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Empathy and the Instructional Designer

Gregory Spencer Williams

A thesis submitted to the faculty of  
Brigham Young University  
in partial fulfillment of the requirements for the degree of  
Master of Science

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## ABSTRACT

### Empathy and the Instructional Designer

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The purpose of this study was to understand how instructional designers define empathy in the context of instructional design technology and how empathy was manifest in their daily work. Through a series of in-depth interviews with six designers, three definitions of empathy emerged including *caring for the learner*, *referencing personal experience in service of the learner*, and *taking on somebody else's viewpoint*. Additionally, analysis of empathy in participants' daily work resulted in six themes: *personal experience*, *metacognition or self-awareness*, *project management constraints*, *multiple stakeholders*, *practical processes and traditional learner analysis*, and *navigating learner goals and motivation*. Several complexities regarding empathy and learner analysis were revealed, including those pertaining to institutional constraints, managing empathetic relationships with various stakeholders beyond learners, the amount of learner analysis necessary for a good design, the degree to which interaction between designer and learner is necessary, and whether increased content knowledge helps designers effectively empathize with learners. In addition to these complexities of practice, the gap in research regarding learner analysis and empathy in instructional design were recommended as important topics for further research.

Keywords: empathy, learner analysis, user experience, design practice

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I consider it a special privilege to have developed much of this project in Dr. Williams' classes. His thoughtful and humanizing insights were invaluable to ensuring I made this study about my participants and benefitting the field rather than about myself. Both as my father and as my professor, Dr. Williams taught me how to listen and how to love. Additionally I am grateful to my mother. Ever supportive and unfailingly positive, she taught me how to work hard and to appreciate beauty. My passion for the construct of empathy stems largely from watching her serve others in unselfish and loving ways.

My wife never questioned my undertaking of this time-consuming project while starting a company at the same time. Her willingness to stick with me through the evolving roller coaster of my career has been remarkable. She provided much needed encouragement to meet deadlines and frequently made personal sacrifices in order to help me finish this research. The completion of this project and my program of study should be celebrated as a cooperative effort with her as it was only through our combined effort that this research was possible at this time.

## TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES.....	viii
Introduction.....	1
Literature Review.....	4
Literature Review Method.....	4
Empathy Across Disciplines.....	6
Empathy in Design.....	10
Empathy in Instructional Design and Technology.....	15
Indirect Instructional Design and Technology Literature Related to Empathy.....	16
Method.....	22
Positionality Statement.....	23
Participants.....	23
Terri.....	24
Brody.....	24
Dan.....	24
Brook.....	24
Donna.....	25
Sierra.....	25

Interview Question Protocol.....	25
Data Analysis .....	26
Trustworthiness .....	27
Results.....	29
Defining Empathy without a Framework.....	29
Definition 1: Caring for the learner .....	29
Definition 2: Referencing personal experience in service of the learner .....	31
Definition 3: Taking on somebody else’s viewpoint.....	32
The role of personal experience.....	33
How Empathy is Present in Designers’ Work.....	34
Theme 1: Personal experience.....	35
Theme 2: Metacognition or self-awareness.....	40
Theme 3: Project management constraints on empathy .....	42
Theme 4: Multiple stakeholders .....	47
Theme 5: Practical processes and traditional learner analysis .....	48
Theme 6: Navigating learner goals and motivation.....	51
Discussion.....	55
Defining Empathy with Batson’s (2009) Framework.....	55
Batson 8: Feeling for another person who is suffering.....	56
Batson 4: Intuiting or projecting oneself into another’s situation .....	57
Batson 6: Imagining how one would think and feel in the other’s place .....	57
Batson 5: Imagining how another is thinking and feeling, or perspective taking .....	58
Complexities of Empathy in Practice.....	60

Learner vs. other stakeholders .....	61
Particular vs. general understanding of the learner .....	63
Service vs. function .....	65
Formal Learner Analysis.....	67
Conclusion .....	70
Limitations .....	70
Implications for Future Research .....	70
APPENDIX A.....	72

## LIST OF TABLES

Table 1 <i>Participant Information</i> .....	24
Table 2 <i>Instructional Designers' Definition of Empathy</i> .....	56



## LIST OF FIGURES

Figure 1: Spectrum of dichotomous pairs from the data.....	60
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## Introduction

Empathy, “is a fundamental capacity, one that is essential for our participation in society,” (Segal & Fulton Suri, 1997, p. 452) and is a defining human attribute. Yaniv (2012) explained, “The challenge of understanding another person and what it takes to truly feel understood by another is at the hub of human social existence” (p. 70). Empathy has been deemed an essential trait of influential people (Burton & Dalley, 2009) and corporate innovators (Brenton & Levin, 2012), and has been positively correlated with creativity (Carlozzi, Bull, Eells, & Hurlburt, 1995). Henriksen, et al. (2015) noted, “The very core of many creative professions requires empathetic thinking” (p. 8). Clearly empathy is increasingly important in our evolving global society, and the demand for innovation and cultural awareness from businesses, organizations, and society at large is rising. Like other critical 21<sup>st</sup> century skills and attributes such as learning, creativity, and critical thinking, empathy is discussed in fields as diverse as counseling (Neukrug & Bayne, 2013; Rogers, 1957), music (Wöllner, 2012), and human development (Moore, 1990). Teaching with and for empathy has also been discussed as a primary goal in education (Cooper, 2011). Hattie’s (2009) large scale analysis found the most significant impact in classrooms stems not from structural reforms but from teacher-student relationships, “It is teachers seeing learning through the eyes of students, and students seeing teaching as the key to their ongoing learning (p. 22).

My experience with evaluating e-learning modules, taking online courses, and reflecting on the discipline as a whole, led me to consider the importance of empathy in instructional design work. While some experiences I’ve had have been energizing and inspiring, others have been incredibly frustrating or boring. How often do designers put themselves in the shoes of their learners when designing instruction and try to offer experiences that they would view as

energizing or inspiring? User-experience experts Segal and Fulton Suri (1997) rightly stated, “Empathy is a fundamental capacity, one that is essential for our participation in society” (p. 452), and I ventured to generalize this sentiment to instructional design. “People have a disposition to be empathic,” observed Wiseman (1996), “But whether they are or not depends on situational factors” (p. 1165). Perhaps the situational factors for those designers who created less desirable content restrained their natural empathic disposition? Or maybe designers’ efforts to be empathetic were genuine, but they lacked sufficient sensitivity to the learners’ perspective.

The conversation surrounding empathy as a construct in social psychology and human development has been fraught with confusion and debate (Decety & Jackson, 2006; Duan & Hill, 1996). There is no clear consensus on its definition. For this study I used Batson’s (2009) framework for empathy, generated from his thorough review of the empathy literature as a general guide for defining and understanding empathy in the lives of participating designers. These points broadly encompass a host of concepts from a variety of disciplines around the multifaceted construct of *empathy*. As an established scholar in the field of psychology, Batson’s summary of empathy offered a useful framework for understanding the many dimensions of this construct. I began this study with a specific focus on Batson’s (2009) points four and five as the initial way of defining empathy for this study. These two points were the most frequently discussed elements of empathy in the social psychology literature (Decety & Jackson, 2006; Duan & Hill, 1996) and also appear more frequently than the others in the design literature reviewed. Though these points provided a helpful framework for understanding empathy, I took extra precaution to not narrow down or define empathy in one or any of these ways with participants during our interaction. Part of my goal was to learn if participating instructional designers understood empathy in novel ways outside of Batson’s framework, and it

was my intention to allow such a perspective if one existed to be shared and valued in the final report. These questions, among others, led me to my two primary research questions:

1. What are the views or perspectives of instructional designers about empathy?
2. How does empathy manifest itself in the everyday work of instructional designers?

The goal of the research was to understand *from the designers themselves* how they understood empathy in their work, and how this understanding was manifest in their regular practice.

## Literature Review

The term empathy is conceptualized a number of ways across fields. Most significantly, it appears in counseling and social psychology, with a host of strands spreading throughout the disciplines such as human nursing, engineering, and education. To provide meaningful context for my study, I reviewed literature both inside and out of instructional design.

### Literature Review Method

For the following disciplines I used the keywords *empathy* and *design* to begin a review of the literature with the exception of nursing and social sciences, for which I searched only *empathy*:

- Human-computer interaction
- User experience
- Design thinking
- Business
- Nursing
- Social sciences (clinical psychology, human development, counseling)

I used Web of Science, Scopus, and Google Scholar to identify seminal works on the construct of empathy based on citation counts that were relatively large as they related specifically to my key words. I used CompIndex in searching literature in human-computer interaction, user experience and design thinking, as well as ProQuest and PsychInfo for business and design thinking based on suggestions from content librarians at our university library. Additionally I searched the general education literature in ERIC, Education Full Text (H. W. Wilson), and PsycINFO using the terms *empathy* and *teach\** which yielded over 4,000 hits. Limiters on this search included subjects marked as *empathy*, *teaching methods*, and *teacher*

*student relationships* as well as full text available and peer reviewed articles. Approximately 160 hits resulted from these limiters, spanning across 1983-2015.

I also searched for the term *empathy* in field of instructional design and technology. I first searched specifically in the electronic journal databases of individual publishing companies for the following journals as provided by our university library: *TechTrends*, *Educational Technology Research and Development*, *British Journal of Educational Technology*, *Instructional Science*, *Technology Knowledge and Learning*, *Educational Research*, *Educational Technology and Society*, *Canadian Journal of Learning and Technology*, *Performance Improvement Quarterly*, *Adult Education Quarterly*, and *Studies in Continuing Education*. I searched all digitally available issues of the journals with some going back to 1950, but most reaching to 1987 or 1996. These titles were picked because they either have connection with the Association for Education Communications and Technology as indicated on their website (<http://www.aect.org>), are regarded as high impact journals in the field (Ritzhaupt, Sessums, & Johnson, 2012), or based on recommendations from scholars at my university.

I purposefully excluded studies about *teaching or designing for* empathy as opposed to designing instruction *with empathy*. While designing *for* empathy may have some relevance to my topic, my study focused on the practices and experiences of designers themselves—not on the content they produce or design. I assumed that if empathy appeared in instructional design literature it would be mentioned in connection with topics such as learner analysis. Thus, in addition to searching for the term *empathy*, I also looked at *learner analysis* and *target population analysis*—two terms frequently used by instructional design scholars (Gibbons, 2014; Morrison, Ross, Kemp, & Kalman, 2010; Smith & Ragan, 1999)—in ERIC, Education Full Text (H. W. Wilson), and PsycINFO. Limitations due to access and library licensure parameters

yielded results from 1987-2014, 1985-2015 and 1977-2015 respectively. While conducting a thorough literature review in each of the disciplines mentioned above (e.g. user experience, business, human computer interaction) was beyond the scope of this project, I included the seminal voices from each field in an effort to gather a holistic understanding of empathy in design.

### **Empathy Across Disciplines**

Empathy plays an important role in fields generally not considered to be design disciplines such as social science, nursing, and business. The social science literature on empathy stems from human development (Moore, 1990), neuroscience (Decety & Jackson, 2006), and counseling psychology (Duan & Hill, 1996; Rogers, 1957) and is the most influential research on empathy across all fields reviewed. Rogers' (1957) perspective on empathy in the psychotherapy discipline was profoundly impactful on the field in that it was one of the first publications to begin the conversation around the specific construct of empathy in counseling. He determined empathy as the ability “To perceive the internal frame of reference of another person with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without losing the ‘as if’ condition” (Rogers, 1959, p. 210). This definition, particularly the phrase *as if one were the person*, has since been contested across time—sparking debates regarding the psychological process of empathy. In a thorough review of this argument, Duan and Hill (1996) called for a renewed emphasis on researching empathy as study of empathy had decreased. Citing Rogers' work as the initial influence to the definitional struggle, Duan and Hill (1996) concluded that two general perspectives on empathy—*cognitive* and *affective*—made up the clear opposing sides regarding the nature of empathy. In order to bring empathy back into the realm of research, they proposed more specific terms—*intellectual*

*empathy* and *empathic emotions*— to help clarify the differing definitions regarding the process and consequences of the construct:

These new terms should allow researchers more freedom of investigating cognitive or affective elements of empathy as distinct phenomena without being caught in the endless debate about the nature of empathy. Continuous effort is needed in understanding how these two processes may exist separately, coexist, or influence each other. (p. 263)

Today most scholars recognize elements of both perspectives when defining empathy. Batson's (2009) eight-point framework is the most comprehensive synthesis of the decades-old definitional battle over empathy in the social sciences that I found. The eight phenomena described by Batson (2009) are summarized as:

1. Knowing another person's internal state, including his or her thoughts and feelings
2. Adopting the posture or matching the neural responses of an observed other
3. Coming to feel as another person feels
4. Intuiting or projecting oneself into another's situation (the origin of English "empathy" fits with this point)
5. Imagining how another is thinking and feeling, or "perspective taking"
6. Imagining how one would think and feel in the other's place
7. Feeling distress at witnessing another person's suffering
8. Feeling for another person who is suffering

These eight ways of defining and understanding empathy include elements of *intellectual empathy* as well as *empathic emotions* (Duan & Hill, 1996) and yet expand on these perspectives while drawing on review of additional literature (Batson, 2009).



