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Leadership Competencies for Instructional Designers: Identifying Critical Incidents Used to Lead Design Projects That Improve Performance

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LEADERSHIP COMPETENCIES FOR INSTRUCTIONAL DESIGNERS:

IDENTIFYING CRITICAL INCIDENTS USED TO LEAD DESIGN PROJECTS THAT

IMPROVE PERFORMANCE

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ABSTRACT

LEADERSHIP COMPETENCIES FOR INSTRUCTIONAL DESIGNERS: IDENTIFYING CRITICAL INCIDENTS USED TO LEAD DESIGN PROJECTS THAT IMPROVE PERFORMANCE

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Even though an instructional designer may not have formal authority or direct reports, to be successful, they need leadership skills. Although the literature calls for instructional designers to possess several critical leadership skills, it does not consistently present the same important skills and often defines them very broadly. Further, authors who have argued that leadership skills are not taught to instructional designers in a sufficient way often call for more education on leadership competencies in graduate school, but the literature does not state where these skills are currently being learned and fostered.

This qualitative research study used methods of grounded theory and the Critical Incident Technique (CIT) to identify leadership competencies instructional designers use to successfully lead design projects and to identify where they learn and practice these leadership competencies. In interviews, 25 instructional designers shared stories about successful and unsuccessful projects they led and where they felt they learned the skills needed to lead successful projects. After qualitative coding to determine common themes, the most frequently cited success behaviors are collaborating positively and communicating successfully with subject matter experts (SMEs) or stakeholders, continuous review with stakeholders or SMEs, completing a needs analysis, project management, and gaining support. Translating these success behaviors

into leadership competencies resulted in four key leadership competencies necessary for instructional designers to lead successful projects: (1) positive collaboration and continuous review with SMEs and stakeholders, (2) completing a needs analysis, (3) project management, and (4) gaining support. These competencies match the research done previously on instructional design and leadership and align with leadership competencies identified by the Center for Creative Leadership. Instructional designers cited doing the work, having a helpful mentor or supervisor, or trying and failing as the most common places where they learned how to successfully lead design projects. This poses an opportunity for further research to be conducted on where these competencies can be taught to new instructional designers. Further research could also be done to define these competencies further or to do similar studies for specific industries or experience level of instructional designers.

This dissertation is dedicated to my son, Henry. You are my proudest accomplishment.

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CHAPTER I

INTRODUCTION

The role of an instructional designer has broadened since World War II when instructional design originated (Reiser, 2002). The literature shows that in addition to technical expertise, instructional designers need strong leadership competencies to successfully own and lead design projects; however, there are few studies that examine and define these leadership skills, and there is little agreement as to which skills are most important (Anderson, 2012; Ashbaugh, 2013; Bond and Dirkin, 2018; Irlbeck and Dunn, 2020; York and Ertmer, 2016). Researchers also call for more leadership competencies to be embedded in instructional design degree programs, but there is no indication in that literature as to where skills are currently being acquired (Anderson, 2012; Ashbaugh & Piña, 2014; Irlbeck & Dunn, 2020; Williams van Rooij, 2010). Further research should be done on identifying the most critical leadership competencies and where they are grown and fostered so that we can best equip future instructional designers for success.

Purpose Statement

The purpose of this qualitative research study is to identify the leadership competencies instructional designers use to lead design projects for performance improvement in the workplace and to identify where they learn and practice these leadership competencies. This study aims to identify which leadership competencies are used so that novice instructional designers can recognize and improve these competencies, setting them up for further career success. This study also aims to identify where leadership competencies are currently learned and practiced, to help determine the best place for competencies to be taught and fostered in the future. Finally, this study uses methods of grounded theory and the Critical Incident Technique

(CIT) to eliminate what are considered "desirable" leadership traits and perceived strengths of instructional designers to focus on what behaviors constitute success or failure for instructional designers in practice (Flanagan, 1954). For the purposes of this study, the terms competency and skill are used interchangeably and are defined as the ability to do something successfully and to use one's knowledge effectively (Merriam-Webster, n.d.-b, n.d.-c). The term behavior refers to the way in which someone conducts themselves, and in this study, it is used to denote the actions of instructional designers that they shared during their interviews (Merriam-Webster, n.d.-a).

Research Questions

This study will aim to answer the following questions:

1. What leadership skills are crucial for instructional designers as they lead design projects to improve their organization's performance?
2. Where do instructional designers gain leadership skills?

Summary

This study will add to the growing research on leadership skills necessary for instructional designers, using methods of grounded theory and the CIT to help identify competencies used to successfully lead design projects that will ultimately improve performance in some way. By collecting stories of both successful and unsuccessful incidents, this study hopes to narrow down the competencies most critical to instructional designers in their roles. The research study will also address a significant gap in the literature by beginning to identify where instructional designers learn and practice leadership competencies. This will help to identify what leadership competencies instructional designers need and will help to answer the question of where leadership competencies need to be taught to instructional designers so that current

leaders in the field can best determine where to foster these competencies for new instructional designers.

In Chapter Two of the dissertation, the relevant literature will be reviewed. In Chapter Three, the methodology used in this study will be explained. Chapter Four will share the results of the research. In Chapter Five, the research findings will be discussed and research questions answered.

CHAPTER II

LITERATURE REVIEW

When becoming a full-time instructional designer, one might realize that to be successful, they need to be able to lead design projects. The same skills that may have earned someone the title "strong-willed" child in their younger years are the exact same skills they need to get subject matter experts (SMEs) to spend time with them and share their knowledge to contribute to a learning project. They are the same skills needed to garner support from stakeholders across the organization, whether the stakeholders are facilitators, directors, or the C-suite. They are the same skills needed to envision all the moving pieces of a project coming together while keeping their sights on the big picture. When an instructional designer is given a project to lead, there are certain skills they need to be successful.

However, there are few studies that examine what these leadership skills are (Anderson, 2012; Ashbaugh, 2013; Bond & Dirkin, 2018; Irlbeck & Dunn, 2020; York & Ertmer, 2016). In some studies, leadership competencies were found when seeking out other, more general, instructional design competencies (Bond & Dirkin, 2018; York & Ertmer, 2016). However, despite the lack of agreement, there are leadership competencies that emerge in multiple studies. Research notes a lack of leadership skills being taught in instructional design graduate education and calls for more attention to these competencies in instructional designers' graduate programs; however, it does not provide any insight to where these skills are currently being learned or practiced (Anderson, 2012; Ashbaugh & Piña, 2014; Irlbeck & Dunn, 2020; Williams van Rooij, 2010). Further research should be done to determine which leadership competencies are the most important for instructional designers in their roles and where these skills are currently learned and practiced determining where they can best be learned and fostered.

The following literature review discusses the evolution of the role of instructional designer over time, why instructional designers must possess leadership skills due to their unique role in organizations, in what capacity instructional designers lead, and how leadership competencies have been measured and prioritized in the literature thus far. The lack of leadership courses or skills integrated into instructional design graduate curriculum is discussed, as is the call for more leadership focus in these programs. Finally, a leadership framework is shared that will be used to compare to the skills found during the study.

A Brief History of the Broadening Role of Instructional Designer

Reiser (2002) attributes the beginning of instructional design to World War II, when education and training experts, such as Robert Gagné, Leslie Briggs, and John Flanagan (who created the Critical Incident Technique [CIT] used in this study), were consulted to train and educate the military. From the mid-1950s to the mid-1960s, B.F. Skinner developed programmed instruction, which introduced a systems approach to education, and in the early 1960s, Robert Mager created a method for writing objectives for programmed instruction (Reiser, 2002). Instructional design models increased throughout the 1970s, and by the end of the decade, there were more than 40 models. In the 1980s, there was great interest in how cognitive psychology impacted instructional design (Reiser, 2002). The performance technology movement, which emphasized front-end analysis, on-the-job performance, business results, and noninstructional solutions to performance problems began to have an impact on instructional design in the 1980s, and this continued through the 1990s, which broadened the field. The 1990s also saw a growing interest in constructivism, which meant instructional designers were tasked with designing more "authentic" tasks in situations where learners became active rather than passive participants. As technology evolved and computers were introduced as a method of performance support,

computer-based training increased in popularity (Reiser, 2002). In the early 2000s, professional development organizations, such as the Association for Talent Development (ATD) and International Board of Standards for Training, Performance, and Instruction (IBSTPI), started creating competency models for instructional designers, and because many instructional designers come into their roles without formal coursework or formal experience, these competency models became heavily relied on to explain what instructional design competencies are desired (North et al., 2021).

The field of instructional design has grown over time to include broad competencies, with influences from performance improvement and technology. Bond and Dirkin (2018) spoke to 251 instructional designers in higher education and found that 63 managed other employees formally (where employees report directly to the instructional designer), 70 managed other employees informally (where managed employees were not direct reports), and 19 said they managed employees both formally and informally. Although this means that most instructional designers are considered individual contributors, nearly 61% say they manage other employees in some way – formally or informally. In Bond and Dirken's (2018) study, they noted that 71% of those who formally lead are in charge of a small team of four or less people, which aligns with Gardner et al.'s (2018) study that found 61% of instructional designers surveyed lead one to three others. Instructional design teams are small and can include other roles, such as trainers or facilitators, learning and development managers, organization development or HR specialists, e-learning professionals, coaches, project managers, and multimedia specialists (ATD, 2022). Working on small teams where they may or may not formally lead people and projects and combining skills from the various industries that have contributed to instructional design over time could be reasons why the role of instructional designer has broadened over time.

Instructional Designers as Leaders

Instructional designers are responsible for leading design projects in their organizations, solving human performance problems and improving their organization's performance in some way (Boyle, 2011; Klein and Kelly, 2018). Instructional designers solve organizational problems with both instructional and non-instructional interventions (Reiser, 2002; Rummler, 2007). In this way, their role is that of a performance consultant, who is responsible for leading the work on performance initiatives by guiding other employees toward a common goal. A performance consultant carries out the phases of their process, leading a team of stakeholders; they are responsible for finding gaps, generate a hypothesis for the possible causes of the gaps, use a systematic process for gap analysis, determine root cause, determine where performance should be, specify a solution, develop prototypes, and implement and evaluate the success of their projects, just like an instructional designer (Rummler, 2007). However, performance consultants are not always expected to carry out the design and development of their solutions, whereas instructional designers complete these tasks (Bond and Dirkin, 2018; Rummler, 2007). In Bond and Dirkin's (2018) study, they determined that instructional designers were responsible for several functions outside what is typically associated with common definitions of the field, noting that the subjects they surveyed were often "positioned as leaders specializing in particular types of learning design" (p. 1). In Chartier's (2020) study that reviewed instructional design literature from the last 25 years, she mentions that instructional design experts lead not only complex design processes but also projects, relationships with others, and expectations from clients and stakeholders. Rummler (2007) defines leaders as "setting an appropriate direction or course for the enterprise and getting the 'troops' to effectively follow and implement that course" (p. 165). According to the research, instructional designers, whether through formal or indirect

assignment, lead design projects from inception to completion, setting the course for the project, and getting stakeholders from the company to support their solution and its implementation (Bond and Dirkin, 2018; Chartier, 2020).

