelines and deliverables and they need practice using tools such as MS Project. Colleges and universities may even want to consider integrating project management practical experience into their programs or using scenario-based training principles. Put learners into a situation, perhaps let them break into groups, and then come up with a solution (like a project plan) and present that solution. Having real-world context would be invaluable.

When instructional designers get into their professional positions, they will face challenges. Having practical experience before hand with help them be prepared to design and manage design projects. For example, one of the biggest challenges that I have faced as an ID is getting client or SME reviews back on time. I can't think of a project where that hasn't been at least somewhat of an issue and I think this is common in the ID field. You have to be able to communicate well to overcome this type of challenge. You also have to set and manage expectations, which also require communication. One of the emerging problems that I have noticed in the field is that stakeholders are not meeting face-to-face very often. I am all for web conferencing, teleconferencing, and things like that but there needs to be some face-to-face interaction where you sit down together and really hash out expectations and requirements up front. Then, develop a social relationship so that you can feel comfortable communicating and collaborating. Team meetings are hugely important.

One more thing that has helped me and may help others is using available tools and templates. For project management, I have relied heavily on MS Excel and Project. However, we tend to forget that there is a lot of writing involved in managing projects. Therefore, many templates are developed in Word to help with the PM aspect. You also need some time of version control setup like CMS, Alien Brain, or Share Point to help manage your documents. These tools also help with quality assurance (QA) reviews. Personally, I have found Google docs to be handy at an initial level before we get into the part of the project where we do not want certain documents to be seen. The military is more restricted but Google docs might work better for commercial projects. These are the examples and recommendations that I offer to my current and future peers.

Appendix F

Participant Structural Descriptions

Eve's Structural Description

The structures relation to self and others, materiality, time, and space made Eve's experiences in managing learning design projects possible. Her deep interests in communication and education clearly reflect the structures relation to self and others. At the same time, the materiality structure characterizes her communication, educational, technical, and organizational skills and represents how she came to experience the instructional design project management phenomenon. Eve earned a Bachelor's degree in Communication Sciences and a Master's degree in Educational Technology from a private university in her home country. She started her career working at that same private university, which she described as a pioneer in online education, where she worked for 10 years. This experience allowed the time and space that she needed to grow her interests in instructional design and project management and to also build her knowledge and skills in those areas. After working at the private university, Eve relocated to the United States. She has been working for a large U.S. based university for three years. Eve is an instructional designer and has been for 17 years in all. Her current formal title is learning designer. She has also worked as a project manager in the past.

As other instructional designers have described, Eve has a passion for education and communication, which are a direct reflection of the relation to self and others structures. During her undergrad studies in communications, she completed a class called Educational Technologies that she really enjoyed. That class is where she learned to love designing content for education and decided to study for a Master's in Educational Technology. While she was working on her master's degree, she worked as a facilitator and also helped faculty design learning materials for students. This opportunity provided time and space structures that allowed her to learn what she needed to know in order to experience her future career as an instructional designer and project manager. This same experience also helped create the materiality structure that allowed her to practice instructional design and project management.

In her current position, Eve's design responsibilities include creating online modules for faculty and students. She explained that project management responsibilities come with her design responsibilities. The materiality structure allows her to experience all aspects of her role including the design and project management aspects in that the subject matter expertise that she has gained in project management and design is the stuff that allows her to successfully fulfill her responsibilities. Her project management responsibilities include creating project plans, monitoring projects, providing feedback, communicating, and making necessary corrections. Many of these responsibilities, such as communicating and providing feedback directly tie to the relation to self and others structures. Eve manages the entire development life cycle of her projects. Time and space allow her to plan and execute these project management responsibilities. She uses the ADDIE model as her basis for managing projects and she uses Trello to track and manage the projects. However, her team may be moving to ASANA, which is different project management software. ASANA has more of the project management features that her team is looking for like an integrated calendar, built-in charts, the ability to assign

projects and tasks to specific people, and to share projects with more people like faculty, program coordinators, or your supervisor. Eve's ability to use these models and tools and to offer recommendations on new tools and methods is a product of the materiality structure that has matured for her over time and has allowed her to perform in a role that requires many hats. All of the planning, communication, and collaboration activities that Eve described were made possible through the relation to self and others, materiality, time, and space structures.

Time and space to learn instructional design and project management are vital structures – regardless of how or where they are learned (e.g., in the classroom, in training, on-the-job). Eve admitted that, although project management is a big part of what she does every day, she did not remember learning about it in school. The first time she learned about project management was when she helped develop an online course in project management, which was a large, multi-module program. She also learned a great deal of project management on the job. Eve stated that nothing has prepared her better than her work experience. Using project templates was one thing that Eve specifically pointed out that helped her learn project management. She also took workshops focused on project management throughout her career. Eve explained that she never felt incompetent in the project management aspect of her role. However, she did sometimes wonder if her master's program should have focused more on project management. Eve intends to pursue more education and training in project management because she knows that she can get better at it, because it is an interest of hers, and because she would like to obtain a project management position in the U.S.