In the field of nursing there is literature around both teaching for empathy and giving healthcare with empathy. Wiseman (1996) believed, “It is the ability to empathize which distinguishes an average nurse from an excellent nurse in the eyes of the patient, regardless of how care is delivered” (p. 1162). In her concept analysis of empathy—a theory construction method in field of nursing (Walker & Avant, 1988)—Wiseman (1996) concluded that interaction between *empathetic* and the nurse was an antecedent for empathy to occur. In her conclusion, empathetic interactions required shared communication from both the patient and the nurse, allowing the patient to be heard, valued, and understood. Baillie (1996) completed a phenomenological study to answer the question: *What is the nature of empathy for a registered nurse?* Baillie (1996) held many in-depth interviews with nine experienced nurses who worked at the same regional hospital. Her findings highlighted the ability for nurses to learn from personal and professional experience as an important part of empathizing with patients. Additionally Baillie (1996) emphasized that the complex contextual factors in nursing (environment, patient, condition, etc.) and how they affect the ability for nurses to empathize. For example, some nurses hesitated to become over involved with patients, drawing a line between being too close and merely empathizing with patients. Who the patient was and how they responded to nursing was a large variable that often made it more difficult for nurses to empathize, such as when patients were experiencing conditions that limited the ability to communicate. According to the nurse participants, empathy was more present when they could hear patient stories and experiences.

In relation to business, empathy has been noted as an important aspect of customer care and experience (Gorry & Westbrook, 2011; Wieseke, Geigenmuller, & Kraus, 2012), general management (Brenton & Levin, 2012; Müller, 2010), and leadership (Cherniss & Goleman,

2001). Leonard and Rayport (1997) who first coined the term *empathic design* suggested, "Developing a deep, empathic understanding of users' unarticulated needs can challenge industry assumptions and lead to a shift in corporate strategy" (p. 113). In this literature, empathy is viewed as a way of seeing and understanding the marketplace in order to gain a competitive edge. Empathizing with the customer and understanding their journey with a product or service can lead to the development of new products based on consumer's latent or unarticulated needs. Additionally this empathic perspective can improve front-line customer service interaction to the long-term benefit of the company's public image and financial bottom line.

In education empathy has received significant attention (e.g., Cooper, 2011, Hattie, 2009) and there is a growing literature regarding teaching *for* empathy in order to reach a variety of end goals. Examples include teaching empathy for peace education and conflict resolution (Sagkal, Turnuklu, & Totan, 2012; Stomfay-Stitz & Wheeler, 2006), cultural awareness or social justice (Guney & Seker, 2012; Warren, 2013; Zembylas, 2012), as well as historical analysis (Brooks, 2009). There is less literature that explicitly addresses teaching *with* empathy. In literature regarding pre-service training for new teachers there has been research regarding teachers' development of empathy in general (Boyer, 2010) as well as teachers' empathy for students who are learning English as a second language (Palmer & Menard-Warwick, 2012; Salerno & Kibler, 2013; Washburn, 2008), or are in poverty (Bennett, 2008). The most significant contribution was from Cooper (2004, 2010, 2011) in moral education. Cooper's (2010) qualitative study utilized grounded theory and included nine student teachers and seven experienced teachers. Cooper (2004, 2010) found four dimensions of empathy present between teachers and students:

1. *Fundamental empathy* was related to characteristics necessary to initiate relationships.
2. *Profound empathy* was a deeper understanding and higher quality relationships where teachers demonstrate personal levels of care and concern and model morality to students.
3. *Functional empathy* was used to facilitate interaction—teachers treat the class as one entity during interaction, using a mental representation of the whole group, which can support group cohesion and a sense of belonging.
4. *Feigned empathy* was when teachers exhibit superficial signs of empathy.

Her book (2011) is largely based on these four points with the primary emphasis being on the role of *profound empathy* in the classroom. In addition to identifying degrees of empathy Cooper (2004) also categorized a variety of constraints on empathy in the classroom including time, policies, and management.

Beyond Cooper's work, additional interest in the practice of empathic teaching was expressed in early childhood education. Recently Peck, Maude, and Brotherson (2015) conducted a qualitative study by conducting a series of interviews with 18 preschool teachers regarding empathy in their work. The main finding from the study was the theme of *expressing sincere empathy* of which the authors identified four sub themes of how empathy was expressed including: embrace inclusion as a philosophy, be relaxed and balanced, accept and respond to family culture, and engage in meaningful communication with families. This finding is very similar to Cooper's (2011) term *profound empathy*, and could be seen as a sub theme to this construct.

### **Empathy in Design**

In their qualitative study of e-learning design team meetings, Rapanta and Cantoni (2013) noted, "The analysis of empathic discourse, meaning discourse that reflects user experience, has

emerged as a valuable method in other design fields” (p. 766). Design fields outside of instructional design not only acknowledged the importance of empathy in the design process, but also have a rich literature on practical methods and guidelines for cultivating empathy during different phases of analysis and development. In human-factors and product design there is the idea of the *empathic practitioner* (Segal & Fulton Suri, 1997), in which “Empathy is not only something to use during interactions with users, it is a way of thinking that should permeate throughout the design process” (p. 454). In user experience there is literature around an *empathic design* process, which Koskinen and Battarbee (2003) explained:

When we talk about “empathic design,” we mean empirical research techniques that provide designers access to how users experience their material surroundings and the people in it, including themselves as key characters of their everyday lives. In empathic design, the designer has to go through some degree of role immersion, and an attempt to seriously keep her data-inspired imagination in check with empirical data. (p. 47)

Regarding the techniques mentioned above, Koskinen and Battarbee (2003) suggested that designers use ethnographic methods (observation, artifact analysis, etc.) to learn about users, participate in activities or tasks with users, and immerse themselves in the culture and context of users. Essentially empathic design in user experience begins with studying the user as an anthropologist might do with a specific culture or population. Building on Koskinen and Battarbee’s (2003) term *empathic design*, Kouprie and Visser (2009) proposed a theoretical framework for empathy in design practice that included four phases:

1. Discovery - entering the user's world, achieve willingness.
2. Immersion - wandering around in the user's world taking user's point of reference.
3. Connection - resonating with user, achieve emotional resonance and meaning.

4. Detachment - leaving the user's world, design with user perspective.

These phases relied on designer interaction with users, personal reflection, and connecting both cognitively and affectively with users' needs and perspectives. In addition to their model, Kouprie and Visser's (2009) emphasized the importance of designer motivation, the combination of cognitive and affective sensibilities to empathy, as well as extended time as key insights of the framework.

Closely related to user experience is the field of human-computer interaction, where empathy is also viewed as an important part of the design process. Wright and McCarthy (2008) explained:

HCI [human computer interaction] is concerned with understanding the influence technology has on how people think, value, feel, and relate and using this understanding to inform technology design. Ontologically, HCI is now concerned with the experience, felt life, emotion, desire, fulfillment as well as the more familiar ontology of activities, practices and tasks. In this context empathy has emerged as an important concept with practical consequences for HCI. (p. 644)

Like user-experience, HCI is concerned with understanding the user across multiple domains (cognitive, emotional, and physical) in order to facilitate a positive interaction with computers or general technology. Both approaches emphasize human values as intrinsically important in the design process (Reeves, 2014). In their widely cited work *The Essentials of Interaction Design*, Cooper, Reinmann, and Cronin (2007) asserted, "The best way to successfully accommodate a variety of users is to design for specific types of individuals with specific needs" (p. 77). Given this perspective, they developed a strategy of using *personas* to facilitate design—a method in which designers develop fictional characters based on gathered user data to segment the

population to be serviced. These characters—or personas—are then used during the design process as a way to consider end-user needs in order to make mass-produced products more meaningful for specific target populations. As Cooper, Reinmann, and Cronin (2007) explained, “It is more difficult to clearly communicate human behaviors and relationships in the abstract, isolated from people who possess them . . . The human power of empathy cannot easily be brought to bear on abstract classes of people” (p. 85). In addition to personas, empathy has been described as an important part of designer thinking and practice in HCI. In a mixed methods study including 16 designers (eight experts and eight novices), Kim and Ryu (2014) had participants carry out a think aloud activity around a fictional design task. They found that experts tended to focus more on *problem framing* while novices spent the majority of the time *problem solving*, and the two groups ultimately empathized differently than one another. Novices tended to think about the fictional product they’d designed based on affect and thoughts of the user enjoying similar attributes. Alternatively, experts thought about the individual attributes of the product’s design in a more reflective and distanced manner, a term the authors called *artifact empathy*. The authors named these two perspectives the *mediated self* (for the expert) and the *simulated self* (for the novice), and built their design thinking rationality framework upon these two characteristics (see Figure 1). Kim and Ryu’s (2014) framework was less about how empathy functioned in designers’ work, but on how they made decisions and interacted with the design itself.

Human factors, user experience, and HCI came together around empathy in the form of *design thinking* (Brown, 2008). Since Stanford University began formally teaching design thinking as a form of knowledge creation in 2005, the discussion around the construct has been significant (Plattner, Meinel, & Leifer, 2010). In their review of the design thinking literature

Johansson-Sköldberg, Woodilla, & Çetinkaya (2013) explain the history of the term and departure from the much more established concept of *designerly thinking*. Beginning with Simon (1969) and concluding with Krippendorff (2006) the authors traced *designerly thinking* from design as creating of artifacts, to reflexive practice, then to a problem-solving activity, next as way of reasoning and making sense of things, and finally to the creation of meaning.

Additionally Johansson-Sköldberg, Woodilla, & Çetinkaya (2013) identified three dimensions of *design thinking*:

1. Design thinking as company IDEO's way of designing and innovating.
2. Design thinking as a way to approach indeterminate organizational problems, and a necessary skill for practicing managers.
3. Design thinking as part of management theory.

The *designerly thinking* body of literature stems largely from academia, primarily in fields such as engineering and architecture. The *design thinking* part was spurred through popular channels such as blogs and company websites, the most significant evangelist being the largest design firm in the world: IDEO. The shared IDEO curriculum with Stanford University emphasized empathy as the first stage of design thinking. This union of research and practice has played an instrumental role in prioritizing empathy in practice as business schools across the world have sought to include design thinking in management education (Dunne, & Martin, 2006; Glen, Suci, & Baughn, 2014). Empathy in this respect is less about knowledge construction and the details of how designers think, than a phase designers (or managers, innovators, creators in general) can follow. Brown and Katz (2011) explained:

It's possible to spend days, weeks, or months conducting [fieldwork] research . . . but at the end of it all we will have little more than stacks of field notes, video-tapes, and

photographs unless we can connect with the people we are observing at a fundamental level. We call this “empathy,” . . . we are not trying to generate new knowledge, test a theory, or validate a scientific hypothesis. The mission of design thinking is to translate observations into insights, and insights into the products and services that will improve lives.

Similarly, in their documentary analysis of empathy in design thinking literature, Köppen and Meinel (2014) concluded, “Design theorists as well as practitioners describe empathy as a crucial impact factor of Design Thinking” (p. 16). Though “there is little use in trying to find a single definition or description of the practice of design thinking” (Johansson-Sköldberg, Woodilla, & Çetinkaya, 2013), the literature reviewed is clear on the importance of empathy as a pillar in the design process.