In 2010, Williams van Rooij argued that instructional designers need both instructional design foundational knowledge as well as project management skills to complete projects on time and on budget and to meet stakeholder expectations. She noted that project management skills include interpersonal skills, namely communication and leadership skills. For higher education institutions, Brigance (2011) argues that educators in higher education are often uncomfortable with the technology used in online learning and that instructional designers can be a source of leadership to help educators navigate change and help with transitions to new technology. In Brito's (2017) study, this was proven when instructional designers assisted with the shift of a higher education institution from one learning management system to another, utilizing change management skills to help move the project forward for the entire organization. Boyle (2011) notes how instructional designers are responsible for resolving communication methods and visualizing future problems and changes – both of which embody leadership qualities. Anderson (2012) argues that instructional designers must be leaders in their organization as well as lead clients and peers, using relationship-building and interpersonal skills to successfully do this. Ashbaugh (2013) interviewed instructional designers to determine what leadership skills are necessary to develop online courses and found that strategy, vision, interpersonal skills, productivity, values, duties, and emotional and psychological strength are all critical for instructional designers. The field of instructional design is changing – from one where the instructional designer is a technologist to one where the instructional designer incorporates leadership skills in their daily practice (Ashbaugh 2013; Ashbaugh & Piña, 2014). Klein and

Kelly (2018) confirmed this shift when they searched 393 job announcements for instructional designers and found that experienced instructional designers are expected to have leadership skills. Smith (2021) recounts from her own experience that instructional designers are project managers and that leading project teams throughout an organization is an essential skill for instructional designers to master.

Measuring Instructional Design Leadership Competencies

Although the literature calls for instructional designers to possess several critical leadership skills, little research has been done on the leadership skills instructional designers need in practice, and that research does not consistently present the same important skills. However, despite the inconsistency in leadership skills called for, some competencies are repeatedly mentioned throughout the literature. Communication, interpersonal skills, project management, and strategy and vision are mentioned multiple times throughout the literature as critical leadership competencies all instructional designers need, regardless of roles and responsibilities. Table 1 breaks down the studies in which these leadership competencies were identified.

Table 1

Leadership and Instructional Design Competencies in the Literature

Leadership/Instructional Design Competency	Studies Mentioning Competency
Communication, collaboration, and "people skills"	Ashbaugh, 2013 Ashbaugh & Piña, 2014 Brigance, 2011 Gardner et al., 2018 Klein & Kelly, 2018 Williams van Rooij, 2010 York & Ertmer, 2016
Project management	Ashbaugh & Piña, 2014

	Bond & Dirkin, 2018
	Gardner et al., 2018
	Williams van Rooij, 2010
Strategy and vision	Ashbaugh, 2013
	Ashbaugh & Piña, 2014
	Gardner et al., 2018
Change management	Brigance, 2011
	Brito, 2017

Ashbaugh (2013) interviewed instructional designers to see which skills were critical for developing online courses and found, in order of frequency, strategy, vision, and personality (interpersonal skills) to be the most important competencies. York and Ertmer (2016) completed a Delphi study of instructional design principles used during design processes, a study originally intended to identify general instructional design competencies. However, they identified communication, client relationships, project management, and design characteristics as skills needed outside of the typical, technical instructional design skills. Brito (2017) used a case study of the implementation of a learning management system to show how critical the leadership skills of change management are for instructional designers, regardless of where their role falls in the hierarchy of their organization. Bond and Dirkin (2018) completed a survey to see what roles and responsibilities instructional designers took on in addition to traditional instructional design skills and found faculty development, project management, supervising others, committee work, and technical support to be the most frequent responsibilities. Once again, they were not studying specifically which leadership competencies were needed. Gardner et al. (2018) completed a Delphi study to see which leadership competencies were needed by instructional design leaders and supervisors who were responsible for direct reports and found

communication, project management, and visioning and strategic alignment to be the top three. Subsequent paragraphs will aim to define some of these competencies in more detail.

Communication and interpersonal skills are mentioned by multiple authors as critical leadership skills for instructional designers as they navigate their organizations (Anderson, 2012; Ashbaugh, 2013; Ashbaugh & Piña, 2014; Boyle, 2011; Brigance, 2011; Gardner et al., 2018; Irlbeck & Dunn, 2020; Klein & Kelly, 2018; Williams van Rooij, 2010; York & Ertmer, 2016). They must work with clients, stakeholders, their peers, and others throughout the organization to create and implement successful learning projects (Anderson, 2012). Communication is the most mentioned critical leadership competency throughout the literature.

Project management is another leadership competency mentioned by the literature that is critical for instructional designers to successfully lead projects within their organizations (Ashbaugh & Piña, 2014; Bond & Dirkin, 2018; Gardner et al., 2018; Williams van Rooij, 2010; York & Ertmer, 2016). It is up to instructional designers to make sure that learning experiences are delivered on time, within budget, and meeting the requirements of the clients or stakeholders involved, as well as to lead all the phases that produce the project deliverable (van Rooij, 2010). Strategy and vision are leadership skills that are closely related that are mentioned a few times throughout the literature (Ashbaugh, 2013; Ashbaugh & Piña, 2014; Boyle, 2011; Gardner et al., 2018). Strategy is used by instructional designers to meet project goals and to create buy-in with stakeholders (Ashbaugh, 2013). Vision includes the ability to anticipate problems and changes to help the organization move forward (Boyle, 2011). Finally, change management is mentioned by a few of the authors as well (Boyle, 2011; Brigance, 2011; and Brito, 2017). Because instructional designers are responsible for training on new products and software (and often get a look at these new items before their coworkers), they can be change agents within their

organizations to help others in the organization transition successfully (Brigance, 2011). Without more research, one can only look at these competencies based on the frequency with which they are mentioned throughout the literature. It is easy to place the onus of education on instructional design graduate degree programs, but without knowing which leadership skills are truly critical for instructional designers' success, it is hard to make an argument for what should be added to programs and how.

It is important to note that for the sake of this study, literature on instructional design competencies taken from job postings was not included because it did not align with the research questions. Job postings represent desired competencies that hiring managers seek in instructional designers, but these do not necessarily reflect the competencies that are present in candidates who get the job. They also may not reflect the competencies instructional designers gain over time. Depending on the length of time that passes between an instructional designer being hired and completing a successful project, they may have learned new competencies.

Despite the studies shared in this literature review, the literature and research that focuses specifically on leadership skills for instructional designers remains sparse. When Ashbaugh (2013) reviewed the literature to identify leadership competencies critical for instructional designers who develop online courses, she determined that standard instructional design competencies (AECT and IBSTPI) made almost no mention of leadership competencies and that literature on leadership as a characteristic of instructional designers was just as rare. It is important to note that neither the AECT nor the IBSTPI have released new standard competency lists since the time of Ashbaugh's publication. According to the IBSTPI (2012) competencies for instructional design, no mention is made of leadership skills except that three of the 22 competencies fall under "managerial" but apply to those leading other instructional designers

rather than being leadership skills necessary for instructional designers. According to the AECT (2012) standards, there is one mention of leadership under the professional skills section, where it says instructional designers lead their peers in designing and implementing technology-supported learning. Gardner et al. (2018) also noted a lack of research on instructional design management and leadership, in general. Although there is a lot of talk of project management throughout the literature, even the studies that sought to find links between instructional design and management or leadership have come up short or cover a very specific sector of the instructional design industry, such as distance education or higher education (Gardner et al., 2018).

Call for Instructional Design Leadership Competencies in Graduate Education

Despite the lack of literature on instructional design and leadership, authors who have argued that leadership skills are not taught to instructional designers in a sufficient way often call for more education on leadership competencies in graduate school. Williams van Rooij (2010) found that out of 145 graduate degree programs in instructional design and performance technology, only 23% offered courses on project management, one of the previously identified leadership competencies that instructional designers use in their roles. She calls for more education on project management in instructional design graduate degree programs but also notes that more research should be done on identifying the ways in which instructional designers gain project management experience (van Rooij, 2010). Ashbaugh and Piña (2014) examined which accredited universities, offering advanced instructional design degrees or certificates, included courses on leadership or management. Of 21 highly regarded programs, including programs at Arizona State, Boise State, Florida State, Old Dominion University, and more, only one-third offered a leadership course, and of that one-third, only half specified leadership rather

than management. The authors then challenge higher education institutions to find ways to provide opportunities for leadership-thinking in current instructional design programs (Ashbaugh & Piña, 2014).

Anderson (2012) claims that it is the responsibility of both academic institutions and instructional designers to help new instructional designers gain relationship-building skills to become better leaders in their organizations. As a result of their study of competencies needed by instructional design leaders and supervisors, Gardner et al. (2018) note that because many graduates of instructional design programs become leaders themselves, educators should consider including leadership competencies in their graduate degree programs. Similarly, Irlbeck and Dunn (2020) argue that because the changing responsibilities of instructional designers means they now need to function as leaders (whether they hold official leadership titles or not), the critical leadership competency of emotional intelligence should be included in instructional design program curriculum to improve the performance of post-grad instructional designers. To many of the authors, it seems that instructional design graduate degree programs are the most logical place to teach critical leadership skills, but more research should first be done on where those skills are currently learned and practiced, seeing where they best fit.

Using a Leadership Competency Model

Leadership theory is complex and contains many different domains and even more definitions of leadership. Dinh and colleagues (2014) looked at 12 years of scholarly research on leadership theory and found over 66 different theoretical domains for leadership theory, noting that there is no unified theory of leadership because there is so much possibility for differing outcomes and context. Because this study is meant to be exploratory, meaning it will explore leadership competencies based on observed behaviors of participants and create themes from

those behaviors, this means it will not aim to assign leadership competencies from certain

leadership philosophies or styles or specific leadership measurement tools.

To show alignment with the leadership field, the researcher still wanted to compare

behaviors identified from participants to general leadership competencies. The researcher chose

to use a leadership development competency model from the Center for Creative Leadership

(CCL, 2014). Because the research shows that instructional designers may or may not lead others

and may or may not lead projects, it was important to consider a leadership as an organizational

quality rather than describing leadership as management or administration (Bond & Dirken,

2018; Ogawa & Bossert, 1995). The CCL model aligns with assumptions from organizational

leadership from Ogawa and Bossert (1995): that leadership functions to influence organizational

performance, that leadership is related to organizational roles, and that leaders are individuals

who possess certain attributes, act in certain ways or both. The CCL has a leadership

development framework that defines competencies based on the level of leadership at the

organization, including leading self, leading others, leading managers, leading the function, and

leading the organization. (CCL, 2014; Scisco et al., 2017). According to Society for Human

Resource Management (SHRM) (2008), a competency-based approach to leadership can help

companies identify and develop their next generation of leaders. Using a competency-based

approach helps organizations to determine what positions and what levels should possess which

leadership skills (SHRM, 2008). The researcher chose this competency model for its

organizational leadership alignment and its general leadership competencies that do not fall into

one leadership style or instrument.