Materiality and relation to self and others are structures that affect how Eve experienced the instructional design project management phenomenon. These structures also influence how she handles the challenges that she faces in her role. One challenge that she often faces is receiving materials at the last minute, which sometimes makes it is impossible to design and deliver on time. She explained that it is a challenge having to depend on others. She must manage time and resources for herself while managing time and resources for stakeholders. To help combat this challenge, she helped her team create policies and guidelines. For example, Eve asks to have the content for an online module four weeks in advance. If she is creating an exam, she requests the content three days in advance. Eve also documents each project phase. In fact, one of the reasons she and her team were considering moving to ASANA is because they need to document at every stage of the project. She recommended documenting every step of the process in order to help the projects move along more smoothly.

Another crucial thing that helps Eve overcome project management challenges is educating and communicating expectations. The relation to self and others structures clearly represent how Eve experienced this part of the phenomenon. Eve provided an example from her current role. When she stated working there, it became obvious to her that people (that she worked with on projects) had no idea of the time and effort it takes to produce an online course. Eve explained how stakeholders need to know how the process works, how many resources are needed on a project, how long it takes to produce a video (for example), and who needs to be involved in the process.

She was explicit that communicating and educating stakeholders on expectations, anticipated timelines, and the overall design and development process is important because it helps people be on the same page from the beginning of the project. Eve essentially has to educate others on the instructional design process. It helps her avoid many misunderstandings and setbacks along the way. It is common for stakeholders to have limited time to work on the content. They have busy careers and lives and working on the content is often not their top priority. Eve explained that you have to overcome these challenges as designers and project managers through communication and collaboration. The relation to self and others and materiality structures reflect how Eve experienced the phenomenon, including how she manages challenges that come along with her experiences and what she recommends to others in order to successfully navigate the phenomenon.

Eve's recommendations for other instructional designers managing projects and for those interested in the profession epitomize the how – how she came to have her own experiences. Eve recommends a variety of tools to help people manage projects including online project management tools such as ASANA and brainstorming and communication tools like Slack. Beyond the tools, however, she reiterated that her most important recommendation is communication. It is critical to get the entire team on the same page, define expectations, set due dates and timelines together, and communicate responsibilities early on. Her other strong recommendation was to document everything. She explained how documentation is another key factor that helps make projects be successful. The materiality, relation to self and others, time, and space structures all made these experiences possible for Eve, which made her recommendations possible for everyone who may benefit from them.

Sandra's Structural Description

Sandra possesses a Ph.D. in Population Development and Demography and describes her journey into instructional design as "accidental." As other instructional designers have described, she never planned to enter the field. Sandra's lived experience in higher education and instructional design was made possible by the relation to self and others, materiality, time, and space structures. Her career in instructional design and higher education began 15 years ago when she was teaching on faculty. The Distance Education Center (DEC) asked her to work with them to prepare an introduction to sociology online course. After the program was rolled-out and while she was still a faculty member, the DEC asked her to continue to work with them to design courses. That is when Sandra decided to research instructional design theories and principles on my own. This self-study, combined with her practical experience was the materiality foundation for her career in the field. Ever since these early experiences, she has worked either as an instructional designer or as a manager of instructional designers. Her experience has included several promotions, from instructional designer to program coordinator to head of a department that was fully responsible for guiding the design and development of online courses.

Sandra's responsibilities at the time included instructional design leadership and support for her team of curriculum designers. The relation to self and others structures illuminate how she was able to lead the team and help them reach their shared instructional design goals. Sandra was also responsible for helping the instructional designers in her department manage projects, which she spent a lot of her time doing. Time and space structures are reflected in her project management experiences. Sandra did not have formal education or training in project management. She learned project management through time, effort, practice, and the space that was afforded her to obtain these skills in her career progression.

Sandra initiated the projects and assigned them to members of her staff. She and her department were managing 23 programs. Sandra had to map all of the programs to someone in her department and help them manage the projects to fruition. Sandra described how she communicated, guided, set deadlines, and kept her department updated on the deadline. She held weekly status meetings with her curriculum development specialists to discuss the various projects they were working on. During those meetings, she identified what issues were arising, where there may be bottlenecks, and where she needed to do some additional sessions with course developers. The meetings were for the purposes of monitoring and managing the projects. She explained that her project management responsibilities primarily lied in monitoring, tracking, finding the bottlenecks and issues, determining the risks, and keeping communication flowing. Sandra's ability to relate to herself, her team, her learners, and other stakeholders made her experience in her leadership role possible. The materiality structure clarifies how her experience came to be in that the skills, knowledge, and expertise that she has gained over time positioned her to not only perform instructional design and project management responsibilities, but also to lead others.

Sandra described how instructional design and development is a process. During this process, she and her team used the Apollo tool for project management. Apollo was used for tracking the project to be sure that each element was on time. Her team also uploaded the units of instruction into the Apollo space. How did Sandra learn to use Apollo? The structures of time and space and the materiality of her knowledge and skillset all apply here. Sandra's prior lived experiences using other tools along with taking advantage of the time and space needed to learn project management and project management tools made continuously building her knowledgebase possible. Apollo allowed Sandra to track how many designers were behind in their work, how many were at risk of not finishing their project on time, and how many people were still on time. This information helped her prepare for the weekly status meetings, which also reflects relation to others, with the content developers. It also helped her to understand which additional meetings she needed to organize and where she needed to have interventions. Project management was indeed another crucial part of her role – one that she had to learn early in her career just as she was learning about instructional design.