### **Empathy in Instructional Design and Technology**

There is little focus on empathy in the literature of Instructional design and technology, though the topic has received limited discussion along with encouragement for more attention. Recently, for instance, Rapanta and Cantoni’s (2013) qualitative study of designer discourse (design meeting observation and analysis) in relation to user experience and designer empathy, yielded recommendations for e-learning design teams. They suggested e-learning teams add user experience anticipation exercises to team meetings and spend more time constructing scenarios on how students and instructors might experience the design. They also noted that much of the user-oriented discussion was not grounded in knowledge or data regarding learners but rather from personal experience. This research prompted Cowan’s (2014) response, in which he provided additional ideas (suggestions based on opinion and experience and not research) that designers might use to increase their empathic understanding of learners. These included



concepts such as piloting e-learning with genuine learners, challenging assumptions about learners during design team meetings, and seeking to include one team member with recent interaction experience with the actual learner segmentation that the e-learning is being directed to. These articles are helpful starters to an important conversation regarding empathy in e-learning, but more is needed on the level of instructional design and technology in general. Little scholarship has been directed specifically at how designers empathize *with* learners for whom they design. Rapanata and Cantoni (2013) invited further research on this topic: “Although e-learning designers try to empathise with learners and tutors, the extent to which they can do so effectively is in doubt and should be studied by a further study” (p. 775). Parrish (2006) also invited additional discussion regarding empathy for learners in his publication regarding design stories as a useful resource for design practice and the training of instructional designers. I was unable to find any other explicit discussion of empathy in the Instructional design and technology literature beyond these few publications.

### **Indirect Instructional Design and Technology Literature Related to Empathy**

Due to the lack of literature on empathy in instructional design, I searched for terms related to what seemed to be similar constructs. One topic in the literature on instructional design practices that has received less attention is the front-end aspect of design (Leigh & Tracey, 2010)—traditionally called learner analysis or target population analysis—of which empathizing for learners may be a commonsensical activity. My assumption was that this phase of design and any associated literature would provide helpful background for my study. Learner analysis is significant to the design process, as Gibbons (2014) explained, “Target population analysis gathers important data about the intended learner without which it is difficult to make intelligent design decisions” (p. 411). This phase has been consistently identified as a key

element in the traditional ISD process (Gibbons, 2014; Morrison et al., 2010; Smith & Ragan, 1999). Though additional dimensions of learner analysis have been suggested such as context and environment analysis (Tessmer & Richey, 2013), the literature on learner analysis is scarce. The few studies that have directly examined how designers in practice approach this phase emphasize the need for more research and discussion about designer empathy and concern for user's experience (Parrish, 2006; Rose & Tingley, 2008, Williams, South, Yanchar, Wilson & Allen, 2011). Though analysis has played a prominent role in instructional models for decades, scholars have raised concerns about whether such analysis actually takes place in any significant way in practice and what the lack of analysis could mean for learners (Leigh & Tracey, 2010). As Rose and Tingley (2008) concluded, based on a qualitative study made up of in-depth interviews with six high school science teachers who also designed their own curriculum, "One of the activities undertaken in the analysis phase of most instructional design models is a target population analysis, in which the learners are objectified as homogeneous, faceless entities." Citing Ertmer's (2001) responsive design model and Osguthorpe, Osguthorpe, Jacob, and Davies' (2003) moral dimensions of instructional design framework, Rose and Tingley (2008) called for an "ethic of caring" in the learner analysis phase of design work:

Our research suggests that, if aligned with the ethic of caring, the analysis phase would include a period of sharing (perhaps through focus groups with stakeholders) and self-reflection, with the desired outcome being that both teacher and learners have a better understanding of their needs and capabilities and of the ways that they might best work together and help each other. (p. 10)

Situated opposite to *analysis* in the ADDIE process—a general instructional design approach—is evaluation, which literature also speaks to the importance of thorough

understanding of the learner. Much has been discussed about the values of stakeholders (Scriven, 2013), particularly in clarifying the needs and context of various stakeholders including learners (Stufflebeam & Shinkfield, 2007). Williams et al. (2011) found, “instructional designers were aware of the important role of needs or audience analysis, but they were not always able to conduct adequate context evaluations, and while clients claimed they’d already carried out sufficient needs assessments . . . most clients had not actually performed adequate context evaluations” (p. 896). Thus, designers often had to move forward on projects without a chance to interact with the learners at all. This finding suggests that when instructional design proceeds with little opportunity for target population analysis, design becomes disconnected from the end user—the learners themselves. The idea that performing shallow learner analysis is not only bad design, but unethical is not new, as seen by Damarin’s (1994) theoretical work connecting feminist ethics of caring to instructional design (Rose & Tingley, 2008):

At its most extreme, instructional design is clearly anti-ethical in the sense that it denies the voice of “the learner” in the determination of the learners [sic] need. Analyzing the learner through abstract systems whose relation to the needs of the learner are theoretical rather than experientially concrete, “ideal systems” proscribe treatments, which work by colonizing the minds of learners. (p. 3)

Damarin’s (1994) statement regarding learner voice preceded the globalized, rapid and often disconnected production of online e-learning, yet her words seem to apply very well to current instructional practices that emphasize scalable learning products and platforms primed for mass distribution. Interaction between designers and learners has become increasingly difficult. Rogers, Graham, and Mayes (2007) identified the disconnection between designers and

learners in their qualitative study of designers dealing with cultural awareness while designing in the current global economy.

Too many instructional designers are frequently isolated physically and mentally from the learners for whom they are designing instruction (p. 207). . . It does seem that it is a serious thing if instructional designers really have no contact with students at all, and if they never see any feedback with regard to the materials and educational experiences they help to create. What do they think their role really is, and how are they supposed to improve? (p. 209)

Rogers, Graham, and Mayes' (2007) call for more time and resources to be given to designers for learner analysis and awareness, in addition to Rose and Tingley's (2008) argument for an *ethic of caring*, both appear to be similar in spirit to Nelson and Stolterman's (2012) idea of design as a *service relationship*.

Design ideally is about service on behalf of the other—not merely about changing someone's behavior for their own good . . . This is not always obvious when observing the behavior of many of today's designers; neither is it adequately dealt with in the contemporary writings on design. (p. 42)

Thus, a number of scholars within the Instructional design and technology literature call for moral, ethical, service-oriented or even empathetic approaches to the design process itself, especially when considering the perspective and experience of the learners. Parrish (2006) summed up this conclusion in his practitioner-oriented article on design stories as follows, “The most critical ID (Instructional Design) skill is the ability to step outside one's own perspective and see the design through the learner's eyes . . . This ability is central to ID because it is needed to understand how instruction would be experienced” (p. 75).

Thus, my review suggests that while Instructional design and technology as a discipline has not been silent on the subject of learner's needs or values as a priority (Duffy & Jonassen, 1992; Schwen, 1973; Wenger, 1987), the topic of designer empathy has not been substantively addressed. Though learners have been included as one of the three traditional components of instructional design, the experience of learning itself deserves significantly more attention (Parrish, 2007). With Parrish (2006), I ask; "How do I[nstructional] D[esigner]s exercise empathy as they design? Can they do it intentionally, or is it simply a trait they possess that shows itself in the quality of their work? Can they learn to practice empathy more effectively?" (p. 72). In human-computer interaction design the foundational goal is "to know the user" (Wright & McCarthy, 2008), in order to improve their design practice, create meaningful content and products for customers, and to consider their work ultimately successful. If the same can be said in Instructional design and technology in relation to learners, then how do designers talk about and carry out the process of coming to know who their learners are, what they see, feel, and experience? What routine challenges and common constraints do everyday designers face in regards to designing for learners with empathy? What implications for teaching instructional designers might be discovered with an increased focus on empathy?

These questions, among others, led me to my two primary research questions: what are the views or perspectives of instructional designers about empathy and how does empathy manifest itself in the everyday work of instructional designers? While the literature regarding empathy in learner analysis in Instructional design and technology is small, there is even less research regarding empathy in instructional design itself. My aim in this qualitative study, then, is to add to the limited literature on this topic (Cowan, 2014; Parrish, 2006; Rapanta & Cantoni,

2013; Rose & Tingley, 2008) by studying how designers may or may not seek to empathize in practice.

## Method

The goal of the research was to understand *from the designers themselves* how they understand empathy in their work, and how this understanding is present in their regular practice. Specifically, my two primary research questions were:

1. What are the views or perspectives of instructional designers about empathy?
2. How is empathy manifested in the everyday work of instructional designers?

Framing the questions this way allowed for me to approach the topic of empathy in instructional design from both a direct or explicit angle by asking about empathy specifically and also from an indirect angle by asking about everyday work and narratives from design experience. Initially I began with a broad approach to the first question. As interviews with participants progressed I honed the conversation to be more explicit about their conception of empathy and how they defined it in their everyday work context. Thus rather than asking about participants' views and perspectives generally of empathy, I began explicitly asking how they defined empathy within instructional design and technology. Thus I developed a two pronged approach which was to first, understand designers' explicit definitions of empathy, and second, understand how participants discussed empathy generally by how they referred to their work and implicit or assumed positions regarding learners. This evolved approach generated a rich and broad understanding of the issues at play regarding empathy in instructional design and technology.

I followed the research approach used by Yanchar and Hawkey (2014) and Williams et al. (2011), which include elements of naturalistic (Lincoln & Guba, 1985), and hermeneutic inquiry (Fleming, Gaidys, & Robb, 2003; Kvale, 1996). The theoretical and practical implications of such a study may lead to additional insight as to how learner analysis could be

improved in addition to other transferable findings in areas such as project management, evaluation in instructional design settings, and instructional design education.

### **Positionality Statement**

This study is inherently influenced with my own viewpoints and assumptions regarding the research questions and untold variables involved in this study. Having been raised as a white male in a Christian, middle-class home with well-educated parents I acknowledge I see the world in a way that likely differs with others raised in settings unlike my own. While I have enjoyed time among people and cultures who do not share my background, beliefs, or assumptions, I realize that this research will yield findings and results influenced by my own position regardless of my attempts to produce the most transferable results possible.

### **Participants**

Participants in this study were six designers, each of whom represents different areas of the industry in the field. Specifically related to participant selection, I used Patton's (2014) quota sampling strategy due to the primary goal of "ensur[ing] that certain categories are included in a study regardless of their size and distribution in the population" (p. 285). All designers were located in different settings across the United States. Each designer was situated in a unique design environment as summarized in Table 1.

To begin the sampling process, I contacted supervisors of organizations that employ instructional designers and inquired about the possibility of interviewing an employee who met our criteria of spending at least 50% of their time engaging in design and related tasks. From these efforts, I was able to develop a small pool of potential participants. Below I've included a brief introduction of each designer in order to contextualize the findings of this study.



Table 1

*Participant Information*

Name	Gender	Years in field	Position/Industry	Highest degree
Terri	Female	17 years	Senior Instructional Designer/Higher Ed Publishing	MS, PhD coursework
Brody	Male	4 years	Instructional Designer/In-house Corporate	MS
Dan	Male	11 years	On-demand Training Production Manager	MS
Brook	Female	19 years	Instructional Designer/ Higher Education	MS, PhD coursework
Donna	Female	7 years	Education Specialist/ Government	PhD
Sierra	Female	12 years	Language Instructor & Personal Trainer/Military	AS, Honorary PhD

**Terri.** At the time of this study, Terri worked for a major publishing company designing curriculum for higher education courses. Before that she worked in corporate settings and a variety of technology and teaching positions both in private and government environments.

**Brody.** When we talked, Brody's job was at a branch of a large investment company where he created learning content for online and face-to-face investment courses for paying clients. He had recently finished a master's degree in instructional science at a major university and changed jobs from a high-paced corporate design firm to his new position.

**Dan.** After working for a short period with a church educational program for teenagers, Dan took a job with a large software company where he designed instructional materials. At the time of this study his primary responsibility was creating a library of training videos meant to augment the experience for users of the software product his employer sells.

**Brook.** Brook's work straddled two domains, designing and teaching a course on instructional design for graduate students, and supporting faculty at her university in

transitioning their face-to-face courses online. She was currently finishing her PhD in instructional design.

**Donna.** After studying adult learning and earning her PhD, Donna worked for a large museum. At the time we talked she designed training for federal staff members across the country as a government employee.

**Sierra.** Sierra held a variety of complex and demanding design positions from personal training to language learning. During this study her primary work involved designing and teaching advanced language courses within the United States Military.

The purpose in sampling different groups derived largely from the idea that designer proximity to learners, culture the designer is situated in, and a number of other factors may play a role in how designer practitioners empathize with learners during the design process. Thus a quota sampling strategy that includes a variety of industry settings was helpful to understanding how designers see and understand empathy in their work. Similar to Yanchar, South, Williams, Allen, and Wilson (2010), my goal in using this sampling strategy was to provide a glimpse into major segments of the field of instructional design. I looked specifically for designers with a varying degree of formal instructional design training, experience, and perspective.