Because instructional designers do not lead managers specifically and because they are

not senior enough to lead functions or the organization, those levels will be excluded from

comparison; this study will only look at the competencies related to leading self and leading others because that is where instructional designers lead in their roles at their organizations, formally or informally (Bond and Dirken, 2018). Leading self includes competencies such as leading with purpose, defined as energizing others by demonstrating passion, commitment, and focus; interpersonal savvy, which is understanding what others need and responding appropriately; tolerating ambiguity, which is defined as thriving in unclear situations. Leading others includes coaching and developing others, defined as providing guidance and support to help others learn and grow and embracing change, which is inspiring, championing, and driving change. Figure 1 shows the full list of leadership competencies, their definition, and the level at which they exist (CCL, 2014; Scisco et al., 2017).

Figure 1

Competencies for Leaders (adapted from CCL, 2014)

Leading Self	Leading Others
• Establishing credibility • Leading with purpose • Delivering results • Doing whatever it takes • Interpersonal savvy • Embracing flexibility • Tolerating ambiguity • Understanding one's own culture and values	• Coaching and developing others • Leading team achievement • Building and maintaining relationships • Resolving conflict • Learning to delegate • Innovative problem solving • Embracing change • Adapting to cultural differences

Summary

The literature on leadership competencies instructional designers need is limited, with much of it focusing on desirable skills rather competencies based on observed behaviors. The competencies identified by the literature that exists are shared, and it is explained that some of the research calls for leadership competencies to be part of instructional design graduate

education but does not provide a reason why it should be learned there. Finally, it is mentioned that leadership definitions and theory are complex, and this study will be exploratory when identifying leadership competencies but will compare those competencies to a popular competency-based leadership framework for leading self and leading others.

CHAPTER III

METHODOLOGY

The purpose of this qualitative research study was to identify the leadership competencies instructional designers use to lead design projects for performance improvement in the workplace and to identify where they learn and practice these leadership competencies. This chapter shares the research questions and then discusses the research design, including data collection procedures and measures of trustworthiness. Then, participant protection and additional measures of trustworthiness are explained. Finally, the limitations to the study are described.

Research Questions

This study aimed to answer the following questions:

1. What leadership skills are crucial for instructional designers as they lead design projects to improve their organization's performance?
2. Where do instructional designers gain leadership skills?

Research Design

This qualitative research study used methods of grounded theory and the Critical Incident Technique (CIT) to identify leadership behaviors that are present when an instructional designer successfully leads and completes a design project and which behaviors are absent when an instructional designer is not successful in leading and completing a design project. This method was selected because it goes beyond subjective data that can come from examining competencies present in job descriptions, where hiring managers share desired skills, which may or may not be critical to success in practice. The protocol was designed to ask instructional designers specifically how they lead design projects and defined success as when a design project meets

the intended goal and outcomes and shows value in whatever metrics were designed to measure its success.

Grounded theory, founded by Glaser and Strauss (1967), is a qualitative research design where the researcher derives a general theory of a process grounded in the views of participants and uses qualitative coding processes to pull themes and descriptions from the data (Charmaz, 2006; Creswell & Creswell, 2020). The constructivist genre of grounded theory was developed by Charmaz and focuses on how participants construct meaning from their experiences – where the emphasis is on examining processes, making the study of action central, and creating abstract interpretations (Charmaz, 2006; Tie et al., 2019). Because this study sought to examine leadership competencies that were present for instructional designers, rather than to assign leadership competencies that already exist in the literature, methods of grounded theory to explore instructional designer's experiences and find common behaviors and then themes were used. Constructivist grounded theory methods, using the CIT as a tool for data collection and analysis, were used in this study to identify what competencies are present when instructional designers are leading design projects. The researcher interviewed participants, who shared stories about design projects from their work experience. Then, she pulled themes from the behaviors collected during interviews to determine what competencies were present in both successful and unsuccessful design projects.

Critical Incident Technique for Data Collection and Analysis

The CIT is a set of procedures used to collect direct observations of human behavior to determine their usefulness for solving practical problems (Flanagan, 1954). The incident refers to the observable human activity that is complete enough to be able to infer or predict things about the acting human, and to be critical, the incident must happen in a situation where the intention is

clear to the observer and where the consequences leave little question as to the effects of the act (Flanagan, 1954). The CIT consists of five major steps: (1) discovering the general aims of the activity being studied, (2) making plans and setting specifications, (3) collecting data, (4) analyzing data, and (5) interpreting data and reporting results (Butterfield et al., 2005). The researcher explains how she approached each of the five steps of the CIT and how she ensured trustworthiness at each step in the following paragraphs.

The first step of the CIT is to discover the general aims of the activity being studied (Butterfield et al., 2005). Flanagan (1954) summarizes that the aim of the activity should be a short statement from experts in the field that expresses, in simple terms, objectives that most people would agree on. In this study, the research aimed to find out what makes successful completion of an instructional designer's design project. Participants were asked about a time they led a successful instructional design project and about a time where they tried but were unsuccessful at leading an instructional design project. The aim was not only to find critical incidents from successful design projects but also to define critical incidents from unsuccessful design projects in comparison.

The second step of the CIT is to make plans and set specifications. Flanagan (1954) notes that the specifics should include detailed information about the place, persons, conditions, and activities. For this study, observations were made about the behavior in the workplace of employed instructional designers while navigating and leading design projects. Next, one must decide whether certain behaviors shared are relevant to the general aims discussed in the first step (Flanagan, 1954). In this study, any action that had a direct or indirect significant impact on the general aims was included. Finally, the observer must be able to decide how important the observed incident is to the general aims, and it is suggested that an incident is critical if it makes

a significant contribution (positively or negatively) to the nature of the activity. Although significance can be a subjective term for observers, for this research study, a significant contribution was one that caused or may have caused a change in the instructional design project that would not have occurred without said contribution. Flanagan (1954) also mentions that observers should be selected based on their knowledge of and familiarity with the activity and that the general aims and specifications should be shared with the observers. For that reason, the following criteria needed to be met to take part in the study:

1. Participants were required to have at least 3 years of instructional design experience, working on an average of 3 (or more) design projects per year. Participants required previous experience in instructional design to be able to accurately identify and have experience with both successful and unsuccessful projects.

2. At the time of the interview, participants were required to be in an instructional design role (or have a related title, such as learning experience designer) where their main responsibility was completing design work (including the analysis, design, development, implementation, and evaluation [ADDIE] of learning experiences). ADDIE is a common label used as an umbrella term that refers to a family of instructional design models that share a common underlying structure (Molenda, 2015). The steps of the ADDIE process were used as part of the criteria to ensure those identifying as instructional designers had similar daily responsibilities.

3. Participants also had to have a leadership role in the project they discussed. Interview questions were worded so that instructional designers would recall a project where they acted in a leadership role, whether formally or informally.

Specifications also outline where, when, who, and under what conditions observations will be made. Data collection began June 2021 and was completed by December 2021. Before participants were found for the study, the researcher conducted a pilot interview with an instructional designer who fit the criteria and an individual who was well-versed in CIT. The purpose of this pilot was threefold: 1. it ensured that the protocol was clear to the interviewee, 2. it provided the researcher practice with the process, and 3. it ensured that the researcher was not leading the interviewee during her line of questioning. In the pilot interview, the interviewee did not provide enough information, and the researcher did not probe for fear of leading the interviewee. The result was that she did not have any clear behaviors and felt that the questions were largely unanswered. The individual who was experienced with CIT provided significant feedback from the pilot interview on how to draw out more context from the participants without leading, and the researcher altered the questions to spend more time asking participants to think about the situation and explain the context before giving them time to answer. She practiced the new questions on a friend and determined she had given enough context for her friend to answer thoroughly. In the subsequent interviews, the researcher got sufficient information and learned the behaviors that led to success without having to ask many follow-up questions. The full interview protocol can be found in the Appendix.

By collecting 50 critical incidents, which is considered the ideal number of incidents by Flanagan (1954) and Butterfield et al. (2005), the researcher found that by the final interviews, saturation was achieved. She noted saturation around the 19th interview but completed all 25 interviews to have 50 total critical incidents. Twenty-five participants met for virtual interviews with the audio recorded. Interviews were transcribed to help with the process of coding and theming. Interviews were scheduled for 60 minutes, although they took roughly 30 minutes on

average. Once all participants answered the preliminary questions to ensure they qualified, they

began the interview. Participants were sent the electronic informed consent to fill out prior to the

interview. Participants who completed the interview successfully were entered in a drawing to

win one of two $50 Amazon gift cards.

Because of the criteria required to participate, convenience sampling was used to gather

participants. Convenience sampling chooses participants for a study because they are readily

available (Mertens, 2014). The social media platform, LinkedIn, was used to reach out to

potential participants because the researcher had over 5,000 connections on the platform at the

time of interviews, many of whom are in the field of instructional design. To ensure that a

variety of instructional designers were chosen, participants were chosen to represent each of the

following career environments, based on Larson and Lockee (2009): K-13 (including higher

education), government or military, business and industry, health industry, and nonprofit. Larson

and Lockee (2009) noted that there are differences in competencies for business and industry

versus higher education for instructional designers. Because this study aimed to collect from the

experiences of instructional designers from all industries, it was important to represent these

different environments.

The CIT's third step is to collect the data. As Flanagan (1954) notes, the CIT works best

when the incidents identified by observers are fresh in their memory, so it is important to talk to

people who have recently experienced incidents from which they can draw. For this reason,

participants in the study were asked to be current practitioners whose main responsibility it is to

do design work. Flanagan (1954) lays out details for how individual interviews should be

conducted, and his methods were used in this study. First, because the researcher was a stranger

to some participants, she briefly explained why she was conducting the study. Then, the general

aims were shared. Next, the researcher recognized the participants' characteristics that qualified them for the study. All participants met the criteria, so none of the interviews had to be ended. Any participant who did not meet the criteria notified the researcher after initially reading the informed consent form and were not invited to interview. Then, she shared the same information that was already communicated in the informed consent form – that the interviews are anonymous, and that any data shared was generalized so that others cannot identify the participants and that pseudonyms would be used throughout the data collection and analysis process to help ensure confidentiality.

The next part of collecting the data is to ask the questions. To ensure balance between success and failure critical incidents, the researcher asked 12 participants about failures first, and she asked 13 participants about successes first. After the specifications were shared with participants, the following questions were asked (not necessarily in this order):

- Think about a time where you successfully led a design project in your role as an instructional designer. First, I want you to tell me the context – the who, what, when, where, why and how. And then, what was the situation, and what did you do?

- Tell me about a time where you tried to lead a design project in your role as an instructional designer but were unsuccessful. Again, I want you to tell me the context – the who, what, when, where, why and how. And then, what was the situation, and what did you do?

- Tell me where you learned the skills you needed to successfully lead a design project.

Note that the third question was not intended to identify critical incidents but rather to collect additional data on where skills were learned. The first two questions of the protocol were created based on Flanagan's (1954) recommendation to ask what the observer did rather than how they

behaved. Questions were tested during the pilot interview to make sure that it was clear what was being asked. The final step of the individual interview was to hold a conversation. However, after the questions were asked, it was important for the researcher not to lead the participant, but the researcher provided verbal cues that she understood and was still listening to the participant (Flanagan, 1954). She periodically asked clarifying questions to get more detail about an activity, but these questions were broad, such as "when you say, 'we designed it,' can you tell me a little bit more about the design process?" or "when you say, 'we,' can you tell me about who was on your team?" The researcher also affirmed the following questions while the incidents were being collected: was the actual behavior reported, was the behavior observed by the reporter, were all the relevant factors of the situation given, did the observer make a judgment about the criticality of the behavior, and did the observer make it clear why they thought the behavior was critical? (Flanagan, 1954). Butterfield et al. (2005) note that the recording of participants' words is one way to add to trustworthiness because it gives the researcher the means to accurately reproduce participants' words when analyzing the data, and as mentioned previously, every interview was recorded so that the researcher could achieve this.

