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Reflections on Global Competence by Four Design Educators

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Reflections on Global Competence by Four Design Educators

by

Philip A. Bulone

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Curriculum and Instruction with a concentration in Higher Education Administration Department of Leadership, Counseling, Adult, Career, and Higher Education College of Education University of South Florida

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Dedication

I dedicate the transformational journey and completion of this work to my son,
Philip Thomas Bulone

It's all about …getting back up and getting back to work and striving to be the best you can be. (Robbie Lawler, mixed martial artist)

The secret of life is to let every segment of it produce its own yield at its own pace. Every period has something new to teach us. The harvest of youth is achievement; the harvest of middle-age is perspective; the harvest of age is wisdom; the harvest of life is serenity. (Joan D. Chittister O.S.B., Benedictine nun)
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Abstract

This inquiry investigated four design educators’ perspectives and beliefs of global competence teaching and learning, and aimed to inform effective global competence curricula planning and instruction across disciplines. The literature uncovered multiple reasons to warrant design educator reflections: (a) similarities among global competence and design thinking characteristics, (b) design education accreditation emphasis on globally oriented standards, and (c) design thinking as a resource to improve practices across disciplines. Accordingly, the inquiry employed a qualitative design and a multiple case-study approach. Data collection methods included: (a) interviews, (b) image artifacts, and (c) researcher reflective memos. A comparative analysis used systematic coding to reveal core theme statements grounded in the data.

The inquiry revealed all four design educators believed: (a) active learning and information gathering activities were effective ways to teach global competence, (b) interaction with others from different backgrounds contributed to global competence development, (c) a formal education experience changed the ways they view the world and empathize with others, (d) the critique was an effective global competence teaching and learning tool, and (e) the role of perception processes fostered ability to recognize qualities of other people and places. All four design educators’ image artifacts represented meanings and interpretations of global competence as human-centered, and expressed physical connection. Ultimately, three overarching discoveries emerged: (a) design educators use mindshifts to develop global competence, (b)
design educators are makers of their global competence development, and (c) design educators are mature motivators of global competence development.

The inquiry concluded with a model for design education global competence development grounded in the data and the literature. Implications for action connected to three higher education teaching and learning areas: (a) mindfulness, (b) the maker movement, and (c) mindsets. Overall, the four design educators’ information-rich narratives and practical curricula design applications presented in this inquiry aim to encourage other educators to relate the global dimensions of their own disciplines to current teaching and research practice.
Chapter One: Introduction

*We are teaching content, but not teaching students how to use it creatively* – *Shari Becker Albright, 2012 NAFSA: Association of International Educators Annual Conference* (West, 2012, p. 2)

*As a society our future capacity for innovation depends on having many more people literate in the holistic principles of design thinking, just as our technological prowess depends on having high levels of literacy in math and science.* (Brown, 2009, p. 223)

United States higher education curricula struggle to produce effective global competence outcomes (Brustein, 2010; Li, 2013). The Asia Society Partnership for Global Learning defined global competence as, “the capacity and disposition to understand and act on issues of global significance” (Mansilla & Jackson, 2011, p. xiii). Hunter, White, and Godbey (2006) further defined a globally competent person as “having an open mind while actively seeking to understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment” (p. 272).

Global competence is an important and reoccurring topic in higher education (Brustein, 2010; Fischer, 2007; Li, 2013; Reimers, 2009). For example, in 1998, the Commission on International Education declared, “America’s future depends upon our ability to develop a citizen base that is globally competent” (p. vii). A decade later, a 2007 Association of American College and Universities report asserted global competence learning as a basic need in education and “essential for work, civil society, and social life” (AACU, p. 15). Recently, the need for better global competence education outcomes inspired the February 2015 American Council on Education (ACE) conference titled, “ACE/AIEA Internationalization Collaborative: Global
Competence, Local Challenges: Building an International Curriculum for Everyone” (ACE “Events”, 2015). This conference called for the need to explore innovative and cost-effective approaches to deliver global competence curricula.

Concurrently, design thinking is identified as an innovative paradigm to improve curricula outcomes across various disciplines of higher education (Beacham & Shambaugh, 2011; Davis, 2010; Dorst, 2011). Design thinking is a discipline “that uses the designer’s sensibility and methods” (Brown, 2009, p. 2) to respond to human needs and is used as “a different way of framing situations and possibilities” (Bucolo, Wrigley, & Matthews, 2012, p. 18). Additionally, design thinking is a constructivist model of teaching and learning and involves the understanding and modification of behavior and views as a result of personal experience (Plattner, Meinel, & Leifer, 2012). Furthermore, global competence and design thinking are rooted in similar human-centered concepts. For example, both discourses involve curiosity, empathy, communication, and holistic approaches to problem solving (Brown, 2009; Mansilla & Jackson, 2011; Plattner et al., 2012). Design education teaching and learning involves the exploration and appreciation of problem solving in a social context (Lawson, 2006). What if design thinking can innovate global competence teaching and learning? And why not start with an investigation of design educator’s perceptions on global competence teaching and learning? In other words, what can globally competent andragogy learn from design andragogy?

Situating Myself in the Inquiry

As a qualitative researcher, I use the active first-person language style to emphasize the interpretative underpinnings of this exploratory inquiry (Davies, 2012; Webb, 1992). Denzin (1989) stated “interpretive research begins and ends with the biography and self of the
researcher" (p. 32). Therefore, I describe myself relevant to the decisions I made about the direction of this inquiry.

I am a design thinker (commercial interior designer) and a design educator. I am also a world traveler. My goal is to travel to all seven continents. Thus far I travelled to four of them. I am an alumnus of two study abroad programs and I planned and conducted numerous educational travel abroad programs with my students. The interconnectedness of the social, political, and economic dimensions of society interests me. I want to practice effective global stewardship. I also want to inspire others to be thoughtful stewards of our global community.

Furthermore, as a doctoral student in a school of education at a top-tier research-one university, I learned about various teaching and learning philosophical orientations. Consequentially, I resonate with social constructionism, interpretive interactionism, and critical reflective theories. I also resonate with qualitative inquiry and “accept that there is no universal truth, that all findings are tentative and context based, and that we live in an irrational and chaotic world” (Janesick, 2011, p. 14). I am curious about the social world. During my experiences as a doctoral student, I learned to better question what I know and what I believe.

Coursework during my doctoral studies exposed me to global competence paradigms. Concurrently, my attendance at design conferences and reading design publications exposed me design thinking principles and application across disciplines (Brown, 2009). I quickly realized the role of global competence and design thinking shared similar ideas. For example, both discourses discussed principles of human-centeredness and systematic approaches to problem solving. So, I began to ponder the potential connections between global competence and design thinking and began to dig deeper into the literature.
Gratuitously, the literature revealed similarities among global competence attitudes and skills, and design thinking attitudes and skills (Brown, 2009; Cross, 2006; Davis, 2010; Eisner, 2002; Green & Olson, 2003; Holloway, 2009; Hunter et al., 2006; Li, 2013; Pink, 2006; Plattner et al., 2012; Taylor, 1994a). I presented Table 1 to clearly illustrate a side-by-side comparison summary global competence and design thinker characteristics found throughout the literature. I categorized the characteristics by attitude and skill learning domains. For example, attitudes are defined as the feelings, preferences, inclinations, enthusiasms, motivations, and approaches people might display toward certain learning situations (Li, 2013; Pierce & Gray, 1979). Skills are defined as a broad range of personal capabilities or proficiencies learners might use to collect and process information through transfer of knowledge (Krathwohl, Bloom, & Masia, 1964; Li, 2013). The similarities between global competence and design thinker attitudes and skills intrigued me. I reflected on the connections between my experiences as a design thinker interested in global matters, the experiences of design colleagues from the United States, and my encounters with design thinkers abroad, which warranted further exploration.

Furthermore my review of the literature pointed to transformative learning theory as the primary way adults learn global competence (Badley, 2000; Hunter, 2004; Taylor, 1994b). Transformative learning theory describes how adult learners change the way they examine their experiences and their interactions with the world (Cranton, 2006; King, 2009; Mezirow, 1978). According to transformative learning theory, perspective transformation experiences facilitate shifts in the way adult learners understand themselves and their surrounding world as a means to cope with new information and new ways of thinking (King, 2009). Perspective transformation experiences stimulate or contribute to transformative learning; in other words “a cause and effect relationship cannot be assumed” (King, 2009, p. 18). For my inquiry, I assumed three
perspective transformation learning experiences: (a) personal-life experiences; (b) professional work experiences; and (c) educational experiences, both informal and formal.

Table 1

*Global Competence and Design Thinking Characteristics Comparison Summary*

<table>
<thead>
<tr>
<th>Learning Domain</th>
<th>Global Competence Characteristic</th>
<th>Design Thinking Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitude</strong></td>
<td>Open minded (Hunter, 2004)</td>
<td>Open minded (Plattner et al., 2012)</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>Risk takers (Hunter, 2004)</td>
<td>Risk takers (Plattner et al., 2012)</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>Empathetic (Green &amp; Olson, 2003; Taylor, 1994b)</td>
<td>Empathetic (Brown, 2009; Plattner et al., 2012; Pink, 2006)</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>Comfortable with ambiguity and unfamiliarity (Green &amp; Olson, 2003; Taylor, 1994b)</td>
<td>Comfortable making judgments in absence of rule (Eisner, 2002)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to critically analyze (Li, 2013)</td>
<td>Able to analyze and fit solutions to context (Plattner et al., 2012)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to interact and communicate with those from other background (Hunter, 2004; Li, 2013)</td>
<td>Able to collaborate/communicate across interdisciplinary teams (Plattner et al., 2012)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to listen, observe, and relate (Li, 2013; Taylor, 1994b)</td>
<td>Able to understand the subtleties of human interaction (Pink, 2006)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to gather information beyond one’s environment (Hunter, 2004; Li, 2013)</td>
<td>Able to look beyond the immediate boundaries (Holloway, 2009)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to be critically self-aware (Hunter, 2004; Taylor, 1994b)</td>
<td>Able to find joy in oneself and elicit it in others (Pink, 2006)</td>
</tr>
<tr>
<td><strong>Skill</strong></td>
<td>Able to constantly make new connections (Davis, 2010)</td>
<td>Able to detect multiple patterns (Cross, 2006; Pink, 2006)</td>
</tr>
</tbody>
</table>

Moreover, as a former interior design program director and current interior design accreditation site visitor, I was familiar with interior design programmatic educational standards related to global competence. These standards guided the development and evaluation of course content and student learning expectations related to issues of global competence. I conducted a
review of various design discipline programmatic accreditation standards and found a consistent placement of value on global theme standards (The Council for Interior Design Accreditation, 2015; The National Architectural Accrediting Board, 2015; The National Association of Schools of Art and Design, 2015). Additionally, during institution site visits, I observed healthy debates over the meanings and interpretations of the global dimensions of design practice, teaching, and learning among academic program administrators and in-field practitioners. I was curious how the community of design educators perceived and applied global competence related curricula standards.

As a visual-oriented learner, I synthesized the concepts that motivated my inquiry and constructed a kaleidoscope diagram to organize and illustrate my thoughts (Figure 1). This medley of ideas became the conceptual framework, or lens, I used to view my inquiry (Roberts, 2010).

![Conceptual framework diagram](image)

*Figure 1. Conceptual framework. Global competence and design thinking attitudes and skills, the design thinking paradigm, design programmatic accreditation standards, and transformative learning theory are the concepts I used to view the inquiry.*
As a researcher, I am driven by what I want to know. I wanted to explore how design educators “make sense of experience and transform experience into consciousness, both individually and as shared meaning” (Patton, 2002, p. 104). Ultimately, I wanted to explore how the role of design educators’ personal-life, professional work, and educational experiences shaped their perceptions, meanings, and interpretations of global competence and the ways they teach and learn global competence attitudes and skills.

Statement of the Problem

There is broad consensus for the need to include global competence in United States education. For example, a national coalition of business, education, and policymaker leaders deemed global awareness as an essential personal skill and competency for United States graduates and warned of the negative economic repercussions as a result of poor global competence education outcomes (The Partnership for 21st Century Skills, 2010). Despite numerous assertions made over the years, higher education institutions in the United States produce inferior global competence student outcomes compared to other nations (Brustein, 2010; Li, 2013), especially in discipline majors such as business, technology, and healthcare (Pascarella & Terenzini, 2005). Furthermore, educators are blamed for their ineffectiveness as critical, front-line promoters of student global competence outcomes (Fischer, 2007; Reimers, 2009; Stohl, 2007), especially when Fisher (2007) reported, “nothing happens unless a university's faculty members share its goal” (p. 36). Additionally, educators’ inability to relate the global dimension of their disciplines to their current teaching and research practice is another contributor to poor student global competence outcomes (Fischer, 2007; Reimers, 2009).

Whereas global competence outcomes are challenged among some higher education disciplines such as technology and healthcare, thought leaders recently endorsed design thinking
approaches as an inventive model or resource to improve practices across these same fields (Brown, 2009; Davis, 2010; Dorst, 2011; Farson, 2008; Martin, 2009; Melles, Howard & Thompson-Whiteside, 2012). Likewise, Grierson (2011) argued for the transfer of skills from design thinking and art education to achieve goals across a range of disciplines. In addition, Pink (2006) enthusiastically confirmed the impact of design thinking across disciplines when he described the Master of Fine Arts degree as the new Master of Business Administration degree. Davis (2010) further promoted the importance of design thinking application when she concluded, “it is imperative that the integration of design thinking is introduced in the academic setting to give future students the leverage they need to be successful” (p. 6538). Despite these progressive assertions, educational settings often overlook the integration of design thinking as a cross-discipline teaching and learning resource (Beacham & Shambaugh, 2011).

All in all, there is a need to innovate global competence curricula design and design thinking offers a set of operating principles to approach innovation (Brown, 2009). Furthermore, educators are critical promoters of student global competence outcomes (Fischer, 2007; Reimers, 2009; Stohl, 2007). Therefore there is a need to explore how design educators teach and learn global competence.

**Purpose of the Inquiry**

I found few studies that explored the connections between global competence and design thinking and fewer studies that explored connections between global competence and design educators. Therefore, I wanted to explore four design educators’ reflections on what they knew and believed about global competence teaching and learning. I also wanted to discover the global competence transformative learning process of these four design educators, especially related to their global competence attitudes and skills development. I based the global
competence transformative learning process on the ways design educators described their personal-life experiences, professional practice experiences, and educational experiences as facilitators of their capacity and disposition to understand and act on issues of global significance.

Ultimately, I wanted to contribute to the global competence body of knowledge in two main ways. For one, I wanted to respond to Brody’s (2007) suggestion that the reexamination and redesign of effective global competence higher education curricula is critical to solve the problem of poor global competence outcomes. Therefore, based on my findings of design educator’s experiences, I wanted to outline a set of global competence teaching and learning resources for both arts-based and non arts-based curricula designers as a way to inform inventive and cost-effective global competence curricula reform strategies.

Secondly, I wanted to address the claim that educators contribute to poor global competence outcomes due to their lack of motivation to promote global competence and inability to relate the global dimension of their disciplines to their current teaching and research practice (Fischer, 2007; Reimers, 2009). Therefore, I wanted to contribute to the social construction of knowledge across a broad audience of cross-discipline faculty members. The narrative account of the four design educators might inspire other arts- and non arts-based educators in higher education to relate the particular global dimensions of their personal life, professional work and educational experiences to their present teaching and research practices.

Research Questions

Four research questions guided this inquiry:

1. In what ways do design educators describe themselves as globally competent?
2. How do design educators integrate global competence into their teaching practice?

3. What factors contribute to the development of global competence attitudes and skills among design educators?

4. What role does transformative learning have in the development of global competence among design educators?

Overview of Methods

Since I wanted to explore the role of design educators’ personal-life, professional work, and educational experiences in their views of global competence and global competence attitude and skill development, I created a qualitative research design and used a phenomenological case study approach. More specifically, I followed a descriptive multiple-case study approach (Patton, 2002; Yin, 2003) comprised of four design educator case study participants. I used three critical reflection data collection methods, (a) in-depth interviews, (b) image artifact, and (c) my reflection memos. Consequently, I used a constant comparative analysis data analysis method in a grounded theory approach (Glaser & Strauss, 1967) to make meaning from the collected data. Furthermore, I used three systematic coding stages, (a) open coding, (b) axial coding, and (c) selective coding to actively sort, organize, and order concepts (Creswell, 2009; Ju-Yu Ho, 2012; Maxwell, 2013). First, I analyzed the data separately for each design educator single case, and then I conducted a cross-case pattern analysis. Ultimately, I used this data analysis process to synthesize common core themes grounded in the data (Strauss & Corbin, 1998).

Limitations

I considered several limitations of my inquiry: hermeneutics, researcher bias, geographical scope, and interview data limitations.
• **Hermeneutic.** Hermeneutic considerations refer to the interpretive nature of qualitative inquiry. In other words, I might read and interpret text different than others. Likewise, others might draw conclusions in different ways from mine.

• **Researcher bias.** According to Maxwell (2013), “it is impossible to deal with [researcher bias] by eliminating the researcher’s theories, beliefs, and perceptual lenses” (p. 124). Therefore, I was aware of possible personal bias and influences and used that understanding in productive ways, with integrity (Hammersley & Atkinson, 1995; Maxwell, 2013). For example, I reflected, wrote about, and revealed my beliefs and perceptions during the inquiry process.

• **Geographical scope.** My inquiry was limited to design educators from a specific distance radius within Western Florida, which might make conclusions more applicable to the immediate area. However, according to Merriam (2009) and Yin (2003), a narrow scope is an accepted limitation of qualitative research and entirely appropriate in case studies.

• **Interview data limitations.** Since interview data were not controlled, the design educators may have experienced recall error and delivered self-serving responses (Patton, 2002). Moreover, the design educators might be anxious towards the interview process or experienced reactivity, or ways I might have influenced them and our interview setting (Maxwell, 2013). Therefore, I allowed the design educators to choose the location for our interview. Also, I avoided confrontational or defensive seating arrangements (arrangements that directly face each other). Additionally, I avoided leading questions and practiced an elevated awareness of my reactive gestures and actions towards the design educators.
Definition of Terms

- **Architecture.** A field of study and practice that primarily addresses “the design and construction of buildings and structures that primarily provide shelter” (The National Council of Architectural Registration Boards, 2015, para. 1).

- **Attitude.** A learning behavior that describes the feelings, preferences, inclinations, enthusiasms, motivations, and approach learners may have toward certain learning situations (Li, 2013; Pierce & Gray, 1979).

- **Design educator.** For purposes of this study, a design educator was defined as a person who instructs college-level courses in, architecture, fashion design, graphic design, or interior design academic programs.

- **Design thinking.** Melles et al. (2012) defined design thinking as, “the term. . . is used to refer to the study of the practices of working designers and the application of human-centered ‘open’ problem solving processes to real world ‘wicked’ problems” (p. 162). Wicked problems are “highly complex problems where the solution to one facet of the problem raises concerns (or causes additional problems) in other areas” (Beacham & Shambaugh, 2012, p. 1873).

- **Fashion design.** A field of study and professional practice that integrates “the visual and technical aspects of wearing apparel to produce products and services” (The National Association of Schools of Art and Design, 2015, p. 120).

- **Global competence.** For purposes of this study, global competence was defined as, “the capacity and disposition to understand and act on issues of global significance” (Mansilla & Jackson, 2011, p. xiii). Furthermore, global competence is generally described in
terms of three learning domains or dimensions: knowledge, attitudes, and skills (Fleming, 2006; Green & Olson, 2003; Hunter, 2004).

- **Graphic design.** A field of study and professional practice that addresses visual, technical, and functional communication needs, either in physical or virtual form (AIGA, The Professional Association for Design, 2015; The National Association of Schools of Art and Design, 2015).

- **Interior design.** A field of study that addresses “the visual, technical, functional, and aesthetic aspects of inhabited spaces” (The National Association of Schools of Art and Design, 2015, p. 123).

- **Skills.** A learning behavior that describes learner capabilities or proficiencies to collect and process information through transfer of knowledge (Krathwohl et al., 1964; Li, 2013).

**Summary**

In this chapter, I introduced the impetus for my qualitative inquiry. For example, based on the literature, I found United States higher education global competence outcomes are ineffective, especially across disciplines such as business, technology, healthcare, and education. I also identified literature that portrayed design thinking as a teaching and learning approach is recognized as a way to innovate systems across business, technology, healthcare, and education fields. Furthermore, the literature pointed to poor curricula design and lack of faculty support as two reasons for inferior global competence outcomes.

Also in this chapter, I described my motivation for this inquiry as a designer, design educator, and qualitative researcher. I also illustrated a conceptual framework I used to view my inquiry. The conceptual framework included an array of concepts found in the literature: the
design thinking paradigm, similarities between global competence and design thinking attitudes and skills, a review of design and programmatic accreditation standards, and transformative learning theory.

The purpose of this descriptive, qualitative inquiry was to explore design educator perceptions of the ways in which their personal life histories, professional practice, and educational experience contribute to the development of their global competence learning and teaching practices through a multiple-case study research design. Findings and discussions from this study should influence curricula design reinvention, and faculty perspective, leading to more effective global competence outcomes across disciplines. The following chapter presents a review of the relevant literatures that informed my inquiry.
Chapter Two: Literature Review

Design thinking requires bridging the “knowing-doing” gap (Brown, 2009, p. 227)

In the previous chapter I described the need to explore connections between global competence and design thinking, especially among design educators. In this chapter I present what is known about global competence and design thinking in academia and industry practice. I begin the chapter with an outline of the concepts linked to global competence education and development. I then describe the origins and themes associated with global competence and design thinking. The chapter progresses with a description of the attitudes and skills associated with global competence and design thinking. I further present studies related to the ways adults learn global competence and design thinking. I conclude the chapter with an overview of globally related themes found in art and design accreditation standards.

Concepts Linked to Global Competence

The literature presented global competence as a difficult term to define. Li (2013) sums up the conundrum best, “although the literature has an impressive deposit of studies on cross-cultural and globally oriented education, the higher education community has not yet reached an agreement on the operational definition of global competence” (p. 126). For this inquiry, I primarily used the Asia Society Partnership for Global Learning’s definition of global competence, as “the capacity and disposition to understand and act on issues of global significance” (Mansilla & Jackson, 2011, p. xiii). I also referred to Hunter et al. ’s (2006) definition of a globally competent person as, “having an open mind while actively seeking to
understand cultural norms and expectations of others, leveraging this gained knowledge to interact, communicate and work effectively outside one’s environment” (p. 272). Throughout the literature, global competence was generally described in terms of three learning domains or dimensions: knowledge, attitudes, and skills (Fleming, 2006; Green & Olson, 2003; Hunter, 2004).

In an attempt to further alleviate potential confusion and illuminate the discussion of global competence, the following section presents an overview of the various cross-cultural and globally oriented concepts often linked to the term *global competence* in the context of education and broader frameworks found in the literature.

The most closely related term, *intercultural competence*, clearly appeared throughout my search of the literature. Intercultural competence shares a similar root word, yet carries a different meaning. The concept of locale distinguishes the term global competence from intercultural competence. For example, Deardorff defined intercultural competence as the ability to effectively communicate and interact “with those from different backgrounds, regardless of location” (2011, p. 66). Similar to global competence, the author posits intercultural competence is transformational, occurs over time, and must be continuously integrated in teaching and learning efforts.

In the broader context of education, the overarching term *global education* was commonly used “too often …without adequate substance” (Bennett, Cornwell, Jamal Al-Lail, & Schenck, 2012, p. 34). Hence, I found Whitehead’s (2015) term *global learning* as a more substantive way to describe global education or a form of learning “that reflects the full scope and substance of engagement with learning in and about the world” (p. 8). As it was important to point out the distinctions between global and intercultural competence, it is important to
clarify the meaning between global education or learning and multicultural education.

*Multicultural education* is a concept associated with the social aspects of education, in the form of a movement or action at all levels of education. The distinctive meaning of multiculturalism directs ways to reform systems so all students have an equal opportunity to academic achievement and success regardless of gender, social class, ethnic, racial, or cultural characteristics (Banks & Banks, 1989). *International education* is a term widely used in the United States since World War II (Whitehead, 2015). International education, like global competence refers to knowledge and attitude learning domains. Due to its origins from times of conflict, international education is rooted in peace, understanding, and cooperation development. Today, international education includes notions of student mobility and the transfer of education ideas and curricula across nations.

A multitude of classifications expand the links between cross-cultural and globally oriented classifications to broader, systems-based frameworks. For example, *internationalization* is commonly associated with international education, yet is distinctively placed in the context of an institutional system. From an institutional perspective, internationalization is a concept that drives action, at the campus level to integrate international dimensions, or the “perspective, activity, or service which introduces or integrates an international/intercultural/global outlook into the major functions of an institution of higher education” (Whitehead, 2015, p. 7). Over the years, the definition of internationalization evolved to include a greater emphasis on the process and iterative nature of global engagement. In other words, higher education institutions evolved to seek and engage local opportunities for global outlook and integration.
Other terminology found in the literature expanded meaning to world systems. For example, the concept of *globalization* frequently appeared in global competence articles and discussions. Globalization suggests broader economic, technological, political, and environmental dimensions (Milman, 2015). Globalization further suggests a movement of people, things, and knowledge or ideas. Discussions of globalization presented themes of challenge and opportunities especially in view of the exponential growth and speed of global interdependence. This growth and speed are apparent in modern society, which places demand on effective global engagement, including problem solving and action (Mansilla and Jackson, 2011).

The term global awareness suggests personal qualities needed to navigate global systems. Maturity, risk-taking, sensitivity and mutual respect, adeptness to other perspectives, collaboration, and open dialogue are examples of global awareness qualities (Milman, 2015). The concept of *worldmindedness* (Merryfield, Tin-Yau Lo, Cho Po, & Kasai, 2008) also builds upon global awareness. For example, worldminded people nurture their global awareness to form a “habit of thinking about the effects of our decisions on people across the planet” (p. 7).