### **Interview Question Protocol**

I conducted three 60-minute interviews generally following Siedman's (2013) qualitative three-interview series. I used a general guide of questions (Patton, 2014) as a starting point, with the goal in the first interview to gain understanding of the whole of the designer's experience in context (Fleming, Gaidys, & Robb, 2003) and then moved towards a depth of meaning and rich description of designer's work experience and views (Seidman, 2013; Yanchar et al., 2010) in following up interviews. Interview questions are detailed in Appendix 1.

Beyond interviewing, I sought other data to complement the interviews, “as a way to concretize and provide evidence for reflective assertions that participants [make] about their practice” (South, 2008, p. 29). Four participants showed me designs they’d done online, one participant sent a text file with examples of editing and discussion with a subject matter expert, and one participant was not authorized to share any artifacts. I asked for these artifacts in the first interview so as to have time to do some basic analysis by the time second or third interview.

### **Data Analysis**

Data analysis followed guidelines mentioned above for important considerations such as dependability and transferability. Similar to Yanchar and Hawkley (2014), my goal was to produce valuable themes around my selected topic for the instructional design community in general. I kept field notes throughout the study, which include both description, and reflective notes. In this regard my data analysis began in during the data collection process. As Kvale (1996) explained, “Analysis is not an isolated stage, but permeates an entire interview inquiry” (p. 205). Moreover, I performed an initial analysis of interviews as they were completed by reading through the transcript and coding statements based on Batson’s (2009) framework and developing themes noted during conversation that I’d recorded in my interview notes. This analysis then offered topics for follow-up discussion in later interviews. Once all interviews were completed, I followed a similar course to Spradley (1979) and South (2008), of which the approach of the latter is built upon methodology recommendations from Kvale (1996):

There is an emphasis upon a process of forming a tentative interpretation of the whole, investigating and characterizing the parts in relation to the researcher’s understanding of the whole, discovering in that process new insights and contradictions, applying this new

understanding to the interpretation of the whole, and repeating this process until the meaning of the whole matches the evidence of the parts in a coherent way (p. 36-37).

Though my analysis did not follow a perfectly linear sequence, it can be described as including five activities that occur in a semi-orderly sequence, as follows: First, I read through all the transcripts in order to gain a sense of the whole data set available, and began developing a codebook of themes both that I had noted during the interviews themselves and in this first reading. Second, I developed the codes through additional readings of the individual transcripts. Third, I checked for negative cases and exceptions to developing patterns as a way to check the individual themes as a part-whole comparison, analyzing comments from individuals in context of what other participants said on the same topic. Fourth, I organized emerging themes into sub themes and broader categories by comparing and contrasting, similar to Spradley's (1979) recommendations for componential analysis. Fifth, I selected quotes and statements from participants that best illustrated concepts to be included in the final report. Throughout the full analysis of the transcripts I continued to refine, verify, compare, and develop the themes and sub themes in relation to the whole data set.

### **Trustworthiness**

I sought a high degree of trustworthiness as recommended by Lincoln and Guba (1985) throughout the whole research study process. To ensure trustworthiness I used the following practices:

- Member checks. After completing the manuscript, including quotations and findings, I invited participants to review and respond to the report as to its authenticity and validity from their perspective.

- Negative case analysis and subjectivity checks. I conducted negative case analysis as I worked through this project by seeking negative cases during conversations with participants and in the early stages of analysis between interviews. Additionally, after completing interviews with five participants of whom I intentionally sought negative cases, I held interviews with the final participant of whom I specifically asked about the majority of the themes identified to that point as a way to generate additional negative cases and provide a subjectivity check to my initial findings.
- Audit trail and reflective journaling. I've maintained a field notes file and an audit trail document so anyone can follow the course of my research from the very beginning to the present time. I can provide this trail and journal upon request.
- I triangulated cases by holding multiple interviews with several different participants across time. Because I was doing analysis between interviews I was able to share initial findings and comments from different participants with the designers who then confirmed or negated my findings. Additionally, all interviews were done in conjunction with a colleague of whom I conversed with following most interviews regarding what we'd heard and observed during the conversation.
- Thick description in reporting. In my final manuscript I used narrative and detailed description so as to enable readers to transfer meaning and concepts to their own unique setting.

All of the designer's names have been changed and some of the quotes have been slightly modified in order to provide a smoother flow for the reader and maintain correct grammar. None of my edits change the meaning of the participant's original intent, of which I verified by member checking.

## Results

With each participant I asked explicitly about how they define or understand empathy. I first analyzed each response separate from my guiding framework for this study (Batson's eight dimensions of empathy) and also coded the interviews for any explicit statements about how the participants viewed empathy itself. Second, in an additional analysis of the same responses, I used Batson's eight dimensions to organize participants' perceptions as a way to illuminate and extend the meaning of their remarks to the larger context of empathy research literature. Finally I compared the two sets of results to generate a broad picture of how participants defined empathy.

### **Defining Empathy without a Framework**

This first analysis generated three general commonalities or definitions across the responses: caring for the learner, referencing personal experience in service of the learner, and taking on somebody else's viewpoint.

**Definition 1: Caring for the learner.** When talking explicitly about the definition of empathy both as an abstract construct and in light of the design work they do every day, many of the participants came back to the idea of simply caring for, or having compassion towards, the user of their design. Brook responded to what she thought empathy was with this succinct answer:

Caring. Very simply put, I mean whether you care about somebody's circumstances or see their point of view in a situation. You know... to take your bias out of it and sort of be in the situation in their shoes. Or as much as you can possibly —and care about that. In this case, it is the caring for the learners themselves that moves the designer to see things from the learner's point of view. Two additional designers —Donna and Sierra— talked extensively

about the importance of caring about the learners as individuals with significant needs and struggles, which the designer may never fully understand or adequately prepare for. Donna stated:

I would define empathy as willingness to put yourself in someone else's shoes and to consider what challenges they're facing in their lives when I'm interacting with them or asking things of them . . . It really is about making sure that, or not making sure but, recognizing that people have challenges in their lives that you are often unaware of and that you don't see. You know we all have our things that are going on below the surface that you can't see in someone . . . So it's recognizing that when you interact with them, those things are coming to the surface and so their reaction to you may not really be to you, but it's sort of other things that they're experiencing. So when you think empathetic, you're realizing that there's more to that person than what you're just seeing and appreciating that.

Similarly, Sierra noted:

And that is what it means to be student centric; it means you care about their life. You care about their sick grandma, and you care about their parakeet that died that meant something to them . . . You have no idea what is going on with them. You have no idea of what inner struggles they are hiding or what battles they are fighting and what is very real to them. So, you know, you can never know what someone else is going through and so as long as you keep that in mind it doesn't matter whether it is a virtual curriculum or a face-to-face curriculum, as long as you know what their needs are you can meet them. You need to know what they want.

From the perspective of the participants I interviewed, care or compassion for the learner went further than whether the learner can understand the design, but extends to who the learner actually is and the context in which they are engaging with the instruction the designer has created.

**Definition 2: Referencing personal experience in service of the learner.** The participants shared many personal experiences with past instructional settings and events that have influenced how they approach their work. This process of reflecting on one's own experience and then relating it to the learner is how some of the participants I interviewed conceived of empathy itself. Dan explained how referencing one's own experience is an integral part of what empathy means to him:

I mean empathy in general - being able to understand someone else's situation, to see through a different lens, to step into another person's shoes and seeing you know what... you know it's tapping into that part of you that is a learner yourself...with learning we're all learners in some way right? And so it's kind of tapping into that part of you that, you know, likes to learn and is excited to learn, and needs to learn, and being able to kind of connect with that part of you as it relates to the other people well.

Dan pointed to the idea that learning is an inherent thing everyone participates in, and thus learning itself can be a shared channel of communication between designer and learner.

After telling me that she wouldn't give me a textbook definition of empathy, Sierra examined this concept from the point of view of her own difficulties with learning:

I would define my role as a designer, in ah . . . in having experienced something. Well I've had, I have learning disabilities, severe learning disabilities, which maybe that's what gives me my empathy is that it's not easy for me to always learn something, you



know sometimes it's very difficult. I can't spell. In any language. I can't... I just can't.  
 . . . So you know, I think that that gives me the ability to see that in my students.

Sierra's conclusion that her personal experiences help her see learners' needs is a specific example of what Terri told me she feels as being an important part of learning empathy as a designer:

I think being in a position of a learner yourself and not having somebody meet those needs. I think that's really important because then it makes you think, well why didn't they understand that I needed X, Y and Z? Is there something that I should have done? Or is it something they are missing? So I think that having that experience of having somebody miss the mark with you when they are teaching you something. That helps.  
 [Like] calculus, which I could not pass. Three times I could not pass calculus.

From this angle, participants' reflection of past learning experiences enables them to see *and understand* the learners' perspective as they struggle with personal frustration, disability, or even failure. Designers shared memories of struggling in a variety of instructional environments as students and then frequently connected these life events as instrumental to how they approach their design work and empathize with their learners.

**Definition 3: Taking on somebody else's viewpoint.** The most frequent idea participants referenced when discussing how they define or understand empathy in their work was the general concept of taking on the viewpoint or perspective of the learner. Brody said it this way:

I would say that empathy is the ability to see things or experience things from somebody else's perspective . . . Um, so I feel like. A lot of what I do is looking at, you know, course pages or presentations or whatever through the perspective of our clients.

Terri's conception of taking the perspective of a student involves more than a thinking exercise but also an operational one:

I would define it [empathy] as the viewpoint of a student. To be able to take the viewpoint of a student or to understand the viewpoint of a student . . . I think it includes more than just the cognitive. I think even just putting myself in the position to see, is something physically possible? When I do corporate training, we do role-playing sometimes because we do instructor-lead. And to just, you know, does it logistically work for a student to be able to get around and if they have a disability of some kind, are we making accommodations for that?

Most designers talked generally about how empathy is the process of “walking in the shoes of another” or seeing from the perspective of somebody else, but what is actually meant by that process is more complex. I will explore these nuances in greater detail when discussing the results of my second research question.

**The role of personal experience.** The most unexpected result was the role of personal experience in service of the learner. Perspective taking and feeling for learners were aspects of empathy I assumed would be present. I also expected participants to talk about empathy in ways that might be related to imagining the experience of others. However, the overwhelming majority of responses related to defining and practicing empathy were connected in one way or another to the designer's own learning experiences. Indeed, some participants such as Brook went so far as to support the idea that without gaining personal experience in the general position of the learner—in her case it would be online college coursework—instructors and designers are severely limited in their ability to create meaningful or useful instructional materials.

Referencing personal experience in service of the learner (or others) may be a concept worth exploring in instructional design as well as other disciplines interested in empathy as a construct.

### **How Empathy is Present in Designers' Work**

My second research question was about how participants understand and define empathy by the work they do and the stories they shared about that work. Thus while my first question focused on explicitly definitions of empathy, my second question examined the manifestations of empathy and the role it played in informal, everyday settings of projects. Both questions work together to paint a larger picture of empathy and instructional design.

Due to the abundance of information and experience gathered from participants, I identified many ways empathy was manifested in participants work. While many of the themes are connected at least in part to participants' explicit definitions of empathy, some were not and helped expand understanding of the role empathy plays in instructional design. Below is a bulleted summary:

- Theme 1: Personal experience.
  - *Sub theme 1: "I've been there."*
  - *Sub theme 2: "I design things I would want as a learner."*
  - *Sub theme 3: "I don't like this, thus it is likely learners won't either."*
- Theme 2: Metacognition or Self-Awareness.
- Theme 3: Project Management Constraints.
  - *Concept 1: Limited choice.*
  - *Concept 2: Doing what is good enough.*
  - *Concept 3: Freedom within set boundaries.*
- Theme 4: Multiple stakeholders.

- Theme 5: Practical processes and traditional learner analysis.
- Theme 6: Navigating learner goals and motivation.

In discussing these themes here, I prioritized those that arose most frequently or appeared to have the greatest potential to build on existing instructional design research. I selected quotes from participating designers for each theme based on the clarity of the quote and its ability to illustrate the concept at hand.

**Theme 1: Personal experience.** As seen in the results of my first research question regarding the definition of empathy, personal experience was important for designers in this study. Additionally participants talked more frequently about how personal experiences influenced their designs than any other form of empathy. Participants' personal experiences of empathy best fit into three subcategories typified by the following statements: *I've been there*, *I design what I would want to experience*, and *I don't like this, thus it is likely learners won't either*.