The fourth step of the CIT is to analyze the data to make it as useful as possible for practical purposes. First, the incidents need to be classified according to a frame of reference (Flanagan, 1954). This is where constructivist grounded theory methods becomes useful to pair with CIT. Initial coding in constructivist grounded theory can include the comparative study of incidents, where behaviors are compared with one another, and as the researcher forms ideas, those behaviors are compared to the conceptualization of behaviors coded early to identify emerging concepts (Charmaz, 2006). Because this study was exploratory in identifying leadership competencies, methods of grounded theory were critical to exploring emerging

themes. Another important tenet of grounded theory is constant comparative analysis, where behaviors are compared within the same interview and then are compared across interviews until those codes are condensed into categories (Charmaz, 2006; Creswell & Creswell, 2020; Tie et al., 2019). The researcher looked at the behaviors within each interview and compared the successful project behaviors to the unsuccessful project behaviors. Once themes started to merge, she revisited the transcripts of interviews with similar themes (in groups of 8 or 9 and then across all 25 interviews) to see if the themes could be condensed into one based on their context. Themes were combined in this way until there was no theme left that only contained one reference, except for one project that was put on hold due to COVID-19. This unique reason could not be combined with any other themes.

Next, the intermediate level of coding (called focused coding in constructivist grounded theory) occurred, where the researcher used the most significant or frequent codes from the first round of coding to continue categorizing and sifting through the data (Charmaz, 2006). She continued from initial coding to focused coding and then completed theoretical coding. Theoretical coding is where the researcher begins to derive the possible relationships derived from the categories identified in focused coding to tell an analytic story (Charmaz, 2006). Theoretical agreement was used, where the codes were compared to "leader of self" and "leader of others" competencies from the Center for Creative Leadership (CCL). Throughout the process of data analysis, the researcher participated in memo writing, which is a crucial part of grounded theory (Charmaz, 2006). She made notes whenever she had a thought or theory about the codes, which helped to construct the discussion of the data later in the research process. The researcher also used NVivo software to help organize and analyze interview data. Again, this method of coding the data according to Charmaz's work aligns with the CIT, where Flanagan (1954) states

that categories must continue to be created, combined, and modified until all incidents have a classification and that any behaviors identified that have significant frequency should be reported out and translated into competencies or skills.

Additional steps were taken to ensure trustworthiness during the data analysis phase of the study according to the CIT. First, the researcher had a colleague (who has successfully conducted published qualitative research) independently extract several critical incident behaviors from a few, randomly chosen, taped interviews to calculate the level of agreement on behaviors and themes (Butterfield et al., 2005). This colleague was also asked to listen to portions of four interviews (Interviews #4, 11, 19, and 23), randomly chosen by a number generator found online to ensure that the researcher was not leading the participants. Finally, the colleague reviewed the categories and themes the researcher identified to ensure they were useful and there was nothing particularly surprising to them. After the interviews were completed and the data was placed into tentative categories, she provided the participants the option to confirm the themes made sense and that the experiences were accurately represented, allowing them the option to add or delete experiences as needed (Butterfield et al., 2005). All these efforts were used to ensure that the data being collected and analyzed was sufficient for drawing conclusions and forming interpretations.

The final step of the CIT is interpreting and reporting the data. This is done in the subsequent Results and Discussion sections.

CIT was previously used in other fields to examine leadership competencies. Flanagan (1954) notes the successful use of the CIT to research leadership competences for the Air Force (Flanagan, 1954). In recent years, the CIT was used to study what Korean managers and non-managerial employees perceive as effective or ineffective leadership behaviors, how leadership

behaviors demonstrated (or ineffectively demonstrated) influence occupational safety on construction sites, and the perceived effectiveness of managers within a Moroccan higher education institution (Chai et al., 2016; Grill & Nielson, 2019; Lekchiri et al., 2018). The CIT is a valuable tool to study motivation and leadership because it provides factual data regarding actions, rather than opinions and preferences (Flanagan, 1954). Additionally, the CIT was appropriate for this study because it used participants' direct observations about situations to determine competencies, rather than looking at job postings created by hiring managers who are looking for desired strengths, not necessarily what is required for the job. CIT provides the critical behaviors that make up the difference between success and failure when carrying out the instructional design role (Flanagan, 1954). The CIT was used to collect data from 25 participants (to collect 50 critical incidents), where they identified both a successful and an unsuccessful critical incident while leading design projects in their roles. This data was analyzed to find leadership behaviors deemed critical to the work of an instructional designer.

Participant Protection

Participants who agree to take part in the study agreed with an electronic informed consent statement. If the participants did not agree, they were not eligible to participate in the interviews. The informed consent explained the study, the time commitment expected, confidentiality information, any risks associated with participation, and the researcher's contact e-mail. If the participants agreed, they scheduled interviews and met with the researcher as planned. All research data and stories are shared in a generalized way in this study to avoid sharing any personal characteristics that could compromise participant anonymity.

Only me, the dissertation committee, transcriber, and experts who were contacted to ensure trustworthiness had access to the audio interviews. Subjects were assigned a participant

number and were only be referred to by this number in all recordings, transcripts, coding

exercises, documents, analysis, and publication related to the project. Any demographic

information shared is generalized to ensure participants are not identifiable by their demographic

profile. Pseudonyms are used in the discussion to ensure anonymity.

Additional Measures of Trustworthiness

Hays and Singh (2012) describe trustworthiness in qualitative studies as "the truthfulness

of your findings and conclusions based on maximum opportunity to hear participant voices in a

particular context" (p. 192). As mentioned previously, the researcher used Butterfield et al.'s

(2005) methods for measuring trustworthiness specific to the CIT. She used additional methods

common to all qualitative studies in an effort to maximize trustworthiness. For example, the

researcher took notes during the interview on any additional observations to contribute to the

credibility and authenticity of the recorded interview data. An audit trail was kept for review of

data collection and analysis methods (Hays & Singh, 2012). Data collection and analysis were

completed simultaneously. In this process, recorded interviews are transcribed and coded as

close to the interview date as possible, rather than waiting until all interviews are complete.

Limitations

According to Mertens (2014), the limitations of using convenience sampling are that

there are limitations to the population pool due to choosing those who are readily available. The

researcher acknowledges that by using social media to collect participants, those who do not use

social media could not be eligible. However, she not only attempted to vary the participants

based on demographic data and experience but also interviewed a sample from across different

industries, including K-16 (n=6), corporate (n=5), government (n=2), health/medical (n=6),

freelance (n=3), and non-profit (n=3) industries. Additionally, there is always a risk with CIT

that the researcher might lead the participants during questioning. As mentioned previously, the researcher had a colleague who has qualitative research experience listen to a sampling of the interview recordings to ensure that she was not leading the participants. The researcher was also limited by asking for two incidents from one person, and there could exist subjectivity. Therefore, she asked 13 participants about a successful project first and asked 12 participants about their unsuccessful project first to help with bias.

CHAPTER IV

RESULTS

Because leadership competencies in the instructional design literature are broadly defined and are often based on desired traits or small sample sizes, this study explored specific behaviors to determine what leadership skills are needed to lead instructional design projects. It also looked at where participants learned the skills to lead successful projects. Methods of grounded theory and the Critical Incident Technique (CIT) were used. The data were coded, themes were created, and the frequency of behaviors was analyzed. This study aimed to answer the following questions:

1.   What leadership skills are crucial for instructional designers as they lead design projects to improve their organization's performance?

2.   Where do instructional designers gain leadership skills?

This chapter presents the findings of the research, derived from interview data with 25 experienced instructional designers who were currently working in the field and leading design projects. Initial, focused, and theoretical coding were used to create thematic behaviors, as described by the participants for a successful and an unsuccessful design project. Behaviors are then translated into leadership competencies in the subsequent chapter so they can be compared to the literature and leadership framework.

Participant Introductions

This section will give a summary of the interviews with each participant. It will share in what industry the participant works and a brief description of the projects they shared (Table 2). As mentioned in Methodology, pseudonyms are used for the participants and details of the projects are intentionally omitted to ensure participant anonymity.

Table 2

Participant Introductions

Name	Industry	Project Description
Natalie	Corporate	Successful: Multi-day program that would consist of distance learning, asynchronous content, and simulations
		Unsuccessful: Simulation in Articulate Storyline
Joel	Higher Ed	Successful: Cross-departmental course
		Unsuccessful: Cross-departmental course
Mat	Freelance	Successful: Multiple product-based courses
		Unsuccessful: Compliance course
Brandon	Government	Successful: Translation project
		Unsuccessful: Training course was ordered after an accident
Skye	Health/Medical	Successful: Learning experience for medical technology
		Unsuccessful: Interactive training guides
Cierra	Corporate	Successful: Technology implementation and enablement
		Unsuccessful: Interactive learning and creating an accompanying learning tool
Shreya	Non-Profit/Corporate	Successful: eLearning course
		Unsuccessful: Technical eLearning course
Sonia	Non-Profit	Successful: Hybrid training program
		Unsuccessful: Large eLearning project

Josie	Corporate	Successful: Customer service training
		Unsuccessful: Undefined learning experience (fizzled out at the beginning)
Amara	Corporate	Successful: Training for new technology
		Unsuccessful: Product-based technology training
Ashley	Health/Medical	Successful: Documentation and learning supports for new technology
		Unsuccessful: Open enrollment training
Sofia	Higher Ed	Successful: Engineering course, including multimedia
		Unsuccessful: College course
Brittany	Health/Medical	Successful: Compliance training on regulations
		Unsuccessful: Training updates for procedural course
Kaylee	Freelance	Successful: Leadership training project
		Unsuccessful: Professional development project
Tom	Government	Successful: Inspection training
		Unsuccessful: In-person training transition to eLearning
Yasmin	Non-Profit	Successful: Process training on technology
		Unsuccessful: Software training
Eric	Freelance	Successful: Health and medical certification training
		Unsuccessful: Technology training for retail
Eve	Health/Medical	Successful: Product training for sales enablement
		Unsuccessful: Undefined training (project ended at needs analysis phase)

Samuel	Higher Ed	Successful: Virtual college course
		Unsuccessful: Virtual college course
Jordan	Higher Ed	Successful: Learning management system training
		Unsuccessful: Resource repository
Zoie	Higher Ed	Successful: Multiple college courses
		Unsuccessful: College course
Theresa	Health/Medical	Successful: Safety course
		Unsuccessful: eLearning course
Emma	Corporate	Successful: Blended training program
		Unsuccessful: Training updates
Alex	Higher Ed	Successful: COVID-19 safety training
		Unsuccessful: Undefined learning experience (scope kept changing until it was put on hold)
Morgan	Health/Medical	Successful: Augmented reality module
		Unsuccessful: Undefined learning experience (never launched due to disagreement about deliverable)

Research Question 1 – Emerging Leadership Behaviors in Successful Projects

Table 2 provides data on the results of the behaviors recorded from participant stories needed for successful completion of an instructional design project. For the purposes of this study, behaviors refer to the actions taken or observed by the instructional designer and relayed during their interviews. These behaviors were not limited to leadership behaviors; they include all behaviors the instructional designer discussed. Whether or not the project was a success was left to the discretion of the instructional designer, and success was intentionally broadly defined

as when a project met its intended goal and outcomes and showed value in whatever metrics were designed to measure its success.