The term *glocalization* relates to globalization and global awareness. Glocalization incorporates ideas of globalization and further suggests the recognition of one’s location or place in the world as a way to view global ideas in context and afford effective action (Milman, 2015). In other words, glocalization blends one’s awareness of the complex interconnectedness of world systems with one’s confidence in their ability to effect change via simpler local efforts.

*Global citizenship* is a concept placed in the context of political and social systems. Global citizenship recognizes human connections and people as members of a larger, universal
community wider than their local nation-state or political community (Dower & Williams, 2002; Nussbaum, 2002). The literature presented the concept of global citizenship as complex and riddled with controversial oppositions of objectivist and subjectivist thoughts. However, human’s virtue of rights and duties were consistently described at the core of global citizenship (Dower & Williams, 2002). Even more so, the global citizenship discourse called for active participation and expression of rights and duties across economic, technological, political, and environmental dimensions of society (Dower & Williams, 2002; Young & Commins, 2002).

Similar to global citizenship, global stewardship is a term related to the concept of individual responsibility and action for the betterment of the world. Bennett, et al. (2012) described the stewardship approach to education as interdisciplinary and collaborative. The authors further described stewardship in terms of development and discovery of commonalities, for example “common humanity and our common habitation of this planet” (p. 34). Like global competence, global stewardship as a model of education follows three similar dimensions: literacies, skills, and dispositions.

Global stewardship literacies, or acquisition of knowledge, included: scientific understanding, cultural understanding, and understanding of global issues. Skills for global stewardship included: effective communication, capacity to identify novel insights and interactions with people of different cultural backgrounds, foreign language skills, use of complex system models (e.g., mathematics), information literacy, praxis, scalar thinking, and triangulation of disparate points of view. Dispositions of global stewardship included: respect, vulnerability, hospitality, compassion, agency, agility, fairness, service, and leadership.
Global stewardship presented a holistic approach to student development with an emphasis on individual accountability and responsibility for change, and development in constructive ways. For example, global stewardship aims to “bring about positive transformation from within the systems, communities, and institutions to which they belong—all while seeking harmonious, responsible change for society, rather than disruption for its own sake” (Bennett et al., 2012, p. 40).

**Globally Oriented Models of Development**

The literature also included works on how people develop intercultural and global minded qualities. Li (2013) credited Bennett’s 1993 Developmental Model of Intercultural Sensitivity as the seminal “theoretical foundation for the development of individual global competence” (p. 127). Concepts of constructivism and cognitive psychology undergird the model and described two stages of development over time. For example, according to this theory, one first passes through an ethnocentric stage, where one reacts to other cultures from internal perspectives of denial, defense, and minimization. Subsequently, one moves towards an ethnorelative phase where one reacts to other cultures from external perspectives of acceptance, adaptation, and integration with others. Bennett’s (1993) model presented the foundation for the three learning domains or dimensions of global competence: knowledge, attitudes, and skills.

Over the past decade, additional intercultural and global learning developmental models emerged. Noteworthy examples included, King and Baxter Magolda’s (2005) Developmental Model of Intercultural Maturity, Mansilla and Gardner’s (2007) global consciousness, Braskamp, Braskamp, and Merrill’s (2008) Global Perspective Inventory (GPI), and Gillespie, Braskamp, and Dwyer’s (2009) Holistic Student Learning and Development Abroad. Furthermore, these holistic dimensions of development were rooted in Kegan’s (1994) Model of
Lifespan Development and described three distinct dimensions: cognitive, intrapersonal, and interpersonal. These three dimensions further frame the intercultural and global learning developmental models found throughout the literature.

Chickering and Braskamp (2009) described global perspective as the development of, “personal and social responsibility that is based on interdependence, identity, purpose, and emotional intelligence” (p. 28). The following is an overview of the three dimensions of global perspective learning and development (Braskamp et al., 2008). Each dimension involves a reflection of cultural theory and a reflection of intercultural communication theory.

The cognitive dimension of development addresses the question, How do I know?, and points to “one’s knowledge and understanding of what is true and important to know” (Braskamp et al., 2008, p. 3). From a cultural perspective, the idea of knowing involves the degree of complexity one places in the importance of cultural contexts and judgment of what is important to know. For example, Chickering and Braskamp (2009) described how students develop ways “to think with complexity, taking into account multiple cultural perspectives” (p. 28). In other words, the reliance on external authorities to determine absolute truth is not as important as the impactful influence of culture, society, and historical context on the acquisition and judgment of knowledge and truths. Furthermore, from an intercultural communication perspective, Braskamp et al. (2008) placed emphasis on proficiency in more than one language.

The intrapersonal dimension of development addresses the questions, Who am I?, and points to “one becoming more aware of and integrating one’s personal values and self-identity into one’s personhood” (Braskamp et al., 2008, p. 3). Additionally, intrapersonal development focuses on one’s sense of purpose. In the context of global perspective development, intrapersonal development involves developing a confident self-identity by incorporating
different and often conflicting ideas about one’s self in relation to different and sometimes conflicting world views. For example, Chickering and Braskamp (2009) asserted student’s need to “form a unique sense of self that is authentic and consistent with their own cultural background” (p. 28). Overall, the literature expressed how notions of emotional confidence and insights from Goldman’s (1995) seminal work on emotional intelligence influence a person’s level of cultural self-identity, levels of respect for others, and degree of confidence in foreign and complex situations.

The interpersonal dimension of development addresses the question, How do I relate to others?, and points to “one’s willingness to interact with persons with different social norms and cultural backgrounds, acceptance of others, and being comfortable with relating to others” (pp. 3-4). From a cultural perspective, this dimension involves the ability for one to move from “dependency to independence to interdependence. . . a paradoxical merger” (Braskamp et al., 2008, p. 4), with respect and openness (Chickering & Braskamp, 2009). From an intercultural communication perspective, this dimension involves the ability to express sensitivity when communicating in pluralistic settings.

The previous section described the broad concepts and terms related to global competence and globally oriented student development. The remainder of the literature review presents a concentrated focus on the topics found in my conceptual framework: global competence, design thinking, transformative learning, and art and design accreditation.

**Origins of Global Competence**

A description of the history of the Council on International Educational Exchange (CIEE), the leading and oldest U.S. non-governmental organization in international education and student study abroad, is an appropriate starting point to illustrate the themes associated with
the need for effective global competency outcomes in United States higher education curricula. Establishment of trust with other nations, national security, economic competitiveness, and cross-cultural awareness were the main themes found in the literature.

The onset of World War II in 1939 contributed to the suspension of various international educational exchange programs with United States institutions (CIEE, 2010). After this war, a United States society wanted to develop international understanding and establishment of trust among nations across the globe (CIEE, 2010). Senator J. William Fulbright further validated this interest and led to a strong support for student and teacher travel as a means of humanizing international relations (CIEE, 2010), which demanded particular scholarships for international student exchange travel. Increased participation in these student travel exchanges eventually led to the formation of the Council on Student Travel in 1947, which eventually became known as the Council on International Education Exchange a year later (CIEE, 2010). The CIEE continues to operate today.

In 1958, the National Defense Education Act passed due to the need for US citizens to acquire knowledge and awareness of international conditions in response to national security concerns during the cold war, in particular immediately following the Soviet Union’s launch of the world’s first satellite (Hunter, 2004). This act afforded funds to higher education institutions to promote the study of foreign languages, history, economics and other social sciences related to the global learning. During the 1980s, it was apparent that the American academic community was no longer the dominant player in scientific and technological progress (CIEE, 2010). Therefore, in 1988, the CIEE developed a national agenda for internationalizing higher education and compiled the report titled, *Educating for Global Competence*. The term global competency first appeared noted in this report (Hunter, 2004). This report demanded urgent action from the
U.S. higher education community to increase enrollment in study abroad programs, more specifically to promote study abroad in developing countries, especially where English was not the primary language. Moreover, the report presented the need for higher education to embed cross-cultural awareness throughout curriculum, not only in the humanities and social sciences, but also across fields such as mathematics, science, medicine, and education.

Over the past decade, the response to the events of September 11, 2001, like the response to the events that led to the 1958 National Defense Education Act, underscored the importance of global competency from the standpoint of national security. According to Hunter (2004), in 2003, a National Association of International Educators (NAFSA) position paper confirmed that international skills and knowledge were critical needs for U.S. citizens to guarantee national security and economic competitiveness. Furthermore, global competence attributes are important factors in preparing graduates to function as world citizens and become productive members of a global workforce (Shams & George, 2006).

Scholarly work by Hunter et al. (2006) was referenced multiple times throughout the global competence literature. Hunter’s (2004) dissertation work set forth a framework for global competence research in the United States. This framework was developed into the Global Competency Model of Readiness and is used for education and corporate training to depict the development of a globally competent learner (Hunter et al., 2006). The model is centrally focused and includes four rings or stages of global competence achievement based on internal and external readiness characteristics. The Global Competency Model of Readiness stages of achievement are not intended to follow a strict sequence. For example, the internal central steps can be discovered simultaneously (Hunter et al., 2006). More importantly, self-awareness is the central internal characteristic of this model and serves as the first stage focal point where persons
should engage in a series of self-reflective actions and strive to understand their own cultural conditions before examining someone else’s. This central model step echoes critical reflection practices at the core of perspective transformative learning.

The second ring of the Global Competency Model of Readiness radiates outward from the center and recommends the following internal readiness challenges for the learner: willingness to take risks, development of open and nonjudgmental attitudes towards difference, and the exploration of multiple perspectives and respect for cultural, social, and linguistic diversity (Hunter et al., 2006). The authors illustrate a series of practical suggestions to achieve readiness challenges including: multicultural coursework, cross-cultural simulation engagement, foreign language development (verbal and non-verbal communication), and direct submersion into an unfamiliar culture (which can include actual study abroad or local exploration).

The third ring suggests the formation of external readiness competencies related to globalization and world history contexts. The understanding of globalization and world history allows the learner to place this knowledge in contexts that recognize the social, political, economic, geographic, and environmental interconnectedness of society (Hunter et al., 2006). The final stage culminates in opportunities for the learner to influence direct collaboration with people from other cultures and nations. This collaboration is facilitated through the identification of cultural differences and global understanding.

written for the K-12 education sector, the higher education community is intrinsically linked to the benefits and action called forth in the book proves invaluable. The book presented a comprehensive evaluation of research and outlined practical applications of global competence teaching and learning.

The authors reported four key challenges that shape global issues. The four key challenges are: (a) a flattened global economy, (b) jobs that require more specialized knowledge, (c) extraordinary global migration, and (d) climatic and environmental issues. The authors also introduced four central global competencies: (a) a curiosity to investigate the world, (b) ability to recognize other’s point of view, (c) ability to communicate ideas and concepts, (e) ability to create action. These competencies allows students to frame problems and identify relevant information, articulate and explain multiple perspectives, bridge world system barriers, and promote active participation to affect positive change.

From a curriculum perspective, the authors presented a variety of approaches for global competence teaching and learning. For example, the authors suggested curriculum designers and educators find meaningful ways to infuse global challenges and themes into existing cross-disciplinary subject matter beyond social studies, including mathematics, language arts, and science. The authors also suggested one view subject matter in a deeper global perspective context as a way to build critical thinking and reasoning skills. They further suggested teaching and learning practices that connects universal themes of identity, oppression, power, and inquiry universal themes, especially through global historical roots. All in all, they promoted learning through international collaboration, whether face-to-face or through virtual means. From an assessment perspective, the authors promoted the use of ongoing informal feedback through reflection exercises and explicit performance-based outcomes based on carefully constructed
rubrics. In all cases, the authors suggested assessment is conducted by a variety of stakeholders, community members and students alike, including those from a global reach.

Like the literature presented on intercultural competence, Mansilla and Jackson (2011) viewed global competence as an “integrated outlook on the world” (p. 11). They ultimately promoted the integrative and interdisciplinary nature of the global competence discourse, including an emphasis on the arts. For example, they presented a global competence rubric matrix for the arts. This matrix outlined opportunities for students to (a) use works of art to investigate the world beyond their immediate environment, (b) use the arts to recognize their own and other’s perspectives, (c) communicate ideas with diverse audiences through works of art, and (d) use the arts to translate ideas into action. Design thinking is an extended discipline of the arts. The following section outlines the origins and themes of design thinking.

**Origins of Design Thinking**

Beacham and Shambaugh (2011) recounted the evolution of design thinking over recent decades. For instance, early generations prior to the 1950s viewed design thinking as intuitive and artistic, which lead to a reactionary movement to view design thinking as rational and logical. Turning points occurred in the 1980s, especially in academia with the publication of seminal works by Rowe (1987) and Schön (1987). Rowe (1987) wrote about information-processing approaches to creative problem solving. Schön (1987) wrote about the participatory and reflective design thinking process. Both of these descriptions of design thinking are inherent in the definition of design thinking today.

Cross’ work on *Designerly Ways of Knowing* (2006) served as a foundation for the current value of design thinking approaches and application across disciplines. The core belief of Cross’ work is “design abilities exist in everyone and that design should be part of general
education” (Beacham & Shambaugh, 2011, p. 341). During the recent years, design thinking gained popularity with industry professionals and progressive thought leaders in economics and social progress (Brown, 2009; Florida, 2002, Nussbaum, 2009) as a prime approach to problem solving and economic success (Goldschmidt, 2013). This increased interest in bridging the gap between design thinking approaches and cross-disciplinary application sparked collaboration between design firms and higher education institutions. A prime example is the Hasso Plattner Institute of Design (http://www.dschool.stanford.edu), a collaborative effort between IDEO, a consulting and design firm and Stanford University (Beacham & Shambaugh, 2011).

Design thinking, or the act of designing, shares themes associated with arts education and artistically rooted intelligence (Eisner, 2002). Teaching through the arts provides learners with a way of developing life skills and attitudes that are transferable across curricula and provides a framework for other learning experiences (Fleming, 2006), which can offer opportunities to incorporate global competence curricula across various disciplines. For example, Art and Art Education have the power to provide knowledge exchange through cultural experiences (Grierson, 2011). Additionally, learners’ tolerance of ambiguity serves as a tool to develop cultural awareness and understanding (Kambutu & Nganga, 2008).

Eisner is a lead scholar in the Arts Education discourse. The following is an analysis of five of Eisner’s six distinctive “artistically rooted qualitative forms of thinking” (p. 5), which draw parallels to global competence approaches and outcomes and further confirms significant connections between global competence and design thinking. The five forms of thinking are: (a) experience of qualitative relationships and making judgments, (b) flexible purposing, (c) the impossibility to separate form and content, (d) non-verbal expression, and (e) relationship to material.
Eison’s first form of thinking portrayed the experiential relational quality of art education and the ability for artists to reason in the absence of rule (Eisner, 2002). He further suggested how the Arts teach students the importance of acute attention towards nuance and the outcome of one’s choices. Concepts of nuance and outcome of one’s choice correspond to key concepts in global education, such as: the acquisition of knowledge, liberated inquiry, attitudes towards other cultures, and the shaping of informed and sensitive ways of thinking.

The second form of thinking described flexibility and the shifting of intention, which parallel global competency characteristics of open-mindedness, exploration, and discovery. The third form of thinking involved form-content relationship; in particular how messages are conveyed. Communication and understanding messages are essential to global competence (Hunter, 2004; Li, 2013). Eisner’s fourth form of thinking approach addressed non-verbal communication and language. According to Eisner (2002), “not everything knowable can be articulated in propositional form.” (p. 8). In other words, thinking is not limited by language. The Arts and the act of producing art or designing are communicative. Alternative means of communication beyond verbal language is essential to interaction with others outside of one’s own culture.

Eisner’s last form of thinking focused on the inherent qualities of the medium with which the artist works. The medium of the artist usually refers to actual, physical material and the artist’s task is to realize the possibilities of the medium, just as a sculptor transforms a crude piece of rock into a humanistic object of beauty. The medium of the global competent student is represented within the constructs of the particular culture or human. For example, the goal of the global competent student is to discover the possibilities of the formation of new cultural
exchange. The following section will explore attitude and skill learning domains of both global competence and design thinking.

**Learning Domains of Global Competence and Design Thinking**

**Global competence attitudes.** In terms of teaching and learning, attitudes are learning behaviors that describe learner feelings, preferences, inclinations, enthusiasms, and motivations (Li, 2013; Pierce & Gray, 1979). The main attitude of a globally competent person is open-mindedness (Hunter, 2004). They also have a willingness to learn and are self-aware (Brustein, 2010; Hunter, 2004). For example, they understand how critical is it to seek to understand one’s own culture and history before they can truly seek to understand others. Additional attitude attributes include: sensitivity and respect for personal and cultural differences, perceptions, and approaches; empathetic attitude; is comfortable with ambiguity and unfamiliarity (Green & Olson, 2003). These individuals are intrinsically motivated to question assumptions and challenge stereotypes of themselves and others. Globally competent people are enthusiastic; they immerse themselves in other cultures and engage with hands-on foreign cultural activities, whether locally or through travel/living abroad opportunities. Additionally, Olney (2008) found 12 models of international or global competence. All 12 models share similar knowledge, skills, and attitudinal components throughout the literature.

**Design thinking attitudes.** Design thinker learning behaviors echo global competence learning behaviors. For example, global competence and design thinking are both human-centered process for innovation and enablement (Lockwood, 2010). Like those who are globally competent, design thinkers may approach challenges as problem seekers, rather than mere problem solvers and prefer to reveal and influence deeper levels of what is at stake. Two studies outlined the following attitudes of design thinkers: having empathy for others; high comfort
levels with risk taking; and high comfort level with failure (Plattner et al., 2012; Royalty, Oishi & Roth, 2012). For example, inherent in the learning and practice of design is to seek to understand the people, whether they are clients or end users of the design product. Also, design thinking philosophies can promote an enthusiasm for failure from the perspective that prototyping or multiple generations of an idea or concept are critical to a successful final design project/product. Personality studies by Leung, Maddux, Galinsky, and Chiu (2008) further observed attitudes of creative people (or design thinkers) as: open to new experiences, intrinsically motivated, tolerant of ambiguity, independent, self-confident, and non-conforming.

**Global competence skills.** In terms of teaching and learning, skills are behaviors that describe learner capabilities or proficiencies to collect and process information through transfer of knowledge (Krathwohl et al., 1964; Li, 2012). Global competence skills include: the ability to work effectively in international settings; awareness of and adaptability to diverse cultures, perceptions and approaches; familiarity with the foremost streams of global change and the issues they raise; and the capacity for effective communication across cultural and linguistic boundaries (Brustein, 2010). Li (2013) further considered essential global competence skills as: the ability to seek and gather information, especially beyond one’s own environment; the ability to critically analyze and evaluate this information; the ability to listen and observe and to relate constructs; and ability to communicate with those from other backgrounds. Global competence skills and behaviors are critical tools of global competence implementation.

**Design thinking skills.** Design thinking skills mirror global competence skills. Royalty et al. (2012) uncovered the following design education program graduates’ skills: ability to project creative confidence; and ability to transfer design thinking skills in their personal lives and their professional contexts. A study by Plattner et al. (2012) outlined the following skills of
design thinkers: (a) able to generate multiple ideas and iterations, and (b) able to work and communicate across interdisciplinary teams. Davis (2010) added the following skills of design thinkers: (a) able to create places or environments “where ideas can be exchanged freely and in a positive manner” and (b) “question everything” (p. 6536). Design thinking, like global competence, involves analysis, synthesis, and the creation and communication of new ideas and understandings (Plattner et al., 2012). The following section describes global competence learning research.

Global Competence Transformative Learning

The literature revealed limited references to how adults learn global competence. A considerable span of time between the references was found, which confirms a critical gap in the literature. The following sections are descriptions of these three studies. Since efforts to define global competence surfaced in recent decades, it is noteworthy to present literature on the ways adults learn the related construct of intercultural competence. Therefore I begin with a description of a study by Taylor (1994b), which addressed the process of learning intercultural competence. I then describe another study conducted in the United Kingdom, which addressed global competence development specific to university teachers (Badley, 2000). Both studies refer to transformative learning theory. Finally, I describe a recent study by Li (2013), which addressed global competence teaching and learning from an operational perspective.

The first study by Taylor (1994b) illustrated the process of how one becomes interculturally competent through the lens of transformative learning theory. Transformative learning theory is centered on adult learner experiences (King, 2009). More specifically, through the lenses of transformative learning, adult learner experiences have the potential power to change learner’s values, beliefs, and assumptions of themselves and the ways in which they view
their world (King, 2009). Shifts of prior perspective or viewpoints occur through a progression of steps and reasoning processes (King, 2005; Mezirow, 1978).

Critical self-reflection is vital to the perspective transformation process (Mezirow, 1991), or ways in which learners examine the world around them. Perspective transformation (Mezirow, 1978) is known as a liberating experience practiced by adult learners to cope with new concepts and information, which conflict with their prior understandings of values, beliefs, and assumptions (King, 2009). Furthermore, perspective transformation illuminates how adults revise their meaning structures (Taylor, 1994a).

**Taylor’s model for intercultural competence.** Taylor (1994a) advocated for critical self-reflection, the adaptive learning, and the theory of perspective transformative learning in the process of how one learns intercultural competence. In his study, he referenced the “third-cultural perspective” (1994a, p. 154), a concept which describes attributes of those interculturally competent as: empathetic, able to build relationships, non-judgmental, able to identify similarity and differences, and able to be more descriptive and less abstract. These attitudes and skill attributes align with findings from more recent studies as illustrated earlier in this literature review.

In the same 1994 study, Taylor organized the themes of his findings into six components to create a learning model for intercultural competence. These six components were: (a) setting the stage, (b) cultural disequilibrium, (c) non-reflective orientation, (d) reflective orientation, (e) behavioral learning strategies, and (f) evolving intercultural identity. The first component, “setting the stage”, illustrated how people bring their own experiences to the process and impetus for intercultural learning that spark a background for intercultural learning. The second component, “cultural disequilibrium”, described the point at which the participant experiences
unease in the host or foreign setting. Taylor made a point to define *cultural disequilibrium* as a required “catalyst for change” (1994b, p. 161) for a person to become interculturally competence.

The third and fourth components addressed non-reflective or reflective mental directions. In other words, the participant’s choice to either question or not question already established personal conventions or values. Taylor found this questioning led to deep critical thinking, which constructed intercultural competence. For example, the disorientation or unease due to the change experienced facilitated participants to question and reflect on prior assumptions; assumptions thus are imbalanced. Participants then moved towards an opportunity to release the imbalance of prior assumptions.

The fifth component in Taylor’s findings represented participant behavior or actions as learning strategies. These actions were grouped into three subcategories. The first group described observation as learning without communicating. For example, participants would watch how cultural natives acted and performed their own actions. The second subcategory involved participation in cultural activities. Cultural activities included examples of satisfying basic needs such as shopping for local food, wearing local dress, and working with cultural natives. The final subcategory encouraged the development of lasting relationships with cultural natives, which set an environment where implicit knowledge flourished with less stress and without trepidation.

The sixth main component explained the evolution of intercultural identity. The evolution of intercultural identity occurred when a participant engaged the values and perspectives of another culture rather than just their original culture. Taylor illustrated the “recursive process” (1994b, p. 168) of intercultural competence learning, which is a process that continues to move in a cyclical pattern as the participant gains greater levels of competence and
expresses less judgment towards others. Taylor’s (1994b) model for intercultural competence development led the way for intercultural competence perspective transformation and critical reflection.

Badley (2000) further promoted transformative learning as a catalyst for change and as an essential requirement among globally competent university teachers. Badley argued for “ethnographic stance” (2000, p. 252) experiences, where teachers situate themselves in environments other than their own. More importantly, this stance allowed teachers to see themselves and the world around them in a different way. Years later, Kambutu and Nganga (2008) further confirmed transformative learning as an idyllic model to advance intercultural competency through cross-cultural awareness, understanding, and appreciation.

Li (2013) confirmed two clear schemes of global competence teaching and learning based on a quantitative comparative study that measured global competence knowledge, skills, and attitudes between U.S. and China students. The author concluded that global competence is teachable through “pedagogical intervention” (p. 138). In other words, global competence learning occurs when explicitly integrated in learning experiences and curriculum designs. In addition, the study confirmed the benefits of exposure to meaningful foreign or international people or cultural experiences, whether face-to-face or through virtual means. Overall, the study empirically tested the developmental and ongoing process-driven ethos of global competence learning.

Taylor’s studies (1994a; 1994b) for learning intercultural competence, Badley’s (2000) study of university teachers global competence development, and Li’s (2013) study of the operational aspects of global competence teaching and learning share themes of transformative learning theory. Additionally, transformative learning approaches to global competence are
similar to ways in which one learns design thinking. The following section presents a review of design thinking learning.

**Design Thinking Learning**

Transformational approaches to design thinking learning were apparent in a few studies. For example, a study by Goldman et al., (2012) investigated the journey of becoming a design thinker through “mindshifts” (p. 15). A mindshift refers to the active shifts in the ways students think that result from the process of learning design thinking. The authors constructed four critical concepts of mindshifts significant to how one becomes a design thinker: human-centered, experimental, collaborative, and metacognitive. Human-centered mindshifts were described as having empathy for others and was integral to design thinking. Experimental mindshifts were described as evolutionary and considered things and situations as prototypes. Collaborative mindshifts characterized as learning with others, considered group effort as critical to problem solving and innovation. Metacognitive mindshifts were described as the awareness of where one is in the design process and pointed to the ability to be agile when responding to changing factors of a problem.