How Sandra learned project management (and instructional design for that matter) reflects the relation to self structure. She understood early on that she needed to learn new concepts and build her knowledge in order to be successful. She started learning project management largely as self-study, reading and studying on her own. She took training courses that included a built-in project management segment, even if the entire course was not focused on project management. She recognized that doing so was vital to her role. She also explained that there were individuals trained in project management within her work environment and that learning from them was helpful. This is an example of how relation to others was also fundamental to allowing her to experience the phenomenon. Sandra also served on a Strategic Management Committee as a representative of teaching and learning, which also taught her a lot because she had to engage in project management training and using tools such as balanced scorecards in order to manage output. Her service on that committee is another example of the relation to others structure. Sandra articulated that all of these things (i.e., self-study, taking training courses, working with others, and serving on the committee) helped her grasp project management over the years.

However, Sandra admitted that she "felt like a headless chicken in the beginning trying to manage her learning design projects." She transparently explained that she felt crazy in the earlier in her career because there were a number of things that had to be done and she had trouble "keeping it all in her head." She is a perfectionist who likes to do things the right way. There were days early in her career when she felt very frustrated because she knew that she was not managing her projects the way they should be managed. She "always felt that there must be a better way." That is when the self-study began and that is why she continued to read a lot. She essentially taught herself project management so that she could be better at it. Then she recognized that she needed training in the area so that she could further enhance my skills. Sandra's ability to self-reflect and recognize her need to build project management knowledge is an example of the relation to self structure.

In practice, Sandra has learned some valuable lessons as well. For example, Sandra tends to write everything down. She maps out all of the necessary steps in order to put appropriate timelines against them. She explained that, even though she had Apollo to help her with project management, she still put things down on paper so that she could have more control over what she needed to do and when she need to delegate something. Documentation helped her determine where the bottlenecks were so that she could delegate appropriately. Although she liked to be in control, she tried to manage her staff so that she would be able to delegate because she recognized the need. She reiterated that managing projects was frustrating in the beginning because she did not feel in control but she had to learn to delegate along the way. She also had to take time to reflect on what she had learned and consider how she could do things better. The insight that Sandra shared into herself and the valuable lessons that she learned along the way were also made possible by the relation to self structure.

Sandra's relation to others is a structure that positioned the recommendations that she made for others. Sandra verbalized that she may have been better off with some formal education and/or training in project management in the beginning. However, without having practical experience, she did not think she would be where she was in her career. She believed that the path that she took, although somewhat painful at first, had been good for her in the sense that she was able to see her own growth and development and was able to appreciate what she was doing. She trusted that the number of projects that she continued to receive evidenced her success. However, she suggested that people considering being an instructional designer and managing learning design projects should seek training, such as a PMP, along with obtaining some practical experience. For example, while an individual is pursuing the certification, she or he could get a part-time or contract position. Another idea that she shared is to build practical experience into educational programs or certifications. She presumed that it would be beneficial if colleges and universities that teach educational technology, curriculum and instruction, or instructional design would include a design project as a requirement – where the students would have to engage in designing and managing a particular project. It could be something like a capstone. Alternatively, higher education programs could build projects into the curriculum along the way. Her point was that, however achieved, practical experience is important.

The challenges that Sandra confronted in her instructional design work and how she addressed these challenges were also made possible by the materiality, relation to self and others, time, and space structures. One of the challenges that she faced was managing people, relying on others to get their work done, which is a challenge reiterated by other instructional designers. Sandra that keeping the projects on track required meeting frequently and communicating regularly. She was constantly in meetings trying to get people back on track and having to supplement their work in order to meet quality standards. Sandra recommended that other instructional designers try not to take on too much work that they may not be able to manage effectively. She also reiterated communicating and building rapport with people. She put time and effort into appealing to people on all levels and getting to know the individuals that she worked with. She also explained that education and preparation were important in overcoming project management

challenges. Not just her own preparation to manage projects, but also educating others on the project management and instructional design process so that they are aware of what they are getting into and what is expected of them. She stated that tools and resources were also helpful to overcoming challenges. She used balanced scorecards, projects plans, QA models, and tools such as Apollo that help with the instructional design and project management process. She recommended Apollo for storage and project tracking and reporting. She also used Excel, Google drive, and Word. Google drive was a favorite because of its ability to share documents and activities amongst a working group – it is a good collaboration tool.

The structures that made Sandra's instructional design project management experience possible – materiality, relation to self and others, time, and space – were evident throughout her story and are also evident in her recommendations. Sandra summarized her experience and recommendations. First, she emphasized preparation – "the more prepared the better." She reiterated that education is important and practical experience is paramount. "Keep everyone informed of what is going on in a project. Meet as often as needed. Communicate and build rapport with people. Delegate and collaborate with your team. Use your tools effectively because they can help you successfully manage projects. Finally, follow an established and proven QA process." Sandra graciously shared that all of these things had helped her immensely.