Table 3

Observed Behaviors Present during Successful Instructional Design Projects

Behavior	Definition	Frequency (*n*=25)
Collaborating Positively and Communicating Successfully with Subject Matter Experts (SMEs) or Stakeholders	The instructional designer mentions working together with SMEs/Stakeholders throughout the planning, execution, and review of the project as a contributing factor to success.	21
Continuous Review with Stakeholders or SMEs	The instructional designer describes frequent review with relevant stakeholders or SMEs, where the instructional designer presented a portion of the project (e.g., plan, prototype, or storyboard) to the stakeholder or SME and received consistent feedback.	13
Completing a Needs Analysis	The instructional designer describes a needs analysis where questions are asked about the learning, and answers are satisfactorily given by the SMEs or stakeholders. The instructional designer used those answers to solve learning problems.	12
Project Management	The instructional designer describes specific behaviors of leading the logistics of a project, such as setting expectations, assigning roles, leading	10

meetings, scheduling, hosting reviews, collecting
feedback, and implementing by certain dates. These
are non-design-related responsibilities that
contributed to project success.

Gaining Support	The instructional designer describes how support from SMEs and stakeholders (and possibly others throughout the organization) was obtained or how the instructional designer's expertise was trusted to make autonomous decisions about the project.	10
Measuring Results	The instructional designer describes how specific metrics were created toward the beginning of the project to ensure its successful completion and/or how those metrics were measured at the end of the project to prove success.	8
Selecting the Right Delivery Method	The instructional designer describes a particular delivery method or technology used to create the learning experience that contributed to its success.	6
Teamwork	The instructional designer created a team of people who worked together to achieve a goal - this refers to an internal team and does not include collaboration with the stakeholders/SMEs.	5
Meeting with All Relevant Stakeholders	The instructional designer describes intentionally meeting with every relevant stakeholder for a project to avoid rework later and to get feedback from all important parties.	5

Creating Engaging Material	The instructional designer describes the process of creating materials that are engaging or interactive for the learner.	4
Having the Right Stakeholder or SME in Place	The instructional designer describes how the stakeholder or SME's skills or expertise were critical to the overall project success.	4
Thoroughly Reviewing Source Material	The instructional designer notes how completing research on or gaining a better understanding of the source material contributed to project success.	3
Placing Yourself in the Learner's Shoes	The instructional designer describes how considering the learning experience from the learner's perspective contributed to project success.	3
Solving a Constraint Problem	The instructional designer describes how they were able to solve problems and work around constraints to create effective deliverables.	3
Testing a Pilot	The instructional designer describes how gaining feedback from a pilot test of the learning experience helped project succeed.	3
Designing and Developing Using an Instructional Design Model	The instructional designer describes the design and development process, using a particular model to help them guide the project.	2
Feeling Passionate About the Project	The instructional designer describes their passion and desire to work on the project as part of the reason it was successful.	2

| Developed Revised-Additional Content Based on Feedback | The instructional designer describes improving on the original content of the successful project after receiving feedback to improve the project further. | 2 |

In the following sections, the most frequently cited behaviors will be discussed and defined in more detail.

Theme 1: Collaborating positively and communicating successfully with subject matter experts (SMEs) or stakeholders

The first major theme is where instructional designers expressed that a positive collaboration with subject matter experts (SMEs) and/or stakeholders was critical to the project's success. Twenty-one out of 25 participants (84%) noted this as a factor to success. Alex described a close relationship with the SMEs she worked with as well as allowing them to review her work regularly:

I had subject matter experts who I knew well and with whom I'd worked pretty frequently on other projects. And then I had the tools that I usually used. It was one of my favorite projects because I didn't have to go through as much of a role with SMEs and fighting SMEs on things. After all, they didn't know what to say. And I'm also a researcher. So, it was nice. I just asked them, what – from the normal things that you do during the day that are relevant – can we contribute your knowledge? And then I did a bunch of research, and I had them double-check my research from ongoing things.

Theresa noted the importance of a SME having a collaborative mindset, "a particular subject matter expert that I worked with was really delightful and very thoughtful and was someone who I just liked working with – enjoyed very much and had a very collaborative mindset." Cierra noted how collaboration could be used to make everyone feel included, "I'd say a large part is

like allaying fears through communication and through collaboration, to make sure everybody felt like they were a part of it, or part of each decision along the way."

Theme 2: Continuous review with stakeholders or SMEs

It is important to note that the difference between Theme 1 and Theme 2 is that for Theme 1, the participant was actively working with the SME or stakeholder on a deliverable, whereas in Theme 2, the participant is handing off a portion of the project to the stakeholder or SME for review, with the stakeholder or SME reviewing and providing feedback. Out of the 25 participants interview, 13 (52%) noted a continuous review process with stakeholders and SMEs, where instructional designers got feedback regularly, as critical to project success. Brandon explained not only how often he met with SMEs/stakeholders but also how that contributed to project success:

> They were extremely responsive, as we storyboarded and drafted and built the content out, so we got feedback consistently throughout, and then, once we gave them a functioning prototype, they were able to give us this really specific feedback so that the project didn't stall anywhere along the way, and because of that closeness between the subject matter experts, the stakeholders, and the instructional design team, the project never lagged or stalled or got bogged down by people not being invested…

Natalie spoke about the benefits of constant review:

> I think what else also helped was constant review – so not constant like every week or so, but it was like, have a review at the beginning – a very rough draft, have review on a more fleshed outline, and have review on the final product…

Theme 3: Completing a needs analysis

Twelve of the 25 participants (48%) mention a needs analysis, or an exchange where the instructional designer asks questions pertaining to the objectives and goals of the project, and the SME or stakeholder can provide satisfactory answers. The instructional designer can then use these answers to successfully plan a learning solution for the project. Kaylee mentioned it as the first reason that came to mind for project success:

> Well first and foremost, the first thing that comes to mind with me is that our employer and our client invested in the analysis phase of the project; they flew us to the client's site. And we spent the better part of a week meeting with our primary stakeholders and doing interviews, touring the facilities, having that opportunity to meet directly with the client, see the work they were doing, get a good feel for what their pain points were, and if they had a particular outcome that they were asking for, what is the problem behind that? It just made such a difference to be able to have that in-person experience.

Mat described how the needs analysis related to the successful implementation of the project:

> I went through quite a long winded LNA [Learning Needs Analysis] process with them, because they didn't have an L&D [Learning and Development] team in sight, so a lot of the questions I was asking, they didn't have the information - they didn't know why I was asking what I was up front… So that took considerably longer than I would normally take, but the effort that was put up front has meant that the ultimate courses that have then come out, which is four different courses for their products, are hitting really, really well with their customers, not only to the users, like them, but also the businesses getting what they need because we made sure to be clear on what the differences between the business goals for that course, so why they wanted it and what they were looking to achieve.

Theme 4: Project management

Ten out of the 25 participants (40%) in the study noted that elements of organizing and leading

the logistics of the project, including setting expectations, assigning roles, leading meetings,

scheduling, hosting reviews, collecting feedback, and meeting due dates. Morgan described why

she thinks project management is critical:

> Project management is not optional - good projects do not happen by accident. They
>
> happen because you clearly define the work to be done – who's going to do it and the
>
> timeline and budget for doing it. So, we set all that up. We had a master project plan.

Cierra noted the meetings and leading effective meetings as a crucial piece for project

management, "A big part of it was going to meetings, being able to lead effective meetings and

asking the right questions." Mat noted the importance of the process involved in successfully

completing a project, "The key thing I would say is, it doesn't really matter what you use so long

as you've got a process and that everyone's clear on who's got what role and what is expected of

them."

Theme 5: Gaining support

Out of the 25 participants, 10 (40%) said that gaining the support of stakeholders and

SMEs and building the trust needed to get that support and lead the project autonomously was

critical to the project's success. Joel noted how his experience in higher education required

faculty support, "there was a lot of participation within all the subject matter experts, you know,

there was support from the chairs of the programs, right? Everybody bought in, you know, that's

one of the biggest things – everybody bought in…" Morgan encouraged review processes to help

gain that support, "Don't design it in a vacuum, look at the people who are potentially naysayers

and, make sure that they're on board with your vision." Alex described being given complete autonomy on the design:

> But I got to design completely what I felt like doing. I didn't have to go back and forth, didn't have to get people to authorize. I just got to create the videos when I thought it was good for videos, and I got to decide to do interactions when I thought interactions were appropriate. I got to be a kid in a candy shop, honestly, with how I designed it.

Sonia described how having a manager who was just as passionate about the project as she was contributed to its success,

> I will say one factor of success was my direct manager. She was very passionate about the project as well. So, she really helped me push it through. Even though I was the lead, she'd be like, "oh, if I were you, in the proposal, I would definitely share a lot of statistics, so they can kind of see how this would help in the long run," like she was giving a lot of tips. She knew the senior management, so she was guiding me to make it so that it would be as easy as possible to get the project approved. And so having her support was, I would say, instrumental to it.

Research Question 1 – Emerging Leadership Behaviors in Failed Projects

Table 4 provides data on the results of the behaviors that the participant felt made the instructional design project unsuccessful. For the purposes of this study, behaviors refer to the actions taken or observed by the instructional designer and relayed during their interviews. Whether or not the project was a success was left to the discretion of the instructional designer, and the researcher clarified that the project could still be considered unsuccessful even it was launched at the interviewee's organization.

 Table 4

Observed Behaviors Present during Unsuccessful Instructional Design Projects

Behavior	Definition	Frequency (*n*=25)
Miscommunication	The instructional designer notes miscommunication about the goals, design, scope, dates, or more about the project.	11
Working with the Wrong Subject Matter Experts (SMEs)	The instructional designer describes working with SMEs who were not experts on the content.	10
Not Completing a Proper Needs Analysis	The instructional designer describes where needs analysis questions either were not or could not be answered or that a needs analysis was not done correctly.	9
Not Enough Time or Too Large a Scope	The instructional designer describes a project that is impossible to complete in the amount of time given.	8
Not Receiving Support	The instructional designer describes not getting support for the project or a lack of trust from relevant stakeholders or SMEs	7
Differing Opinions within the Business	The instructional designer describes how stakeholders with opposite opinions were at odds, which ultimately held up the project.	5
Did Not Receive Sufficient Source Material	The instructional designer describes not receiving enough or the correct content from which to design/develop the learning experience.	5

SME Acting as Instructional Designer	The instructional designer describes a time where the SME was designing the instruction and should not have been.	4
Lack of Feedback	The instructional designer describes not receiving necessary stakeholder/SME feedback to move forward - either it was delayed or no feedback was given.	4
Did Not Consider Learner	The instructional designer describes how the learners' needs were not considered in the design and development of the project.	3
Wrong Delivery Method Used	The instructional designer describes where they were not able to use the correct delivery method and felt the intervention chosen was unsuccessful.	3
Did Not Define Metrics for Success	The instructional designer describes a situation where there is a lack of ways to evaluate or measure the effectiveness of a learning course.	2
Too Many People Involved	The instructional designer describes how having too many stakeholders slowed down the project and ultimately contributed to its demise.	2
Lack of Confidence to Speak Up	The instructional designer mentions that they were not confident enough to speak up when they knew a project was going in the wrong direction.	2
COVID-19	Because of the COVID-19 pandemic, the instructional designer describes that a project was put on hold. indefinitely.	1

In the following sections, the most frequently cited behaviors will be discussed and defined in more detail.