In addition, a thematic exercise by Gray (2013) revealed four main factors that shape design thinking: environmental, social, formative, and evaluative. The first, environmental factor, referred to the consideration of physical conditions, including arrangement and surface features of the space in which a typical design thinker engages in a learning experience. The second, social factor, referred to the players and interactions typically involved in a design thinker learning such as peers, faculty, and design practitioners with an emphasis on collaboration, critique, and self-reflection.
The third, formative factor, referred to how design thinkers use mental constructs to make sense of the design process. For example, Gray’s (2013) review of literature clearly illustrated how students who formed and internalized a design process through engagement and reinforcement of design knowledge were better equipped to deal with “wicked problems” (Cross, 2006). Wicked problems are ill defined, do not have a direct solution, and deal with ambiguity (Cross, 2006). Gray (2013) further illustrated how individuals who did not embrace a design process formulated simplified or linear outcomes associated with traditional well-defined problems. The critical nature of the ability to deal with wicked problems supports the design thinking paradigm. The final or evaluative factor that shapes design thinking included the flow of the first three factor activities with an addition of evaluation strategies. Evaluation strategy examples were public feedback through a formal critique experience by design studio professors and outside jurors, self-reflection, iteration, and peer feedback.

In the seminal work, *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, Brown (2009) described design thinker characteristics as: intuitive aptitude, ability to recognize patterns, skilled in the creation of ideas that have both emotional and functional meaning, and ability to express with tools other than words. For example, tools of expression include: visual thinking methods, storytelling, prototyping, and collaboration. Moreover, this work outlined design thinking as a “continuum of innovation” (p. 16), or a system that occupies three overlapping and non-linear spaces or processes: (a) inspiration, (b) ideation, and (c) implementation.

The inspiration space of design thinking aims to define a problem or motivate people to search for solutions. The written *design brief*, or set of mental constructs is an essential feature of the ideation space as a way to form a framework for direction and discovery and to establish
measureable benchmarks of solution management. Careful thought is practiced in the development of a design brief to ensure direction is balanced and contain constraints; not too abstract or too narrow and flexible enough for “capricious whims of fate” (Brown, 2009, p. 23).

The ideation space of design thinking aims to synthesize collected information and construct solution insights. An additional goal aims to create multiple, different choices as a way to test insights against one another. The premise of design thinking believes multiple choices promote divergent thinking, and divergent thinking leads to innovation. The involvement of interdisciplinary teams in the ideation process is a critical way to manage the complexity of multiple ideas and choices and further “cultivate optimism” (p. 76).

The implementation space of design thinking aims to prototype, or make ideas tangible by turning them into actual products or services. Testing, iterating, and refining products and services are at the core of the implementation space. More so, the design thinking paradigm encourages risk taking and a willingness to fail in the spirit of learning, continuous improvement, and growth. It is for these reasons the implementation space promotes series of prototypes that are quick, simple, and inexpensive. The ultimate aim of the implementation space is the clear communication and acceptance of an idea.

Furthermore, limited literature was found on how graduates from design programs, or how design thinkers, develop and demonstrate creative skills and temperament. Perhaps the lack of research is attributed to Beacham and Shambaugh’s (2011) summary, “design thinking is a subjective idea in many design curriculums and is not usually an explicit learning outcome. Design thinking typically occurs in learning settings as incidental, rather than a planned learning outcome…In short, students learn design thinking through design practice rather than being told this is what design thinking is” (p. 345). Therefore, design thinking is experiential and difficult.
to clearly identify explicit learning outcomes. In other words, in many curricula, one learns how to think like a designer by practicing the act of designing, which supports the research design choice to include a purposeful sample of design educators who have a combination of an earned degree in design and design practice experience.

**Art and Design Accreditation and Global Competence**

Design educators are exposed to a multitude of opportunities to teach and learn global competence outcomes set forth by art and design programmatic accreditation agencies. There are three main programmatic accreditation agencies related to design education and recognized by US institutions of higher education: (a) The National Architectural Accrediting Board (NAAB); (b) The Council for Interior Design Accreditation (CIDA); and (c) The National Association of Schools of Art and Design (NASAD). These three agencies commonly refer to components of global competence in their respective description of standards.

For example, NAAB requires program graduates to understand the “parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors” (NAAB, 2015, p. 16). CIDA dedicates one of 16 main standards to global perspectives of design. From a broad perspective, CIDA describes this standard as the need for “entry-level interior designers [to] have a global view and weigh design decisions within the parameters of ecological, socio-economic, and cultural contexts” (CIDA, 2015, p. II-13).

NASAD (2015) provides education guidelines and standards for specialized design programs such as communication (graphic) design, fashion design, and interior design. NASAD standards explicitly describe numerous standards related to global competence, such as need for graduate understanding of global perspectives, responses to global users, and professional
practice within a global context. Issues related to global competence are consistently addressed by design related programmatic accreditation agencies.

**Summary**

In this chapter, I described the literatures that informed my inquiry. I opened with an explanation of concepts linked to global competence and holistic student development. I further described the origins of global competence and design thinking. I also reviewed the similarities between global competence attitude and skills and design thinking attitude and skills. The chapter progressed with a description of the few studies I found related to the ways people learn intercultural or global competence, which were rooted in transformational learning theory. Additionally, I described the framework of the design thinking paradigm as a continuum for innovation. I concluded the chapter with a description of globally oriented teaching and learning standards among design education programmatic accreditation agencies. In the next chapter, I describe the inquiry research design and methods.
Chapter Three: Methods

Designers have learned some powerful methods for arriving at innovative solutions. How might we use those methods not just to educate the next generation of designers but to think about how education as such might be reinvented to unlock the vast reservoir of human creative potential? (Brown, 2009, p. 222)

In the previous chapter I outlined what is known about the global competence and design thinking discourses. In this chapter I describe the research design and methods used in my qualitative inquiry. First, I outline the research questions that guided my inquiry. Then I describe the rationale for a case study approach, including epistemological and theoretical underpinnings. As the chapter progresses I describe how I selected and communicated with the design educator participants. I also describe the three methods I used to collect the data: interviews, image artifact, and my reflective memos. Consequently, I describe how I used a constant comparative analysis method to make sense of data, including the procedures I used to code and organize the data. Furthermore, I include a discussion of credibility and verisimilitude considerations and describe my role as researcher in these considerations. In addition, as the primary research instrument, I provide a self-reflection biography to expose potential bias and researcher subjectivity. I conclude this chapter with a timeline summary of my inquiry process.

Research Questions

Yin (2003) stated “defining the research questions is probably the most important step to be taken in a research study” (p. 7), therefore I open my description of research design and methods with an outline of the four research questions that guided my inquiry:
1. In what ways do design educators describe themselves as globally competent?

2. How do design educators integrate global competence into their teaching practice?

3. What factors contribute to the development of global competence attitudes and skills among design educators?

4. What role does transformative learning have in the development of global competence among design educators?

The remainder of the chapter describes how I connected the data I collected to the research questions, and ultimately to its conclusions (Yin, 2003).

**Qualitative Research Design**

I wanted to explore four design educators’ reflections on what they knew and believed about global competence teaching and learning through a qualitative inquiry of the ways they described their personal-life experiences, professional work experiences, and educational experiences. Therefore, I followed a qualitative research design and used a phenomenological multiple-case study approach. I decided to follow qualitative traditions of inquiry since they are descriptive and inductive and place emphasis on the understanding and explanation of participant behaviors through the collection, analysis, and interpretation of their own experiences, words, actions, and records (Berg, 2004; Creswell, 2009; Merriam, 2009).

Additionally, I selected qualitative research modalities since they are naturalistic or discovery-oriented (Guba, 1978), as opposed to experimental. In other words, my inquiry does not begin with a theory to prove. Rather, I wanted the central factors of how design educators develop global competence attitudes and skills to emerge through the descriptive data collection and systematic analytic process. Furthermore, “qualitative inquiry is not a single, monolithic
approach to research and evaluation” (Patton, 2002, p. 76). Consequently, I used a multiple-case study approach framed by a constructivist epistemology and a phenomenological theoretical perspective.

**Epistemology.** A constructivist epistemology (Crotty, 1998) influenced my inquiry and pointed out “the unique experience” (p. 58) of how the design educators constructed reality. Constructionist approaches emphasize the socially constructed nature of reality (Guba & Lincoln, 1990). Constructivism explains how people interpret and shape their knowledge of reality or worldview through cultural and linguistic constructs (Guba & Lincoln, 1990; Patton, 2002). Constructivist approaches such as meaning perspective, social, and self conditions are inherent in the transformative learning theory discourse and underpin my inquiry.

Furthermore, I designed my inquiry with the goal to contribute to the social construction of knowledge. For example, Creswell (2007) and Stake (1978) suggested the experience of evaluating and reading rich and explicit descriptions of case studies contributes to the social construction of knowledge. Therefore, I included explicit descriptions for each individual case study in addition to the cross-case study analysis.

**Theoretical perspective.** A variety of purposes, questions, and situations influence the possibilities within qualitative research depending on different theoretical perspectives associated with qualitative inquiry (Creswell, 2009; Merriam, 2009). Therefore, I informed my inquiry with a phenomenological theoretical perspective (Van Manen, 1990) and aimed “at gaining a deeper understanding of the nature or meaning of [design educators’] everyday experiences” (p. 9).
**Case study approach.** I selected a descriptive case study approach for its purpose “to gather comprehensive, systematic, and in-depth information about each case of interest” (Patton, 2002, p. 447). Creswell (2007) defined a case study:

> Involves the [examination] of an issue explored through one or more cases within a bounded system (i.e., a setting, a context) …over time, through detailed, in-depth, data collection involving multiple sources of information, and reports a case description and case-based themes. (p. 73)

Additionally, according to Yin (2003), a case study approach is appropriate for exploratory research questions; questions based on “what”, and most appropriate for answering explanatory research questions; questions based on “how” and “why” (pp. 6-7). These categorization schemes of question types resonated with my research questions. Furthermore, Yin (2003) defined a case as a unit of analysis. During the design phase, I identified the design educator’s teaching and learning experiences as the unit of analysis for each case.

In more specific terms, I designed a multiple-case study comprised of four individual design educator case studies. I included the in-depth individual cases as a way to gain think, rich descriptive data (Patton, 2002). Additionally, Yin (2003) described the use of multiple-case designs as a common way to study “school innovation. . . in which individual schools adopt some innovation…but the study as a whole covers several schools” (p. 46). Since one of my initial goals for this inquiry called for innovative ways to reexamine global competence curricula, I found a multiple-case design an appropriate research design choice. Likewise, I ultimately included a multiple-case design because they are “considered more compelling, and. . . regarded as being more robust [than single-case designs]” (Yin, 2003, p. 46).

**Participants**

I used a purposeful sampling strategy (Creswell, 2009) to select the four design educators. I selected four design educator participants from my network of personal colleagues.
to benefit from established levels of rapport and access (Rubin & Rubin, 2005). I did not select or interview any current or former employees that directly reported to me. Additionally, I selected each design educator from four separate specializations to gain rich data across typical design areas (Patton, 2002; Yin, 2003) and provide sufficient variety in experience and credentials. Furthermore, I included design educators from different fields to create a “stratified sample” (King, 2009, p. 19) or balanced representation. Consequently, I selected one design educator from each of the following design specializations: (a) fashion design, (b) graphic design, (c) interior design, and (d) architecture.

Moreover, I set forth specific criteria requirements to support my selection process and strengthen the contextual “bounded system” of my multiple-case study (Creswell, 2007, p. 73). For example, Beacham and Shambaugh (2011) agreed design thinking is learned experientially through design practice, whether in the academic studio or in the field. Therefore, I required the design educators to have an earned design or design-related degree from a United States institution of higher education. In addition, I required them to have a minimum of two years’ professional work experience in their respective design specializations. I also preferred their design practice work included a range of work activities; from initial design concept development through design project implementation and evaluation. I based the two-year work experience time period requirement on general national professional licensure minimum years’ experience criteria. Finally, I required the design educators to have a minimum of one year experience teaching college-level design courses, which each design educator greatly exceeded.

**Communication with participants.** Once I secured permission from the Institutional Review Board, I immediately sent a research invitation to potential design educator participants via email and attached a copy of the approved informed consent form for their review. I
included a copy of the research invitation in Appendix A and a copy of the informed consent form in Appendix B. To my surprise and joy, the first round of four design educators I invited immediately accepted my invitation. Consequently, I sent each design educator a participant interview guide to review common terminology and relevant concepts and allow time to reflect on guiding interview questions prior to our first interview appointment. I included a copy of the participant interview guide in Appendix C.

I set appointments to meet with the design educators at a place of his or her choice. At our first interview meeting, we promptly reviewed and mutually signed the informed consent statement. After that, I asked the design educators to complete a questionnaire as a way to document relevant information in a timely manner. I also incorporated the use of the questionnaire to allow the design participants to transition into a participative mood by first answering simple and achievable questions pertaining to demographics, such as gender, age, ethnicity, and race. They also provided a pseudonym name that I used to uphold confidentiality. I included a copy of the background questionnaire in Appendix D.

**Data Collection Methods and Procedures**

Since the literature revealed critical reflection practices as prime facilitators of transformative learning (King, 2009; Taylor 1994b), I used critical reflection methods to collect my data. More specifically, I used three data collection methods: (a) in-depth interviews, (b) image artifact, and (c) my reflection memos. The first method entailed an initial in-depth, individual face-to-face interview, which allowed critical reflection through open-ended question exchange and storytelling. The second form involved a follow-up interview with an image-elicitation activity, which expanded critical reflection. Finally, my reflections of participant observations and behavior during interviews and dialogue further illuminated participant
experiences, words, actions, and records. In the following section, I describe each of these methods in greater detail.

**Initial in-depth interviews.** I found storytelling as a common form to collect data, especially through open-ended interviews. For example, King (2009) called for attention towards deeper understanding of the effective facilitators of transformative learning through the stories of adult learners. Turner (1996) characterized stories as fundamental instruments of thought and posited human experiences are organized as stories; “stories are how we remember” (Pink, 2006, p. 101). Furthermore, storytelling is an expressive tool used by design thinkers to situate facts in context and convey them with emotional impact (Brown, 2009; Pink, 2006). Therefore, based on these arguments, I decided to interview design educators and asked them to describe stories and experiences about their life, education, and career histories.

I used an interview guide (Creswell, 2009) with carefully worded; “standardized open-ended questions” (Patton, 2002, p. 342) to minimize variation in the interview process. I included a copy of the interview protocol in Appendix E. I also added potential verbal prompts to support each interview question. Prior to the interviews with the four design educators, I field tested the interview protocol with two other design educators and revised the original questions and prompts accordingly for better clarity. I illustrated the alignment of research questions with the interview questions and potential interview question prompts in Table 2.

Additionally, during the interview process an additional relevant question emerged, “What would a global competence class in a design program look like?” I used “types of content/learning objectives”, “learning activities”, and “methods of evaluation” as prompts. Furthermore, Patton (2002) believed the use of a closing question allows “the interviewees to have the final say” (p. 379), so I asked the design educators, “What should I have asked you,
which I did not think to ask, about the role of the experiences that shape your global competence attitudes and/or skills?” This practice allowed me to gather rich data from a direction that might have not occurred to me.

I listened and asked for clarity (Janesick, 2011; Rubin & Rubin, 2005). As recommended by Janesick (2011), I documented expression and body language through memo notes as a way to make sense of the data. I audio recorded each interview with a portable recorder device, and a smart phone device as back-up. I downloaded each recording to my personal computer, which is password protected. I then hired a professional transcription service and sent them the recordings to transcribe. The transcription service transcribed each interview verbatim and emailed me digital copies, which are also backed-up on their secure server.

**Follow-up interview and image-elicitation activity.** At the conclusion of each initial interview, I set an appointment for a subsequent, follow-up interview (Rubin & Rubin, 2005) to obtain more depth and to ensure the data are balanced and thorough. Additionally, at this time, I verbally explained the preparation for the image-elicitation activity. I also provided each design educator with written instructions for the activity in the form of a handout. I included a copy of the image-elicitation activity handout in Appendix F.

I wanted to incorporate a visual resource artifact method for multiple reasons. For one, the literature supported visual thinking as a prime skill designers use to think and communicate (Brown, 2009). Since the participants are designers, I believed the use of a visual image to elicit memories or dialogue was an appropriate method. Additionally, the literature supported the acceptance of visual research methods as a tool to create, analyze, and interpret data (Cahnmann-Taylor & Siegesmund, 2008; Eisner, 1991; Knoblauch, Baer, Laurier, Petschke & Schnettler, 2008). Overall, visual resources add richness to the data collection and analysis process and are
used to enhance perspectives by influencing new ways of seeing phenomena and “grasp what cannot be revealed in text” (Eisner, 1991, p. 246). Finally, creative habits of mind and notions that “the aesthetic as part of everyday experience” (Janesick, 2011, p. 140) motivates me as a designer, design educator, and qualitative researcher.

Therefore, I used an image artifact as a visual resource to elicit conversation and rich dialogue; a method adapted from photo-elicitation interviewing techniques (Collier, 1957). Photo-elicitation interviewing is a data collection method technique researchers use to bring forth information from participants through the use of photographs as memory cues or prompts (Collier, 1957; Martin & Martin, 2004). Similarly, I asked the design educators to select and bring an image artifact to the follow-up interview to promote memory cues or prompts. Copies of the selected images for visual reference purposes are included in the discoveries chapter of my inquiry.

Furthermore, I incorporated the activity as a way to empower the design educators, sharpen their memories, express emotional responses, and explore values, beliefs, attitudes, and meanings (Banks, 2001; Collier, 1957; Harper, 2002). I asked them to describe the importance of their selected image. I also asked them to describe how the meanings and interpretations associated with their selected image contributed to their global competence, or their nature to understand and act on issues of global significance.

Like the initial in-depth interviews, I audio recorded each interview with a portable recorder device, and a smart phone device as back-up. I downloaded each recording to my personal computer, which is password protected. I then hired a professional transcription service and sent them the recordings to transcribe. The transcription service transcribed each interview verbatim and emailed me digital copies, which are also backed-up on their secure server.
Table 2

Alignment of Research Questions with Interview Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Interview Question</th>
<th>Interview Question Prompts</th>
</tr>
</thead>
</table>
| **Research Question One (RQ1):** In what ways do design educators describe themselves as globally competent? | **Interview Question One (IQ1):** How would you describe your interest in global issues?  
**Interview Question Two (IQ2):** What does it mean to you, to be globally competent?  
**Interview Question Three (IQ3):** Please illustrate examples of global competence as related to your career practice | IQ1 Prompts: social, political, economic, environmental  
IQ2 Prompts: propensity to understand and work with others; language skills; place knowledge in world context  
IQ3 Prompts: human resources, operations, financial, exchange of goods/services, customer/client relationship |
| **Research Question Two (RQ2):** How do design educators integrate global competence into their teaching practice? | **Interview Question Four (IQ4):** Describe your level of awareness of global competence accreditation standards for academic design programs.  
**Interview Question Five (IQ5):** What do you believe are effective ways you incorporate global competence in your design classes? Any ineffective ways?  
**Interview Question Six (IQ6):** Tell me about the importance of global competence in the education of design thinkers. | IQ4 Prompts: NAAB, CIDA, NASAD, explicitly address in your classes  
IQ5 Prompts: subject matter context, use of technology, methods of instruction, class dynamics  
IQ6 Prompts: impact on self, others, profession |
| **Research Question Three (RQ3):** What factors contribute to the development of global competence attitudes and skills among design educators? | **Interview Question Seven (IQ7):** What has contributed to your global competence attitudes?  
**Interview Question Eight (IQ8):** What has contributed to your global competence skills? | IQ7 Prompts: open minded, risk taker, empathetic, comfort with unfamiliarity  
IQ8 Prompts: analyze, communicate those with different backgrounds, listen, self- awareness, make connections |
| **Research Question Four (RQ4):** What role does transformative learning have in the development of global competence among design educators? | **Interview Question Nine (IQ9):** Please describe any major events in your life that significantly influenced your understanding and/or appreciation of issues of global significance.  
**Interview Question Ten (IQ10):** Tell me of any turning points when you realized your values, beliefs, or expectations of global issues changed.  
**Interview Question Eleven (IQ11):** Based on these turning points, in what ways do you now experience views of global issues that are different than you used to?  
**Interview Question Twelve (IQ12):** What information/experiences do you believe you need to continue to develop your global competence? | IQ9 and IQ10 Prompts: births, deaths, relocation, travel, rites of passage, “aha moments”, self-reflection, relationships, work, education |
**Researcher reflective memos.** I used my written reflective memos as the third data collection method. I used this method as a strategy to view the data in abstract ways while remaining true to the essence of the data (Birks, Chapman, & Francis, 2008). Maxwell (2013) described analytic memos as, “a type of researcher writing other than field notes, transcription, or coding” (p. 19) that facilitates serious reflection and analysis, and are organized in a systematic, retrievable form. For example, I included informal marginal comments of participant observations and behaviors on interview transcripts. I also wrote analytical passages observations, responses, reactions, and themes during and after the data collection. I organized and stored these memos in a digital file and systematically analyzed them during the data analysis process (Bogdan & Biklen, 1998). Additionally, I weaved my analytical reflections into the case study descriptions and discoveries.

Table 3 organizes the alignment of research questions with the three data collection methods. This concise format shows how I investigated each research question with more than one data collection form.

Table 3

*Alignment of Research Questions with Data Collection Methods*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Question One (RQ1): In what ways do design educators describe themselves as globally competent?</strong></td>
<td>Initial in-depth interviews&lt;br&gt;Follow-up interview visual image activity&lt;br&gt;Researcher reflective memos</td>
</tr>
<tr>
<td><strong>Research Question Two (RQ2): How do design educators integrate global competence into their teaching practice?</strong></td>
<td>Initial in-depth interviews&lt;br&gt;Follow-up interview visual image activity&lt;br&gt;Researcher reflective memos</td>
</tr>
<tr>
<td><strong>Research Question Three (RQ3): What factors contribute to the development of global competence attitudes and skills among design educators?</strong></td>
<td>Initial in-depth interviews&lt;br&gt;Follow-up interview visual image activity&lt;br&gt;Researcher reflective memos</td>
</tr>
<tr>
<td><strong>Research Question Four (RQ4): What role does transformative learning have in the development of global competence among design educators?</strong></td>
<td>Initial in-depth interviews&lt;br&gt;Follow-up interview visual image activity&lt;br&gt;Researcher reflective memos</td>
</tr>
</tbody>
</table>
Data Analysis and Procedures

I used a constant comparative analysis method in the grounded theory approach (Glaser & Strauss, 1967) to make meaning from the collected data. I decided to use a constant comparative analysis method with open, axial, and selective coding procedures because of its essential goal “to discern conceptual similarities, to refine the discriminative power of categories, and to discover patterns” (Tesch, 1990, p. 96). Additionally, according to Strauss and Corbin (1998), the art of comparison is a creative process and involves inductive and holistic ways of thinking. These constant comparative method principles resonated with me as a creative professional.

Patton (2002) suggested, “Where there are several cases to be compared and contrasted, an inductive approach begins by constructing individual cases” (p. 57). He further suggested, “The first task is to do a careful job independently writing up the separate cases. . . once that is done, cross-case analysis can begin in the search of patterns and themes that cut across individual experiences” (p. 57). Therefore, I organized the data analysis into two phases based on Patton’s (2002) strategy for multiple-case analysis. I analyzed the data for each separate single-case during the first phase and then across all four cases during the second phase. Before I engaged in any data analysis phase, I read and re-read the interview transcripts, including the responses to the image-elicitation interviews and my reflection memos.

Furthermore, I organized and analyzed the data through a set of rigorous coding procedures (Merriam, 2009; Strauss & Corbin, 1998). Coding the data allowed me to describe and acquire new understandings of how the role of design educators’ personal-life, professional work, and educational experiences shaped their perceptions, meanings, and interpretations of global competence and the ways they teach and learn global competence attitudes and skills. For
example, I used three systematic coding processes (a) open coding, (b) axial coding, and (c) selective coding, to actively sort, organize, and order multiple ideas (Creswell, 2009; Ju-Yu Ho, 2012; Maxwell, 2013). Ultimately, I used this data analysis process to synthesize core findings grounded in the data (Strauss & Corbin, 1998).

**Separate Single-case Data Analysis Phase**

During the first data analysis phase, I analyzed the data collected separately for each design educator single case. More specifically with-in each case, I structured my analysis according to each of my four research questions. I also described and analyzed the design educators’ image artifact and subsequent dialogue separately for each case. I used three stages of coding procedures.

I began the first coding stage of the single case analyses by re-reading and analyzing the data to identify open codes, or similar elements (Ju-Yu Ho, 2012; Maxwell, 2013). I searched for similar words, phrases, and events to identify initial groups of concepts (Simon, 2011) and scribed remarks in the margins of hardcopy transcriptions and memos. I grouped open codes according to my research questions in a digital visual table format for each single-case. I illustrated an example of a single-case open code table in Table 4.

During the second coding stage, I reexamined the groups of open codes to determine how they were linked (Simon, 2011) to global competence principles informed by the literature. I compared, deconstructed, and rearranged similar open codes to build concept models, or axial codes to either support or create new groups (Ju-Yu Ho, 2012; Maxwell, 2013; Simon, 2011) again, according to each of my research questions. These conceptual models informed a continued analysis of existing and new, emergent data. I outlined the axial codes according to
my research questions in a digital visual table format. I illustrated an example of a single case axial code table in Table 5.

During the third coding stage, I further analyzed and connected relational qualities, between and among the axial codes, to create selective codes or underlying core themes (Ju-Yu Ho, 2012; Maxwell, 2013) according to my research questions. I listed core themes and re-read the data to evaluate meaning and context. Subsequently, I crafted core themes into story line statements as way to “report rich, tightly woven accounts” (Simon, 2011), that “closely approximates the reality [the research] represents” (Strauss & Corbin, 1990, p. 57). Furthermore, in some instances, relational qualities within core themes revealed subthemes. I created a visual table of the core themes for each single case to further utilize in the second cross-case analysis phase. I included a table of core theme statements for each single case in Appendix H.