Ann's Structural Description

Ann's interest in higher education and technology led her into the instructional design profession. The structures that made her experience as an instructional designer and project manager possible were materiality, relation to self and others, time, and space. Ann officially became an instructional designer eight years ago. Before that, she supported faculty in different ways, including instruction, administrative support, and technology support. She portrayed an ardent interest in education and explained that she had always wanted to work in higher education. Becoming an instructional designer, on the other hand, was not intentional. She started working in academic support at a community college and found that she had a natural inclination for technology. She started teaching herself in order to provide better support to the faculty. She was building the materiality structure, the knowledge and skills that she would later need in her instructional design career. Ann's interest in supporting faculty and pursuit of roles that would allow her to do so reflect the relation to self and relation to others structures. Once she got into these faculty support roles, she became interested in teaching online, using technology to support instruction, and creating instructional activities using technology. These experiences led her down the path to becoming an instructional designer.

Building upon the prior knowledge that was transferred from previous faculty support roles and having the time and space to learn and practice instructional design and project management skills formed the structures that had brought her to the point that she was at in her career. At the time, Ann was in her second positon as an instructional designer at a university. Her responsibilities included working with faculty to help design and develop their online courses. Her project management tasks were outlined in the Intervals project management software that her team used. She was responsible for managing the design projects and ensuring that pertinent tasks were completed, ensuring that instructors understood what their expectations were, and communicating with the various stakeholders involved in the process. The materiality, relation to self and others, time, and space structures illustrate how Ann is able to meet her various, complex responsibilities and how she feels about her experiences as an instructional designer and project manager.

Ann managed the entire lifecycle of her learning design projects. She relied on the Intervals tool, which had tickets and tasks. Intervals tickets were opened for each project and she was able to track the time spent on each task. Any project member that was working on the course development and revision process (including managers and the editorial team) had access to Intervals. Therefore, the Intervals tool allowed Ann the space she needed to collaborate with her project team.

Ann did not have any formal project management education. Therefore, Intervals was particularly helpful to her because the tool laid out the timeline and sequence of the project. She was responsible for prioritizing and multitasking and believed these skills were transferable from prior roles and experiences that she brought into the project management process. In other words, the materiality of her experience, knowledge, and skill-set that she built over time in different

spaces allowed her to fulfill her project management responsibilities. Ann learned project management primarily on-the-job and also brought skills from her education. Ann's on-the-job learning, combined with her education provided the space and time that she needed to practice and hone her skills. For example, she described how completing her master's degree 100% online helped her with time management, strategic planning, setting timelines, and project management. These experiences also influenced how she felt about managing her learning design projects. She did not feel as overwhelmed as she could have (with no formal education or training in project management) in managing learning design projects because she had transferrable knowledge and skills. She had also learned skills as she continued her career that made her a better, more efficient project manager.

Relation to self and others was also in play as Ann recalled how having a mentor also helped her when she was new to project management. She was paired with a "very good mentor." Ann's mentor taught her about project management and strategic planning. From then on, she said that every place that she worked had people that were helpful. If there was a senior instructional designer, for example, a lot of skills and strategies transferred to her through working with such experienced people. Ann strongly recommended mentorships. However, she admitted that if she could go back and change anything in her preparation, having formal education in managing the course development cycle might have been helpful. Ann believed that instructional designers need to be able to identify what needs to be done and when it needs to be done. In addition, they know what questions to ask and understand what the course development and revision process looks like.

Ann expressed that, for those interested in going into instructional design, some type of formal project management education and training would be beneficial. She also recommended that communication be a part of educational technology and instructional design programs because individuals must be able to communicate with SMEs (such as faculty). This is another example of how the relation to self and others structures influenced how she managed her role and how she felt about her responsibilities. From Ann's viewpoint, educational technology training is also important for those interested in instructional design because the tools help in communicating. Ann used a lot of educational technology strategies and tools with the faculty that she worked with in order to make the project development cycle more efficient and effective. Ann explained that it is important to be able to manage a project but IDs also need to be able to do the work because designers must manage the project and work on the deliverables at the same time. She reiterated that designers have to be able to do both. Ann also made recommendations for higher education. She suggested that college and university programs focused on preparing instructional designers may not need to offer an entire three-credit course on project management but they definitely need to include an outcome or two about understanding basic project management.

Ann described how, like instructional design, project management can be challenging. One of the common challenges that she encountered was faculty responsiveness. She could not control what faculty did or how and when they did it. Even with a project plan in place, instructional designers

are not in control of when faculty will submit content. She painted a picture of how, in her position, collaboration with faculty was essential. She and her colleagues relied on the faculty for their subject matter expertise but recognized that faculty had their other responsibilities. She overcame this challenge by setting reasonable expectations of herself and with faculty, realizing the inherent limits and boundaries. She also felt that effective communication with faculty members and others was crucial. Ann emphasized that building relationships with faculty and others to support their common goals was essential to project management. The relation to self and others structures made these communication, building rapport, and collaboration experiences possible.