Theme 1: Miscommunication

Eleven out of the 25 participants (44%) cited a breakdown in communication as a reason for a project being unsuccessful. Sonia described the miscommunication that occurred from a lack of feedback, "It was a lot of miscommunication, I think, the first round also of iteration, my direct manager didn't really communicate the feedback he had gotten from his direct manager, so there was a lot of miscommunication all around." Sofia described a similar situation where she could not get feedback from a faculty member:

> And even though we have kickoff meetings that outline and documents that clearly
>
> outline who's responsible for what, some faculty, and these are typically faculty who live
>
> out of the area, and they can't be reached easily, they drop off the radar… And this just
>
> happened to me where a faculty member, just kept saying she was too busy. She's too
>
> busy all the time to meet – and now we're having to go back, even though the
>
> development cycle is passed, we have to go back and fix all her stuff.

Ashley described miscommunication as a lack of information needed to complete the project, "They didn't get the information from the customers until very late and then some of the information we got was incomplete. It was just like, I think nothing's changing." Theresa described a team member who did not follow her documented process and sent a client work that she had not signed off on:

> He didn't follow my direction – and what ended up happening is when I was gone, he
>
> sent something that the two of them had developed. He had introduced some spelling

errors. She hadn't corrected them. And the client was like, "why are we paying you all of this money for you to send me things that are like this?" And there was a debacle.

Joel described a miscommunication where the stakeholders and SMEs did not really understand the needs analysis process and felt he was attacking the work they had done:

> They pretty much left that meeting feeling that my questions to them made them feel inadequate for the job – made them feel that they had not thought through, you know, the program – made them feel that I was giving them more obstacles, you know, than solutions, and it was simply because during our first meeting I asked them how are they planning, do they have a coherent approach to developing content.

Joel was ultimately removed from the project. Eve described a significantly similar situation, "At a certain point, when I was trying to get information from these SMEs, apparently, it came across to this [stakeholder] that I was being combative because I was stopping the SMEs and asking them to clarify a certain point." She was also removed from the project for trying to gather information during the needs analysis.

Theme 2: Working with the wrong SMEs

Out of the 25 participants, 10 (40%) described working with SMEs who were not qualified as experts on the topic or content they were assigned to. Natalie described SMEs who were out of practice with a product, "I used very biased people to help me build it that were the subject matter experts but hadn't used [the product] for years, decades, and so, I feel like that one was a fail." Samuel described working with a SME on an online course who did not have online teaching experience, "For one of my projects at my current organization, I was tasked with being able to work with somebody who has never taught online before." The SME was asked to condense the face-to-face content down for the online environment, and negotiation was tough.

Samuel said the outcome was that "it started as a pleasant, wonderful conversation, ended up being a very drastic change in what we initially envisioned, and we had to redo the entire thing." Zoie described a very similar experience with a faculty member at her institution:

> And this particular course, this subject matter expert had created and instructed for many, many, many, many years. And the program director wanted to take the course in a different direction – and he extended the offer to the subject matter expert who had worked on and instructed, in hopes that he would latch on to the vision and produce the content that aligned with the vision. That didn't work out so well, and so he had given him like two different attempts, and it just didn't work out. And so, we just had to let him go…

Theme 3: Not completing a proper needs analysis

Nine of the participants, out of the 25 (36%), described a situation where, for one reason or another, they were unable to complete a needs analysis. Mat admitted outright that it was his lack of analysis that led to his project's demise:

> From an instructional design point of view, I didn't do a good enough job at the beginning in that I jumped straight to solution mode and "I can build a course for that – I've got two weeks free. I can make that pretty quickly," and I didn't take enough time to ensure that all of the documents were going to be there, they were signed off, everyone had seen them.

Joel described a difficult situation where he attempted a needs analysis, but no one had answers for him:

> Well, asking them those initial questions made them realize where they were – that they had not really conceived the idea that they had. They had no outcomes. They had no

assessments for those outcomes. They had no content that was going to be cohesively integrated within their topics, and in just three or four questions, it completely crumbled their whole idea of what to do.

Theme 4: Not enough time or too large a scope

Eight of the 25 participants (32%) note a lack of time to complete the project as one of the reasons their project failed. Alex described this simply, "It's unsuccessful because it did not make the timeline, and when it's done, it won't be the scope that we'd agreed on." Skye described a large, complex scope for a project that was launched but that she ultimately felt was unsuccessful:

> I think it might have just been like too large in scope and too heavy in administrative tasks, I guess – so, I think, from a user standpoint, people loved it, but from a development standpoint, it was really difficult and very expensive.

Theme 5: Not receiving support

Out of the 25 participants, 7 (28%) said that the lack of stakeholder or SME trust in their suggestions, processes, or design work contributed to an overall unsuccessful project. Natalie notes a project where she was on her own:

> And it failed because my business leaders couldn't make a decision. They wanted everything solved – they couldn't name anything, so I took this topic as my own, and I said "Well, I think this is the issue," and I just did it without the support or buy-in from them.

Yasmin describes being new to her role and not having the trust of her manager yet:

> So, I felt upset and frustrated because I really didn't have the power of the vision. I think you have to influence. I was new at the organization. It was my first project with this

client, so I feel that she didn't trust me. She didn't follow my recommendation because she didn't feel it was going to work.

Research Question 2 – Places Instructional Designers Learn and Foster Leadership Skills

Table 4 provides data on the results of the second research question, where the researcher asked participants to describe where they believe they learned the skills necessary complete their successful design project.

Table 5

Where Instructional Designers Feel They Learned Success Skills

Where Instructional Designers Learned Success Skills	Description	Frequency ($n=25$)
Doing the Work	The instructional designer describes successful on-the-job projects that helped them or that they have learned over the years through practical experience in the workplace as an instructional designer.	16
Having a Helpful Mentor or Supervisor	The instructional designer describes how they had a helpful mentor or supervisor who taught them.	9
Trying and Failing	The instructional designer describes trying and failing and/or being given the chance to fail and learn from a project.	8
From an Instructional Design Degree Program	The instructional designer describes coursework toward a degree in instructional design, or a closely related field, such as educational technology.	5 ($n=16$)

From the Workplace (in a Non-Instructional Design Role)	The instructional designer describes how previous practical work experience in a job outside instructional design helped them.	7
Personal Professional Development	The instructional designer describes personal professional development they pursued on their own time (outside of work).	4
From a Previous Degree (Unrelated to Instructional Design)	The instructional designer describes a previous college degree program that is not instructional design or a related field.	4
Work-Related Professional Development	The instructional designer describes work-sponsored professional development opportunities.	4

In the following sections, the most frequently cited places for where leadership skills are learned are described in more detail.

1: Doing the Work

Sixteen of the 25 participants (64%) noted that they learned how to do their job successfully by gaining experience from different projects during their time as an instructional designer.

Brittany talked about how having five years of experience has helped her to learn how to be successful:

A lot of the relevant skills were developed during my time in this specific job. I've been in this job for around five years…. at this stage, I've had enough successful projects, and I've developed more confidence in my own instructional design.

Eric likened it to building muscle in the gym:

Like you build muscle in the gym, it's called time under tension. You just keep doing it, you stay consistent, and you just keep working hard. That's what I call when you work with something so long, you just get time under tension. That's how I cut my teeth, and then I learned how to build pickup software as I went… You get into a project, and you figure it out. That just mounts up over time.

Jordan described it, "Honestly, I just learned it as I was doing it – I learned it like drinking from the fire hose."

2: Having a Helpful Mentor or Supervisor

Out of the 25 participants, 9 (36%) said that having a helpful mentor or supervisor to teach them how to successfully lead a design project was critical. Natalie had a mentor who taught her more about instructional design from the business perspective:

Fortunately, we hired a person who was more business savvy. And so, he took me under his wing. He saw what I was trying to do, and he saw it as something that would win. And so, he said "Okay, this is how we really knock out of the park," and so, where I honestly learned the true consulting and true project managing and really how to make projects be effective and conducive was from his business perspective.

Samuel described an effective relationship with a mentor:

I truly had somebody who was looking over my shoulder, seeing what I'm writing for rubrics and saying, "no, it doesn't make sense. No, you don't need to do that." Literally going through all that stuff that, eventually, I started to pick up and was like, "oh, okay. I see what you're trying to say and do." It was real training on the job, literally in the field. And that's when I learned about communication, making sure everyone is happy and that's how I'm still an ID today.

3: Trying and Failing

Eight of the 25 participants (32%) admitted that their failed projects (and being given grace to fail) allowed them to learn and do better in future projects. Natalie said:

So basically, how I got here was trial and error – almost four years of just messing up, of destroying, of not getting the resources I needed, of not getting the buy in I needed, of finding all the issues but because no one knew what to do or what they needed, I had the freedom to roam and ask, and go to anyone's door and – trial and error.

Morgan described being given a safe space in which to make mistakes:

To be honest, I learned most of it through failure. In my 20 years as an instructional designer, I've seen a project go sideways every possible way – that we rush through the analysis, that we didn't have time to do an analysis, that we just crank out learning objectives that we weren't very clear what we wanted to measure. So, a lot of taking those non-examples and saying, "I want to do it this way next time…" And then, getting the opportunity to try things out and fail without losing your job or getting reprimanded, that that's been a big part of it too.

4: From an Instructional Design Degree Program

It is important to note that only 16 of the 25 instructional designers interviewed for this research had degrees in instruction design. It was not required to participate. Because of the smaller sample size, this is the fourth most frequently listed place where instructional designers gained knowledge. Five of the 16 participants (31%) listed their instructional design degree as instrumental in their project success.

Brandon said:

I found that the [degree] program was valuable because it shifted how I think about what

it is that the instructional designer does and what the learning and development function

of an organization is because it's not really learning, and it's not really development, the

learning and development function of an organization should be enhancing an

individual's ability to do the mission of the business.

Emma described how her degree program helper her, as a former educator, really understand

how people learn:

I did go back to school, and I have a master's degree in instructional design. And I think

that having the experience of teaching and not having the vocabulary and understanding

what I was doing but seeing it work and then going back to school and figuring out, "oh,

well, that's why… they didn't understand…" So I didn't have a strong sense of what was

learning – but there were things that when I did go back to school, I was like, "okay, that

makes sense because that's how people learn."

5: From the Workplace (in a Non-Instructional Design Role)

Out of the 25 participants, 7 (28%) said they gained critical skills for success in

instructional design from working other roles outside of instructional design.