**Cross-case Pattern Data Analysis Phase**

During the second data phase, I conducted a cross-case pattern analysis (Patton, 2002; Stake, 1978) to uncover thematic commonalities across all four single cases. Like the single-case first phase, I structured the cross-case analysis of the design educators’ core theme statements according to each of my four research questions and across design educators’ image artifact. However, for the cross-case phase, I expanded the analysis and investigated commonalities across all of the design educators’ core themes regardless of theme categorization to a specific research question.

Likewise I used a coding procedure similar to the way I used the procedures for the single-case data analyses. For example, I grouped all four design educator with-in case themes according to each of my research questions in a digital spreadsheet format. Then, I searched for similar words, phrases, and events of the core theme statements across all four single cases. I
then compared, deconstructed, and rearranged the groups to determine how they were linked.

This process revealed a new list of cross-case pattern axial codes or categories. I illustrated these categories in Table 6.

Creditability and Role of the Researcher

Creditability and Role of the Researcher

As the primary researcher of this qualitative inquiry, I served as the research instrument, or the “tool of discovery” (Rubin & Rubin, 2005, p. 37) throughout the data collection and analysis process. To serve as a tool means to aid, support, or contribute in an effective manner to achieve a goal. Tools work best in conjunction with one another and when they are reliable. Therefore, I discuss issues concerning the credibility and validity of my research inquiry including my role as the researcher.

Patton wrote “any research strategy ultimately needs credibility to be useful” (2002, p. 51). Credibility refers to the ways audiences believe in, or trust, the objective and subjective components of an inquiry. Patton (2002) named three distinct elements that influence the credibility of qualitative research. The first element refers to rigor. The second element refers to an affinity towards philosophical beliefs in the value of qualitative inquiry. The third element refers to the trustworthiness of the researcher and the essential role of the qualitative researcher. Researcher roles are situational and contextual, and determined by the identities of both the participants’ and researcher’s own personality and values (Glesene & Peshkin, 1992). In the following section, I describe each of the three influential elements of credibility and strategically describe my role as researcher in response to each element.

Rigor. Rigor refers to thoroughness and meticulous methods that reveal high-quality data (Merriam, 2009). Rigorous techniques in qualitative design enhance the quality of analysis. Rigorous methods depend on depth of description and are systematically analyzed, which are
inherent in the constant comparative data analysis method I specifically selected for my inquiry. For example, I grounded the core themes in the data, conducted authentic searches and made the most sense out of data as ways to confirm the credibility of my inquiry. Additionally, I anchored thematic categories in the words, experiences, descriptions, and meaning-making of the design educators.

**Philosophical beliefs in the value of qualitative inquiry.** Patton (2002) asserts how the philosophical beliefs of the researcher and the audience of an inquiry affects the credibility of this study, in other words, credibility for a qualitative inquiry might be further enhanced by the researcher and evaluators’ appreciation for values rooted in qualitative research modalities such as naturalistic inquiry, inductive analysis, and descriptive and interpretive approaches. Furthermore, a belief in self-discovery is essential to understanding the value of qualitative research (Brown, 1996; Merriam, 2009). Since self-discovery and critical self-reflection are core concepts of perspective transformation, a qualitative inquiry is a consistent approach for the research design of this study (Taylor & Cranton, 2012).

**Trustworthiness of the researcher.** Maxwell (2013) informed me about my role as a qualitative researcher, “you are the research instrument in a qualitative study, and your eyes and ears are tools you use to gather information and to make sense of what is going on” (p. 88). Furthermore, as the research instrument, my trustworthiness is critical. Therefore, I was keenly aware of my primary role to collect, describe, organize, and interpret the data (Wolff, 2002). I honestly described patterns and presented those patterns as my own based on systematic analysis and interpretation of the data. I allowed the four design educators to tell their individual stories. I actively listened to them and observed and noted their mannerisms and inflection. I practiced self-awareness and reflected on my personal values, beliefs, and bias (Maxwell, 2013) through
the reflective memo process as a way to identify and avoid negative consequences associated with these values, beliefs, and bias (Creswell, 2009; Maxwell, 2013).

Table 4

**Grace Single-Case Open Codes**

<table>
<thead>
<tr>
<th>RQ1 Open codes</th>
<th>CODE</th>
<th>RQ2 Open Codes</th>
<th>CODE</th>
<th>RQ3 Open Codes</th>
<th>CODE</th>
<th>RQ4 Open Codes</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>awareness - ideas</td>
<td>RQ1:G-1</td>
<td>abroad</td>
<td>RQ2:G-1</td>
<td>confidence to make difference</td>
<td>RQ3:G-1</td>
<td>bring real life experiences back</td>
<td>RQ4:G-1</td>
</tr>
<tr>
<td>beauty</td>
<td>RQ1:G-3</td>
<td>communication</td>
<td>RQ2:G-3</td>
<td>DIY culture</td>
<td>RQ3:G-3</td>
<td></td>
<td>RQ4:G-3</td>
</tr>
<tr>
<td>bring things visually together</td>
<td>RQ1:G-4</td>
<td>critique</td>
<td>RQ2:G-4</td>
<td>entrepreneurial</td>
<td>RQ3:G-4</td>
<td>growth</td>
<td>RQ4:G-4</td>
</tr>
<tr>
<td>communication - own ideas</td>
<td>RQ1:G-5</td>
<td>design influences</td>
<td>RQ2:G-5</td>
<td>generation X opportunities</td>
<td>RQ3:G-5</td>
<td>research</td>
<td>RQ4:G-5</td>
</tr>
<tr>
<td>express self - creative means</td>
<td>RQ1:G-6</td>
<td>get students involved</td>
<td>RQ2:G-6</td>
<td>Metro NYC/Queens</td>
<td>RQ3:G-6</td>
<td>teachable moments</td>
<td>RQ4:G-6</td>
</tr>
<tr>
<td>impact</td>
<td>RQ1:G-7</td>
<td>happens because of industry</td>
<td>RQ2:G-7</td>
<td>risk taking</td>
<td>RQ3:G-7</td>
<td>travel</td>
<td>RQ4:G-7</td>
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<td>make a difference</td>
<td>RQ1:G-8</td>
<td>history</td>
<td>RQ2:G-8</td>
<td>seek out for self</td>
<td>RQ3:G-8</td>
<td></td>
<td>RQ4:G-8</td>
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<td>RQ1:G-9</td>
<td>information finding</td>
<td>RQ2:G-9</td>
<td>self-awareness</td>
<td>RQ3:G-9</td>
<td></td>
<td>RQ4:G-9</td>
</tr>
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<td>observation</td>
<td>RQ1:G-10</td>
<td>manufacturing</td>
<td>RQ2:G-10</td>
<td></td>
<td>RQ3:G-10</td>
<td></td>
<td>RQ4:G-10</td>
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<tr>
<td>open minded</td>
<td>RQ1:G-11</td>
<td>marketability</td>
<td>RQ2:G-11</td>
<td></td>
<td>RQ3:G-11</td>
<td></td>
<td>RQ4:G-11</td>
</tr>
<tr>
<td>physical representation of thoughts</td>
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<td>mediate</td>
<td>RQ2:G-12</td>
<td></td>
<td>RQ3:G-12</td>
<td></td>
<td>RQ4:G-12</td>
</tr>
<tr>
<td>research</td>
<td>RQ1:G-13</td>
<td>other languages</td>
<td>RQ2:G-13</td>
<td></td>
<td>RQ3:G-13</td>
<td></td>
<td>RQ4:G-13</td>
</tr>
<tr>
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<td>RQ1:G-14</td>
<td>places</td>
<td>RQ2:G-14</td>
<td></td>
<td>RQ3:G-14</td>
<td></td>
<td>RQ4:G-14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>product development</td>
<td>RQ2:G-15</td>
<td></td>
<td>RQ3:G-15</td>
<td></td>
<td>RQ4:G-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ramifications</td>
<td>RQ2:G-16</td>
<td></td>
<td>RQ3:G-16</td>
<td></td>
<td>RQ4:G-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>raw materials</td>
<td>RQ2:G-17</td>
<td></td>
<td>RQ3:G-17</td>
<td></td>
<td>RQ4:G-17</td>
</tr>
<tr>
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<td></td>
<td>research</td>
<td>RQ2:G-18</td>
<td></td>
<td>RQ3:G-18</td>
<td></td>
<td>RQ4:G-18</td>
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<tr>
<td></td>
<td></td>
<td>see - virtual experiences</td>
<td>RQ2:G-19</td>
<td></td>
<td>RQ3:G-19</td>
<td></td>
<td>RQ4:G-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>see - visual people need to see</td>
<td>RQ2:G-20</td>
<td></td>
<td>RQ3:G-20</td>
<td></td>
<td>RQ4:G-20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>see - get out to see</td>
<td>RQ2:G-21</td>
<td></td>
<td>RQ3:G-21</td>
<td></td>
<td>RQ4:G-21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>start small</td>
<td>RQ2:G-22</td>
<td></td>
<td>RQ3:G-22</td>
<td></td>
<td>RQ4:G-22</td>
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<tr>
<td></td>
<td></td>
<td>struggle big</td>
<td>RQ2:G-23</td>
<td></td>
<td>RQ3:G-23</td>
<td></td>
<td>RQ4:G-23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>study abroad</td>
<td>RQ2:G-24</td>
<td></td>
<td>RQ3:G-24</td>
<td></td>
<td>RQ4:G-24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>visit other places</td>
<td>RQ2:G-25</td>
<td></td>
<td>RQ3:G-25</td>
<td></td>
<td>RQ4:G-25</td>
</tr>
</tbody>
</table>
### Table 5

**Grace Single-Case Axial Codes**

<table>
<thead>
<tr>
<th>RQ1 Open codes</th>
<th>GC Axial code</th>
<th>RQ2 Open Codes</th>
<th>GC Axial code</th>
<th>RQ3 Open Codes</th>
<th>GC Axial code</th>
<th>RQ4 Open Codes</th>
<th>GC Axial Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>awareness - ideas</td>
<td>action</td>
<td>action</td>
<td>confidence to make difference</td>
<td>comfort with unfamiliar</td>
<td>bring real life experiences back</td>
<td>comfort with unfamiliar</td>
<td></td>
</tr>
<tr>
<td>awareness - others</td>
<td>action</td>
<td>big picture</td>
<td>action</td>
<td>critique</td>
<td>comfort with unfamiliar</td>
<td>comfortable environment</td>
<td>critical self aware</td>
</tr>
<tr>
<td>beauty</td>
<td>communicati on</td>
<td>communicati on</td>
<td>awareness</td>
<td>DIY culture</td>
<td>comfort with unfamiliar</td>
<td>critique</td>
<td>empathy</td>
</tr>
<tr>
<td>bring things visually together</td>
<td>communicati on</td>
<td>critique</td>
<td>collaborate</td>
<td>entrepren urial</td>
<td>comunicate</td>
<td>growth</td>
<td>empathy</td>
</tr>
<tr>
<td>communicati on - own ideas</td>
<td>communicati on</td>
<td>design influences</td>
<td>comfort with unfamiliar</td>
<td>generation X opportunit ies</td>
<td>critical self aware</td>
<td>research</td>
<td>information gathering</td>
</tr>
<tr>
<td>impact</td>
<td>critical analysis</td>
<td>happens because of industry</td>
<td>communication</td>
<td>risk taking</td>
<td>risk taking</td>
<td>travel</td>
<td>make new connections</td>
</tr>
<tr>
<td>express self - creative means</td>
<td>critical self aware</td>
<td>get students involved</td>
<td>communication</td>
<td>Metro NYC/Que ens</td>
<td>risk taking</td>
<td>teachable moments</td>
<td>open minded</td>
</tr>
<tr>
<td>make a difference</td>
<td>gather information</td>
<td>history</td>
<td>communication</td>
<td>seek out for self</td>
<td>risk taking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>make something</td>
<td>make new connections</td>
<td>information finding</td>
<td>critical analysis</td>
<td>self- awareness</td>
<td>risk taking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>observation</td>
<td>make new connections</td>
<td>manufacturin g</td>
<td>critical analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>open minded</td>
<td>observation</td>
<td>marketability</td>
<td>critical analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>physical representatio n of thoughts</td>
<td>open minded</td>
<td>mediate</td>
<td>critical analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>research</td>
<td>open minded</td>
<td>other languages</td>
<td>critical self aware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>share a vision</td>
<td>open minded</td>
<td>places</td>
<td>critical self aware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Validity and Role of the Researcher

Issues of validity are concurrent with issues of credibility or believability. Validity refers to the ways the research may be correct or incorrect. Maxwell (2013) considered a key concept for validity as the “validity threat” (p. 123), or events or processes that might influence invalid conclusions. Unlike quantitative researchers who address validity through strategic comparisons
and statistical controls prior to beginning the research, qualitative researchers normally identify validity threats after the research has begun (Maxwell, 2013).

I identified the following validity threats to my inquiry: a threat of chance associations, threat of misinterpretation of interview data, threat of “reactivity” (Maxwell, 2013, p. 125), or the researcher’s influence on the study participant, and the threat of researcher bias (Table 7). In the next section I describe a response strategy for each identified validly threat and my role as the researcher.

Table 6

Cross-case Axial Codes

<table>
<thead>
<tr>
<th>Cross-case Axial Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>abroad</td>
</tr>
<tr>
<td>active learning</td>
</tr>
<tr>
<td>awareness</td>
</tr>
<tr>
<td>care</td>
</tr>
<tr>
<td>communication</td>
</tr>
<tr>
<td>critique</td>
</tr>
<tr>
<td>education</td>
</tr>
<tr>
<td>making/craft</td>
</tr>
<tr>
<td>open to connect/ openness</td>
</tr>
<tr>
<td>research/information gathering</td>
</tr>
<tr>
<td>seeing</td>
</tr>
<tr>
<td>values</td>
</tr>
</tbody>
</table>

Table 7

Response Strategy Identified By Validity Threat

<table>
<thead>
<tr>
<th>Response Strategy</th>
<th>Validity Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Triangulation</td>
<td>Chance associations</td>
</tr>
<tr>
<td>Member Checks</td>
<td>Misinterpretation of interviewee data</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Researcher’s influence on the participant</td>
</tr>
<tr>
<td>Peer validation</td>
<td>Selective attention to detail and data interpretation</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>Researcher bias</td>
</tr>
</tbody>
</table>
**Data triangulation.** Rigor is inherent in the grounded theory method. However, this method poses a threat of chance associations. I addressed the threat of chance associations of the data through data triangulation. Data triangulation is a method that uses a variety of data sources to produce more rich data than one method alone (Creswell, 2009). For example, I used three data sources, (a) in-depth interviews, (b) image artifacts, and (c) my reflective memos to gain deeper insights and strengthen my inquiry (Patton, 2002). Furthermore, I used data triangulation to illustrate the ways different data sources support grounded results rather than casual associations. I also used data triangulation to illuminate consistencies across the data and reveal sensitivity to different nuances (Maxwell, 2013). Overall, the use of data triangulation methods provided an additional layer of rigor to my inquiry.

**Member checks.** Since I was acquainted with my participants prior to the inquiry, I faced a variety of threats typically associated with the relationship between the researcher and participants. Therefore I addressed of meaning misinterpretation with the member check process. I shared interview transcripts and categorical analyses with the design educator participants for validation (see Appendix G). This process allowed me to check and portray the real meaning of the design educator’s experiences (Maxwell, 2013) and provided an additional layer of trustworthiness (Loh, 2013) to my inquiry.

**Reactivity.** Additionally, I avoided leading questions and practiced an elevated awareness of my actions towards the design educators as ways to address the threats of reactivity (Rubin & Rubin, 2005), or my influences on the design educators. For example, I systematically reflected on my interactions with the design educators during and after our interview meetings noting mutual reactive observations such as gestures, body languages, expressions, and feelings.
Insights gained from the review of these memos contributed to the interpretation of the interview data.

**Peer validation.** The process of retelling the story of the participants poses the threat of the possibility that the researcher will use selective attention to detail and data interpretation (Merriam, 2002). I addressed this threat by ongoing data analysis and dialogue with peers from the qualitative research and design education field for their validation, otherwise known as peer validation (Loh, 2013), and I adopted a “stance of neutrality with regard to the phenomenon under study” (Patton, 2002, p. 51).

**Reflexivity.** The concept of bias and researcher subjectivity pervades the socially-dependant and interpretive nature of qualitative research designs (Denzin, 1989; Maxwell, 2013; Patton, 2002). I addressed the threat of my position through reflexivity or critical self-reflection (Hammersley & Atkinson, 1995; Lincoln & Guba, 2000). I engaged in critical self-reflection at multiple points during my inquiry. For example, throughout the data collection and analysis process, I identified and inscribed personal bias, prejudices, viewpoints, or preconceptions through self-reflection memo writing practices (Janesick, 2011; Lincoln & Guba, 2000; Maxwell, 2013) and included the reflections in the written discussions of my inquiry. Additionally, I monitored subjectivity by viewing myself as a learner and regarded the design educator participants as knowledge contributors or co-researchers (Boylorn, 2008).

Furthermore, Patton (2002) acknowledged the credibility of qualitative methods, “hinges to a great extent on the skill, competence, and rigor of the person doing the fieldwork” (p. 14). Therefore, I present a reflective self-biography as a way to share my credible background, educational, and work experiences and illustrate the perceptual lens, or ways I view the world.
In addition, I relate relevant personal influences and skills to typical qualitative researcher characteristics and skills.

**Researcher’s reflective self-biography.** I earned a masters degree in interior design and a bachelor’s degree in psychology. My experience as a design student confirmed my value of aesthetics, artistically rooted intelligence, and inductive analysis. I developed sensitivity to the human condition and environmental and social psychology through academic experiences in both psychology and interior design coursework. I acquired observation skills, and learned how to listen to and record others during experimental and clinical psychology projects as well as client/user interview experiences in interior design projects. As a result of design practice, I learned about abstraction and whole-part relationships. Additionally, through the methodical steps of the design process, I learned how to categorize user needs, how to recognize form and system patterns, and conversely how patterns may not fit, which are all transferable skills to qualitative design analysis. Like qualitative design, my design experiences offered opportunities to practice analysis, synthesis, and evaluation skills. Through this professional preparation, I also learned how to accept critical responses to my designs and use criticism to strengthen future design, which echo the role of the researcher in qualitative research design.

I consider commercial interior design my first career, particularly hospitality design; restaurants and hotels. I am client-centered and interact with people from a range of backgrounds and cultures, including international clients and users. As a designer, I interview clients, gather relevant information, and formulate written programs based on descriptive client and user needs. In this role, I practice problem solving through problem seeking, communicate expressive design plans to discerning audiences with the goal to create memorable experiences and environments, and practice creative dimensions of fluency, flexibility, originality, and
elaboration or the layering of details. It is my belief that these experiences positively contribute to my role as a qualitative researcher.

Higher education is my second career. I have experience as an adjunct faculty member at both public and private non-profit, regionally accredited institutions. However, critical influences of my higher education career experience occurred at a proprietary, nationally accredited career college, where I served as a full-time faculty member and department chair for the interior design program. More recently I served as the campus director of education for the same institution, and oversaw a variety of applied design, technology, allied health, and business degree programs. Over the years as a campus director, I experienced an inexorable amount of organizational change management, which afforded me opportunities to practice tolerance of ambiguity and navigate transitional systems. As a result, I am keenly aware of personal and systems-based reinvention processes.

As an academic leader, I practice servant leadership, where I share power and put the needs of others first. Furthermore, I view my leadership role foremost as a learner, whether as a campus director or faculty member leader of the classroom. For purposes of this study, I believe these attributes beneficially influenced my ability to treat the design educator participants as co-researchers. My ability to identify my role as learner is an additional, valuable technique to monitor researcher subjectivity.

In addition to my academic administrator positions, I serve as an accreditation site evaluator for a national institutional accreditation agency and a programmatic design accreditation agency. I believe my experiences as an evaluator influence my ability to focus on the information presented, remain neutral, and make judgments based on collaboration with
peers guided by vetted evaluation standards, all of which are strategies to counter qualitative research design validity threats.

Woven through my personal-life, professional, and educational experiences is a curiosity for culture, whether my own or other’s. For example, I was raised in an ethnically homogenous family rooted in the culture, values, and traditional events associated with Italian American descent. I believe this experience contributed to an ardent sense of self-awareness. As a grandchild of immigrants, I appreciate American cultural assimilation and value patriotism, adaptability, work, and tolerance of others. For me, Italian or Italian American cultural influences are paradoxical and influenced a personal appreciation to question and approach perspectives from opposing viewpoints, which are prime traits of qualitative researchers. I am further influenced by the careers of family members. For example, conversations with my detective father and brother sharpen my ability to recognize and search for clues. Conversations with my social worker mother heighten my awareness of how others express social cues. Searching for clues and interpreting social cues are both essential skills for qualitative researchers.

Additionally, my childhood worldview was informed by the diverse urban culture of metropolitan New York City. I believe this experience contributed to a practical sense of observation, awareness, and tolerance. Ironically, years later, my presence in New York City on September 11, 2001 transformed my worldview as I witnessed the events that occurred that day from the office where I worked in midtown Manhattan. While I remain tolerant of others, I am aware of the realities related to extreme cultural ideologies and actively seek to understand cultural norms and expectations of others.
Furthermore, travel inspires me and I seek foreign adventurous experiences. For example, I participated in a semester studying abroad in Italy and an intensive study program in Sweden. As a faculty member, I led educational travel tours in Italy and France. Moreover, I worked with design educators and design students in Canada, Saudi Arabia, United Arab Emirates, and Turkey. In short, I am fascinated by people and places. My world view is enriched by travels to places far-off as Iceland to South Africa and points in between. Most of all, I believe in the transformative power of travel.

**Summary**

In this chapter, I described the research design and methods used in my qualitative inquiry. First, I outlined the research questions that guided my inquiry. Then, I asserted the rationale for qualitative research design and described the use of a constructivist epistemology and a phenomenological theoretical perspective to undergird my inquiry. As the chapter progressed I described how I selected the four design educator participants and described key points of communication with the participants during the inquiry process. I also described the three methods I used to collect the data: (a) interview questions, (b) image artifact, and (c) my reflection memos. Consequently, I described how I used a constant comparative analysis method to make sense of the data, including the procedures I used to code and organize the data. Furthermore, I included a discussion of credibility and validity threat considerations and described my role as researcher in these considerations. As the primary research instrument, I provided a self-reflection biography to reveal potential subjectivity, bias, and the ways in which the researcher views the world. In the next chapter, I make the data I collected visible.
Chapter Four: Discoveries

Design has the power to enrich our lives by engaging our emotions through image, form, texture, color, sound, and smell. The intrinsically human-centered nature of design thinking points to the next step: we can use our empathy and understanding of people to design experiences that create opportunities for active engagement and participation.
(Brown, 2009, p. 115)

In the previous chapter, I described the overall research design, case study approach, and the methods I used to collect and analyze the data. In this chapter, I make the data I collected visible. I present descriptions of how the role of design educators’ personal life, professional work, and educational experiences shaped their perceptions, meanings, and interpretations of global competence and the ways they teach and learn global competence attitudes and skills. I organized the chapter into two segments. In both segments, I include quotes from each designer educator, my interpretations, and excerpts from my reflective memos.

In the first segment, I present discoveries revealed through the single case analyses of the four design educators; separated by each design educator. For each design educator, I include their background information and a description of their selected image, including discoveries associated with how the meanings and interpretations associated with their selected image contributed to their global competence. I follow the image description section with an outline of the individual case discoveries in the form of themes. I grouped each section of themes according to each of my four research questions.

In the second segment of this chapter, I describe common themes that emerged through a cross-case analysis of all four cases. I describe the assembly of common themes according to
relevant categories and connect the descriptions to the literatures that informed my inquiry. Furthermore, I describe what my discoveries mean. I synthesize the cross-case common themes and express three overarching discoveries about the ways four design educators’ knew and believed about global competence teaching and learning. I conclude the chapter with a discussion of the overarching discoveries. The three overarching discoveries serve as theoretical constructs to inform research conclusions and recommendations for future inquiry, which are further explained in chapter five.

Throughout this chapter I used the data from my three data collection methods to describe my discoveries. For example, I used direct quotes, stories, and passages from the design educator initial and follow-up interview with image artifact activity. I also weaved additional insight and interpretation analyses from the observations, responses, and reactions I collected through my reflective memos.

Reflections on the Discovery Process

The interview process intrigued me. I found all four design educators engaged and serious in their responses. Furthermore, as I vetted through the transcriptions of the interview data, I noticed a similar dialogue response style among the four design educators. Their responses reminded me of playwright scripts. For example, they often described scenarios acting out dialogue between two persons, like a conversation between a teacher and student or designer and client. Lawson (2006) described these exchanges as a process of “how designers come to understand problems and get ideas about solutions through a process that is conversation-like” (p. 265). Similarly, Cross (2001) quotes designer Kenneth Grange about the processes of how designers think, “You do have to ferret around…..to find that which is then suddenly obvious to you” (Lawson, 2006, p. 277). Therefore, I often included the design educators’ “conversation-
like, ferreting around” passages and their illustrative stories to exhibit the ways designers think and process.

Equally, the rich dialogue elicited through the image artifact visual resource selection activity proved effective. The design educators used the image artifact activity to enhance their perspectives of their meanings and interpretations contributed to their global competence. They used the images as a way to see new phenomena and “grasp what cannot be revealed in text” (Eisner, 1991, p. 246).