Several tools helped Ann with communication, collaboration, and other aspects of project management. Ann explained that one thing that helped her in working with the faculty was using a course-outcomes alignment mapping worksheet and templates. She said that they did not spend much time using instructional design models such as ADDIE, but they did rely on worksheets and templates. She also used Google Docs and Google Drive to communicate and collaborate with faculty. Meetings were also important to Ann as communication tools. These tools, practices, and resources helped her in managing projects and further exemplified the materiality, relation to self, and relation to others structures.

Ann described having a love-hate relationship with the tools that she used. She hated having to document everything, but still acknowledged the importance of documentation. Ann felt like she could remember things on her own and that it took more time to record certain tasks than it did to do certain tasks. However, she admitted that there had been times when Intervals had really kept her track and led her down the correct development path. She expressed that feeling resentful of having to document everything was probably just a part of her personality. Her ability to self-reflect evidences the relation to self structure.

Ann repeated how having the right tools and templates were beneficial. However, effective communication with all parties involved was more important to project management as a whole. She explained that, regardless of whether you use project management software or not, keeping all stakeholders informed and on-track is crucial. In addition, a certain level of planning and organization is important in successfully managing projects. She pointed out that you can gain the necessary knowledge through a combination of education and experience. The materiality structure, which explains how she is able to manage the project management aspect of her role, made Ann's lived experience possible. Her relation to self and others structures allowed her to learn from others and also communicate and collaborate with others. The time and space structures afforded her the practical opportunities that were so vital to her success.

Jean's Structural Description

Jean's story is similar to most of the other participants in that she started working in education, in her case at a community college, before transitioning into an instructional designer role. She worked on her first instructional design project 10 years ago. Since then, Jean worked on courses and projects related to instructional design for her job, school, and side projects. The time and space structures, along with the materiality and relation to self and others structures, allowed this transition and her long-term career as an instructional designer to be possible. Jean described how she was working at a community college 10 years ago, that offered tutoring in math, science, and technology. She started graduate school around the same time that she was working at the community college. One of her first classes was Introduction to Instructional Design. The class had an instructional design project as a requirement for completion. Jean explained that, since the community college was interested in getting their training certified through a national organization, she decided to design a set of training courses for the tutors as her class project. That was how Jean got started in instructional design. The materiality of her knowledge and skills started with what she learned in education and transferred over to the skills that she needed in instructional design. The time and space structures allowed her to grow the instructional design and project management skills that she needed in her career. Jean has held various roles that ranged from training design and development to managing other instructional designers.

Jean reflected on her technical skills and how they also contributed to her career progression. She was often pulled into projects because people recognized her technical skills (as a former programmer). These skills precipitated people asking her to either build training or teach technical skills. The relation to self and relation to others structures are evident in her testimony about her skills and ability to help others in need of technical acumen. Jean was responsible for the instructional design process from start to finish. Her focus was on getting the best quality courses for the students. She spent a lot of time speaking with instructors, trying to get on the same page about requirements, and getting them to understand the Quality Matters Standard. She described her working situation as a partnership, a collaborative effort between the faculty and herself. Jean's description of how she worked with others such as her SMEs and her concern for the quality of learning for her students further demonstrated the relation to self and others structures.

Jean's approach to project management also reflected the materiality, relation to self and others, and time and space structures. Her project management responsibilities generally included creating the project timelines, making sure that the project team stayed on track, making any adjustments as needed in the project, communicating with the various stakeholders, and managing tasks to ensure that the team delivered the project in a timely fashion. When she worked at the Learning Center with the tutoring program and when she was Director of the Office of Distance Learning, it was her responsibility to get the projects started, make sure that they progressed, and make sure that they ended well. Jean tended to base the project

management aspect of her work on the ADDIE model. She also learned about the Zone of Proximal Development from one of the instructional designers that worked for her. Her team started including that as a model because it worked better for their faculty members and other stakeholders. Although she had achieved the position of a leader, she still listened to the input of her staff in order to make the experience better for her faculty and learners. Jean's ability to consider the ideas of others and make changes in how things were being done, while still keeping the projects on track and meeting quality standards required a seasoned materiality of knowledge as well as time, space, and relation to self and others.

Jean displayed a transfer of knowledge from other roles, which is also reiterated in the stories of the other participants. Jean explained, "Having a background in computer programming, project management was already a part of what I did in order to ensure that the software, online systems, or apps were delivered on time." Jean also took a course in Project Management in graduate school, which she described as her formal training. She learned project management over time through her education and career. However, she admitted that she did not feel adequately prepared to manage projects earlier in her career. It took preparation, experience, and time. Time and space to practice and build upon existing skills allowed her to go from being unsure of her project management skills to being self-assured. Jean said, "You must learn project management through application and understand that the process will vary somewhat by project." She explained that you can learn theory or best practices but if you do not apply it soon you will not remember all of what you learned. Jean self reflected and stated "I am a sink or swim learner – put me in the middle of it, give me the resources I need to be successful, and let me run with it." This is another example of the relation to self structure.