**Subcategory 1: "I've been there".** When practitioners talked about personal experience from the angle of "I've been there" they shared how certain periods of time as a learner, or specific experiences with learning led them to think about their current learners through that lens of personal experience. For example, Terri works for a major publishing company that creates general education curricula for university students.

I have been a college freshman. I've been in general education courses. So it is much easier for me to say "Yeah, as an incoming freshmen what are the concerns and thoughts of these students? And how do they feel about their college experience and how will they feel about this course? Is it exciting enough or is it just a page turner?"

Similar to Terri, Donna reflected on her experiences with science and math subjects as a child and how she struggled with not understanding the relevance of the curriculum at that time. These experiences have impacted how she approaches her designs with her current learner audience of federal employees in that she wants them to see the relevance and reality of the content in their own lives. When I asked Sierra about working with unmotivated students in her military language position she responded by asking me some rhetorical questions such as “Have you ever tried to study for something that was hard for you?” and “Have you ever felt like not doing your homework?” In essence, Sierra explained that having been in that position (of little motivation), she can reflect on that experience and more adequately address the needs of unmotivated learners. Brook, a designer and instructor in higher education cited personal experience in doing online coursework as a major influence for wanting to improve online education for learners due to her own negative experiences as a learner.

I took all my doctorate classes online so, and I was the worst student on the planet because I was so critical of everything and I admit that. But it also helped me a great deal to find my research because, um, I had focused on my papers and classes on you know, “this is not good, how can we make it better and what can we do?” It helped in a way to be a student in an online class has helped me more than anything for my instruction and for my research and I really try to preach that with my faculty too . . . and that’s why we are doing this training series, we are going to put them in a student perspective. Because that’s part of the problem I think. They have never been students in online courses. A lot of them have not. And that really really helped me.

For Brook, having “been there” gives her new eyes both as an online designer and a faculty instructional coach on campus.

***Subcategory 2: “I design things I would want as a learner”***. As it relates to content knowledge, and whether the content in the curriculum is fitting and helpful to learners, Brody explained that he often relies on his own personal experiences or frame of reference as a way to project what the learner may need or want:

I usually use my own instincts and experiences as a guide. And so if I’m reading something and I think it’s confusing, then I’m going to change it. Right? If I’m looking at something and I think it looks good, then I’m going to say, yeah, then it’s good. If I think it’s ugly, then I’m going to say no it’s ugly. People aren’t going to like it. I put my preferences and my tastes and my experiences –I kind of use them as a gauge because I make this assumption that people will probably have similar feelings to what I have.

Brody isn’t saying his needs and that of the learner are the same, but that his level of understanding of the content itself is minimal and thus he and the learners of this particular design are in a similar position related to content knowledge so making his personal experience of the design is useful to the instructional development process. Referencing her experience helping faculty design their content for online dissemination, Brook stated this concept clearly: “I really do try to practice what I preach. I don’t try to push things on people I wouldn’t do myself.” She continually stressed the importance of factors like interaction, personality, and instructor presence in an online course; largely because she would want to learn in a course where she felt a human was teaching her. Brook explained:

I think it’s important for face-to-face instruction too that you are more of a human being, not just a militant authoritarian that's just requiring something of the student. I just think it's harder to create that presence online. It’s easier to be a machine in an online class than it is in a face-to-face class.

For Brook, she'd rather be in a class that allowed for this element of instructor presence, and so she designs her own courses in a similar fashion. Reflecting on her own experience with homework, Sierra stated, "I choose to create something that I like, believe in, and would like to learn myself." She expounded on the concept by referencing her own experience and how that impacts the way she designs for military personnel:

So when I was a kid and I had to go to school, damned if I was doing homework! I was not doing homework. No way would I do it . . . you know, [later] –I was where I wanted to be and there was nothing I wanted more in the world than to go learn a foreign language. And uh . . . they would give me a paragraph this long [indicates a very long length] and tell me to break down all the elements of the information and I was like "Can't I just write down what happened in a movie?" . . . So when I design the curriculum, that's how I think about them. I try and think about what are the different aspects that might be interesting about it. What are their lifestyles like at home? . . . They have a stressful, you know, job to begin with and they need to get out of that for a little while. So I need to design homework that they can do, that they can still be engaged. So I give them TV to watch.

Sierra designs curricula and assignments that she predicts her students will find interesting in the context of their busy lives.

***Subcategory 3: "I don't like this, thus it is likely learners won't either"***. This final concept of personal experience is less about reflecting on a past experience and more about actually experiencing the content itself. Rather than thinking back on a specific event or moment as a learner, participants talked about simply referencing their own feelings or experience with the design at hand as a way of checking in with what the learner may be feeling.

In his work designing corporate training tools and video tutorials, which are used both internal to his employer and for their customers, Dan reported using his own experience of the design to trigger action on behalf of the learner. He explained one such moment he had when watching a video:

I had this thought, you know what if someone's watching this video and they're feeling the same way that I felt while I was watching that video? I don't know that that impacted it more than just that observation [laughs], but I just thought, oh man, you know, I hope that they don't feel the same way that their managers making them take this course and they're going to have to slog through it. But I try to always keep that in mind as I try to remove long pauses in some of these recordings and if I can, you know, if I see it, you know a power pulling slide and just they're on that thing for, you know, 10 minutes, and it's just so thick with text, you know I try to put myself in the learner's shoes and say hey, maybe I can tweak this and break this slide up and make it 10 different slides or something like that, or add some kind of an interaction to this to make it more exciting, or more engaging. You know, because that's kind of always there in my mind.

An interesting result along this theme is when designers talked about being on the receiving end of dull instructional design and how that impacts their work moving forward. For Brody there isn't necessarily a clear goal or action item from his experience other than perhaps a deeper level of critical thinking regarding his instruction:

I've been taking this [free] Udacity course for a little while and I always just like skip the activities, and like just watch the videos. . . I think the quizzes are kind of annoying sometimes, like I don't go to the discussion boards, I don't do any of that stuff, because I don't feel like it and I don't have time and I don't want to put the effort into it. But I



think, man, if I was designing this course, like I would have put those things in there too, because, part of me, by the book, you have that kind of stuff. And then part of me too is I just wonder like, you know, how much of those types of things that I'm putting into my courses, or what not, are people just skipping . . . because they don't feel like doing it?

His phrase *by the book* stands out in the results in that much of what designers talked about when referencing personal experience was intuitive, emotional, and experiential. There was little to no discussion about formal learning or design theories learned in the past to influence their conception of learner experience or needs. Indeed when discussing a past job in a corporate design setting where she had to instruct information technologists on how to deliver learning content, Terri emphasized the ability to remember one's own experiences as struggling learner as a way to better serve current students. "Remember back when you were learning. Where were your pain points?"

**Theme 2: Metacognition or self-awareness.** In the early stages of interviewing, a developing theme of being self-aware or having a high degree of metacognition arose as a potentially important link to how participants empathize with learners in their everyday work. This theme did not appear when I asked participants explicitly about empathy but when discussing their everyday work it was evident that metacognition was important element for some participants in understanding empathy in instructional design. Brody heavily emphasized this point in one of his early interviews:

I think that there is this kind of interesting connection between empathy and like... being perceptive and, and, uh, aware of even your own personal reactions to things. Like I think there is a connection between being aware of your own thoughts and feelings and being able to put yourself in others' shoes. The more aware and thoughtful you are about

like how you react to things and the way you feel, like, the easier it is to kind of imagine that for other people. And so what I'm getting at, as I was saying before was like if I'm reading the course, and something doesn't sound right to me or something is kind of confusing or odd, I have to notice that . . . I think it requires practice and skill and taste and, and other things to be able to like really actually recognize and pinpoint what those things are um, and the more, the better you're able to do that with your own, understanding how your own mind works, you better understand how other people's minds works.

Though being self-aware is similar to the concepts of personal experience described in theme 1, the difference from the data is that it is less about the personal experience itself. Metacognition as the participants discussed it is more related to the *ability or process* of withdrawing themselves from the present task to reflect on their design or personal experience, and evaluating the instruction's effectiveness by ultimately contemplating the ways in which learners might receive or react to the design.

By my final interview with the majority of the designers I posed the following statement to explore this theme in more depth: *Designers must have a high degree of metacognition or self-awareness in order to be effective at creating engaging and relevant instruction for learners.* In their responses, designers agreed that metacognition plays an important role in how they create instruction. Dan connected this concept to being willing to ask for help in order to improve the design and Sierra discussed how being aware of her own content knowledge and viewpoint of her exams helps her improve as a designer and make more intentional choices to the benefit of her learners. Donna verified the role being self-aware can play in helping designers see things from the perspective of the learner:

I think metacognition, self-awareness is incredibly important because we all tend to design programs to our own neuroses at times [Laughs]. . . If you've got 24 people in a room, you get 24 different perceptions . . . there's 24 truths in the room and everybody's interacting as if their truth is the main one. So I think that we need metacognition and self-awareness to realize how it [the design] reaches who we're designing the program for.

One caveat, or negative case was Brook's experience. She explained that she feels her context in higher education is different from designers like Brody who work on a traditional design team who develop content on a regular basis. Her work on a university campus means she does less designing and more coaching instructors on how to design their own courses, and in that process she feels self-awareness "isn't a bad thing" but the critical element is, "You also have to be aware of your audience and who you're training." In other words, no one will argue with the idea that knowing yourself better is a bad thing, but what is more important is the ability to bridge that and other knowledge to the learner you are actually designing for.

*Metacognition* as a thematic result has less to do with empathy itself than with general instructional design practice of learner analysis. However, this and the following theme—*project management constraints on empathy*—act as bridges between empathy as a construct and the field as a whole by showing what emerges when empathy is examined as an aspect of design practice. In other words, by better understanding how empathy occurs in practice and the context in which designers are or are not able to empathize with others, new insights into improving designer education and practice can be observed.

**Theme 3: Project management constraints on empathy.** While all the participants agreed that empathizing with the learner played a role in their work, the degree to which they

were able to do so varied. One of my initial motivations for this study was my own experience with unhelpful or even painful instruction I was required to take for work or other purposes. How participants talked about their workplace constraints brought to light a few potential insights as to why this might be.

As designers shared their experiences regarding situational constraints on empathy, three types of situations were commonly discussed—those involved: limited choice, doing what is good enough, and freedom within set boundaries. Like theme 2, these types of situations were not a part of the conversations around explicit definitions of empathy but rather resulted from discussing experiences and stories from participants' daily tasks.

***Situation type 1: Limited choice.*** As I expected, nearly all designers acknowledged projects or settings in which their ability to make design decisions they felt would serve the learner best were denied by employers. Donna explained that this should be no surprise, especially in her context of working with the government:

I mean like in the government any time something goes wrong all of a sudden there's a new rule for why you can't do something or why you shouldn't do something. So I think that's just sort of inherent in daily life.

While most designers shared Donna's general acceptance of working under the constraints of a project or employer's regulations, some participants expressed poignant frustration at not being able to design effective instructional materials for learners. Terri's experience with previous employers and current freelance work was illustrative:

I do some freelance stuff too for corporate still, some of the same people I used to work with, and it's: "Here's your Word document, here's your process. You follow it. If it doesn't work, make the content fit. Make it work even if it doesn't work well." I had

quite a few friends that could not reconcile that at my old company and they would complain about it, and complain about it. They fired one of them because she complained too much. And the other one, he ended up quitting because he just couldn't do it. And at the time, I thought it was the only job around because I would work at home every now and then so I would just tell my friends, I'd say: "Just do it! Who cares? They are giving you a paycheck at the end of the week." But some people just couldn't do that. I can do that if I have to but it doesn't make me feel good. It makes me feel like this training could be thrown out in the garbage next week and it really doesn't matter.

While it isn't clear that the frustration experienced by Terri and her co-workers stemmed from stifled empathy for learners, what appears to be present is a genuine struggle some designers experience when not allowed to do the work they feel is needed in order for the goals of their job to be met. Other participants talked about how they often felt removed from what the learner actually needed, and instead of obtaining more information to guide the design, they were left to create what they perceived as unsatisfactory materials. That said, from my interviews it seemed that Brody's statement about these situations might apply to most ID contexts: "Only in the most extreme circumstances when you have a, you know, hard-nosed client or someone who just doesn't care, that you're going to have to create something that's not effective."