Moreover, the design educators expressed a range of global issues through their dialogue. I present a list of global issues identified by the design educators in Table 8.

Table 8

*List of Global Issues Identified by the Design Educators*

<table>
<thead>
<tr>
<th>Global Issue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change</td>
<td></td>
</tr>
<tr>
<td>Destruction of historical communities</td>
<td></td>
</tr>
<tr>
<td>Energy issues</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Global economies (Greece)</td>
<td></td>
</tr>
<tr>
<td>Global warming</td>
<td></td>
</tr>
<tr>
<td>Human trafficking</td>
<td></td>
</tr>
<tr>
<td>Immigration and refugees</td>
<td></td>
</tr>
<tr>
<td>Internet/Technology/World smaller</td>
<td></td>
</tr>
<tr>
<td>ISIS</td>
<td></td>
</tr>
<tr>
<td>Lack of income/livelihood/farming</td>
<td></td>
</tr>
<tr>
<td>Life vs. Death cultures</td>
<td></td>
</tr>
<tr>
<td>Political unrest</td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
</tr>
<tr>
<td>Rape/Genocide</td>
<td></td>
</tr>
<tr>
<td>Raw materials</td>
<td></td>
</tr>
<tr>
<td>Sourcing/outsourcing</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td></td>
</tr>
<tr>
<td>Transgender acceptance</td>
<td></td>
</tr>
</tbody>
</table>
Single Case Analysis of the Four Design Educators

In the following segment, I presented discoveries revealed through the single case analyses of the four design educators. I separated the cases to provide clear descriptions of the meanings and interpretations and celebrate the unique qualities of each design educator. I began the single cases with a brief background description of each design educator. Then, I provided a description of the design educators’ image artifact(s), as a dynamic and vivid way to introduce the data. Following the image artifact description, I described the core theme statements discovered through a constant comparative analysis method using open, axial, and selective coding procedures. I grouped the single case core theme statements associated with each of my four research questions and identified the core theme statement with a research question designation code. I presented the list of single case core statement theme research question designation codes in Table 9.

Table 9

Table of Single Case Core Theme Group Designation Codes

<table>
<thead>
<tr>
<th>Single Case (SC) Designation Code</th>
<th>Description of Research Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-RQ1</td>
<td>Data analyzed according to research question 1 (RQ-1): In what ways do design educators describe themselves as globally competent?</td>
</tr>
<tr>
<td>SC-RQ2</td>
<td>Data analyzed according to research question 2 (RQ-2): How do design educators integrate global competence into their teaching practice?</td>
</tr>
<tr>
<td>SC-RQ3</td>
<td>Data analyzed according to research question 3 (RQ-3): What factors contribute to the development of global competence attitudes and skills among design educators?</td>
</tr>
<tr>
<td>SC-RQ4</td>
<td>Data analyzed according to research question 4 (RQ-4): What role does transformative learning have in the development of global competence among design educators?</td>
</tr>
</tbody>
</table>
Case One: Grace, Fashion Design Educator

**Background information on Grace.** Grace is 50 years old and identified as a Caucasian female. She did not identify with any specific ethnicity. Grace earned two higher education design degrees. After high school, she first earned a bachelor degree in architectural technology from a private institution of higher education. She worked as a draftsperson and furniture designer during her first years in design professional practice. In her thirties, she returned to college as a non-traditional adult student and earned a second bachelor degree in fashion design from a private career college. Today, Grace practices fashion design as a freelance apparel product developer. Recently, she earned a masters degree in career and technical education and works as a career advisor at a private university. Grace has over 12 years’ fashion design teaching experience at a private career college located in West Florida.

**Grace’s image artifact.** I present Grace’s image in Figure 2. Grace expressed the importance for her to select an image “that would portray [her] design specialty [fashion design].” Grace explained her image searching process via “Google” as a way to “figure out what my feeling was.” Her search naturally led to fashion “magazines”, a typical form of media in the fashion industry. Grace discovered, “across the board, the magazines all share the same message no matter where they’re from. So, my first idea was to gather magazine [images] from different countries.” Grace described her search further. A particular issue of Italian *Vogue* with a cover image of “an Asian model that was looking American” intrigued her. Grace described how the “styling of the [model’s] clothes” depicted an “iconic and familiar American [style]; like the Jackie Onassis look” as ways she thought the model looked American. Additionally, the bold “Global” magazine cover title intrigued Grace. She believed the combined qualities of the model image and the cover title “meshes all of fashion.” Even more so, a quote from the
magazine caught Grace’s attention and reflected personal values and beliefs; “beauty is king, and it’s something that brings people together …with no national or racial limits.” She thought the quote articulation “was just a cool way of portraying that melding of cultures” and “could be in any magazine in any language to portray the global capabilities [and global meanings] of the fashion industry.”

Furthermore, Grace felt the need to “make something, because [‘sharing our vision of things’] is just part of what we do” and “part of global competence.” She used a digital graphic program and combined elements to create a new image. She layered the image of the existing magazine cover over a new background pattern she made because “in terms of fashion presentations” she would use “patterns as found in textiles.” The pattern she created impressed me. She used a “repeat” of a small graphic representation of a “flat map of the world” to make a larger pattern. The pattern repetition resembled a piece of “checkered” or “herringbone” patterned fabric. Grace added words from the magazine cover article to her newly created image. She used a blue and green color palate to represent colors of water and earth typically used to depict the “globe.”

**Grace single case core themes.** In the next section, I describe the 19 core themes and 10 subthemes that emerged through my analysis of Grace’s interview data.

**(SC-RQ1) Theme one: Grace identified her critical awareness and open attitude toward other views as a way to describe her as globally competent.** Grace immediately described her experiences of conducting research as a way to become more aware,

Research is a big part of the fashion design program. Trend research, in particular. In some ways it did make me more aware that people out there are doing and learning and teaching about really anything that you can think of.

Grace further described research as a way to be open to other views and perspectives,
And knowing that you have that as a resource and you can look to other people, I mean, that really does incorporate the idea of being open to other views and perspectives. But unless you know how to find that information much of it may get lost.

Figure 2. Grace’s selected image artifact. For courtesy of Vogue Italia, Jan, 2013 issue - photo by Steven Meisel. Grace arranged an image of a Chinese model, dressed in a classic American Style, over a background pattern of smaller world continent images. She added words inspired by www.globalfusionproductions.com to illustrate her belief that beauty brings people together with no boundaries.

(SC-RQ1) Theme two: Grace identified her ability to share a vision as a way to describe her as globally competent. Grace originally connected the concept of sharing when she discussed her awareness of global competence from a design education perspective, “I feel that design programs, in general inherently include or develop some of the skills that are considered
important for global competence. And it’s an arena that I think is just conducive to sharing ideas”. Grace later emphasized the theme of sharing when she described her selected image,

Well, I really wanted to find an image that would portray my design specialty as part of this, too, and so I did want to make something because that’s just part of what we do. Sharing our vision of things, I think, is a part of global competence.

Subtheme: Beauty is a way to bring people together. Grace enthusiastically shared a quote that inspired her image choice when she described her image selection from an international Vogue magazine cover:

In the world of fashion, beauty is king, and it’s something that brings people together with no national or racial limits. And so I thought this was just a cool way of portraying that melding of cultures. And we all have a vision. I think that image could be in any magazine in different languages and to me it portrays the global capabilities of the fashion industry.

Furthermore, Grace described the limitless qualities of beauty: “the language of what’s beautiful in terms of models and fabrics and clothing and design really has no boundary.”

(SC-RQ2) Theme one: Grace utilized global ramification topics as a way to teach awareness of global issues related to the fashion industry. Grace described “global ramification” issues related to fashion design as sourcing and international manufacturing, which further, “gets into knowing labor laws, trade laws and agreements.” She elaborated on the Internet’s influence on marketing,

I mean, the world of merchandising now is global, with the Internet. And in terms of being aware that your customer is not just someone who’s local or in the United States. Your customer can be anybody in the world. Knowing who you’re selling to and how to reach out to those people and that tastes may be different. Something that you might not be able to market here might be something that really can sell somewhere else.

(SC-RQ2) Theme two: Grace utilized lessons in history as a way to connect global issues to culture, time, and place. Grace described awareness of fashion design from a historical standpoint,
There’s a lot of history and influence from other countries in fashion. And so, you know, we teach history of fashion and even going back in time to ancient Greece and some of the components of fashion that are still around today. Being aware of the history, being aware that styles you can imagine have already been done before, seen before in some other place.

Grace further described the importance of international fashion centers and relationships of historical influences,

The influence of the fashion capitals, which are Paris, Milan, London are places that we really emphasize. Knowing the history and the input as well as contemporary events that may influence what’s happening in terms of the fashion product or the fashion customer here.

\textit{(SC-RQ2) Theme three: Grace utilized active learning approaches to teach students effective information gathering skills.} Grace described the lecture classroom activity as ineffective for any design education, especially global topics. She described more participative teaching activities,

I think, for the most part lecture in a design classroom is really quite ineffective. I think you do have to get the students involved. I feel like even taking something that is lecture-based, but allowing the students to be involved. I mean, I always wanted to have computers in any classroom I was in so that if we got to some kind of a lecture topic I could say, okay, you know, here’s a breakdown of Fashion Weeks that occur in the different cities, look for the schedule of event. [For example], what was the name of the venue? Try to find some realistic information and some contemporary information as opposed to just having a list of notes on whatever it is that we’re talking about.

\textit{Subtheme: Research never stops.} Grace believed research was an effective global competence teaching and learning tool and emphasized “research is a big part of the fashion design program” and “needs to be incorporated into design programs.” Furthermore, Grace emphasized her conviction for research when asked about what she needed to become more globally competent, she responded: “I don’t think research ever stops. So more research.”

\textit{(SC-RQ2) Theme four: Grace believed education abroad activities were effective ways to teach students open-mindedness and comfort with unfamiliarity.} Throughout the interview,
Grace believed in the importance of education abroad opportunities. Grace described her impressions of one of her student’s openness to participate in an international internship experience,

I’ve helped some students who were just completely comfortable with the fact that they’re going to apply for an internship in Australia and then go [there] for three months and figure out how to make that work. I think that’s pretty interesting, too, on the part of I think what fashion students consider just a part of what they should do. It doesn’t necessarily mean they need to stay local. They need to go to other parts of the country, as well as international, to really, get a full picture of what’s involved in the fashion industry. I was quite pleased and perhaps impressed with how easily she made the whole transition. And so that set everything up and it was very easy for me, too, as well. We, at times communicated with the internship site to make sure they understood what was going on, that they had the paperwork, you know, with the time difference and everything like that. But she made it seem like she was going around the corner so I was really quite impressed. I’m not sure everybody’s like that. I think it’s a good thing. It’s really necessary in fashion to have an open mind like that.

Grace continued to describe the reciprocal open attitude of the international internship site despite logistical challenges, “It’s a nice thing that a company in another country would just be so welcoming to say yes, as long as we can just figure out the logistics of this. Of course, you know, a student from anywhere, we would love to have you.”

Later on in our interview, Grace expressed concern about the practicalities of education abroad experiences, especially cost factors,

I think part of what our limitations as visual people; we need to see things to really understand them, but it is a huge expense to study abroad or do different things. Not everybody has the opportunity to do that, but perhaps somehow our educational system could work on ways that could become easier for students of all ages, and not just Higher-Ed design students, but for all students.

Grace wondered about the effectiveness of virtual teaching and learning experiences as an alternative way to expose students to international exchanges.

Now that I’m in an online learning platform, I think about all the virtual things that I try to introduce to online students and I wonder would we have to start putting a camera in a factory or in some kind of boutique and do an interview with somebody? Will it be as effective? Do you really need to travel and experience the culture? I don’t know. I
mean, we attempt to bring presentations live through a screen …but I’m still not sure if that’s as great an experience as it could be. How can you exchange people at that rate, to go there and experience it more viscerally?

**Subtheme: Seeing is central to understanding.** Grace believed visual people need “to see things to really understand them” and described an ideal teaching scenario despite limitations,

I think because design students are so visual, it would really help them to actually see and feel something in a place like that and get a better understanding. Or to be able to take some samples or garments that we prepared and send them over to a boutique in another country and learn from the boutique owner the experience of what the customers were saying or discuss where they get their fabrics from; those kind of things. In a perfect world.

**(SC-RQ2) Theme five: Grace believed critique was an effective way to teach critical analysis skills.** Grace identified the constructive and evaluative nature of the critique teaching and learning tool particularly used in arts-based education as a way to teach global competence.

What stands out most would be critiques. I think developing [global competence] skills and attitudes is inherent in design because of critiques and the way we just look at things as designers. I find it is very important and something that I don’t think many other disciplines get to enjoy. I almost feel like I’m just oblivious to the fact that every discipline doesn’t have critiques and project-based types of experiences.

**Subtheme: Build self-awareness.** Grace described her learning outcome from a critique experience as a student.

There were panels of people who would be judging you; that was pretty intense. For students, that was something that built a level of self-awareness in terms of the skills. That particular forum develops the ability to critically analyze, whether someone is critiquing you or you are critiquing your own work, or [other] people’s work.

**Subtheme: Critiques cultivate communication and inspire innovation.** Grace expanded her beliefs of effective learning outcomes of the critique experience,

The format of critiques [teaches students] to communicate their ideas; to learn how to communicate what they’re thinking. I believe it is a very exciting, dynamic kind of a forum that people look forward to. You almost expect to be inspired and to find innovation in a critique setting.
(SC-RQ2) Theme six: Grace believed global competence issues are inherent in the fashion design education. Grace emphatically stated, “Fashion really is very international” and did not identify formal curriculum standards in the fashion design education community. She believed the nature of the fashion industry drives awareness of global issues in fashion design education.

When it comes to the fashion industry, I think there are a lot of global issues that end up in different classes because of the way it affects the industry. I don’t think we put these issues into the classroom because they’re expected as a standard. It’s the other way around. It’s just part of what’s involved in the industry.

Subtheme: Interdisciplinary industry connections. Grace expanded her view of inherent global dimension of fashion design education when she added,

And then the other thing that we get very involved in would be interdisciplinary projects, and so you start to understand the way people and projects and industries [connect] on a bigger scale. Countries can be connected and have roles and things that go on.

(SC-RQ2) Theme seven: Grace utilized communication tools to teach students effective ways to globally share ideas. Grace identified the critical need to teach overarching communication skills, including communication technology literacy to fashion design students,

I think we teach the [communication] skills. Whether or not people have an understanding of the complexity of global communication with tangible products is another story. Being social media literate and aware of all the technology that is available to communicate ideas in any form to any place.

Subtheme: Need to learn other languages. Grace further reflected on the need for students to learn communication in languages other than English,

There are many jobs that I see that do require somebody to be fluent in English and Chinese, so that could be something more and more that is desired. Communication in other languages is a tool that students should gain to be globally competent.
(SC-RQ2) Theme eight: Grace believed students should first approach global issues at a small scale as a way to make any impact. Grace elaborated on the overwhelming vastness of global issues and the challenge to make an impact, especially for students,

You know I struggle sometimes to go actually right to the bigger global issues with [global competence] because how much are you able to be at that level? You know, in a setting where you’re actually not an industry player with the money to be reaching out and making a difference. I think part of global competence is to be training students on a smaller scale to have those skills and abilities to be able to do that, eventually, at the bigger level.

(SC-RQ2) Theme nine: Grace believed global teaching resource partnerships could offer more effective ways to teach global competence attitudes and skills. Grace believed partnerships with global organizations could expose students to more direct learning experiences, especially since she believed design students understand better when they are active participants and see things,

We can teach about global sourcing but we don’t have the resources to actually have a business to be working with an overseas factory, to be dealing directly with some of these issues. Perhaps you need to be able to experience things, perhaps work with companies. [Partnerships] would be the most amazing way to be able to do that. That would be the ultimate.

Subtheme: Face-to-face vs. virtual experiences. Grace continued to describe a picture of a partnership scenario,

If we were then able to fly somebody there, or fly the whole class there, [or] just to have a relationship where we could get a virtual tour of a factory in China and get to meet some of the people that are working there and see the life that they live. I know when it comes to Walmart factories, they are required to actually house the people that are working there, and that housing should look a certain way. And they should be working a certain amount of hours. It’s hard to always just talk about that kind of thing. It would be so neat to actually be able to be connected and see that type of a situation in the most economical way you could do it.

Subtheme: Faculty work abroad. Grace described practical work-related faculty sabbatical opportunities as a way to enrich and share the global dimensions of design education,
Back in the days of old-fashioned education you would send your professors off for a three-month sabbatical to experience life or whatever. That would be the time for design educators to go off and observe a factory or work in one of the other fashion capitals somewhere. To be able to bring real life experiences back to the classroom.

(SC-RQ3) Theme one: Grace believed living in metropolitan New York City strengthened her multicultural awareness. Grace believed the multicultural setting of the location where she grew up contributed to her awareness of others,

The location that I grew up in, which was Queens, New York a metropolitan city is full of pockets of different neighborhoods that are very influenced by whatever culture has migrated to that particular area. Whether it was the people, the food, there was a lot of awareness about different people and their culture.

(SC-RQ3) Theme two: Grace believed the encouragement of individual effort afforded to the Gen X generation added to the confidence in her ability to make a difference in the world. Grace believed the encouragement of individual efforts afforded to the Gen X generation contributed to her action-driven attitude to make positive change in the world,

I feel the generation I am in, Gen X (I’m kind of on the edge of being a baby boomer), but I think [Generation Xers] had a lot of opportunities available to them, although we had to seek those out ourselves. For example my parents just didn’t assume they would go to college and move wherever and do those kinds of things. But they were the parents who encouraged [their children] to do those things and realized it was part of what we could do. Although, they never really were involved to where they would say, okay, well let me sit down with you and help you research. They just kind of said, well, what’s your plan? Okay, well, sure. I’ll cosign a loan and we’ll get you a ticket and send you off to wherever you want go to school and everything. So I think part of that allowed us to feel like we could do and achieve whatever it is that we set our minds out to do. Whatever perspective we had, it was something that we could accomplish. And I think that’s part of global competency is to have the confidence to say if I get involved in, or initiate that project, maybe I can make a difference.

Subtheme: Entrepreneurial Spirit. In addition to attitudes of individual efforts, Grace described her generation’s disposition as business risk-takers,

We are a generation of entrepreneurs, too. We’re not scared to say, okay, here’s this grand idea; I’m going to quit my job and I’m going to start my own business and do it. So I think you have to have that kind of an attitude, too.
(SC-RQ3) Theme three: Grace believed her urge to make things added to her ability to make new connections. During our second interview, Grace demonstrated great enthusiasm toward creation or making things. For example, she manipulated multiple images to make a new unique representation to express views. Additionally, Grace described a distinctive approach to her Master of Arts in Career and Technical Education thesis presentation and her urge to incorporate a visual component,

Because I feel like being trained as a designer, I grew up making things and everything had color and texture and it was always a presentation format (as opposed to research directed activities such as reading or writing). So, for me as a designer, presenting a portfolio of information [for her Master’s thesis] was uncomfortable to me. I felt as if something had to come to life, even through text pages, that expressed the visual part of me. I was able to do that with a bit of graphics, backgrounds, and the borders. You know, everything had to have colors that matched and different fonts. And then we got to one portion of the portfolio where you had to describe your overall vision for career and technical education, and I came up with a croquis, which is a fashion drawing, a fashion illustration (quick sketch of a human figure illustrated with a fashion design garment). And it was of me. I had rendered some clothing that I actually made, and so I took the croquis, and I took parts of the project [to represent parts of career and technical education]. I [related] the jacket as the foundation of career education, [other parts to relate to] the internal team or the support system, and then the pants were this; the accessories were that; the blouse was this. And that was what my image was for whatever they were asking me. So it became an actual drawing then in the portfolio, and I actually went [to the presentation] dressed, in the clothing, which I think [the professor] had not experienced before. I was unable to just write a bunch of things. That’s not good enough for me. It’s almost like I had to express this huge component. To finish a program like that, I had to express it through my creative abilities.

(SC-RQ3) Theme four: Grace believed interaction with overseas fashion manufacturers created her need for flexible and clear intercultural communication styles.

Grace believed her interactions with overseas fashion manufacturers contributed to her awareness of communication barriers and need to communicate in clear and flexible ways. Grace described how the fashion apparel manufacturing industry in the United States quickly shifted to overseas manufacturing in the early 1990s for cost benefit purposes. She immediately observed a decline in quality control, which resulted in multiple manufacturer errors and
disruption between the design intent originated in the U.S. and finish product produced overseas, “The products start coming back to the United States and they’re not exactly what they [the designers] had hoped they would be or they wanted to make adjustments; there’s no control of it here [in the U.S.]”. Grace told stories of how she engaged in multiple revision exchanges, often sending parts of garments and patterns back and forth overseas, piecing them together with pins, using photographs and speaking over the phone until the manufacturers produced the product correctly.

(SC-RQ3) Theme five: Grace believed her experiences as a graduate student strengthened her information gathering and research skills. Grace believed her experiences in the Masters of Education program contributed to her information literacy skills. Grace appeared amused when she recounted her first assignment experience as a graduate student, “I always liked to write but when I was posed with whatever the first project was in the master’s program, I felt like, wow! This is the type of education [laughter] that I haven’t done a heck of a lot of, but I really enjoyed it and I find it so valuable in really every aspect of my life; related to design projects and everything else. I feel there is nothing you can’t answer if you have learned the skill of research.

(SC-RQ4) Theme one: Grace believed her international travel experience as a young adult altered her appreciation for other places and cultures. Grace traveled to Brazil when she was 21 years old with a college classmate and believed this experience facilitated a change in the way she viewed other places and cultures. Grace described her cautious approach to the experience of her observations of similar behavior between Brazilians and Americans, which made her more comfortable in a foreign environment,

You make it work because I felt like these are people in this country and they have homes and families and they dance and I can remember being in one of the clubs and they
played American music. And so there would be a bunch of people there singing and
dancing, and you thought, wow! Everybody speaks English and they know this song, but
they had no idea what they were saying. [Laughter] And it was something that we
thought was fun and we felt comfortable being in that situation. We thought, “Yeah we
can do this. It’s fun.”

Grace contemplated whether the experience would be the same or different if it were in a place
closer to home, “I don’t know if that just shows an openness perhaps to considering a place like
that, just like it would a trip to Miami or someplace local, but it allows you to appreciate and
learn about another culture.

(SC-RQ4) Theme two: Grace believed her experiences moving away from New York
City converted her world view in broader ways. During our second interview, Grace offered a
deeper reflection of her experiences growing up in a metropolitan city. She described how
moving away from New York City altered her world view in broader ways,

We had talked about having access to a lot of different cultures, and being open to
different ways of life. But in some way, New York can give you the sense that there’s
nothing greater outside of your perimeter, which is not always a good thing. Even now,
you talk to some people in New York, and they’ll be like, “Well, why? Why would you
go anywhere else?” So I don’t know if that’s part of the mentality that you have so much
access, then you might be kind of missing something that you don’t even know is there.

(SC-RQ4) Theme three: Grace believed unconstructive experiences associated with
critiques changed the ways she views open and empathetic learning environments. Grace
believed her experiences as a teacher changed the way she views and acts in learning
environments. For example, she approached teaching and learning from an open and growth-
oriented perspective,

This is a global issue. I feel like [professors] can be condescending and discouraging, in
architecture as well as in fashion. And I’ve really made it a point to remember that
[critiques] are not about being condescending; it’s about being open and taking moments
to teach and share and that kind of thing. And I think it’s a really unhealthy situation and
not a very good teaching strategy to put people in that kind of an environment
(condescending and discouraging). And I think more designers need to be aware of
whether they have the tendency to do that or not. Because people need to evolve at
different levels and you need to allow people to feel comfortable in those situations to grow and to talk about more and more things and to feel creative and to allow their creative energy to develop. And so the minute that situation, that scenario, is not a friendly one or a healthy one, I think that’s the most terrible thing that you can do in a design education environment. As a student and as an educator and I feel like that is something I am aware of. As an educator I want to be sure that that is not the environment I’m leading.

Grace clearly demonstrated her perspective transformation through the process of our interview when she stated, “Well, I just realized how impactful that can be in a negative way.”

**Case Two: Dolce, Graphic Design Educator**

**Background information on Dolce.** Dolce is 41 years old and identified as a White male. He identified with a Caucasian ethnicity. Dolce did attend an institution of higher education immediately after high school; rather he pursued a career in musical theater. His musical career abruptly ended after he was diagnosed with major health issues and survived three brain surgeries. Dolce decided to redirect his career and remain connected to a creative field, which lead to a bachelor degree in graphic design from a private career college. He practiced graphic design as the editor and chief for a design magazine, in both print and digital publication formats. He returned to college to advance his career and earned a MBA in marketing from a private online university. Dolce is currently the graphic design department chairperson for an online career college, headquartered in West Florida. He has over five years’ experience teaching graphic design courses on campus and through online learning environments.

**Dolce’s image artifact(s).** Dolce selected two images. I present his first image in Figure 3A and his second image in Figure 3B. Figure 3A depicted hands holding a globe of the earth. Figure 3B depicted multiple puzzle pieces and words arranged in a circle shape. Dolce felt his images “[aren’t] super creative but they have meaning.” I assured him of my appreciation for his focus on meaning expression.
Dolce identified his preference for his first image or Figure 3A, the image “with the globe in the hands”. This image resonated in him “an understanding for all different cultures, all different races, and how they all connect to one another” especially in the way he perceived “the hands connecting to the world and [connecting] their different beliefs”. He added “different ways of communication” to his list of reasons for choosing this image. Dolce further contemplated the meaning of the depiction of what appeared as “young children’s hands” when he stated,

I don’t necessarily teach young children but from an educational perspective, maybe that means they’re learning from social and economic things going on right now. To be educated as young professionals in different industries and they’re being inspired by different things.