Although Jean felt more successful at project management than she did in the beginning, she perceived that, if she had taken project management coursework early on, she would have been better off. Based on her experiences, Jean recommended that people have formal education courses in instructional design and then project management. First, start with an education in instructional design. Once they have an instructional design job or something similar, then they can pursue project management training such as courses or a certification. That way, they can apply as they are learning and better grasp the concepts. For instructional design higher education programs, Jean recommended providing a foundation, a general understanding of project management, so that it is not foreign to instructional designers when they enter the workplace. She reiterated that practical experience is critical.

Jean believed that she had been pretty successful at managing projects, especially after gaining practical experience. However, she still faced challenges in managing projects. One of the biggest challenges she confronted was explaining and making stakeholders understand expectations. She faced the notion that people just expected her to do it [complete the project/create the coursework]. However, explained that it is actually a process. She had to explain the process of instructional design to SMEs and even explain their role as subject matter experts. Jean's relation to others structure allowed her to successfully navigate this challenge.

Jean "helped them understand that they also have some responsibility in building the coursework." Making sure that everyone understands her or his roles and expectations was a common challenge for her that she believed other instructional designers shared. Communication and building relationships helped Jean overcome this challenge. She held weekly meetings with stakeholders such as faculty, deans, program chairs, and committee heads to build trust and rapport. She would also have informal conversations with the project team that did not relate to the project so that people could just get to know her. This is another example of the relation to others structure, which allowed her to communicate, build rapport, and ultimately get past the challenge of communicating and managing expectations.

Jean and her teams used MS Excel and MS Project to manage projects. They also tried some online project management tools, "which were good because everyone would have access to everything and the updates would be more real than static." Jean used these tools to aid in planning and documenting the project timelines, milestones, and critical paths. These tools "helped plan and communicate what we all needed to do in order to keep the project on track." Although she felt MS Project was good from a director's standpoint and for administrators, Jean did not think it was good for communicating within a project team. She observed that the online tools were better for communication and collaboration. Jean "could assign a task, the project team could see the task, and then they could keep track of that portion of the project that was their responsibility."

Jean would summarize her experience and resulting recommendations as follows. Using project management tools is helpful, being knowledgeable of instructional design and project management is even more important, and communication and building relationships makes a huge difference. Jean would reiterate these things to instructional designers. For those interested in becoming instructional designers, she recommends that they learn as much as they can about instructional design and project management from their education and from the people they work with. She recommended that until individuals new to instructional design and project management have some experience, they should base their work on a proven model such as ADDIE. Then, they can adjust and find another model or tool as necessary. She reiterated the need to "work to build rapport and trust with people." All of these recommendations further elucidate the materiality, relation to self and others, time, and space structures that explain the how of Jean's lived experience as an instructional design project manager.

Kay's Structural Description

Kay's relation to self and others, materiality, time, and space structures were exhibited in her story. Kay's relation to self was first evident as she described why she got into instructional design. She described herself as a problem solver with a creative angle and believed that other instructional designers possessed similar traits. Kay became interested in instructional design (ID) when she took courses in Industrial Organizational Psychology as an undergraduate student. This is when she first started building material knowledge, the materiality structure that she would need throughout her career. From there, she started learning more about the craft as a corporate learning intern during her senior year in college. Her first role was as a training coordinator and she eventually grew into the instructional design role. She had been working as an instructional designer for six years and explained that she liked how "instructional design is both analytical and creative at the same time."

Kay's title was Learning and Development Specialist II. That role was a combination of an instructional designer and program manager. She had progressed in her career from a junior ID position at a different company before joining the current company in the senior role. The time and space structures that explain how Kay had come to be where she was in her career allowed her to grow from a student, to an intern, to a junior instructional designer, and on to a senior instructional designer/program manager role. Kay explained that her responsibilities included working with Human Resource (HR) leaders to develop training interventions for HR initiatives. Her responsibilities also included seeking continuous improvement opportunities such as reviewing her team's processes, templates, and tools and doing industry research on best practices. Kay also served as a project manager, which she described as the third major component of her role. The project management aspect of her role involved a lot of communication. She defined timelines, provided status updates, ensured sure that other IDs working on the project were meeting the timelines, touched-base with the IDs about their statuses, and kept up with her own deliverables. Kay explained that her organization "use to have Program Managers, but the IDs are responsible for that aspect now." She provided status updates to business stakeholders and to the learning managers, following through on the work and making sure that deliverables were received on time. Kay's relation to others structure made it possible for her to execute many of her most critical project manager-related responsibilities.

Kay and her team relied on the ADDIE model for project development. They embraced the model and had become increasingly precise in how they followed it. They had built templates and developed processes to help guide the team through the different phases of ADDIE. Kay's team also used a variety of tools to help them manage projects. They created project plans in Excel and used Outlook emails and their calendars. Her team "put things on people's calendars and sent many emails." They also used One Note as a communication and collaboration tool. Both Outlook and One Note helped her communicate and collaborate with the project team. Kay respected the importance of communication and collaboration as a key part of her role, demonstrating the relation to self and others structures.