***Situation type 2: Doing what is good enough.*** When designers are faced with project constraints, and processes and time must be cut short, the common theme participants discussed was simply doing good enough. Often this meant limited or no learner analysis or even guessing as to what and who the learner was like.

I have one manager that his mantra was: He'd use his arm to say "Good enough, it's good enough." [Dan holds his arm out and bends it down in a defeated manner.] Like, it

doesn't need to be a high quality show/performance. It just has to be enough to answer their questions, meet their needs, deliver the content which is not in my nature but you know, it's hard to stray from that when you have a deadlines.

When Dan says “not in my nature” he is talking about how he enjoys making things entertaining and engaging for students, so in this situation he is required to limit those impulses and just get the job done. This eclectic attitude of doing what is needed with what is available was present in many of the participants' responses. Terri explained how often proposals were shaved down to very basic products that clients were happy with though she felt it was “garbage training” and not helpful to the learners in the long run. Brody shared how often clients requesting training simply weren't invested in the product as long as it was compliant with specific regulations or constraints the organization itself was under by a third party. Such an approach to design may be efficient or even necessary at times, but it also limits a designers' ability to empathize with the learner and create the best possible experience for students. This concept is closely related to the next theme of empathy—multiple stakeholders.

***Situation type 3: Freedom within set boundaries.*** While many participants referenced limiting factors to acting upon empathic impressions for learners, some participants related a different experience. Brook and Sierra both enjoyed a sense of freedom to design and work with learners in ways that they felt allowed for empathy to flourish. And yet both designers acknowledged the requirement to design within the constraints of their workplace settings.

Brook explained:

We have real autonomy. We have autonomy of what we do, the projects we start. We do most of the work on our own and we get the people in our office to help. There's really not a layering of administrative policies that we have here.

In her work she is able to interact with faculty and students in a very open and flexible way. She is able to both directly communicate with and empathize for her learners. Sierra also has frequent interaction with her learners. When faced with management constraints Sierra has a strong method for ensuring her learners' needs are met:

I am military so those [regulations and constraints] are set in stone and I am not going to sit and try and push those. What I will try and push is different methods . . . I am not doing my job if I don't serve my student. So I need to have complete integrity and I need to say to my stakeholder, "You are requiring me to do something that is either A) not ethical, B) not appropriate or C) not doable. So I will get rid of the not ethical and not appropriate, and I'll tell you the not doable and why and let's see if we can change that into something that meets your goal." And then the stakeholder and I will come to an agreement that is acceptable to both of us.

Sierra chooses the word "freedom" to describe her ability to serve the learner in her designs, which includes running diagnostics to understand their needs and prepare materials that will help them do their job adequately.

These three concepts of this particular theme of empathy are general impressions or manifestations from the data of which nearly all of the participants shared experiences and insight that would demonstrate one of these concepts. It was common for participants to feel empathy for learners as they sought to create the most useful training possible, but their management environments and constraints were very different. The design context influenced how designers were either discouraged or enabled to empathize with learners and act in their designs accordingly.

**Theme 4: Multiple stakeholders.** As I held interviews with participants I assumed that empathy would focus on learners and learner needs. An unexpected result was that designers discussed multiple stakeholders in addition to learners they feel they need to empathize with in order to be successful in their job. This theme offers context and perspective to any explicit discussion about what empathy actually is by shifting understanding to the important question of *who* a designer is having empathy toward. Perhaps in part because my attention was so focused on designer empathy with learning stakeholders, this theme did not appear in the formal definitions of empathy from participants.

Dan was one of the first participants that challenged my assumptions of what empathy in instructional design might look like. “I guess empathy first off would be focusing in on who it is that I am working for. So, and there’s a few different people that would fall into that category and it’s not always the person that’s going to pull this video up and be watching it on the other side of the screen.” Each participant mentioned a variety of stakeholders that they not only consider the needs of, but actively empathize with. Individuals and groups mentioned beyond learners included subject matter experts, learners’ learners, project managers, other divisions of the same organization (i.e., sales team, instructors, IT), customers of designer’s clients, and more. Dan discussed this point extensively:

You have the learner and then how much they are going to learn and be effective, but then you also have the product managers . . . you know they want to see quantity; they want to see, you know, do we have all the latest versions; do we have something for everything that we offer; and to have something that would be our high gold standard for everything that we offer is impossible, basically. And so it kind of is a . . . you know, how do the stars align to give priorities and all the different stakeholders what they need.



So it's a little bit more complex than just hey we've made the very best training - we did it! . . . It's all fine and good to say, you know, I'm focused on the learner, and that's what I learned in school, and that's what I would want someone else to do, but, you know, money talks as well. It's like, okay, if I don't hit these numbers, we don't make this target, we're not getting bonuses. . . my job might be. . . on the line, you know, and I like my kids, and feeding them, more than the person that I'm designing training for [laughs].

This finding led to another unexpected insight, namely, that truly empathizing with learners and with other stakeholder points of view can lead participants to contradictory or conflicting design choices and conclusions. In other words, designing instruction that best helps learners achieve an intended goal is not always the primary goal of all stakeholders involved. Dan talked about how one of his managers compared the training he works on to the clubhouse of a condo unit; people will buy the product more frequently if good-looking training is included. As he said: "I don't make any sales, but I have to make the sales people happier, give them something to sell." Terri discussed how her clients and management were often happy with the end product while she was not, largely due to how she felt the training would actually perform in helping the learner have meet the objectives of the course. And yet in past positions at other organizations she felt that in order to maintain her job what mattered most was keeping these non-learner stakeholders satisfied. Designers may empathize with the learners to create the best possible instruction, but that doesn't mean they aren't trying to see things from the perspective of fellow designers, managers, and many other individuals or groups.

**Theme 5: Practical processes and traditional learner analysis.** As I discussed formal learner analysis activities and processes, it became clear that most of the designers did not have a concrete system in place that involved understanding the learner's needs. However, all

participants talked about methods they've used to try and connect with their learners, many of which were related to how they straightforwardly defined empathy (e.g., perspective taking, imagining themselves in the place of the learner). Early in the interview process I generated the following statement of which I gave participants to react to: "Much of design empathy is intuitive or based on personal experiences or feelings about what is being presented –not on hard data or formal learner analysis."

This intentionally polarizing question brought out responses regarding a variety of tools, methods, and processes participants currently use or have used in the past to do learner analysis.

These include:

1. User personas in corporate settings.
2. Demographic information obtained from other departments such as marketing.
3. Listening in on customer service calls.
4. Informal collaboration or questioning of instructors.
5. Informal conversations with coworkers or managers.
6. Pre and post instruction surveys.
7. Piloting instruction with individuals of a similar demographic as the learner.
8. Review of learner's work.
9. Interacting with the learner informally at workshops or in classrooms.
10. Formal meetings with learners' management (i.e., client who is contracting the ID work).

As participants reflected on the formal and informal methods used to understand and empathize with learners, many of them expressed thoughts similar to Brook's below:

I think you can gather information about learners informally like I think a lot of that doesn't have to be on paper necessarily where we have a survey and we find out, you

know, all these different things about the learner and we chart it and graph it. And um, there can be much more informal ways of building relationships and getting to know that learner and where they need to go without it being such a formal process.

There was some disagreement regarding how much learner analysis might be appropriate based on design context. Some designers were emphatic that interaction with the learner was critical to knowing what their needs were while others were content with alternatives such as site visits. While working for a corporate design firm Brody often made such trips when beginning a new design project:

Going on site even and like meeting the people even if they're not the actual learner you still get a much better sense of the culture and of the, of the location and what people are like generally from going to talk to the people face to face even if it's not direct learners it's just people who work for the same company, you still get a better sense than if you didn't do that. Like if you just talked on the phone or you just read a stat sheet. So I think that is what it was all about sometimes just face to face meeting on site in their offices was about as good as you could get without talking face to face with the learners.

Terri also made site visits when working in a corporate setting, but now working for a higher education curriculum publisher she gets her learner data from the marketing team and informally uses her family members as beta-testers:

He (Terri's son) is my guinea pig [laughing] he has had online courses, and I will have him sit through my preview courses and I'll say "what do you think of that? Do you think that is really good? If you got stuck what do you think of that kind of content?" And he will tell me, "It's boring" [laughing], he doesn't hold anything back!

A question not just of whether interaction was important, but *how much* interaction is necessary for a good design was also raised. The question of designer interaction with learners had no clear result, though most felt like Sierra when she said, “the best diagnostic is you just talk to your students.” However, it was clear that resources and constraints participants faced did not always make such interaction possible.

**Theme 6: Navigating learner goals and motivation.** Batson’s (2009) first element of empathy—“Knowing another person’s internal state, including his or her thoughts and feelings”—would seem to be the goal of a traditional learner analysis. There is certainly a connection between this theme and the definitional pattern in which participants noted *caring for the learner* as one way of defining empathy. However, the conversations I had with participants led me to see this concept of empathy in an even more expanded way. Many participants discussed preparing their designs in a manner in which they could anticipate and serve the goals and motivation levels of their target population whether they fully understood them or not. Thus as participants imagined learners’ goals for taking a course, or observed motivation levels in clear ways (paying customers) or more removed (instruction was disseminated or mandated by authority figures to learners) they sought to know learners’ internal state as they engaged with instruction.

Discussing learners’ goals with students themselves is critical to Sierra’s work both as a curriculum designer and instructor. She explained how sharing her goals with the students is also an important part of that process:

So I am required to teach grammar, my students are required to learn grammar. I don’t want to teach it, they don’t want to learn it. So within the confines with the freedom that I have is to . . . instead pull up authentic material, with the target grammar point in mind,

and work on them together and say “Ok, here is these in Persian, let’s go through this and whoever finds this grammar point gets brownies” or whatever. You know, you just find ways to make it interesting, and that is freedom within something. Now, can I take that out? No. Because if I take grammar out of their lesson then they don’t get college credit for it and I am not going to do that to those students. So it becomes a “me” problem as an instructor. How do I do it so that they are going to be interested? And not everybody is going to be interested in what I have to teach, you will never please everyone.

Sierra was emphatic that while learners might have different goals for their instructional experience than designers, instructors, or educators it is critical for both parties to reconcile the goals till they are the same. Brook follows a similar pattern with faculty members by sending out a survey each spring to learn what goals and interests they have so she and her team can prepare meaningful instruction. Donna also expressed the importance of this cooperative approach in government instruction.

Dan also discussed learner goals and motivation in regards to his learners of whom he has rarely met.

I have to remember that they’re not necessarily going through in order and watching all the videos that I’ve made in the sequence that I think should work according to my design, you know my plan, they have their own agenda in mind, and so if I create a two hour video and what they need is a minute fifty-five, it says to them, well I have to do some work to get to this. You know, so even in the way that it’s presented, not necessarily the viewer itself, but the way that I’ve chopped up or presented it or tag lined it added to it so that it’s searchable, the things like that, might say, I value you enough that I want to present something to you that you can instantly find and that you can come

back to because maybe you do a task once every year and there's a certain procedure that you need to follow and maybe you don't always have that fresh in your head and you need to refer back to this video as you're doing that yearly task, you know, and I guess that's showing a certain amount of empathy, you know, you could use the word love, even.

Though the participants had drastically different design contexts and objectives, all of them discussed and illustrated how empathetically considering learner goals is a part of their work. This process of considering, discovering, and even negotiating goals with learners is closely tied to a process Gibbons (2014) described as crucial to good design:

The dynamic interaction of learner and instructor [and/or designer] goals is a major predictor of the success of instruction. An instructional designer begins with a performance goal, and the learner also forms the performance goal, which may be either very like or very different from the designers. So, a good designer considers what can be done to communicate and negotiate a common goal before launching off into strategic interactions ... the potential mismatch of goals and the need to communicate both goals and means presents a challenge to some of the assumptions designers have tended to make in the past . . . One of the overriding goals of instruction ought to be to turn as much control as possible over to the learners—as much control as the latter shows evidence of being ready for. (p. 40-41)

As designers sought to understand the learners and the learner's goals, they could then adapt the design to be more accommodating to the learner's goals while still maintaining the standards and rigor required for the course content and the original instructional goals dictated by

the educational authority. This *dynamic interaction* required empathy on the part of the designer, but also information about the learner that could actually influence design decisions.