During our conversation, Dolce further reflected on the meanings associated with his selected image and described an interpretation of shared, reciprocal action, “the more they take things from the world [it appears] like they’re holding onto it.”

Dolce described his second image or Figure 3B as “less of an image, more of like a visual, like a typographical” because “I love typography”. Dolce believed the puzzle pieces reflected,

The connection for me to know all the different attributes that as an educator, you should be and you should expect from the end result, when you’re teaching somebody. [For example], you want somebody to be knowledgeable, caring, open-minded… so these are all words that build the puzzle of the world and how we want people to be.

**Dolce single case core themes.** In the next section, I present the 13 core themes and eight subthemes that emerged through my analysis of Dolce’s interview data.
Figure 3A. Dolce’s first image artifact. Reprinted from “Blossoming Demand of International Schools in Hong Kong” by Angel Oi Yee Cheng, April 2014, Retrieved from: http://educationpolicytalk.com/category/education-market/. Dolce selected an image of multi-racial children’s arms and hands reaching out and holding onto a globe of the Earth.

Figure 3B. Dolce’s second image artifact. Reprinted from “Blossoming Demand of International Schools in Hong Kong” by Angel Oi Yee Cheng, April 2014, Retrieved from: http://educationpolicytalk.com/category/education-market/. Dolce selected an image of puzzle pieces arranged in the shape of a circle. Each puzzle piece includes a word that describes a global competence characteristic.

(5C-RQ1) Theme one: Dolce described his self-awareness to connect with the outside world as a way to describe him as globally competent. Dolce reiterated his belief to “be completely connected with the outside world at all times” as a way to describe his global
competence. He believed his interest in global issues influenced him personally and professionally and made him a richer person.

I find that global issues influence a lot of who you are. By understanding what's going on in the environment, what's going on in the world and then how that relates to you personally and professionally, how you can take what's going on in the world and the things that are happening and make yourself a richer person by the way you talk and interact with people; looking and seeing what's going on in the world, watching the news. Actually, I found that now that my mom's living here, I watch the news more and watching the news has made me a richer person as far as engaging in conversations with people and relating certain topics at work to things that are going on in the world.

*Subtheme: Connection to personal values.* Dolce believed in a need to connect with personal values as an effective way to interact with others,

Learning how to interact with people of all different races, sexualities, whatever it might be, is super important, and being able to listen and observe what they're doing and be able to come up with solutions. That all comes back from being very connected with your social, economical, and political values and you can't really do that unless you're connected to the outside world.

Dolce described a common scenario, based on a personal value for privacy, to teach decorum when interacting with others,

I've had many, many cases, both on the ground and online, where people will either think I'm super straight [chuckles] or super gay, or they don't know, or whatever. And sometimes they'll just come out and ask. And that's when you let them know, okay, that's not something you really ask. Here's the answer to your question if it really means that much to you, but in the future it's probably not a good idea. So you bring that idea of your own values of how you would treat a student to them so that they understand, social etiquette, I guess you would call it.

*Subtheme: Treat people as I like to be treated.* Furthermore, Dolce definitely declared his empathetic nature as a way to describe his global competence, “I'm a really, really big fan of treating people as I like to be treated.”

**(SC-RQ1) Theme two: Dolce identified his interest in communication as a way to describe him as globally competent.** Dolce expressed strong beliefs about the role of different communication techniques including body language. For example, he stated, “You can't be too
knowledgeable of both subject matter and how people just communicate, different techniques in communication."

Subtheme: Listening. Dolce considered his ability to listen as a way to describe his global competence, “It also has to do with your interactions and your abilities to listen and understand. It's about listening and not cutting people off and also being a problem solver.”

(SC-RQ2) Theme one: Dolce utilized discussions about acceptance and understanding to teach open-mindedness and inclusiveness. Dolce described his willingness to discuss global issues, especially as a way to expose issues to gain acceptance and understanding. He referred to discussion topics, “whether they're completely different than who you are in terms of their sexuality or just their skin color”, and used the example of how the televised Diane Sawyer interview of Caitlyn Jenner was as an opportunity to “see all of what happened in [Caitlyn Jenner’s] life, and there's a lot of things that are going on in people's lives underneath what you see on the outside, and so you can't be as judgmental.” Dolce related the example of sharing information to gain acceptance and understanding to the act of teaching, when he said, “It's exactly what we're doing in the classroom.”

(SC-RQ2) Theme two: Dolce expressed a careful approach to the instruction of sensitive global issues. Dolce clearly expressed a careful approach to teaching global competence and through our conversation, especially toward issues of politics and race. Early in our discussion he made statements such as, “I'm not really a political-type person” and “I tried to stay away from a lot of political stuff because it wasn't really tied to the subject matter of design.” Later on, Dolce described cases where he carefully guided students on graphic design projects,

Let's say a student's struggling on coming up with a topic for a project. Maybe reach out into what's going on in the world and offer suggestions. So having a global competence
would, of course help to do that but also being a little careful about not going too political or too racial or whatever it might be. . . having the knowledge of being able to offer a suggestion and not cross the line.

Dolce further described cases when students included political or racial subject matter to their graphic design projects, “Sometimes they won't tell you anything, and you just wonder, but you never really ask. In that case, you don't be so explicit with, certain subject matter because it may offend certain students, and you don't want to, obviously, offend.” Dolce then expressed how he would “put it in the instructor’s hands” as a way to address sensitive classroom material.

Subtheme: Boundary-free project assignments. Dolce coached instructors to “deliver the message to the students that they can do whatever they feel is right for [their project] in terms of how they want to express their creativity.” Dolce also coached faculty in the graphic design program to “try to keep [projects] very boundary-free” and to guide students to “open their mind to what they feel they'd like to do for the project.” He believed students should explore project topics to “see what one interests [the student]”, to avoid any bias from an instructor choosing a project topic for them.

Subtheme: Self-awareness. Dolce considered self-awareness a way to gauge appropriate interaction with students, especially when he described interaction with others from different races or sexual orientations, “I mean you never bring it [topics of race or sexual orientation] up directly. Right? [Only] if certain students offer that information, like I today told you about my partner.” Dolce also described “tiptoeing around those questions and not trying to be probing about specific things” but rather, to just “be aware. . . Being aware of what's going on. . . Being aware of yourself.” Dolce further reflected on self-awareness, “I also think that it [global competence] has a large influence on yourself. Trying to bring your interpretation based on your own self being. Like we talked about earlier, that's a really big part about this.”
(SC-RQ2) Theme three: Dolce believed information gathering or research was effective ways to teach students attitudes of open-mindedness and risk-taking. Early in the interview Dolce expressed his belief in the influence of information, “Teachers, whether design or otherwise, cannot have too much information.” Later in our discussions, Dolce related the term “design thinking” with “research”. Dolce believed research leads to open-mindedness and risk-taking attitudes, “Before somebody jumps in to doing a design project, they need to do their research, and so in doing that, you have to be open-minded. You have to be able to think about how what you do may or may not take a risk.” Additionally, Dolce encouraged his students to stretch their comfort level while in college as a way to practice taking risks,

Like, if you go back to research and then thinking, I always like to tell me students to get into something they're not really super familiar with and to incorporate the idea of unfamiliarity and bring that to the table and to design projects. I think that's super important for a design thinker because when you go out to work for somebody in the industry, you're not going to only be doing the things that you're comfortable with. You're going have to do things that are outside of the box. Pushing yourself to be unfamiliar and getting into the unfamiliar territory in school is always a great practice.

Dolce reiterated consistent views about the role of research developing an open mind,

Before somebody jumps in to doing a design project, they need to do their research. Go back and see what was done before, how was it done before, how can you make it different and in doing that you have to be open-minded.

Subtheme: Historical and social representation. Dolce elaborated on his belief of research as a way to incorporate global competence in teaching when he described more specific learning activities he incorporated in his graphic design history courses,

Graphic design is delivering messages, whether they're visual or typographical and they reach into social issues. In the [typography] class they have to find a quote that has social value to it, and then they have to represent that in [the style of] typography. They also have another project where they have to do a representation of a type of an era, and so that would go back to the history of design, looking at type in a different way.
Dolce ultimately described graphic design education as, “Research and looking into the trends of today, the trends of before, and how they have changed.”

*SC-RQ2* Theme four: Dolce believed collaborative learning activities were effective ways to teach students interpersonal communication. Dolce believed in the importance of communication, as ways for people “to understand other’s ways of doing things” and “just learning from one another by asking questions.” He described the need for graphic design student project assignments to have “a definite people component or collaborative component” as a way to “learn from others” including communication projects involving “research and presentation.”

**Subtheme: Public service communication project.** Dolce described the qualities of a public service announcement learning activity as an ideal collaborative graphic design communication project. For example, a service announcement normally would address an issue of global significance. The project would involve “lots of presentation” and offer students the opportunity to “talk about what [the issues] means from a global competency perspective” and “get feedback.”

*SC-RQ3* Theme one: Dolce believed his resourceful ways contributed to his ability to gather information. Dolce reflected on his ability to identify and use resources as a contributing factor toward his ability to act as a problem solver,

I learned how to be very resourceful, in understanding things without having to ask a ton of questions. So by interacting with others and doing a lot of research, I felt like that contributed to my ability to analyze what they [clients and employers] wanted and come up with solutions.

*SC-RQ3* Theme two: Dolce believed his role as an educator pushed him to have a greater spirit of inquiry and challenged him to take risks. Dolce believed his role as an
educator inspired a greater spirit of inquiry and challenged him to take risks. He described how
the role of his students challenged him to be open to learning and risk-taking,

Some of the [qualities] I really love to have in a student are things like inquiry. It is always good to have a student that wants to know more and more and inquires about everything you say. It pushes you, as the educator to really be knowledgeable to answer those questions. Or, so if you don’t know the answer to it, learn. My belief was, “If I don’t know the answer, I’m not just going to give you some random answer to your question. If I don’t know it, we’ll look it up and learn ourselves, together.

Dolce related another contribution of his role as an educator to the development of his global competence attitudes, “as an educator, you take a risk with something or try something different.”

(SCRQ3) Theme three: Dolce believed his interactions with colleagues from other countries added to his self-awareness and interpersonal communication skills. Dolce described examples of his experiences with colleagues during his tenure as a magazine editor. He interacted with colleagues from international backgrounds, which he believed contributed to his intercultural communication skill development. For example, he became more aware of the potential for misunderstandings and was sensitive to the perception of his tone when he engaged with a female colleague from Eastern Europe, “I would explain something to her, and she wouldn’t either understand the word or understand what the phrase meant, and so I would have to break it down and let explain it to her, what a specific thing means or also because she understood things differently, even like when you’d speak to her, you had to be careful about the way you said things, the tone you said things.” Dolce further explained the explorative nature of intercultural communication and the rich, reciprocal learning all parties gain in the communication process, “It's really an exploration thing. You have to make some mistakes, unfortunately. It’s having this self-awareness and understanding when somebody tells you how to turn it around to a positive thing. [Say] I'm really sorry; I understand. This is a learning
experience for all of us (without taking it personally). If you take it personally, then you're not learning anything from it.”

Dolce described other situations (with colleagues and students) where he confronted behaviors he considered inappropriate based on cultural misunderstanding. Dolce used these misunderstandings as opportunities to communicate culturally appropriate expectations. For example, he explained how he would “nip [uncomfortable situations] in the bud” and facilitate “heart-to-heart conversations.”

(SC-RQ3) **Theme four: Dolce believed his experiences in musical theater contributed to his outgoing personality and ability to influence others.** Dolce reflected on how his experiences in musical theater contributed to his outgoing personally and dynamic teaching style and further related these attributes as a way to influence openness in others,

Now that I look back on it, I think about how me being in musical theater and having a background in music helped to be a better teacher [because] I was never shy about being in front of people. I probably would've not been as dynamic as a teacher and probably shut down not only myself but others because [I] wasn't worth listening to.

**Subtheme: Criticism.** Dolce reflected on his experiences with criticism as a design educator, a musical theater performer, and as an employee,

You'd give a critique to somebody and it would be a difficult to say and both difficult to watch somebody get a critique like that but it takes a couple of times for them [students] to understand that your intent is only for the good. I took certain critique from folks that were not around me, difficult because I didn't know them, and so that was something that I had to work through because I don't know their personality. I think because I had that outgoing background and the experience of working with directors who were very, very critical, and you'd have to do run-throughs and pre-shows, and if you were doing something wrong, you'd get yelled at and have to do it over and over and over again. I think that made me a stronger person receiving critique, for sure.

(SC-RQ4) **Theme one: Dolce believed his experiences with students and education colleagues altered a change in his views of empathy.** Dolce believed his experiences with students and fellow educators facilitated a change in the way he empathized with others,
I've learned from working with certain people in different situations that empathy is a really big thing. It was actually a very difficult thing for me to learn in this position because you have to be really, really empathetic with students. Coming from the magazine, where I didn't have to deal with that, I could just say, "Look, it's a deadline. Meet it or you're out." It's a little different in the educational world. So I've had it from both sides where, you know, you've got to be a tough person in the magazine editor position, but then in the department chair position, you have to be a little bit more empathetic. I think that's been a transition for me. Working with people that are empathetic and learning their techniques, their styles, have been super helpful for me.

(SC-RQ4) Theme two: Dolce believed his experiences as a multiple brain surgery survivor transformed a new appreciation for life and his ability to be more aware of the outside world. Dolce described his survival of multiple brain surgeries as a facilitator of a transformed outlook on life, which also facilitated a change in his career path from musical theater to graphic design,

I'd say that [I was] just being grateful to be alive after what I went through with that surgery. Three brain surgeries isn't something that your typical, average person has in their lifetime, so you know, coming through something like that and realizing that this is a gift, to be alive, to move forward, made me want to do something really meaningful with my life that I could express my sense of creativity in a different direction. Losing all of your motor functions and not being able to do what you used to love to do drives you forward to want to find something else. That's a major, significant life event and combined with my mom now living here, and then changing my life so that it suits not just me but both of us and keeping her abreast of things that are going in life so that she doesn't live in [a] bubble of being alone. She's alone quite a bit during the day. Dolce believed in the adaptation to technology as a way for him and his mother to “reach the outside world” and stay connected.

(SC-RQ4) Theme three: Dolce believed his experiences with both face-to-face and distance interaction platforms altered his views of effective communication techniques. Dolce identified communication as a critical component of global competence. Dolce further described his experiences with both distance and face-to-face interaction as facilitators of the ways he views communication with others. For example he described his preference for face-to-face communication because of the added ability to recognize body language, “While you can ask
questions back and forth through a distant situation, it's a little more difficult because you don't
know their state of mind. You can't see their face. Facial expression is everything. Body
language is everything.” Dolce further described his interactions with student presentations and
believed body language is an additional way to assess and establish trust,

It also plays into the body language, too because you also can see when they're presenting
if it's believable, if they passion for what they're talking about or if it's just a scripted
thing. The disruption [of my views] came when I didn't teach for ground anymore and I
didn't have that face-to-face interaction.

Case Three: Maria, Interior Design Educator

Background information on Maria. Maria is 54 years old and identified as a White
female. She also identified with a Hispanic ethnicity. Maria earned a bachelor degree in interior
design from a public university immediately after high school. She also passed the national
examination for interior design qualification and is a Florida Licensed Interior Designer. She
practiced both residential and commercial interior design for various firms in West Florida for
over 25 years. In her forties, she earned a masters degree in theology from a private university.
She currently works full time as a director of programs for a religious institution and teaches
design courses part time. Maria has over 20 years’ experience teaching interior design and
general education courses for multiple career colleges in West Florida.

Maria’s image artifact. I present Maria’s image in Figure 4. Maria began her image
search with a brainstorm activity to empower her thinking of the meaning of global competence,

I kept thinking of the idea of relationship and this is a process of evolution, of growth.
We're coming together as the world sort of gets smaller, we are interacting more with one
other. Obviously, technology makes communities more accessible to one another. And
with that comes a lot of good and a lot of bad, but somehow, we have to coexist.
Maria’s image artifact. Photography by David Alan Harvey reprinted from “The Mysterious Maya” by Stuart & Stuart, 1977, pp. 135-136 Copyright National Geographic Society. Maria selected an image of a group of people, in ethnic cultural dress, climbing up the side of a rugged mountain. The people are helping each other on their journey to the top where a cross stands.

Maria explained how this image immediately “leapt out” to her. She described her interpretation of people’s journey depicted through movement, time, and collectivity when she stated,

I see in this image a group of people, and it seems to me that they are trying to get to the top of something. It seems like they're climbing. And there's diversity in this image, and people are going about it differently. There’s a main path, and then there's other people trying other ways to get up there. And I see people stopping to help one another. There seems to be this sense that we're all on this journey together, and we're helping ourselves get there. And some of us are already there. Some of us are not. Meaning that we are able to interact, we're able to have relationships, and we're able to accept. And it's not static, we're going somewhere with all of this.

Maria used the image to connect her beliefs of design ideals “unity and harmony and wholeness” to her interpretation of global competence ideals “of living together and being one in harmony.”

Furthermore, Maria alluded to the chaotic scene and rocky landscape depicted in the image as her interpretation of the realities associated with global competence challenges, “and it's not pretty in a way because it's kind of rugged and messy.”
Maria single case core themes. In the next section, I present the 14 core themes and 14 subthemes that emerged through my analysis of Maria’s interview data.

(SC-RQ1) Theme one: Maria identified her awareness of world interconnectedness as a way to describe her as globally competent. Maria described her initial views on global competence as “having awareness of what’s happening in the world today; a real look at how we are all connected in some way” and immediately identified her awareness of world interconnectedness as way to describe her global competence, “Well, what I’ve always been interested in just that [connectedness to others]. It’s just the awareness of how what we [designers] do impacts people, and regardless of where we design, people use what we design.”

Maria further described a meaning of awareness as “awareness that there are differences” regardless if one is “able to have an understanding, or maybe not even an understanding” of a global issue. She referred to: “recycling”, “being kind to another person”, and “not buying into the stereotypes” as examples of her application of global issue awareness.

Subtheme: Role as an educator. Maria believed her role as a teacher keeps her current with world issues, “I think that’s one of the reasons why I still teach because teaching is how I’m forced to look at it [global issues]. Teaching keeps me relevant and current in my world.”

(Sc-RQ1) Theme two: Maria identified her responsibility to take action as a way to describe her as globally competent. Maria reflected on her passion for her work, “You know, everybody wants to feel like their work matters in the world, and guess what? It does.” From an educator’s perspective she expressed joy in “helping the students …see things differently.” From a parish administrator’s perspective, she expressed her love to “tangibly do something within my communities in my parish.” Furthermore, Maria believed in her responsibility to practice design in responsible ways, “Shame on you if you don’t take advantage of those
opportunities to design an environment that can support things that people do in a positive way.” Maria continued to reflect on the realities of work expectations and action,

The reality is that when you’re working, the bottom line is always going to be profit and you’re working with budgets, and time schedules that don’t sometimes enable you to make a difference according to your original intentions. You have to really be strong and able to stand up sometimes for what’s right because you’re going to get knocked down. Because the direction to do the right thing oftentimes ends up not being the cheaper way to do something.

Subtheme: Role of morality. Maria identified her moral conviction to act on global issues.

As designers, we have a lot of power that I feel that, if we don’t use it well, shame on us. For me, it’s a moral issue when I think of global competency. It’s about what I understand to be right, and if I have the power to do right for other people or other communities, I should do it.

Subtheme: Social Justice. Maria identified her disposition to act on issues of social justice, from both a design educator and parish administrator experiences. Maria described examples of social justice issues as “climate change”, “sustainability”, and “the life versus death culture.” Maria emphasized her need to model awareness of social justice issues and the “impact and consequences of our design within other places in the world.” When referring to social justice, Maria described at time that “shocked” her,

I always looked at [teaching a Universal Design course] through a social justice point of view. I remember [a project involving] the population of the elderly and being aware of some students who were very biased against the elderly. They were very derogatory. I would hear from students, “Old people are stinky,” or, “Old people are dumb.”

Maria responded to her students, “Okay, well, you know, you’re going be old one day” as a way model awareness of care and respect and inspire empathy.
(SC-RQ1) Theme three: Maria identified her receptivity toward learning as a way to describe her as globally competent. Maria identified her receptivity toward learning as a way to describe her global competence,

The more you learn, the more you don’t know, and that’s okay, and that’s I think that’s part of this global competency. “You go through life thinking you want answers, and sometimes you realize it’s not about knowing the answers. It’s about knowing. It’s about the questions, learning how to frame those questions, and learning and just being reminded all the time that there’s stuff you don’t know.

Maria expressed a humble reflection, “You know there’s so much you don’t know.” She ended her statement with soft laughter.

Subtheme: Changing views over time. Maria elaborated on her ability to recognize change as a way to further describe her willingness to learn, “Just when you think you know something, well, people change, so it’s not what you think it is because time changes cultures”.

Maria described a personal intercultural experience to further illustrate her point about assumptions of others,

I came from Cuba at a time where Cubans were very different. The Cubans that come from Cuba today; it’s like I don’t know them. I don’t know the words they use. I don’t understand their rituals. I don’t understand their way of thinking. It’s different because that culture has changed under the communist system. So when I meet with Cubans today, I realize I can’t think that they know what I’m talking about, or I can’t assume that they know what I’m talking about because we are totally different. So it’s interesting how from the same country and three generations later things have changed, and so we speak Spanish, but we don’t speak the same language. And so that’s [an example of how] you have to be open to understanding that you don’t know everything.

Maria expressed a sly expression with laughter and stated, “You think you know, but you don’t.”

Subtheme: Challenge the way she sees the world. Maria related her role “to teach people to see the world” to her personal willingness to challenge the ways she sees the world,

If I’m not willing to constantly challenge the way I see the world, how can I challenge anybody else? You know, and so sometimes, I see things I don’t want to see. Like, I don’t want to know about abortion. I’d rather shut that out, but the reality is it’s out
there, and I have to know about it … or, human trafficking or, big business and how they go in and obliterate the landscape and don’t care about the people.

Subtheme: Avoids encapsulation. Maria described her willingness to learn and confront potentially challenging issues outside of herself,

There are a lot of issues that, [sigh] we can encapsulate ourselves and just think, “Okay, this is it.” We have a responsibility to teach everyone to see that there’s [potential for] evil. [For example,] there’s a culture of death [and] if we’re not aware of, we’re part of it; we support that. Maria illustrated another example of being aware of the interconnectedness of challenging, global issues, “Like even now, with the whole thing with Planned Parenthood. Well, now you look at who are the companies that have been supporting them? Because maybe I have been supporting Planned Parenthood indirectly because I supported or I bought products from this company who gave them millions of dollars, which allowed them to do what they’re doing. So, again, everything is connected in today’s world.

Maria described the ways she continues to learn about the interconnectedness of issues and other points of view by, “reading up on [issues], going to conferences or webinars or whatever is available to make myself more knowledgeable …[to] avoid encapsulation.”

(SC-RQ2) Theme one: Maria taught her students about the ability for design to make a difference in the world. Maria began teaching in addition to practicing design early in her design career. She believed in the importance to communicate to her ability to make a difference as a designer to her students. Maria stated with jest,

Well, I wish somebody would’ve said this [design work matters] to me,” She described situations when she told students to “start leaving people your experiences and to tell others how their designs “can make a difference.” Maria forcefully announced, “In the end, that’s really what you’re trying to do. You know, everybody wants to feel like their work matters in the world, and guess what? It does. You know, how good is that? This [Design] is no joke.

(SC-RQ2) Theme two: Maria utilized the design process programming phase to teach students about the global impact of design decision making. Maria believed the programming or analysis phase of the design process is a prime way to integrate global competence teaching and learning opportunities, particularly related to awareness and design decision-making, “You
have to do good programming analysis because that sets up the design decisions you’re going to make, so if you’re aware of what the program is, who are these end-users, and what are their stories.”

*Subtheme: Thoughtful effort reflects care for others.* Furthermore, Maria strongly believed instruction of thoughtful analysis and design decision-making demonstrates care for others,

There’s no such thing as neutral environments. Environments are either going to inspire people and make them want to be better, or they’re going to have a negative impact. And sometimes that neutral environment is even the saddest of all because we know when we’re in a bad environment. We feel agitated. It doesn’t feel right. But when you’re in a neutral environment, basically, what you’re saying, “We don’t really care about who uses this space. And we have to respect that because there’s more than one way of how people gather or how people do what they do, and that’s not just one right way of doing it, so sometimes you have to look past, you know, our preconceptions of how people will behave or what will lead people to do good things or be good or be better or feel better about their world. Because if I feel good about my world, chances are that I’m going feel like somebody cared about me.

*Subtheme: Trends affect change.* Maria inspired students to look at trends affecting change,

You have to help students look at the trends, and if we don’t like the way things are going, we might have an opportunity to change it. So it’s getting them to see that what you do matters, not only on a local level, but it’ll matter to others [at the global level].

*Subtheme: Research promotes proper assumptions of others.* Maria believed awareness “should start always from researching” and “not assuming we know anything.” She believed the ideal situation for any global competence learning experience would be “time so that the research - the programming that comes in at the very beginning [of a design project] is thorough and deep. She described a course where students “spent a whole quarter developing and researching, [the] program so that there was a real understanding of who they were designing for, what region of the world they were designing for.” She also incorporated constraints into the design program
requirements as a way to move students out of their comfort zone and seek additional information. For example, Maria guided students to use a specific international design material website resources to allow students the opportunity to, “make them aware, where are these” and to “wade through that [because] it is global, so it is messy.”