Kay reflected on how she learned to manage projects, which involved time and space. "Thinking back, my education did not prepare me directly to manage projects. I learned to manage projects almost 100% on the job." However, she pointed out that people learn to manage deadlines, timelines, and multiple intervals just from being in college. Kay also "learned a great deal from her more senior colleagues." She observed what worked for her senior colleagues and adapted their practices for her projects. She offered her experiences working with change managers as an example. This example displayed the relation to self and relation to others structures. She explained that working with change managers taught her a lot about project management. She offered, "They are really good at managing projects and I learned ideas like being clear on when you need something back and setting contingencies." She also shared how the communications skills that she picked up from working with senior people helped her become a better project manager. It was apparent how her relation to self and others helped her gain and hone skills that are vital to project management. Kay also described how using templates helped her grasp project management concepts. For example, using an email template helped her learn how to communicate status updates. The materiality structure, as evidenced by the combination of her educational background, the knowledge and skills that she gained from working in various positions within education and instructional design, and working with templates were all at play in making Kay's career in instructional design and project management possible.

Although Kay felt successful in managing projects, she admitted that, if she could go back in time, she would get more exposure to actual project management tools. She explained that Excel, for example, could take painstaking practice to learn how to do certain things. Kay had learned by trial-and-error. However, she thought that a formal educational setting is a good place to learn basic project management concepts as well as how to use project management tools. She shared that, after obtaining a higher education in a related field, it is necessary to gain real world experience. Kay explained that practical experience is where people learn the different factors that affect delivery of a project.

Kay went on to explain that once you have the education and training, it is important to understand other factors that help in successful project management. The first one that came to her mind was communication. She said that, "if you communicate clearly with your customers and leaders, the rest is just hitting the mark on expectations." One challenge that Kay faced all the time was customer management and education. She perceived that it is common that customers do not understand all of the work that goes into creating an e-learning course or classroom training. Therefore, their expectations may be unrealistic. She perceived customer expectation management and education as a big challenge that is common in the field of instructional design. Two major points helped her with getting past this challenge. First, getting her team's project plans created with best practice timelines helped to set expectations and get everyone on the same page. The other thing was communicating expectations and providing stakeholders examples, such as from You Tube. For example, Kay sent stakeholders a video on what instructional designers do to give them a basic understanding of the role in order to help them understand the relevant expectations. This emphasis on education and communication

along with the insight that Kay displayed in sharing examples and project plans shows her relation to self and relation to others structures at work.

In addition to communication, customer management, and education, Kay recommended that ID teams have a solid marketing plan. She explained that, "if you can successfully market to your organization internally, then they know who you are and what you do." She reiterated how using a model such as ADDIE helps guide IDs and helps ensure that they are not skipping important steps in the development process. Her final recommendation was for IDs to make sure that they are smart with documentation. Kay emphasized that is important to document everything. She provided a few examples to back this up. "If someone calls you and says they need you to move a deadline out, document it. Put it in an email confirming what was discussed and update your project plan." She added that having scope documents, project charters, and other documents signed off on by your customers also helps make the project management process run smoothly. The ideas that Kay suggested to other instructional designers as well as those interested in instructional design showed the materiality and relation to self and others structures. The structures of time and space were also evident in how she came to be where she was in her career.

Anthony's Structural Description

Anthony had an interesting background that included entrepreneurship, business management, training, and instructional design. He had officially been an instructional designer for 14 years but had been designing courses for about 15 years prior as a trainer. As other instructional designers described in sharing their stories, Anthony had gotten into the field by accident. He had owned and managed several small businesses in different industries and had decided after some time that he wanted to do something he really loved. He decided to make scuba diving his profession and moved to a warmer client in pursuit. Eventually he became a dive instructor and later a dive instructor trainer. Anthony started designing courses fairly soon after he came under the mentorship of a lead dive instructor who also became a very close friend. It was that dive instructor that got Anthony involved in instructional design and helped him to learn it. The way Anthony transitioned into the field, along with how he started to learn instructional design signified the relation to self and others, materiality, time, and space structures. Anthony recognized his own strengths and interests, was willing to learn from a mentor and share what he knew with others, and focused on building his knowledge of instructional design through study and practice.

Anthony reflected on his education and the early part of his ID career, a part of his experience that also illustrated the relation to self structure. When he studied for his master's degree, he was a graduate assistant to the chair of the Instructional Design Department at a university. He also worked on several contract instructional design projects on the side because he was not making enough money as a graduate assistant. That is when he got into designing online programs for students pursuing master's degrees in instructional design. This experience also allowed him to build upon his materiality structure, which would be crucial for his career progression. After he graduated, the university kept him on for a couple of semesters as Director of E-learning. Anthony described how he learned a lot in that position, which allowed him to grow his learning management systems (LMSs), online learning, and simulation skills. Anthony explained that he was hired for several positions in his career because of his background in creating higher levels of interactive online learning and due to his simulation experience. The materiality structure had made these experiences possible. Over time, Anthony had provided instructional design to support for military contracts, higher education, and commercial initiatives. He had also held a position as an assistant project manager, where his primary responsibility was to be a bridge between the program manager and a staff of instructional designers. That position was Anthony's first venture into project management for instructional design. Time and space structures had allowed him to experience instructional design and project management in different industries and spaces over the span of his career.