## Discussion

I have attempted to generate a broad understanding of empathy from the point of view of practicing designers by asking them for explicit definitions while also seeking to understand how those definitions or other variations of empathy are manifested in their daily work experience. Merely asking participants about how they define empathy falls short of contributing substantial understanding of how designers understand the general construct of empathy. Indeed empathy is a complicated construct of which social science research is not conclusive, and throughout this study I learned that it is too large or complex to discuss in definitional terms. Thus, in this study I sought to bring together participants' straightforward responses to what empathy is in the context of their work with how they talk about empathy in their daily tasks and activities. This approach enabled me to develop a broad view of the role of empathy in instructional design.

### **Defining Empathy with Batson's (2009) Framework**

In coding participants' responses to the explicit definition of empathy, three definitional themes emerged. When examining these themes in light of the design literature and Batson's (2009) framework, four of Batson's points were most relevant: feeling for another person who is suffering, intuiting or projecting oneself into another's situation, imagining how one would think and feel in the other's place, and imagining how another is thinking and feeling, or "perspective taking." These points are listed in the order to which they correlate with the three definitions offered by participants without the framework, as shown in Table 2, and are described in more detail below.



Table 2

*Instructional Designers' Definition of Empathy*

Without Framework	With Batson's (2009) Framework
<i>Definition 1: Caring for the learner</i>	<i>Batson 8: Feeling for another person who is suffering</i>
<i>Definition 2: Referencing personal experience in service of the learner</i>	<i>Batson 4: Intuiting or projecting oneself into another's situation</i>  <i>Batson 6: Imagining how one would think and feel in the other's place</i>
<i>Definition 3: Taking on somebody else's viewpoint</i>	<i>Batson 5: "Perspective taking"</i>

**Batson 8: Feeling for another person who is suffering.** This concept orients around how someone is feeling regarding another's current state or condition. Batson (2009) explained:

In contemporary social psychology, the term "empathy" or "empathic concern" has often been used to refer to an other-oriented emotional response elicited by and congruent with the perceived welfare of someone else. (p. 8)

The first definitional theme discussed in the results section, *Caring for the learner*, is related to this concept in that designers talked about how seeing the learner as an individual who may be going through experiences or setbacks outside of the instructional setting is an important part of how they define empathy. *Feeling for another person who is suffering* appears least in the design literatures reviewed, however the concept is closely tied to Rose and Tingley's (2008) *ethic of caring*, Cooper's (2011) *profound empathy*, and Osguthorpe et al.'s (2003) *moral dimensions of design* and was certainly relevant to participants in this study. While the title of Batson's (2009) concept includes *suffering*, a more appropriate way of summarizing the participants' definition might be *feeling for another person* or simply *feeling for the learner*.

**Batson 4: Intuiting or projecting oneself into another’s situation.** To illustrate this concept, Batson (2009) gave the example of hearing a friend tell you she lost her job, and your response—if using this dimension of empathy—means you might ask yourself what it would be like to be a young woman just told she is losing her job. He goes on to explain:

Imaginatively projecting oneself into another’s situation is the psychological state referred to by Lipps as *Einfühlung* and for which Titchener first coined the English word empathy. Both were intrigued by the process whereby a writer or painter imagines what it would be like to be some specific person or some inanimate object, such as a gnarled, dead tree on a windswept hillside. This original definition of empathy as aesthetic projection often appears in dictionaries, and it has appeared in recent philosophical discussions of simulation as an alternative to theory theories of mind. But such projection is rarely what is meant by empathy in contemporary psychology. (p. 6)

This perspective on empathy is much more aesthetic and has more to do with imagination than empirical analysis. Koskinen and Battarbee’s (2003) *empathic design* is most closely related to this theme in that they define empathy as “an imaginative projection into another person’s situation . . . it denotes role taking, which reconstructs in the imagination aspects of the other’s situation as the other “perceives” it” (p. 45). Kim and Ryu’s (2014) *artifact empathy* also bears relevance to this point in that expert designers imagined the functions and roles played by designed artifacts in the hands or presence of users. In this study, participants described moments in their design work in which they empathized by imagining what it would be like to be one of their students though the participants themselves shared little in common with learners.

**Batson 6: Imagining how one would think and feel in the other’s place.** This dimension of empathy is similar to the point discussed above, but has more to do with the

designer identifying with the user through concrete methods. Batson (2009) describes his sixth concept:

To adopt an imagine-self perspective is in some ways similar to the act of projecting oneself into another's situation (concept 4). Yet these two concepts were developed independently in very different contexts, one aesthetic and the other interpersonal, and the self remains more focal here than in aesthetic projection. (p. 7)

Empathizing, in this regard, involved referencing personal learning experiences from the past, which enabled participants to imagine what the learners of their designs were experiencing. Herd and Mehta (2013) concluded that the affective and self-identifying dimension of empathy leads to more creative product design than the more calculating cognitive flavor of empathy frequently called *perspective taking*. Cooper, Reinmann, and Cronin's (2007) definition of empathy —“The ability to feel what others are feeling” (p. 19)— is the foundation by which *persona construction* was built, with the goal of having designers interact with and immerse themselves in the world of the user. Segal and Fulton Suri's (1997) concept of the *empathic practitioner* is based on the empathy being the capacity for participating in the feelings or ideas of others and emphasized the importance of identifying with the affective experience of users. As participants reflected on their own experiences and then projected themselves into the perspective of their students, they demonstrated this principle of *imagine-self perspective*. Thus, when Terri remembered her Calculus class, she took those feelings and experiences and projected them on the learners she was currently designing for as a way to better meet their needs.

**Batson 5: Imagining how another is thinking and feeling, or perspective taking.**

Returning to Batson's earlier example of having a friend tell you she lost her job, he illustrates

the meaning of his 5th concept this way: Rather than imagine how it would feel to be a young woman just told she is losing her job, you might imagine how your friend is thinking and feeling. Your imagining can be based both on what she says and does and on your knowledge of her character, values, and desires. (p. 7)

Many of the participants talked about taking the viewpoint of the learners and seeing things from their perspective as a critical part of their practice. This may be the most common way of defining empathy for designers, as this Batsonian dimension of empathy came up more frequently than any other in the interviews. This definition has a strong presence in the design literature as well. Leonard and Rayport's (1997) *empathic design* was one of the first articles to encourage ethnographic methods for better discovering latent needs and identifying with the user. For Suri (2003), "Empathy is our intuitive ability to identify with other people's inner states based upon observation of their outward expressions, their behavior" (p. 53). Suri's (2003) *empathic design* concept is established on the process of using a variety of methods to enable the designer to take the perspective of the user and imagine how they are feeling. Brown and Katz (2011) understand empathy in a similar way, as "The effort to see the world through the eyes of others, understand the world through their experiences, and feel the world through their emotions" (p. 50). These definitions and approaches to empathy share the general format of starting first with qualitative methods, such as observation and interviews, as a form of coming to understand the user, and only then moving to designing for learners. While participants didn't follow such a pattern in the design process specifically (they didn't use ethnographic methods to prepare for creating their instructional designs), they *did* talk through these stages of design as a part of their thinking during the design process.

In connecting themes from results of my two research questions, I found that four of the six themes generated in answering my second research question were fair representations of at least one of the three definitional themes discussed under my first research question.

*Metacognition* and *Project Management Constraints* were somewhat related to how participants defined empathy and yet these two themes do not clearly fit with Batson's (2009) points or with the three definitional themes shared by participants. One possible explanation is that both themes have less to do with empathizing itself than with the process and consequences of having empathy for learners and other stakeholders. Looking at empathy in instructional design in this way—a factor that plays a significant role in the design process and evaluation—presents at least three interesting complexities for discussion.

### **Complexities of Empathy in Practice**

Within the six themes of empathy, I noted at least three dichotomous pairs of unexpected tensions that arose from the results that bring clarity to some of the potential challenges with learner analysis in practices (see figure 1). These pairs appear to exist on a spectrum, with neither extreme being necessarily bad or good but merely present in the responses and experience of the participants.



*Figure 1:* Spectrum of dichotomous pairs from the data.

First, designers empathize with many stakeholders and ultimately choose whether to prioritize the perceived needs of the learners first or other individuals and parties. Second, contexts and opinion vary widely regarding when it is more important to do a detailed learner analysis and when a general understanding of the learners' demographic is sufficient. Finally, as

related to the first pairing, designers (and other associated stakeholders with the instruction) must choose the degree into which they embrace a service orientation of instructional design versus filling a purely functional role of getting the job done under required constraints. As noted above, these pairings do not stand as polar opposites, and they do not appear to be mutually exclusive. However, there is a spectrum between each pair and for each design decision and instructional product the choice could be mapped along these continuums.

**Learner vs. other stakeholders.** Design leader Tim Brown asserted that the most important skill for a Design Thinker is to "Imagine the world from multiple perspectives —those of colleagues, clients, end users, and customers" (Brown, 2008, p. 87). From the interviews it seems that this skill of perspective taking on behalf of others is critical for instructional designers as well. Donna talked about learning to see things from the perspective of her coworkers as well as the instructors who deliver her training to government employees. Dan noted that the customer of his design and the learner of the instruction were two different sets of people, the software company he designs for has been acquired many times bringing with it new stakeholders with new goals for the instruction. Brody shared the challenges he has in taking the perspective of both subject matter experts and fellow employees in other departments of the internal team. Terri discussed the challenge of being able to help faculty subject matter experts understand her feedback as it related to the needs of college freshmen. In these cases and more, the participants were using their own personal experience as a reference to better serve those they were enlisted to help, take their perspective, and even feel for them.

However, empathizing with multiple stakeholders doesn't mean one can design in a way that will satisfy everyone involved on the project, including specific learners in the instructional setting. Referencing a particular student in her class Sierra explained, "There are times when

that doesn't work . . . you can be empathetic, but you can't . . . you can't risk the other students for that. Because then you are ignoring the rest of them." Thus while designers might empathize with multiple stakeholders, they must ultimately decide to what degree they put the learner first in their design and sometimes there is little freedom with that decision (as described in the results section above). In Dan's case the needs of other stakeholders often outweighed the needs of the learners. He felt that though they did their best under constraints, his design team has had to produce work he doesn't "feel that is necessarily the best thing for the learner." Alternatively, Sierra has developed a position of negotiation from which she is able to advocate for the learner in her designs. When asked to do projects under certain conditions by which she doesn't agree will help the learner, she has a strong attitude of prioritizing the learner's needs over other stakeholders:

I am not going to do what they tell me to! I am going to choose, with my free will, to think about . . . when I do this I think about my learners, and I place myself in their position. What would I want if I was taking this class? Then design it in a very selfish manner, for myself [Laughing].

It is tempting to compare settings like Dan's and Sierra's as one being less effective or correct than the other, to insist that Dan and his team are doing a "bad" job and should be more assertive like Sierra on behalf of the learner (or Sierra should be restrained in order to match Dan's practical situation). However such a comparison ignores the context and goals of the instructional environments for which both work. My unexamined assumption before starting this study was that in the majority of cases prioritizing the learners' needs and meeting the goals of other stakeholders would be more or less compatible, but this is not true in the experience of participants. Additionally, many of the designers had to choose to what level they could side

with the learner versus satisfying other stakeholders. The degree to which instruction prioritizes the needs of the learner over other stakeholders should be a matter of open discussion and reflection for design teams and other organizations producing educational materials.

**Particular vs. general understanding of the learner.** When I began conversing with participants my feeling regarding the importance of a designer knowing the learner was comparable to the sentiment found in HCI. My view was very much like Cooper, Rienmann, and Cronin (2007) who stated: "It is impossible to design appropriate behaviors for a system without understanding the users of the system in specific detail" (p. 111). Wenger (1987) emphasized the understanding of the learner when he said: "No intelligent communication can take place without a certain understanding of the recipient" (Wenger, 1987, p. 16). Thus when Brody raised the question in one of our conversations around *how much* understanding of the learner is necessary I realized that my assumption of "more is better" probably had limitations. Brody thought aloud with me:

I do think that there's a little bit of a threshold about like how much information about the actual audience and how much face-to-face interaction actually makes a difference when at the end of the day when I'm working—I wonder about that.

Brody wasn't advocating for a position that no interaction between designer and student or some form of learner analysis was needed, but rather, under certain circumstances might it be possible that knowing the learner more would actually be less effective? Most participants were posed this question or one like it, and the general response from all of them was that *it depends*. Dan feels that most of his knowledge of learners second hand and that is good enough for his purposes, meanwhile Sierra struggles to give her curriculum to others due to the fact that it is so individualized and personality driven it may not be totally clear or useful in the hands of others,



“This has always been my problem with curriculum design,” she told me. And yet Sierra also noted that you can get too far on the extreme of knowing the learner,

Interviewer: Do you ever think there will be a design situation, or can you think of a design setting in which knowing more about the learner simply wouldn't be that helpful?