(SC-RQ2) Theme three: Maria believed active learning experiences and resource partnerships abroad were more effective ways to teach and learn global competence. Maria recounted the effective global competence experiences she had as a design student. She believed educational travel design project site visits were effective. Maria described the cultural, sensorial, geographical, and environmental insights she gained from a travel experience to a different region of the U.S. while an undergraduate design student as a way to “get a sense of the energy and the people and the foods and the colors and the climate and the quality of light.” She further described how this actual experience abroad allowed her to analyze how she would “use light” and “create more energy efficient spaces” to “harness sunlight or the heat” or to incorporate “the view.” Maria also advocated for students to connect with the users of the spaces they design regardless of distance,

Ideally, having an opportunity to interview them or talk to them. She reflected on the institution’s role in the resource development and utilization as a way to resolve logistical and accessibility challenges that may limit student ability to travel or engage face-to-face learning exchanges with others, “like Skype” or if a school [program] had those kind of resources [technology or network of contacts] available, in other words, have the connection already premade.

(SC-RQ2) Theme four: Maria utilized a human factors course to expand awareness of global issues. Maria believed the outcomes from her human factors course, expanded her students’ awareness of global issues,

Because of the class I’m teaching currently on human factors, my first thought is just an awareness of the diversity that exists between cultures and how human beings interact
with their environment, or interact with one another and those differences, and respecting
them.

Subtheme: Phenomenology of place. Maria utilized lessons of phenomenology of place as
a way for students to become more aware of the needs of others,

One of the things we talk about [in the Human Factors course] is the phenomenology of
place and this awareness that we’re all wired to want a sense of place. And that transmits
all the way, big picture down to what you’re touching, down to how things feel. There is
something beyond the physical that matters to people, again, this sense of place.

Maria described an example of her approach to sense of place from her experience with an
airport interior design project,

[It] was as a big challenge because you’re looking at anyone and everyone and all the
time. You know, so how do you come up with a design concept that says hospitality and
place to people who are coming in from other places, that this may the first time they’ve
ever [been to that place since] it’s an international airport. So what you think says,
“welcome” to another person, may say “rejection” you know.

(SC-RQ2) Theme five: Maria believed the feedback students receive from guest jurors
through the design critique process teaches objective points of view. Maria believed the
feedback students receive from guest jurors through the design critique process teaches objective
points of view, whether the process occurs face-to-face or virtually,

[Guest jurors] input would be valuable because they’re the ones that would be looking at
it more objectively. Where, as an educator, I’m looking at other ways of evaluating the
project. They’re not going to be as emotionally invested in the student as I might be, so
they’re not going to be critical. I think that’s how you would be able to assess that fairly.

(SC-RQ2) Theme six: Maria believed the promotion of life-long learning is an effective
way to inspire inquisitiveness and build community awareness. Maria believed teaching her
students about the value of life-long learning is a way to help them develop their curious
disposition toward a wide-range of industries and build community awareness,

That’s the other thing you have to teach students because it’s being part of that
community of professionals, because you don’t have all the answers. You’re not going to
have all the answers, but other people have answers, and so you go to these conferences,
or professional organizational workshops, and you’re going to be exposed to that. That’s a very important part of the education that you want to impart, and professionally why you want to be involved in those kinds of organizations, so that you can hear, or [read] periodicals [and] journals that exist in different [industries]. Get interested in it enough to read what the professionals are writing about.

(SC-RQ3) Theme one: Maria believed her Catholic religious and Hispanic ethnic background contributed to the ways she frames her point of view. Maria believed her Catholic religious and Hispanic ethnic background contributed to the way she frames her point of view. She expressed a full sigh when she revealed her religious affiliation,

Well, obviously, [sigh] I’m a Catholic, Christian, so I tend to see things from that point of view. I’m also Hispanic, and I think the Hispanic culture as a whole is always thinking about their community. You know, we tend to relate. How I survive is through community. I think we all innately have that within us. The Christian theology behind that is that we are modeled after the trinity, the trinity being the perfect community which exists in total harmony.

Subtheme: Psychological and spiritual components of design. Maria further related her views on community and universal needs to psychological and spiritual components of design,

And so I feel like, spiritually, all of us universally have this need, have the desire for this ideal environment, you know, where we respect another’s freedoms, we understand issues of privacy, how important it is to have the ability to control how people interact with you, how much interaction you want with others, or times that you need to retreat. You know, there are psychological and spiritual components to what we do as designers, and for me there’s spirituality to that, and I think that’s probably how I frame things.

Subtheme: Personal values. Maria believed her personal value system contributed to her disposition to act on issues of global significance as both a design practitioner and design educator in productive ways. Early in her career as a design practitioner she realized designing “things” is “really about having a conscience”. She attributed the values she learned from her Catholic upbringing as a way to guide her actions,

I have to have values because otherwise I’m just going do whatever anybody wants.” In her early college education experience, Maria identified the first value she understood as
important as “environment awareness” or “what we do [as designers] affects the environment”. During the same experience she also realized “that people matter too” and “people value good spaces.” Maria further realized as she matured she could “make things work better for people, which makes them more productive, and in turn makes them happy, and you start to see the ripple effect.

Maria also believed her personal values systems contributed to her ability to navigate challenges inherent in the global design industry. She described times when she encouraged her students to rely on personal values as a way to navigate career challenges,

All I can do is be present to them [the students] and represent my profession, my industry to them in the best way I know how, in the most real way I know how, so that they have at least an awareness [of what they will] be up against. It’s a cruel industry, and you better have it together, and you better know what you’re doing, and you need to have values because, if you don’t, you’re going to be chewed up and spit out.

(SC-RQ3) Theme two: Maria believed her openness to relationships and willingness to learn from other people contributed to her ability to listen, observe, and relate. Maria described her nature to “just being open to relationships and people” and working with teams as contributors of her global competence skills to listen, observe, and relate (Li, 2013; Taylor, 1994b). Maria learned about global experiences from clients and people she worked with that “traveled a lot.” Maria wished she traveled more. Maria identified her experiences with a “very well-traveled” industrial designer she worked with on an airport design project as a key contributor to her ability to interview and observe others. She described how this person, “sharpened the way I started doing things.”

He was just authentic. He would say, “Let’s just look. Let’s just see”, there was an openness. There wasn’t like, “Oh, I know we’re going to see this.” And we looked at what ordinary people did. Like, “Isn’t that interesting how they got into that elevator?” Or, “Look at how interesting that person goes up to that desk,” or, “Notice how this material is being used or not used.” He was looking at the ordinary things. It was not just the big things. It was like the detail, down to the hand. And that’s what I was getting from him, that even the details matter, how people move …it was his ability to communicate that to me. As a designer, that was inspiring to me.
(SC-RQ3) Theme three: Maria believed exposure to energy crisis issues in college ignited her awareness of sustainability and responsible design. Maria believed exposure to energy crisis issues in college ignited her awareness of sustainability and responsible design during her undergraduate years as a design student in the “the ‘70’s, early ‘80’s,

At that time, it was really about energy. It was really about understanding energy, and how we, as designers, can design spaces that are kinder to the environment. Leaving a smaller carbon footprint. Those were issues that were really important, and that was my first awareness as an individual that we, as designers, should have a conscience.

(SC-RQ4) Theme one: Maria believed her experiences as design student altered the ways she looks at things. Maria believed her early experiences as a design student facilitated a perspective transformation of the ways she sees things. She further related learning about design to learning a language,

One of the things I learned about designing very early on when I was getting my education is that you’re teaching someone how to see differently. It’s teaching them that design is a language, and to learn language, you have to learn to see things. [And question, what is the lens that we’re seeing through?

(SC-RQ4) Theme two: Maria believed her early design practice experiences converted her ability to analyze ethical behavior and self-awareness. Maria believed she formed a keen awareness of ethical judgment and ability to critically analyze the realities of design practice early in her career. She also formulated a change in her perceptions of how clients and employers cared for their design projects,

I think that happened early on, when you realize you get out of school, and you think you’re going to set the world on fire. And then you get your first project, and you realize they [clients and/or employers] don’t really care. Nobody really cares and I was like, “Well, should I care then?”, “Do I play this game because I need the money, and I need to make my way in the world?”

Maria described her perception of corruption in the design industry, which fostered a change in the way she was impacted by other’s behaviors and motivations,
There were people who will come to you and say, “Okay, if you do this, or if you use this product, you can have this, or you can go on this trip.” People use the word “leveraging.” They are aware that you’re involved in certain projects so they want [to coerce you to use their products]. I knew it was wrong, and, in fact, it really turned me off.

Additionally, Maria realized it was best to seek out people who shared her same values, “So what I started doing is realizing that you have to build your team with people who value the same things that you value, and that’s who you surround yourself with.”

*Subtheme: Caring role models.* Maria believed her interaction with people who demonstrated care and respect for the interior design industry professional regulation and standards served as ethical and values-driven role models,

Now that I think about it, the people I worked for were very professional, and they were very much involved in setting standards for the State of Florida [interior design professional licensure]. They cared about licensing because, for them, licensing helped to establish certain things that they needed to happen for these reasons [ethical standards]. When I got out school and I went to work for a company like that, they had their values already pretty set. They were good people and they cared about their profession, and they wanted their profession to be respected. That helped to form me.

*Subtheme: Different cultural expectations.* Early in her design career, Maria was confronted with an intercultural dilemma. She was a designer on project that used Mexican craftsmen on a high-end project. Maria was also assigned as their translator, therefore spent more casual time with them shopping and setting them up at their temporary residence. She initially questioned the initial ways the “alpha woman” client treated the craftsmen, especially their meager living quarter arrangements for eleven workers in addition to a modest daily stipend. However, as Maria observed the interactions she saw how the client respected the craftsman for their “generational craft” and in exchange the craftsmen were “very grateful and happy” albeit Maria perceived them as part of a submissive culture. Maria recounted this memory as her “first reality check that there was a different expectation of …respect.” She went
on to explain how she observed this type of exchange and speculated how these particular craftsmen “probably” were taken advantage of others clients in the San Antonio area (where they worked on projects). However Maria reflected, “[her client] really valued [the craftsmen’s] craft, and I know [the craftsmen] sensed that. And I think that gave them an appreciation for what they were doing, and they did anything she would ask them to do.” Maria believed her design work experience allowed her to accept an awareness of “how cultures come together” and “treat one another.”

Subtheme: Personal dignity. Maria believed her interaction with certain clients who did not treat her with dignity propelled her to change her tolerance for unacceptable treatment, “Clients wanted me to do things that I knew weren’t right or clients who treated me with no dignity. Those were the defining moments where I did say, “No, this is not acceptable. You know, you can’t treat people like that.”

(SC-RQ4) Theme three: Maria believed her role as a mother transformed her views of world legacy issues. Maria described her role as a mother as a way that transformed her awareness of the world legacy or “what [she brings] to them [her children] when she stated “It’s like you think about who comes after you. I don’t know if that’s just because you get older and you realize that, but that’s where I was being influenced.” She also related the idea of legacy to her design education, when she stated, “I’m designing for future generations.” Maria further described examples of challenges that impact future generations. She expressed concern about the tendency for United States societal views to “separate us instead of unite us.” From a design standpoint, she also Maria expressed concern for society’s tendency to support “tearing things down and starting over” and challenged the notation that “everything’s disposable.” Maria
believed the need to personally “show [her] children how to [work through challenges]” and realize “some things matter and they should be around for a while.”

Case Four: Robert, Architecture Design Educator

**Background information on Robert.** Robert is 60 years old and identified as a Caucasian male. He identified with an Anglo-Saxon ethnicity. After high school, Robert earned a bachelor degree in architecture and immediately went on to earn a master degree in architecture, both from public universities. Early in his career, Robert practiced architecture at various architectural firms and considers healthcare design as his primary area of design professional practice. He occasionally consults on projects. Robert’s primary career is in higher education and serves as an Associate Professor for an architecture program at a public university in Florida. He has 30 years’ experience teaching architecture and design-related courses.

**Robert’s image artifact.** I present Robert’s image in Figure 5. Robert decided to describe an image that one of his students used as a concept driver for a thesis project. Essentially, Robert described the image depiction of a Palestinian person passing a loaf of bread over a barbed wire barrier to an Israeli person. The image made a lasting impression on Robert in multiple ways. For one, the content of the image sparked a profound awareness of global issues. Secondly, he described how the students’ discovery of the image “through an internet search [of images]” changed the “whole course of her thesis” and “became a powerful way of looking at things differently than they would’ve before”, which supported my assumptions of the powerful connections between image-elicitation and design thinkers.

Furthermore, Robert expressed many values, beliefs, and meanings prompted by this image. He described his literal and metaphorical interpretations associated with the barbed wire
barrier as a “wall”, “fence”, and even a “bridge” between two adversarial cultures and “how an image sort of transforms our notion of what a wall is”,

[They] have it put up for protection obviously, but the other side. . . it also blocked people out. But that little piece of bread that passed through the chain link fence [inspired a different way of thinking.] [Rather than] thinking of walls chain link fence. I’m thinking of the wall as a connector, like a bridge. It connects things together; like a bridge, moving across. It can link things together; the notion of penetrating walls.

Robert further described his symbolic interpretations of the bread as “life giving”,

In this case, the bread represented a way of breaking through a political wall. . . like a peace offering in a way between these two worlds. The bread was very significant. It wasn’t like I’m passing a gun through the fence. I’m passing a piece of bread, and that’s the beauty of it. It wasn’t like, you know, here’s a wall; I’m passing a gun so you can shoot somebody over here or whatever. It was passing something that was life giving and required for life. So the bread became sort of a metaphor as this idea of goodness penetrating darkness.

![Robert’s image artifact](source.png)

*Figure 5.* Robert’s image artifact. Source Unknown. Robert selected an image of a Palestinian and an Israeli passing a loaf of bread to each other over a barbed wire covered concrete barrier.

**Robert single case core themes.** In the next section, I present the 16 core themes and 15 subthemes that emerged through my analysis of Robert’s interview data.

**SC-RQ1 Theme one: Robert identified his awareness of what’s going on in the world as a way to describe him as globally competent.** Robert described his essential definition of
global competence as, “awareness of what’s going on in the world” without “not knowing the word [for global competence] beforehand.”

( SC-RQ1) Theme two: Robert identified his empathetic nature as a way to describe him as globally competent. In addition to awareness, Robert considered his “acting with the sense of [an] empathetic attitude” furthermore, “sensing what’s needed because their different views in terms of how one responds to the awareness.” Robert questioned how one responds to awareness and choice of action, “I mean do you go in and change certain cultural traditions? Or do you say no, you can’t believe this anymore because you believe this or that?” He concluded “there is a real tension in terms of how you respond.”

(SC-RQ1) Theme three: Robert identified the need to define value systems and a way to describe his and other’s assumptions of global competence. Robert argues for global competence discourse’s need to determine a set of “presuppositions”. For example Robert stated,

[Global competence] talks about [attitudes] such as “empathetic risk takers” and “open minded”, but it doesn’t say what they come to the table with that makes them competent. Because some may say, “Well, I’m competent if I feel that [I have these global competence attitudes and skills].

Robert acknowledged global competence attitudes and skills but cautiously described how people who identified as globally competent “bring to the table something different in terms of presuppositions. Robert explained, “Presuppositions are basically what someone assumes or believes before they are competent.” Robert believed the global competence community could benefit from a systematic definition of principles “we all can agree upon” to guide globally competent people when they “come to the table” otherwise “we have nothing when somebody confronts us with an issue.”

Subtheme: Human dignity as personal value assumption. Early in the interview, Robert
added to his way to describe his global competence as “acting based on values that reinforce human dignity.” Robert consistently referred to his core belief value of “human dignity” through our conversations and added “the world is important, and “the environment is important.” Furthermore, at a point toward the conclusion of our final interview he stated, “For me it’s human dignity”; a reference to the “back part” of his global competence.

Subtheme: Perception of other’s value systems. Robert described how different groups establish their value system based on their own set of motivations and intentions. For example, he used economics as a motivator.

If somebody thinks of global competency and the presupposition that they have is that economics is the most driving thing, that’s the presupposition that ultimately economics drives everything and material. [So], they may say they’re globally competent, but their competence is a different kind of thing. Because some may [identify themselves as] competent [however, they may] bring to the table something different in terms of presupposition.

Robert described potential scenarios when differences in presuppositions become conflicts.

But what will happen is if you confront someone from a different culture, from a different place and say, “This is wrong, you are polluting the world, and you’re destroying the planet”. They’re going to come with a different set of presuppositions. They’re going to say that’s not important to us. What’s important to us is our economy. What are important to us is jobs. What’s important to us is our lifestyle. Or religious presuppositions they [may] say, “You’re not significant because you’re not of our particular religious belief, or in particular you don’t share our beliefs so you’re not significant. You’re not important. So we can kill you. We can wipe you out and behead you.”

(SC-RQ1) Theme four: Robert identified his belief to create ethical or moral boundaries as a way to confront difficult global issues of conflict. Robert further emphasized the need to create ethical or moral boundaries,

Because if one culture believes they can eliminate another culture or eliminate another group of people because of ethnicity or whatever, then you somehow say this is not right. There has to be some kind of boundary there.
Robert believed “human beings are important, significant” and stated his willingness “to defend those beliefs.” Robert believed “you can’t address an issue [that goes against your beliefs] until you really get to the point of what’s driving that culture to do those [things].” Robert continued his dialogue and expressed his struggle with the complexity of confronting cultural systems that conflict with his personal moral values, “It gets sticky, should I want my morality against their culture? It gets really difficult, when you have extreme cultural differences in views [of personhood and human dignity] and how they see the world.”

Robert described how differences between cultures could stem from each the belief each side is trying to “destroy [their] culture or way of living.” He pointed out that a presupposition of human dignity could address conflict from a standpoint of the assurance that “people aren’t being treated in a way that is inhumane” rather than an intention to “want to destroy [one another’s] culture.” Robert clearly expressed his disheartened position when he concluded, “So that’s where it gets difficult.”

**Subtheme: Impact of design decisions on others.** Robert related his belief in his personal focus on “what’s important in life” as a” real ethical issue.” Consistent with his strong conviction of “human dignity”, Robert defined his mission as an architect as “people are important”. He further described the importance of his work as an architect, “I’m making something that’s going to impact the world, impact other people.” Robert warned about the rampant temptation for other design practitioners to make decisions “simply based on greed, money.” He advocated for better ways to solve issues that oppress human dignity and create devastating environments and used current conditions in China as an example.

**(SC-RQ1) Theme five: Robert identified his holistic approach to thinking and acting as a way to balance conflicting viewpoints and remain encouraged to solve vast global issues.**
Robert revealed a constant belief in a “balance” in his awareness of global issues, which included holistic, or “big picture” thinking patterns and action. Furthermore, he used a holistic approach as a method to break “big [overwhelming] issues of the world” into smaller, manageable components and solve them “at that very moment.” Robert advocated design educators to “stay the course”, “not give up”, and “guard against discouragement…because [global] issues are so vast.”

*Subtheme: Think globally, act locally.* Robert approached global competence thinking and action from a statement he heard growing up, “think globally and act locally; to look at global things and then act in that situation as you understand the world, so you have the bigger picture.” He described two case examples where his students practiced big picture thinking and applied results to a smaller problem. One example involved a student who designed a “great little bathroom” with great care and attention to detail, regardless of the bigger perception of the insignificance of typical bathroom spaces. Another example involved an international student’s primary desire to study in the U.S., motivation to base her final architecture thesis on a real-problem related to her home city, and returned home to apply her acquired skills to a local problem.

*(SC-RQ2) Theme one: Robert identified research as an effective way to teach the ability to gather information beyond one’s environment and look beyond immediate boundaries.* Robert inspired students to meticulously “dig” for information at a “deep” level and taught them research requires “getting dirty.” He believed the most effective research experience for an architecture student involved a year-long thesis project course and holistic approach to addressing issues.
(SC-RQ2) Theme two: Robert utilized the architectural studio setting as a way to teach the ability to make new connections and interact with those from other backgrounds. Robert acknowledged the breadth of issues and inherent challenges involved in an architectural project. For example, he stated, “The architect has to juggle and understand…put together and form something and make gestures of form and space” and “think about all these multi-layers of issues from the diversity of a client and a cultural group using a particular space.” Robert also acknowledged typical architectural student frustrations because they “want to make a building” whereas typical architectural educators want to “teach [students] tools, [new] critical ways of thinking that help them then address larger issues.” Robert believed in the value of “what’s good about a design curriculum” when he stated, “Design education helps a student think holistically about all these issues. This issue, this issue, this issue, because we’re not just thinking about how to solve one sort of mathematical problem.” Robert utilized the multifaceted, collaborative, and dynamic studio design setting to teach students critical analysis and holistic approaches to problem solving. In his studio professor role, Robert modeled active design behavior by “just making” and showing examples [of effective design solutions].

Robert described a time when a student was not “culturally aware” and the repercussions of ineffective design decision-making for an international housing design project,

[The student] wasn’t culturally aware, competently. He decided [to use] the window height [to determine the measurement] for people to sit in chairs, but they didn’t sit in chairs. They sat on the floor. So when they sat in the apartment they couldn’t look out.

Robert emphasized the importance for architectural students to “think about all those issues”, including cultural and environmental issues. He described other examples of awareness for architect students to consider such as: cultural terms of how one “enters into a house or how you
move through a space in terms of gradients of privacy” and “availability of materials, and the
craft level of a group.”

**Subtheme: Critique.** Robert utilized the interactive critique process to engage students in
analytical dialogue and teach critical analysis, self-awareness, and ability to constantly make new
connections. He mimicked the dynamics of a typical critique exchange, “You can always say…
Well, why didn’t you think about this?--You didn’t think about that.--Oh, I got it.--I didn’t think
about that.”

**(SC-RQ2) Theme three: Robert identified the practice of making as a way to teach**

**holistic patterns of thinking, critical analysis, and care for others.** Robert taught an elective
class “called the care of making.” I observed his enthusiasm as he described the course
experience. He described how the course experience helps students “see certain patterns about
designing ideas or critical making issues.” Course outcomes included thematic and conceptual
aspects of “making”, “diligence”, and “love of their craft”. Course project assignments required
students critically analyze topic that “deals with historical craft traditions around the world” to
teach students how to “look at two sides of an issue.” Robert described examples of research on
Turkish carpet craft traditions and Afghanistan merchant cart craft traditions. Students looked at
both the “beauty of the craft” and potential negative impacts associated with the “making” such
as, “human toll” and ecological or environmental repercussions. Ultimately, Robert used course
project assignments to teach on “historical traditions” and “ways of looking at ethical issues
across the world.”

**Subtheme: Balance of sacrifice.** Robert identified the “issue of sacrifice” as a type of
“ethical issue.” He used the “case with the children making the carpets” when “they’re hiring
little kids that have smaller fingers to [make carpets] in these sweat shops.” He also used an
example of a workaholic’s drive to “to their best.” Robert responded to both “the good and the
bad’ with a reflection of his views on the “balance of sacrifice” when he stated,

You can sacrifice to a point, it’s dangerous and it’s hurting someone. There has to be a
balance between a love for your craft, wanting to do your best, but also keeping in
balance that you don’t go so far that you’re neglecting a holistic view of life, your family,
the world around you.

Subtheme: Care and beauty of craft. Robert’s enthusiastic description of the course
experienced continued. He described the course experiences exposed students to more than “just
the technical stuff” and related “making” as a way to teach the “issue of love”, which he further
emphatically pointed out “you don’t hear a lot about in school”,

You know, do you care about this person? There’s a sense of caring for the individual.
You know, if we care, we care at all different levels from the person making the object to
the person that’s receiving the object. And one of their projects they have to do is make a
gift that they give away to somebody that they love. So what that does, it forces them to
think about the person they’re going to give this to. And what’s interesting, you can
make a piece of junk and give it to somebody; they’re going to like it because you gave
them something that you made. You know, it could be just a little trinket. But they try to
make an object that has some kind of significance and meaning. And one of the criteria,
it they have to find joy in the making of that thing. So it can’t be simply well, this is an
assignment. They have to find some sort of connection with the person. And it’s
interesting as they go through that process, and research has shown this, as you make
something for someone uh, there’s a degree of happiness that happens because you’re
doing something for somebody else.

Subtheme: Value and joy of making. Robert reflected on global issues from the vantage
point of “how we think about the things we do, the things that we make” when he recounted a
story about a “pizza guy” he met with this students during a trip to Italy,

There’s this guy [who] made pizza. It was the best pizza I’ve never had it. It’s a
wonderful sort of focaccia bread. [The pizza guy] was so happy. He talked about the
skill, the craft of making that. And it was a lesson to all of us as students and a teacher of
the value of work, the value of the pride and what [he was] doing. I mean the person
wasn’t making great architecture, the person wasn’t doing all this famous stuff, but in that
little part of his world he was making a lot of people happy and enjoyed what he was
doing. And this person took a lot of pride, talks about how he makes pizza and every day
came and was so happy to work.
Robert described the discussion with students about the lessons learned from the “pizza guy”,

It’s deeper than just a guy that makes pizza and his little restaurant, in a tourist town. [It is about] somebody that has found a certain niche in his life, an enjoyment. He doesn’t make a lot of money. But he’s happy. He’s completely content, and he’s doing something great, and he’s providing this wonderful service for people, and people flock to his little restaurant. The lessons we learn in travel that may not be the big things but are little things that cause us to pause a little bit and think about what it means for me … Am I going to be a practitioner and make an object, or make a building?

(SC-RQ2) Theme four: Robert believed lessons in perception teach ways to think about things differently and inspire deeper levels of understanding and experience. Robert described a typical first year architecture student expectation “to want to design a house”, which he definitively responded with, “and basically, we don’t do anything like a house.” Robert believed he needed to “shake up” first year design students and teach them “to learn how to see” by learning how to “break down” and abstract ideas; to teach them the “tools that makes them think about things very differently” before they advance to projects involving more concrete issues of space, form, and materials. Robert discussed the need for his students to clearly see small components of a design challenge or solution as a way to further “see large scale” challenges or solutions.