At the time, Anthony's role did not substantively involve project management. He was responsible for the front-end analysis of a government initiative and served as an expert in instructional design. He explained that he was "not doing a lot of project management in this role because the government employees must make those decisions." However, they did ask for

his recommendations. In previous ID positions, Anthony had been responsible for analysis, scope definition, template creation, and process documentation. He also created the IMS, or integrated master schedule, for his projects – which included target dates and deliverables. His project management responsibilities centered on project planning and resourcing. Anthony shared that he also spent a great deal of time communicating as a major part of his role. This further displayed the relation to others structure. He explained that, with commercial contracts (for example), "you really have to make sure that everybody is on the same page because there is nothing worse than having different ideas about what is expected." He emphasized the importance of instructional designers/project managers gathering and defining requirements and communicating them. He reiterated that meetings were very important in maintaining communication between instructional designers and stakeholders. He offered that weekly meetings, whether in-person, over the phone, or via teleconference, were crucial to keep projects going. Anthony also shared other aspects of his previous project management role. His other project management responsibilities included monitoring progress of the team against the IMS deliverable schedule and contingency planning. For example, when his project team was facing a quickly approaching deadline but only had 49% of the content developed, they had backup plans in place. Anthony explained that being on the same page about expectations, monitoring the project, having contingencies, and communicating throughout the life cycle were critical to the success of the project. "Also, having good working relationships with your clients and your team is essential, but that goes back to communication." Anthony's undergraduate degree was in Communications and he believed that the degree had helped him in both instructional design and project management. His materiality structure included components of communications, business, training, and instructional design – all of which had served him well in his career.

For all of his education, training, and experience, Anthony did not have any formal training in project management. However, he supposed that his background in business management helped him with the project management aspect of the role. He reasoned that his background in business, coupled with his education and work experience, transferred over into managing learning design projects. The first projects that Anthony managed, such as the projects he managed at the college and when he was designing courses for the schools, were small in scope. He explained that they were "one-person type efforts." Anthony shared that tools like the templates he used, which followed instructional design and project management models, helped him get started. He also used and recommended others tools such as MS Excel, MS Project, and also MS Word. He pointed out that people tend to forget that there is a lot of writing involved in managing projects. Therefore, templates are also developed in Word to help with the PM aspect. He had found Google Docs to be useful at certain parts of a project and for certain industries. For example, he mentioned that the military was more restricted but Google Docs might work better for commercial projects. One final tool recommendation was having a version control system. He suggested that project teams need some time of version control setup like CMS, Alien Brain, or Share Point to help manage their documents and to help with quality assurance (QA) reviews. It is important to note that all of the tools that Anthony recommended facilitated

communication, sharing, and collaboration. In other words, although he was referring to tools and technology, the suggestions still put the relation to self and others structures on display. The materiality structure was also at work in the background as it takes a significant amount of material knowledge to learn and understand how to use these tools.

Anthony emphasized that he would not change anything in his preparation to manage projects because managing projects was a logical next step, a natural progression in his career. He "had a good enough background from business management and education to make smart decisions and ask the right questions." As far as project management models, Anthony was a proponent of iterative design and had used the agile method several times because he felt that agile and iterative design worked well together. The project that he was working utilized an agile approach. Anthony had also used waterfall-type methods for other projects (only when the client requested that he do so).

Anthony had a few recommendations for anyone interested in pursuing a career in instructional design. These recommendations reflected his relation to self and others and materiality structures. He said that the first thing people need is to have a good understanding of communication. "You have to be able to build rapport with people and collaborate well with them." He pointed out that "you have to be able to influence a team to work together, especially in project management." These things require excellent communication skills. Instructional designers/project managers must be able to communicate, express empathy, and still maintain the project schedule. He also described how culture plays a part. A shared culture and mutual trust help people work better together.

Anthony recommended that people seek practical experience opportunities, whether it is a part of their coursework or not. "People need experience in working with the concept of timelines and deliverables and they need practice using tools such as MS Project." Colleges and universities may even want to consider integrating project management practical experience into their programs or using scenario-based learning principles. For example, Anthony described how instructors could put learners into a situation, perhaps even in groups, and let them come up with a solution (like a project plan) and present that solution. He reiterated that having real-world context would be invaluable because instructional designers face unique challenges.

Having practical experience before starting a professional position would help new instructional designers be prepared to design and manage design projects. For example, one of the biggest challenges that Anthony faced was getting client or SME reviews back on time. He thought that this was a very common challenge and could not think of a single project where that had not been at least somewhat of an issue. He reiterated that IDs have to be able to communicate well to overcome this type of challenge. They must also be able to set and manage expectations – which also require communication. One of the emerging problems that Anthony had noticed in the field was that, with the advancement of videoconferencing technology, stakeholders were not meeting face-to-face very often. He proposed that their needs to be some face-to-face interaction where people sit down together and really hash out expectations and requirements up front.

Project must develop a social relationship so that they can feel comfortable communicating and collaborating. The relation to self and others structures were apparent again as Anthony shared his recommendations about communication and collaboration. Other structures may have been a little more hidden in his story but the materiality, time, and space structures were nevertheless instrumental.

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