Mat talked about being a trainer, "I was originally a classroom trainer, face-to-face, and I would

highly recommend that for any instructional designer just to give it a go because it gives you that

viewpoint of what trips people up – what's the questions they ask?" Emma also had experience

dealing directly with learners:

I was a teacher and had to develop my content because all teaching situations are unique,

and we didn't have textbooks that aligned to the curriculum. So, I got to really test out

what worked with my students and see firsthand that, not everything depends on what's

going to speak to your audience.

Zoie noted how previous experience in sales helped her with transferrable corporate skills, and

Brittany mentioned how experience in a lab setting helped her with time management.

Summary

The purpose of this qualitative research study is to identify the leadership skills

instructional designers use to lead design projects for performance improvement in the

workplace and to identify where they learn and practice these leadership competencies. This

chapter presented the results of the individual interviews, where participants were asked to

describe a successful and an unsuccessful design project and asked where they believe they

learned the skills to complete successful design projects. Thematic analysis shows that there are

certain behaviors that are present in multiple successful design projects.

Five behaviors emerged as the most frequent for successful completion of instructional

design projects: (1) collaborating positively and communicating successfully with SMEs or

stakeholders, (2) continuous review with stakeholders or SMEs, (3) completing a needs analysis,

(4) project management, and (5) gaining support. The five behaviors that emerged as the most

frequent for unsuccessful projects were (1) miscommunication, (2) working with the wrong

SMEs, (3) not completing a proper needs analysis, (4) not enough time or too large a scope, and

(5) not receiving support. The places that were most common mentioned as where the

instructional designers learned how to successfully complete projects were (1) by doing the

work, (2) from a helpful supervisor or mentor, (3) by trying and failing, (4) from an instructional

design degree program, and (5) from the workplace in a non-instructional design role. A

discussion of the emerging themes and leadership skills is presented in the final chapter.

CHAPTER V

DISCUSSION

This purpose of this research was to answer the following questions:

1.   What leadership skills are crucial for instructional designers as they lead design projects to improve their organization's performance?

2.   Where do instructional designers gain leadership skills?

Methods of grounded theory and the Critical Incident Technique (CIT) were used. The data were coded, themes were created, and the frequency of behaviors was analyzed. This chapter includes a discussion of the emerging themes and leadership skills. First, the success behaviors will be compared to the failure behaviors for alignment. Then, the behaviors will be expressed as competencies and compared to the competencies discussed in the previous literature and compared to the leadership competencies for leading self and leading others.

Interpretation of Findings

Success versus Failure Behaviors

Of the top five most frequently cited success behaviors, each one had an antithetical behavior listed as the most frequently associated with an unsuccessful project. Cited the most on both sides, the ability to communicate successfully is the most critical factor between a project's success or failure. Table 5 shows the most frequently cited behavior for both the successful and unsuccessful design projects.

Table 6

Most Frequent Success and Failure Behaviors

Success	Failure

Collaborating Positively and Communicating Successfully with Subject Matter Experts (SMEs) or Stakeholders	Miscommunication
Continuous Review with SMEs/Stakeholders	Working with the Wrong SMEs
Completing a Needs Analysis	Not Completing a Proper Needs Analysis
Project Management	Not Enough Time or Too Large a Scope
Gaining Support	Not Receiving Support

The frequency of the critical incidents for a successful and unsuccessful project shows alignment. From looking at the most cited behaviors, the presence or absence of critical competencies can make or break a design project.

Comparison to Instructional Design Leadership Literature Findings

As mentioned previously, communication, interpersonal skills, project management, and strategy and vision are mentioned multiple times throughout the literature as critical leadership competencies all instructional designers need, regardless of roles and responsibilities. In this section, the skills identified as critical for success from this research will be compared with the competencies that appear most frequently in the limited literature on leadership competencies in instructional design.

Communication and interpersonal skills are mentioned by most often authors as critical leadership skills for instructional designers (Anderson, 2012; Ashbaugh, 2013; Ashbaugh & Piña, 2014; Boyle, 2011; Brigance, 2011; Gardner et al., 2018; Irlbeck & Dunn, 2020; Klein &

Kelly, 2018; Williams van Rooij, 2010; York & Ertmer, 2016). The top two behaviors found in this research to contribute to successful projects are collaborating positively, communicating successfully, and continuous review with SMEs and stakeholders. We can combine these two most frequently cited success behaviors into leadership skill associated with communication – the ability to collaborate positively and conduct continuous reviews with SMEs and stakeholders. Not only does this leadership skill identified support the literature, but it solves one of the problems with the literature. The literature presented a limited view of communication, noting it as a technique to achieve a purpose rather than including specific competencies that set leadership communication apart from communication as a skill all professionals should have.

Project management was another frequently mentioned competency in the literature (Ashbaugh & Piña, 2014; Bond & Dirkin, 2018; Gardner et al., 2018; Williams van Rooij, 2010; York & Ertmer, 2016). Project management is how instructional designers ensure that learning experiences are delivered on time, within budget, and meeting the requirements of the clients or stakeholders involved (van Rooij, 2010). This matches the fourth most cited behavior associated with successful projects from this research, where participants noted situations where they led meetings, set expectations, assigned roles, and placed deadlines on the work, all guiding the project to a successful completion.

Strategy and vision as leadership competencies appear in a few the instructional design leadership studies (Ashbaugh, 2013; Ashbaugh & Piña, 2014; Boyle, 2011; Gardner et al., 2018). Ashbaugh (2013) defines strategy as the competency used by instructional designers to meet project goals and create buy-in with stakeholders. Gardner et al.(2018) note persuasion as a key element to being a visionary. The fifth most mentioned behavior necessary for instructional design project success is gaining support, where the instructional designer described needing the

trust and support of stakeholders to make a project work. The ability to gain the support and trust of your stakeholders partially aligns with Ashbaugh's (2013) and Gardner et al.'s (2018) thoughts on proposing solutions to stakeholders to persuade them to accept the implementation of those solutions.

The one behavior that was frequently cited during this research that does not appear in the instructional design leadership literature is conducting a needs analysis. However, conducting a needs analysis is part of the analysis phase of the ADDIE framework, a commonly known framework that is used in instructional design and in the formation of other instructional design models (York & Ertmer, 2016). So, in one sense, some might argue that needs analysis is a technical skill necessary for instructional designers, rather than a leadership skill. However, the way the participants described their role in the needs analysis was one of leadership. Participants described things like leading a line of questioning to get to the root cause of the problem, getting the right stakeholders in the room to ask questions, and collecting data to determine where gaps were. Needs analysis becomes a leadership skill when the instructional designer is responsible for leading a successful needs analysis and gathering enough data to move forward with their responsibilities on the project.

The behaviors identified in this research align well with the leadership competencies mentioned in the limited literature on instructional design and leadership. Communication and interpersonal skills, project management, and strategy are, in this research, the most important leadership competencies for instructional designers to lead successful projects. However, this research gave more specific definitions to communication and strategy, by identifying that collaboration and continuous review with stakeholders and SMEs and gaining support are critical to project success.

Comparison to the Leadership Competency Model

To determine whether behaviors identified by participants align with leadership competencies and are not simply technical skills required to complete instructional design projects, the top five behaviors will be compared with the Center for Creative Leadership (CCL) leadership competencies for leading self and others. Collaborating positively and communicating successfully with SMEs and stakeholders align with interpersonal savvy and building and maintaining relationships, as defined by CCL (2014). Because participants also talked about situations where they were met with opposition or different SME/stakeholder opinions and were able to resolve those differences in successful projects, resolving conflict could be associated with this behavior as well. Continuous review with the SMEs and stakeholders aligns will with building and maintaining relationships, as projects had to go through multiple reviews throughout. Completing a needs analysis aligns well with CCL's (2014) definition of innovative problem solving because the instructional designers interviewed explained situations where they had to ask questions to determine a gap or a root cause of a problem being faced at their respective organizations. Project management as defined by the instructional designers interviewed aligns with leading with purpose (because the instructional designer set goals and milestones for the project to ensure it was delivered on time), delivering results (as instructional designers worked to achieve learning objectives within budget and on time), doing whatever it takes (because instructional designers described some very serious constraints under which they had to produce solutions), and leading team achievement (because instructional designers were tasked with making sure everyone involved in the project was successful or were responsible for leading meetings and making sure expectations were set with everyone involved). Instructional designers needed to establish credibility to gain the support of SMEs and stakeholders and

described situations where, once the credibility was established, they were able to work on learning solutions autonomously.

Based on the definitions of the success behaviors and the stories of the participants, Table 6 breaks down which CCL leadership competencies align with the five most common success behaviors identified in this research (CCL, 2014).

Table 7

Comparison of Success Behaviors with CCL Leadership Competencies

Success Behaviors	Associated CCL Leadership Competencies
Collaborating positively and communicating successfully with subject matter experts (SMEs) or stakeholders (collaboration with SMEs/stakeholders throughout the planning, execution, and review of the project as a contributing factor to success)	Interpersonal savvy (leading self) Building and maintaining relationships (leading others) Resolving conflict (leading others)
Continuous review with SMEs/stakeholders (frequent review with relevant stakeholders or SMEs, where instructional designer presented a portion of the project [e.g., plan, prototype, or storyboard] to the stakeholder or SME and received consistent feedback)	Building and maintaining relationships (leading others)
Completing a needs analysis (questions are asked about the learning, and answers are	Innovative problem solving (leading others)

satisfactorily given by the SMEs or

stakeholders - instructional designer uses

those answers to solve learning problems)

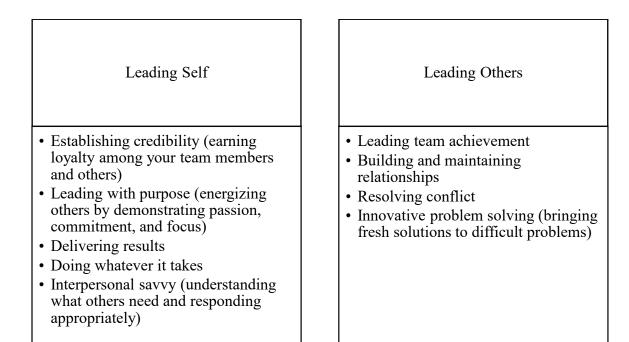|	
Project management (managing the logistics of a project, such as setting expectations, assigning roles, leading meetings, scheduling, hosting reviews, collecting feedback, and implementing by certain dates. These are non-design related responsibilities that contributed to project success)	Leading with purpose (leading self) Delivering results (leading self) Doing whatever it takes (leading self) Leading team achievement (leading others)
Gaining support (support from SMEs and stakeholders was obtained or how the instructional designer's expertise was trusted to make autonomous decisions about the project)	Establishing credibility (leading self)

Based on the alignment of the success behaviors with the CCL leadership competencies, Figure 2 shows the CCL Leadership Competency model adapted for the role of an instructional designer (with only the relevant competencies listed) with explanations of some of the more abstract competencies.

Figure 2

Leadership Competencies for Instructional Designers (adapted from CCL 2014)

Leading Self
• Establishing credibility (earning loyalty among your team members and others) • Leading with purpose (energizing others by demonstrating passion, commitment, and focus) • Delivering results • Doing whatever it takes • Interpersonal savvy (understanding what others need and responding appropriately)

Leading Others
• Leading team achievement • Building and maintaining relationships • Resolving conflict • Innovative problem solving (bringing fresh solutions to difficult problems)

This leadership competency model can provide a concrete set of competencies for future instructional designers to focus on in their studies or on the job. The CCL provides both core and customized leadership development programs where people can work on these competencies and grow them as leaders. This could be a potential starting point for instructional designers looking to grow their leadership skills.