Sierra: Yes, because you start to get so far into the learner's brain, that you may lose your original compass. So it is like, you know, I was in a survival training event and when you start to rely too much on the person who is with you and your sense of direction and not your equipment, you get lost. So, you need to be able to trust yourself, trust your partner, but still know that your equipment is not going to lie. The same thing with the learner.

Sierra's comparison of trusting yourself and a partner in addition to “equipment” is similar to Donna's process of using her intuition in conjunction with her learner survey data. At times it is the data that moves her to investigate making a new design decision on behalf of the learner, while other times it is an intuitive feeling she gets that moves her to search the data for verification and additional instructional choices.

In addition to the degree to which a designer understands and empathizes with the learner is the amount of interaction that occurs between the two groups. As Gibbons (2014) noted, “Nothing spoils a [seemingly] well-imagined design based on [apparently] good theory as much as watching a learner suffer through the experience of using it. Many designers are isolated for one reason or another from try-outs, and yet it is from witnessing try-outs that the most authentic and detailed data can be obtained” (p. 321). Designers in this study mentioned some of the same reasons for feeling isolated from end-learners—budget, time, not a part of the process, and it didn't seem like it was necessary (as discussed above).

Those who did have consistent interaction with their learners in some form suggested that while it might not make a huge difference, engaging with learners was extremely valuable. Donna explained, “I just can’t imagine designing an effective program without some kind of interaction with your learners. You know?” Terri agreed when she stated: “I think to be very effective and to actually reach your goal, I think you do have to have the interaction with the end user.” And yet there were those participants who felt interaction certainly wasn’t bad, but having close contact with learners might involve crossing a threshold of diminishing returns for the design project.

It is likely there is no one correct answer to how specific designer knowledge of—and interaction with—the learner should be. Context, goals, criteria, other evaluation standards, and design decisions all contribute to what seems to be an ever-changing target of how much interaction and knowledge of the learner’s characteristics is necessary. The challenge is that these boundaries are often fuzzy for both designers and their managers alike. However, explicitly talking about these points would perhaps at least enable designers to feel more aware of their constraints as well as feel connected to the learners they are striving to serve.

**Service vs. function.** The identity of instructional design as a field has been fragmented over the years by a variety of influences (Gibbons, 2014). Nowhere was this schism of identity more clear in my study than when participants talked about their purposes for their work in relation to learners. The majority of designers talked about their work as a form of service to learners, or as a service relationship (Nelson & Stolterman, 2012).

However, many participants talked about the difficulty of delivering quality service to learners due to constraints such as compliance issues, budget limitations, or supervisors. Dan expressed a desire for his team to do more on behalf of the learners though it was clear that doing

so wasn't possible. Brody pointed out that constraints limiting the service he could provide were usually not malicious but more banal in nature, such as compliance with firm standards. For Brook and her team, service is the goal and they felt empowered to deliver that service across campus to the benefit of faculty and students. Sierra acknowledged that if she is not serving the learner then she is useless: "I can't just decide that you're going to do what I want. I need to do what you want, or I'm not providing you a service."

The emphasis on service is connected to empathy in a symbiotic interchange as described by Wiseman (1996):

The consequences of an empathic interaction is that 'empathes' have a basic need to be understood, they feel valued and more ready to understand themselves and change. The person being empathic feels satisfied because he/she senses they have been of help and fulfilled the need to be useful to others. (p. 1166)

In other words, as participants empathize with learners they are in a better position to serve them in their designs. As they are able to serve learners, a sense of accomplishment or satisfaction then stems from a job well done. This sense of satisfaction was strong in the designers I interviewed, especially when describing moments they receive feedback from learners who have benefited from their designs. Terri reflected, "When I go back through [my work], if it makes me feel like the students can actually learn from what I've given them, then I think I've done a good job." She went on to explain a dismal situation at a past job in which her role was viewed as purely functional:

I didn't want to be lumped into the generic, instructional designer who could be replaced as one of our vice presidents once said--had to take his words back--by the monkey at the

zoo . . . that was his feeling! He felt that what we did was take content from one document and put it somewhere else into a format that was acceptable for sale.

Brody also worked for a company that used instruction as a product to be sold, but for him and his team their goal was “to create a high-quality product that people can take a course and learn from it and understand, and that will help them reach their goals.” He noted that this wasn’t always the goal of all other stakeholders but as a unit of the larger organization the defined success by how well the learners benefited from their content.

From these results, it appears that the field would benefit from embracing the service orientation evidenced in other design disciplines. While participants may have technical expertise and fill other roles while on the job (i.e., project manager, IT worker, content creator, researcher, consultant), they are uniquely qualified and positioned to advocate for the experience and needs of the learner. Such an orientation may improve the effectiveness of instructional materials as well as provide a larger return on investment, as Brook suggested.

It’s a service-minded orientation that we put on our office is that we are not a policy generating office. We don’t mandate things, um, but we are here to help . . . And I think that’s been really beneficial in building relationships with our students and with faculty that we are just here to help.

The functional perspective of an instructional designer may recognize the value in strong design, but if the priority is on cost or other constraining factors rather than the needs of the learner, then bad or even useless design will be the resulting product.

### **Formal Learner Analysis**

There was no consistent theme or practice among designers regarding a formal learner analysis method or process. Considering that the A in ADDIE represents the learner analysis

stage of design—a phase that has consistently been described as instrumental to the traditional instructional design process (Gibbons, 2014; Morrison et al., 2010; Smith & Ragan, 1999)—the lack of consensus regarding learner analysis is puzzling. And yet this finding should not be surprising given that some scholars have identified this inconsistency and the potential ramifications of ignoring it (Gray, 2014; Leigh & Tracey, 2010; Rogers, Graham, & Mayes, 2007; Williams et al., 2011). Gray (2014) voiced a strong rebuke of the issue when he stated:

For decades, IDT has tended to treat the learner as a faceless blob in the enactment of a seemingly singular “ID Process”; the learner as a disembodied ratiocinator that is recognized primarily for how it thinks, often with little accounting for the distinct agency, identity, and lived experience of the individual learner . . . Our poor definitions of context often result in a normalization of the learner: a collapsing of unique characteristics into a convenient, generalized description that tells us little about the unique challenges of specific learners. The learner profile, as it is currently implemented in much of ID theory and practice, is more similar to a stripped down version of Weber’s “ideal type” than a “round” character as found in literature. This latter assumption of “roundness” is inscribed into tools created for empathetic design and is commonly implemented through the use of personas in marketing and user experience design. Current learner analysis in ID practice results in profiles that read more like market segments, including components such as basic demographic characteristics, reading level, and past experience with the instructional content. (p. 203)

Gray’s (2014) descriptions of treating the learner as a “faceless blob” may sound extreme, yet based on the experiences of several of the participants in this study, such a description does capture, to some extent, how learners’ perspectives were (or were not) addressed in the

instructional design process. Additionally, results from this study were consistent with Leigh and Tracey's (2010) findings from their review of the research on practicing designers which revealed that in the field of instructional design generally, needs assessments are conducted infrequently and learner characteristic assessment is inconsistent.

Designing to the needs of the learners was for most participants a highly intuitive process in which there were little-to-no formal techniques for piloting instruction with actual students. The only exceptions were in the cases of designers who held instructor responsibilities and thus received direct feedback by observation and interaction with students.

## **Conclusion**

Like many qualitative studies, my initial research questions appeared straightforward and yet the results from my conversations with participants led to a rich and complex data set. I have attempted to highlight the most relevant themes, patterns, and insights related to the field of instructional design as they relate to practicing designers and empathy.

## **Limitations**

While there are many interesting points and helpful insights regarding design in this study, I do not claim these results as causal or conclusive about the participants or the field as a whole. I intentionally recruited participants from different design contexts within the field so as to get a more diversified data set, and while this is one of the strengths of the study it is at the same time a limitation in that the contexts of the participants were in some cases extremely different. Some designers taught the same students they designed for while others never met their learners; some never left their cubicle while others flew across the world delivering training and gathering information.

An additional limitation was the lack of designers from an in-house corporate design context; a perspective I feel may have shed additional light on the topic of empathy from one of the largest groups of practicing designers. While some of the participants had worked in settings similar to a designer creating training for team members or employees at their place of work, none were currently working in that setting or had extensive experience doing so.

## **Implications for Future Research**

Many more questions were raised than answered by my conversations with participants. In addition to the complex pairings discussed in the section above, other similar themes arose motivating questions such as:

- How does designer content knowledge influence how he or she empathizes with the learner?
- What methods of learner analysis are more useful when working with motivated learners as compared to unmotivated learners?
- What conditions warrant a formal learner analysis?
- How do designers navigate project constraints in order to create instruction they are proud of?
- Does designer anonymity influence how they approach a design project or task?
- Is formal learner analysis widely taught in ID programs? If so how?
- What is the role of ID education related to empathy and negotiation?

Additional questions about the role of the human as designer are also relevant here as learning analytics and automation take an increasingly more significant role in instructional design settings.



## APPENDIX A

Below is a short outline of intentions, goals, and potential questions for each respective interview.

**Session 1:** Seidman (2013) outlined the goals of a first interview. “In the first interview, the interviewer’s task is to put the participant’s experience in context by asking him or her to tell as much as possible about him or herself in light of the topic up to the present time” (p. 17). My aim, then, was to gain a sense and understanding of designer’s work context, routines, constraints, goals, and general outlook of everyday design practice.

1. Begin by trying to get a basic understanding of the designer’s work life and environment
  - a. Tell me about your work. How did you become a designer? How did you come here?
  - b. What kind of designs do you do? What are your responsibilities?
  - c. How do you see your role in the design process?
2. Now try and get a sense of how the designer views their design work specifically
  - a. What constraints do you experience in your work?
  - b. What design process do you use?
  - c. What is your opinion about the process?
  - d. What do you think is the most important aspect of the design for this job?
  - e. How successful do you believe your designs to be?
  - f. Tell me about a design project you’ve done from start to finish
3. Enquire about additional information that can enrich the remainder of the study.
  - a. Do you have any artifacts (design documents, communication, meeting notes, etc.) that I can review to better understand your work as a designer?

**Session 2:** “The purpose of the second interview,” Seidman (2013) explained, “Is to concentrate on the concrete details of the participants’ present lived experience in the topic area of the study” (p. 18). In this session I discussed empathy and learner analysis in more detail and encourage designers to reflect on and share how they considered or thought about the learners during design. The conversation was informal, thus the bullet list below does not represent the definitive order questions were asked.

1. Begin by following up with questions from the first interview, and then move towards discussing empathy and design in broad ways.
  - a. Tell me about the learners you typically design for.
  - b. Tell me about how you conduct learner analysis (LA) or get to know the people you design for. *(term may be different based on what the designer and their team call this phase of design)*
  - c. How did you learn to do LA? What activities, techniques, or strategies do you use during LA? Can you talk me through the LA phase of a current project?
  - d. What is your opinion about how LA/NA is conducted at your work? What conditions are important for a really good LA?
  - e. How do you feel when conducting learner analysis?
  - f. How do you see empathy in your everyday design work?
2. Now discuss the designer’s thoughts and feelings about learners more specifically, moving towards a more focused conversation around empathy in design.
  - a. How do you talk about these learners during the design process? In what ways do you think about these learners as you design?

- b. How do you believe learners using your designs feel when they use them? Do you think about that as you design? If so, can you give me an example or context?
    - c. How do you believe instructors using your designs feel when they use them? How do you feel about the learners and instructors you design for?
3. Now ask explicitly about empathy and its role in instructional design.
  - a. What does empathy mean to you in the context of the work you do?
  - b. Tell me about what role empathy might play in your design work.
  - c. What other thoughts have come to you while we've been talking?

**Session 3:** The goal of the third conversation is reflection on meaning (Seidman, 2013).

Thus I will clarify, probe, and seek to understand content from past formal interviews and artifacts, as well as give participants the opportunity to add or expound on any topic they desire.

In this final conversation I:

1. Asked participants about some of the general themes I had developed in analysis over the course of the interviews,
2. Asked questions to generate further insight, drilling down on specific topics that were not addressed substantially in earlier conversations,
3. Invited participants to add anything that was important to them that may have not come out previously, and ensured their questions or concerns were addressed to their satisfaction.

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