Discussion of Where Instructional Design Leadership Skills are Learned

To many of the authors, it seems that instructional design graduate degree programs are the most logical place to teach critical leadership skills (Anderson, 2012; Ashbaugh and Piña, 2014; Gardner et al., 2018; Williams van Rooij, 2010). These authors call for more graduate programs to teach leadership competencies; however, they do not examine where leadership competencies are currently being taught to successful instructional designers. This research sought to answer the question of where successful instructional designers feel they learned the skills to be successful.

More participants mentioned that they learned leadership skills on the job, from a helpful mentor or supervisor, or from trying and failing than from their instructional design graduate degree programs. Perhaps graduate schools could do a better job preparing instructional designers in these areas. If graduate degree programs want to teach these competencies, they could incorporate more hands-on project work as part of the curriculum to allow students to work with one another, with stakeholders and SMEs and gain practice managing projects and timelines. However, more research should be done in this are to determine the best ways to incorporate these competencies into instructional design graduate degree programs. Creating standalone courses for instructional designers to learn leadership may prove troublesome as graduate degree programs have a limited number of courses for different topics that they can require. It may be best to fold leadership opportunities into existing courses if programs want to build leadership skills.

Only 16 of the 25 participants had pursued a graduate degree program in instructional design, so maybe graduate school is not the only place that should provide extra development on these competencies. Leaders who employ new instructional designers should, as the research suggests, provide mentorship and a safe environment to try new things to test their success. If the most cited place for instructional designers to learn skills was on the job, perhaps being given low-stakes projects or being partnered for projects while instructional designers are still new could be a helpful way to let them lead and learn while doing. More research can also be done on the best ways to provide mentorship opportunities and ways to teach these skills on the job.

Implications

This study identified five leadership behaviors that can be expressed as four leadership skills that instructional designers use most often to lead successful projects: the ability to

collaborate and continuously review with SMEs and stakeholders, the ability to complete a needs analysis, project management, and the ability to gain support. This furthers the research that frequently identifies communication and interpersonal skills and project management are critical leadership skills needed by instructional designers. These skills can be further aligned with nine leadership competencies for leading self and leading others: establishing credibility, leading with purpose, delivering results, doing whatever it takes, interpersonal savvy, leading team achievement, building and maintaining relationships, resolving conflict, and innovative problem solving.

Using the CIT allowed the researcher to uncover actual behaviors rather than desirable traits or perceived strengths of participants. Some of the literature on instructional design competencies consists of instructional design managers musing about what competencies they look for or believe they possess, but this does not mean those actual skills are present for a successful instructional designer (Gardner et al., 2018, Klein & Kelly, 2018). Other studies look at job descriptions or have interviewees assess job tasks and expectations, which provide the same problem – it is unclear whether these competencies are the reason for success for instructional designers (Bond & Dirkin, 2018; North et al., 2021).

This research also defined more specifically what was previously broadly identified as communication, interpersonal skills, and "people skills" by the literature (Ashbaugh, 2013; Ashbaugh & Piña, 2014; Brigance, 2011; Gardner et al., 2018; Klein & Kelly, 2018; Williams van Rooij, 2010, 2012; York & Ertmer, 2016). By identifying that good communication consists of not only collaborating positively with SMEs and stakeholders but also continuously providing material to SMEs and stakeholders for feedback, this study adds to the conversation about what defines successful communication for instructional designers.

Based on the literature, authors feel that instructional design leadership skills should be taught in graduate degree programs. However, only 31% of the 16 participants who hold an instructional design degree noted their degree program as a factor contributing to their success on projects, whereas 64% of all 25 participants said they learned necessary leadership competencies as an instructional designer from doing the work on the job. This is in alignment with the authors who feel these leadership competencies are not covered enough in instructional design graduate degree programs. It also highlights the importance of on-the-job training and mentorship for people who are new to their field.

Throughout the interviews, 32% of participants admitted that they learned the skills they needed to lead successful design projects from failing on previous projects. Although instructional design degree programs can help prepare instructional designers for on-the-job situations by providing more opportunities to lead group projects and gain hands-on experience during degree programs, instructional designers should grow and learn on the job as well. Future research might look at ways to build those leadership skills on the job – whether through mentorship programs, providing new instructional designers with low-stakes assignments, or even by providing instructional designers access to professional development, such as the programs offered by the Center for Creative Leadership (CCL) or other leadership development programs.

Some might wonder why completing a needs analysis is considered a leadership competency rather than a technical competency associated with instructional design; it is, after all, the first step in the ADDIE framework for instructional design, which is the basis of many instructional design models (Molenda, 2015). Although the needs analysis framework itself could be considered a technical skill for instructional designers, being able to ask the right

questions, get answers without SMEs/stakeholders becoming defensive, and using those answers to identify the learning gap and recommend and create a solution to close that gap requires leadership skills. It is the role of the instructional designer during the needs analysis that makes needs analysis skills leadership skills. The instructional designers described successful situations where they were able to lead a line of questioning and work on an acceptable solution with stakeholders. The participants also described losing control of leading the situation during unsuccessful projects. In fact, both Eve and Joel described an almost identical situation for their failed projects, where a SME became so defensive during the needs analysis that Eve and Joel were removed from their respective projects. Joel's SMEs accused him of speaking to them as if they did not know what they were doing. Eve said her SME "went off" on her after she continued to ask probing questions over days and hours' worth of initial meetings. Instructional designers must dig into problems and identify gaps without making SMEs or stakeholders feel inadequate.

Limitations

Limitations for this study include the limitations related to qualitative research and convenience sampling. By using convenience sampling, the researcher only interviewed participants who had social media accounts on LinkedIn. She aimed to achieve trustworthiness through multiple measures, including finding diverse participants from different industries. Participants also represented four different countries, but 88% of participants were from the United States. Therefore, it could be said that these research findings are primarily limited to instructional design leadership competencies needed by instructional designers in the United States.

The results are also limited by the instructional designers' recollection of the stories they told. There are two sides to every story, and in the case of these successful and unsuccessful projects, the researcher only heard the instructional designer's side of the story. Even though she rotated the success and failure stories, participants could still have been biased and answered one question more favorably than the other. The researcher also noted in the field notes that some people were extremely hesitant to talk about their failures. Regardless of which interview question was asked first, some people spent far less time on answering the failure question than the success question, which is understandable. For this reason, people may have been less objective about their failure out of fear or insecurity. The researcher feels this phenomenon presents itself in the data; the success behaviors and failure behaviors align well in terms of the frequency of themes mentioned, but the success behaviors appear with a higher frequency than the failure behaviors for each antithetical behavior.

Recommendations for Future Research

There remains the opportunity for these competencies to be studied further. Future studies could focus on the specific competencies and do research on best practices for improving the competencies. For example, research could be conducted to find out how successful instructional designers gain support during instructional design projects. Also, since many participants noted the skills they learned on the job, there may be future research opportunity to find out how leaders of instructional designers can better mentor new instructional designers and provide them with safe opportunities to try and fail on the job or through professional development plans. Research might also look at the performance of instructional designers over time to see if implementation of professional development plans and mentorship programs are effective in growing instructional designers' skills.

Further research should also be done on where these competencies are learned and fostered. Research can be conducted on improving how these competencies are included in the instructional design graduate degree programs. Project-based learning could be implemented and tested in graduate degree programs to see if it is successfully preparing instructional designers with these leadership competencies. Finally, this research could be replicated with participants that are pre-dominantly from outside the United States to see if there is alignment in the leadership competencies needed by instructional designers in other parts of the world.

Conclusion

This study interviewed 25 experienced instructional designers to determine what leadership skills are crucial for instructional designers as they lead design projects to improve their organization's performance and where those leadership skills are learned. This resulted in four critical leadership competencies for instructional designers leading design projects: (1) positive collaboration and continuous review with SMEs and stakeholders, (2) needs analysis, (3) project management, and (4) gaining support. The leadership skills are most learned (1) by doing the work, (2) from a helpful mentor or supervisor, (3) by trying and failing, (4) from an instructional design degree program, and (5) from a previous role not in instructional design. These skills can be further aligned with nine leadership competencies for leading self and leading others: (1) establishing credibility, (2) leading with purpose, (3) delivering results, (4) doing whatever it takes, (5) interpersonal savvy, (6) leading team achievement, (7) building and maintaining relationships, (8) resolving conflict, and (9) innovative problem solving (CCL, 2014; Scisco et al., 2017). These nine competencies can provide a basis for a leadership development program for new instructional designers to grow these skills.

From the stories shared with me, even if the instructional designer is an individual contributor, they lead the project from idea to implementation. For that, leadership competencies are crucial. They need to be able to collaborate with people from all areas of their organization and to take advice and suggestions from those people. They also need to earn their SMEs' and stakeholders' trust so that they can implement the solution they know will be best for organizational improvement. One of the ways they do this is by setting up a continuous review process with SMEs and stakeholders to make sure everyone is on the same page. They do not just set up the review process though, they establish logistics of the project including completing the analysis, determining the objectives, setting expectations and scope, assigning roles, communicating deadlines, mitigating risks, and leading effective meetings – all to ensure the project is considered a success and is completed on time and within budget.

If leadership skills are not taught and fostered, instructional designers will have to figure it out on their own and may not always be given the space and freedom to try and fail. It is important to continue to explore the areas where these important leadership competencies can be taught and fostered in new instructional designers to assure the success of the future generation of instructional designers.

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APPENDIX

This appendix outlines the full interview protocol for the study. The researcher shared this information at the beginning of the interview:

This interview is being conducted as part of my doctoral dissertation. This study aims to find out what makes successful completion of an instructional design project. I am going to ask you about both a successful and an unsuccessful design project you led. For the purpose of this study, I am defining success as when a project meets its intended goal and outcomes and shows value in whatever metrics were designed to measure its success. I have chosen you because I believe, based on your qualifications, you can provide crucial information about leading design projects. So, at this point, I just want to confirm that you have at least 3 years of instructional design experience, working on an average of 3 design projects per year and that you are currently an instructional designer (or have a closely related title) and that your main responsibility is to complete design work (including the analysis, design, development, implementation, and evaluation of learning experiences). Lastly, I want to reiterate what we shared in the informed consent form that the interviews will be anonymous, and that any data shared will be general so that others cannot identify you and that pseudonyms will be used throughout the data collection and analysis process to help ensure confidentiality. Do you have any questions?

Next, the researcher began the interview protocol. Note that the order of the first two questions were reversed for 12 of the 25 participants.

- Think about a time where you successfully led a design project in your role as an instructional designer. First, I want you to tell me the context – the who, what, when, where, why and how. And then, what was the situation, and what did you do?

- Tell me about a time where you tried to lead a design project in your role as an instructional designer but were unsuccessful. Again, I want you to tell me the context – the who, what, when, where, why and how. And then, what was the situation, and what did you do?

- Tell me where you learned the skills you needed to successfully lead a design project.

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