Subtheme: Abstraction. Robert described specific learning exercises he used to teach how to abstract ideas and see things differently particularly drawing exercises. He incorporated lessons from classic drawing books by Betty Edwards (1999), like Drawing on the Right Side of the Brain as ways to teach students about “analysis, perceiving and understanding something.” Robert believed drawing exercises “less about learning how to draw” and more about “visually obsess[ing] on the thing that you see, and then begin[ning] to translate that.” He also described the use of a “zen line drawing” assignment as a way to teach “distillation of ideas in a very
simple way.” Zen line drawings illustrated with only one brush with black ink and students had to study an object, and represent exactly what they saw with as few marks as they could.

Robert narrated a typical description of a time when students struggled with the outcome of learning how to see when instructed to draw an apple,

> They’re moving the apple over, and they’re doing all these drawings. I say, what are you doing? You’re not looking at the apple. The apple’s a thing you’re trying to understand. Not a specific apple. Not the universal apple. Not the apple that you know [in your mind, or an] Apple computer. It is the apple that is in your hand right now that you’re looking at. That’s what you’re trying to perceive, and so it’s hard for them to make that shift between left and right brain.

Furthermore, he believed the act of physically drawing was a more effective method of teaching students to learn how to see than producing computer generated drawings. Additionally, Robert described writing activities as a ways to “record awareness of their environment” and “begins to [think] about sounds. He also described poetry as another exercise of perception as a way to “capture in a few words, essences, emotions, and experiences with abstraction” and “at the same time is more powerful if you just wrote every word of it out.”

Subtheme: See beyond the visual experience. Robert discussed challenges when managing client perceptions the architect’s role,

> I had a client once that said, you know, your job is to make it pretty. That’s what he said to me. He said, your job is to make it pretty. I’m [thinking], you know, that’s not my job. I’m not just some sort of graphic person that just deals in this visual world. My job is to do much more than that. It’s to give you a building or a house that is life-giving for you. It’s very difficult [to communicate that to a client].

Robert encouraged his students to communication the “small lessons” of how architects can affect “how [people] live everyday” in other words, rather than “simply looking at the fancy stuff” as a visual experience, look at a different view of the visual experience as the “aural and smells and tactile experience that an architect can give a person [and] have them rethink how they occupy a building [or space].”
**Subtheme: Super-perception: Be like the loon.** Robert used a concept from the influential nineteen century architect Louis Sullivan to further illustrate the importance of perception as a way to gain deep understanding of the world,

In *Kindergarten Chats*, [Sullivan] gives us an example of the loon. He says the loon is just a bird [that] really understands perception and you should be like the loon. I need you to be like this bird that [is] highly perceptive of what’s going on around you. And to do this, you have to do exercises of perception and tuning in. It means being still for a minute.

**Subtheme: Super-perception: Autobiography of a cup.** Robert utilized a learning assignment called *Autobiography of a Cup* as a way to teach students to learn how to “question and understand small design objects”, which could ultimately apply to the greater perception of “large-scale stuff” with practice. Robert instructed students through an analysis of “different ways of thinking about the perception of a cup, what a cup is, and from its sort of functional aspects, to its beauty, to its making, to its craft, to its historical basis.” He used five [elements] of analysis: (a) context/where (could apply to cultural context); (b) physical form/what messages convey; (c) users/who; (d) need/why and; (e) processes/ how (object came into existence).

Robert narrated an elaborate description of an analysis of a cup. I present the following synopsis of the description to illustrate the richness of his teaching tool’s role to think about things differently and inspire deeper levels of understanding,

First of all, every cup that you see exists within a particular context. One [example of context] if I want to understand a global issue, [is to] understand a culture, I begin to understand [the cup] at the level that particular context. One [example] I think about [is] a teacup. What is the context that this is occurring in?

The second [element] …What is the thing itself that I’m looking at? With the teacup, what is the physical configuration of the thing? What is it that I’m physically trying to understand? It has a certain shape. It has a certain density. It has a certain material. It’s shaped a certain way, but it also has a particular message and context. It’s a cup that’s sending a message about what it is. That Starbucks cup [over there] says, “I’m quick. I’m at a coffee place”. That’s the meaning that portrays, whereas if you’re sitting here with an elaborate beautiful[ly] constructed coffee cup from the 18th century that would send a different message. Oh, why, he’s drinking out of that cup.
That’s really strange. You know, and I’d begin to think about the content of that “whatness”.

The third element I talk about is the “who”. What is the group, the persons that revolve around that particular object? What are the cultural traditions, of the individuals? It’s both the user and the maker of the object. Who are these people? [Opposed to the] first thing, the context had to do with the religious, cultural, political context, [however] now we’re talking about the specific individuals…not just culturally but also physically and who they are. [For example], if we look at a Japanese cup for the tea ceremony, it was made by impoverished Koreans that were making these thousands of pots, and then the tea masters would take these piles of teacups and find one that had all qualities of beauty, of timelessness, and they put it in their lips. They taste, and become a revered role [of tea master]. So there was a maker, a selector of the thing, and then you had the tea ceremony that revolved around this special cup.

[The fourth] element is the question of why. Why does the particular cup exist at all? Why did it even come into existence? What caused the need to create the cup in the first place? Well, you can say, well, people had to drink something, so they need something to drink out of. Okay, that’s a beginning point. So you begin to look at the purpose; utilitarian issues, functional issues.

And finally you look at the processes. How did the thing come into existence? What created the thing? And [in the case of a cup] perhaps it’s made by clay. It’s put in a kiln, and then the kiln, you have a person forming it, which is just back to the maker. And [the elements] cross reference each other. They’re not separate little things. They’re all interconnected. And so you have a process of making a cup. And the processes of making something are then [questioned], analyzed, and revealed. In a global sense, are the processes sustainable over time?

Subtheme: Question meaning associations: Furry cup. Robert vividly described an additional example of learning how to think about things differently from a design object, in particular how people question meaning and association with context,

There’s a great image of a cup [by artist] Oppenheim in the [New York] Museum of Modern Art. It’s a teacup and a spoon. It’s all covered with fur. Because our association with the cup is to drink something out of it. Then the thought of, first of all, putting a liquid in it, and then realizing what the fur would do. You know, when the liquid went in it. And then putting our lips on the rim of a furry cup and drinking!; and then the thought of cleaning the thing with this fur. It’s like a squirrel fur or something like that. It’s really gross. But it’s in the Museum of Art because our associations with what a cup is and what that thing represents, and it represents something very different in our minds. And that’s what Oppenheim was trying to do when [s]he created that art object. [S]he wants us to think about what our associations with drinking tea or coffee.
(SC-RQ2) Theme five: Robert believed lessons in history were effective ways to teach students to critically analyze global issues. Robert taught design and architecture history by “studying styles but went much deeper”. He described historical lessons from the perspective of the social, political, and functional implications of great spaces over the centuries. For example, he related “pivotal points in history” to “understand how these events, which took place by certain ideological and philosophical understandings of the world started to change, the view of science, the view of discovery, wanting to discover things, the quest for knowledge.” Furthermore, Robert believed students needed to also “understand the history that led to [a] particular design, stylistic idea or [building]. For example, he lectured on how “Rome was based on a political system of conquest, of slavery” as a way to understand the construction of the Coliseum or other buildings in Rome “built with slave labor.”

Robert used a variety of learning activities in addition to lecture. For example, when he taught a recent education abroad course he coordinated a student team analysis and spatial design project with “the religious history, the secular history, and the political history” of the surrounding site in Florence, Italy.

Subtheme: Peaceful coexistence. Robert believed his knowledge of history as a way to describe his global competence. Furthermore, he believed historical knowledge should include “why people feel the way they do, and [how they] defined their values [or] what they believe over a period of time.” Additionally, he believed in historical awareness of “tensions” and to understand “peaceful coexistence of differing views”, especially during “times of peaceful coexistence”.

(SC-RQ2) Theme six: Robert incorporated international travel education programs as a way to teach critical self-awareness and relate to those from other backgrounds. Robert
believed lessons from travel helped inspire self-reflection and shape self-awareness. Robert advocated for international travel education programs and described how his affiliated university program provides education abroad opportunities for their faculty and students in places like Hong Kong/China, South America, and multiple iconic design cities throughout Europe. He believed “the issues that [students are] exposed to [abroad] makes [them] more sensitive to address [similar issues] that happens to us [in the U.S.] and makes them more “empathetic.”

Robert described an actual student project that occurred during a travel education semester in Hong Kong,

[The students were] given a little piece of land in a community that’s right next to a historic area along this waterfront, and they have to develop it. They have to somehow come up with a set of ideas. And so that’s forcing them to sort of be globally competent in terms of what would they do here, what would they do there? And they see the challenges that are there in terms of the structure, the building um, how do you create streets and all the things that support human life.

(SC-RQ3) Theme one: Robert believed his religious upbringing experiences contributed to his capacity and disposition for empathy. Robert immediately referred his parent’s influence, particularly his mother and strong religious upbringing as the primary drivers of his “concern for other people, concern for other communities, other cultures; not just my own.”

(SC-RQ3) Theme two: Robert believed travel experiences expanded his awareness of world system issues and needs of others. Robert believed personal travel experiences, unrelated to his role as an architecture educator strengthened his awareness of world issues and needs of others from different cultures. He described an experience teaching English language in the Czech Republic “when they had just moved from communism.” He described the need for Czech citizens to learn the English language “to survive [economically] and go into business, especially international business.”
Furthermore, Robert also believed travel helped him “see the patterns that have happened over centuries and [see] things that are really valuable.” For example, his experience of the “siesta” contributed to a way of looking at “how [a] particular culture lives could be lessons to us.” He constructed an argument to “rethink how we live our daily lives based on [the siesta] experience” in other words an opportunity for “workaholic” Americans to think about how they use and value their time during the work day,

[Europeans] are able to spend time with their family during that siesta, to sort of chill out a little bit. It takes away some of the stress, perhaps. [However] the European culture is changing. They are getting rid of that [the siesta]. But I think we need to think about those things culturally, were they there, what was the significance and what have we lost? Is there a possibility that we can rethink how we live our daily lives based on that experience? Rather than saying oh, let’s go back to siesta, [what] does it mean if I take a working lunch, time to reflect, to meditate, to get away from everything? Is it time to see my kids, do I have time to get away? So by having that experience makes you think there’s certain values in that and then how do I incorporate that set of values in terms of family times to reflect and get away from their work to move away from it and then get back to it. Because [those that take siestas are also] all hard workers. [It’s not like] they are not working hard. A lot of people just say they just sleep and [are] lazy, but no--they balance things.

**(SC-RQ3) Theme three: Robert believed exposure to energy crisis issues in college added to his awareness of ecological and sustainability issues.** Robert believed exposure to the 1960s “movement of getting back to nature”, and 1970s era energy issue crisis made him more aware and sensitive toward ecological issues and sustainable design.

**(SC-RQ4) Theme one: Robert believed his role as an educator made him hypersensitive toward the ways he views global issues.** During our conversation, Robert demonstrated a change in the view of his role as an educator, particularly how teaching architecture “heavily” influenced his “level of awareness [of global issues] more so had he “just gone into [architectural] practice” when he stated,

It’s funny, when you start teaching architecture, that’s a teacher to you. Believe it or not, you’ve learned this being a teacher. You learn [global issues] because now you have to
teach it to somebody. So I think that in a way, if I wasn’t a teacher, I don’t think I would’ve had the level of awareness, if I’d just gone into practice. I was [aware] of [global] issues from college, but having to teach the issues, and discuss the issue, that makes you hypersensitive because you have to read about it yourself. [If] I’m going to have to teach about this issue, well I better read about what they say.

(SC-RQ4) Theme two: Robert believed his experience as a student converted new world views. Robert believed he experienced a sense of disorientation of his belief system when he left home to attend the university and empathetically related his experience to similar experiences of his students,

Because then you’re exposed to all kinds of stuff. Good and bad. You’re exposed to dorm life and a lifestyle that’s very different from being at home, especially me coming from a strong religious background. And so there’s this sort of disorientation at that point about your belief systems, about what’s important about life. And then you have college professors that are really challenging you about what you believe. So at some point you can no longer hold on to what [your parents] believed. And so that’s when you begin your own soul searching. And that soul searching’s not a bad thing. I mean I think it’s a good thing. And I see my college students go through it.

Subtheme: Study abroad experience. Robert described his study abroad experience as a student as a “turning point”, “eye opener”, and “life changing” because he had the opportunity to,

Really see a different way of life, a different pattern of how someone lives out the day. All these little things; not the big stuff, but the little things that make you think about a different culture. To see how they interact in their relationships, and how they address issues themselves, [as] you interact with them.

Robert confirmed a strong belief in the transformative power of exposure to other cultures based on his study abroad experience as a student when he stated, “And that made me very sensitive when I wanted to direct a program, because it was so life changing for me.”

Commonalities in the Cross-case Analysis

In the following segment, I present discoveries revealed through the cross-case analyses of the four design educators in the form of core theme statements. Rubin and Rubin (2005)
described core themes as statements that provide further explanation of a theory. The following cross-case core theme statements expressed the ways design educators’ personal-life, professional work, and educational experiences shaped their perceptions, meanings, and interpretations of global competence and ways they teach and learn global competence attitudes and skills.

I structured the presentation of the cross-case core theme statements into three groups. The first group presents cross-case core theme statements discovered according to the image-elicitation activity. The second group presents cross-case core theme statements directly associate with one of my four research questions. The third group presents emergent cross-case theme statements regardless of direct association with a research question. Like the single case analysis, I identified each core theme statement with a group designation code. I present the list of cross-case core theme statement group designation codes in Table 10.

Table 10

Table of Cross-case Core Theme Statement Group Designation Codes

<table>
<thead>
<tr>
<th><strong>Cross-Case (CC) Designation Code</strong></th>
<th><strong>Description of Designation Code</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-IE</td>
<td>Data analyzed according to image-elicitation (IE) interview activity</td>
</tr>
<tr>
<td>CC-RQ1</td>
<td>Data analyzed according to research question 1 (RQ-1): <em>In what ways do design educators describe themselves as globally competent?</em></td>
</tr>
<tr>
<td>CC-RQ2</td>
<td>Data analyzed according to research question (RQ-2): <em>How do design educators integrate global competence into their teaching practice?</em></td>
</tr>
<tr>
<td>CC-RQ3</td>
<td>Data analyzed according to research question (RQ-3): <em>What factors contribute to the development of global competence attitudes and skills among design educators?</em></td>
</tr>
<tr>
<td>CC-RQ4</td>
<td>Data analyzed according to research question (RQ-4): <em>What role does transformative learning have in the development of global competence among design educators?</em></td>
</tr>
<tr>
<td>CC-EM</td>
<td>Data analyzed across all four design educator cases regardless of direct association with a research question or emergent themes (EM)</td>
</tr>
</tbody>
</table>
**Cross-case core themes.** In the next section, I present the 12 core themes and two subthemes that emerged through my cross-case analysis.

**(CC-IE) Theme one: All four design educators’ image selections represented meanings and interpretations of global competence as human-centered.** All four design educators’ image artifact selections represented meanings and interpretations of global competence as human-centered. The human form or people were the primary focus for each image artifact. For example, Grace’s image included a portrait of female with multicultural facial features. Dolce’s primary image included hands and arms of multicultural children surrounding a globe. Maria’s image included a flock of people, in traditional cultural dress, climbing a rugged landscape. Robert’s image included two people extending a piece offering to each other. Respect and concern for people is at the core of global competence pedagogy (West, 2012). Brown (2009) posits design thinking “is deeply human in and of itself” (p. 4).

**(CC-IE) Theme two: All four design educators’ image selections expressed a physical connection of togetherness.** All four design educators’ image artifact selections expressed meanings and interpretations of global competence through a physical connection of togetherness. Fitting pieces together (Lawson, 2006) and working together in harmony (Brown, 2013) are essential goals of design thinking. For example, Grace’s image of the Asian model depicted in a classic American style on the cover of an Italian high-end fashion magazine ultimately expressed the concept that “beauty is king, and it’s something that brings people together …with no national or racial limits.” Dolce’s primary image selection “with the globe in the hands” depicted children’s hands “connecting to the world and [connecting] their different beliefs.” Maria’s image selection depicted a dynamic scene of people, some in traditional cultural attire, climbing a rugged, natural landscape. The people look like they are on a journey
to a higher point in the landscape. They appear to be helping one another along the way. Robert’s image selection depicted two people from adversarial cultures and separated by a barbed wire barrier reaching over the barrier to pass a loaf of “life-giving” bread as an act of peace and “goodness penetrating darkness.” Fitting pieces together (Lawson, 2006) and the creation of harmony are essential goals of design thinking. All four design educator’s images represented empathy through “togetherness”. Empathy is a core principle of both global competence (Mansilla & Jackson, 2011) and design thinking (Brown, 2009).

(CC-RQ1) Theme one: All four design educators diverged from a common description of global competence and used language and terminology from other globally oriented concepts to articulate their global competence. All four design educators diverged from a common description of global competence and used language and terminology from other globally oriented concepts to articulate their global competence. All in all, I reflected on how the four design educator’s descriptions of global competence consistently expressed notions of humanity and empathy, and how they called for responsible action toward global issues.

Accordingly, I reviewed my reflection memos and observation notes and found how all four design educators appeared bewildered and used multiple pauses and filler words when they attempted to articulate an operational definition of global competence. These expressions of wavering confirmed Li’s (2013) observation of the higher education community’s difficulty to describe an operational definition of global competence.

For example, Grace’s identification of her global competence as “her desire to share a vision” and Robert’s holistic approach to balance conflict while persistently encouraging problem solving reflected Bennett et al.’s (2012) leadership disposition of global stewardship. Furthermore, Maria’s description of her receptivity toward learning as a way to describe her
global competence reflected the vulnerability and growth disposition of global stewardship. Additionally, Maria, Dolce, and Robert’s convictions toward personal values and responsible action more specifically reflected meaning associated with global citizenship. For example, Maria and Robert described their ethical and moral stand for human dignity, a concept at the core of global citizenship (Dower & Williams, 2002) Additionally, Dolce described his global competence as responsible action based on the *Golden Rule*, or “treat people as I like to be treated”. Dower and Williams (2002) referred to rights and responsibilities similar to the *Golden Rule* in their descriptions of global citizenship.

*(CC-RQ1) Theme two: All four design educators primarily identified a position of awareness as a way to describe themselves as globally competent.* All four design educators primarily identified a position of awareness as a way to describe their nature to understand and act on issues of global significance. The literature presented awareness in terms of consciousness (Nunn, 1996) and self-awareness (Ferrari & Sternberg, 1988). For example, Grace pointed to her disposition to gather information and become aware of other views and perspectives, especially through global fashion trends. Dolce emphasized his balance of being aware of the “outside world at all times” and self-awareness; “being aware of what's going on. . . Being aware of yourself.” Maria described global awareness in terms of connection and impact with others. Robert simply expressed the core of global competence as, “awareness of what’s going on in the world.” Furthermore, expressions of awareness align with the literature on global awareness (Milman, 2015) and worldmindedness (Merryfield et al., 2008). Clearly, the four design educators formed a *habit of thinking* about the interconnectedness of their decision making on others.
**Theme one:** All four design educators believed active learning activities were effective ways to teach global competence. All four design educators believed active learning activities were effective ways to teach global competence attitudes and skills. Fink (2003) categorizes active learning activities as “significant learning experiences” (p. 6). Significant learning activities engage students in their learning and create high energy environments. Active learning allows the students to directly access information, learn by “doing” and “observing”, and reflecting on what one is learning and how one is learning alone and with others (p. 107). For example, Grace believed students learned more about international aspects of fashion when they actively gathered and shared information with classmates. Furthermore, active participation is a principle of design thinking (Brown, 2009) and adult learning theory (Caffarella, 2002).

**Subtheme: Collaboration.** Collaborative learning is another example of active learning (Fink, 2003). Dolce believed in the power of asking questions and learning from others. He further described the collaborative learning outcomes of a typical graphic design service learning project. Maria related her essential views of community when she described collaborative learning activities that involved designers or design students “observing” and “interviewing” their clients. Furthermore, Robert emphasized his belief in collaborative learning settings when he described the dynamic relationship between faculty, students and each other in the typical design studio setting, which allowed them to share and question prototypical ideas (Lawson, 2006). Additionally, collaboration is a critical 21st century learning outcome reported in 2011 by the Organization for Co-operation and Development (West, 2012). Collaboration is a critical skill among design thinkers (Brown, 2009) and inherent in global competence practice (Hunter, 2004).
Subtheme: Information gathering. “Receiving information and ideas” (p. 104) is an additional example of active learning (Fink, 2003). During my interview process, I observed and reflected on how the design educators synonymously use the terms “research” and “information gathering.” Upon further investigation, I found clarifying definitions in the literature. Dickinson and Marsden (2009) confirmed the “tension between the terms research and design” (p. 1) within the design professions, particularly the interior design and architecture professions where design faculty and students use the term research to refer to the expectation “to collect information on a particular client or product (p. 1). They further clarified the term “research as the systematic pursuit of new knowledge and “programming” (phase of design) as the systematic search for information. Nonetheless, all four design educators believed learning activities that allowed students to gather information were effective ways to reinforce student ability to understand and act on issues of global significance. For example, Grace emphatically stated “more research” as a way for her and her students to become more globally competent. Dolce concurred with Grace’s belief when he expressed, “‘teachers, whether design or otherwise, cannot have too much information.” Maria believed “awareness”, the prime descriptor of global competence, “should start always from researching” and “not assuming we know anything.” She further promoted the programming or “information gathering” phase of the design process as a critical awareness learning activity. Robert encouraged his students to “dig deep” for information as a way to develop holistic approaches to solve significant challenges.

(CC-RQ3) Theme one: All four design educators believed a cross cultural experience contributed to their development of a global competence attitude and/or skill. All four design educators expressed how experiences with others from different backgrounds contributed to a personal global competence attitude or skill. For example, Grace believed the multicultural
encounters as a child and young adult living in Queens, New York heightened her awareness of others. She also believed her work experiences with overseas fashion manufacturers added to her awareness and improvement of intercultural communication. Dolce believed his experiences with colleagues from other cultural backgrounds, such as Albania and Russia also added to his self-awareness and betterment of intercultural communication. Maria believed her Hispanic culture experiences strengthened her views about community. More specifically, she further reflected on the influences of time, place, and power differences among within her own Cuban culture, based on her interactions with cross-generational emigrant Cubans. Robert also strengthened his awareness of the economic needs of others from different cultures and intercultural communication through his experience as a volunteer service English teacher in the Czech Republic. The four design educators’ cross-cultural learning experiences support Taylors’s *cultural disequilibrium* as a critical “catalyst for change” (1994b, p. 161) of intercultural competence and mirrors Badley’s argument for “ethnographic stance” experiences (2000, p. 252), where teachers situate themselves in environments other than their own.

**(CC-RQ4) Theme one: All four design educators believed a formal learning experience facilitated a perspective transformation of the ways they view the world and others.** All four design educators believed a formal learning experience facilitated a change in the way they viewed the world and others. For example, Grace’s observation of other teachers’ delivery of condescending or arrogant criticism during critique teaching and learning activities changed the ways she views the role of “teacher” and now conducts a careful and growth-oriented approach to communicate with others with different views. Dolce described how his observations and interactions with students and educator colleagues in formal learning settings facilitated a change in the way he empathized with others. Maria recounted how her own experience as a design
student facilitated a perspective transformation of the ways she sees things and now uses design as a “language” and a “lens” to view the world. Robert vividly explained how his transition to college as traditional student involved a sense of disorientation and facilitated a “soul searching” experience and challenged what he believed. Furthermore, he described the interactions he experienced through a formal study abroad experience as “life changing.” All of these perspective transformation experiences included a *disorientating dilemma* (Mezirow, 1978), which facilitated a change in the way the design educator views, and acts within, the world. I was fascinated to experience how the design educators practiced “critical reflection” during the conversations, which ultimately led them to think autonomously and articulate moments of transformative learning (Mezirow, 1978).

**(CC-EM) Theme one: All four design educators connected an experience with people and places abroad as an effective way to teach and learn global competence.** All four design educators expressed the importance of traveling as a way to teach and learn global competence attitudes and/or skills. For example, Grace told stories about her own travel abroad as a young adult and her “wish to travel more” as a way to develop global competence. She believed her students should not stay “local”, whether it meant to travel across the nation or abroad. She was further impressed by her student’s risk-taking and openness to participate in internships abroad. Grace was concerned about the costs, time, and logistics of international travel, especially for faculty and students. She described faculty work abroad through “sabbaticals” and potential with international education and industry partnerships as ways to foster exposure to more sensible teaching and learning opportunities abroad. Furthermore, Grace expressed a connection to place and global competence when she described her mix of experiences living in and moving from Metropolitan New York City. Dolce also expressed a desire to travel more on one hand, and his
appreciation for the role of international students’ influence on the global competence class experience. Maria intensely described the effectiveness of her travel to Boston as a design student to viscerally experience “the energy and the people and the foods and the colors and the climate.” Like Grace, Maria also described the use technology as an option to alleviate potential logistical challenges of travel learning experiences.

Furthermore, Maria believed in the power of place, so much so she dedicated a topic about the physicality sense of place in her Human Factors course. Robert was passionate about education abroad, especially when he described how his own experiences as a study abroad participant inspired his desire to direct a study abroad program. Robert reflected on multiple lessons learned through travel abroad, for example, he related lessons of joy with the pizza guy and life-balance with the siesta. Robert told other stories about international students related global formal architectural college experience lessons back to their home countries as a way to resolve local problems. There is a plethora of literature to support education abroad as an effective method to teach and learn global competence (Braskamp et al., 2008; Doyle, 2009; Gardinier & Colquitt-Anderson, 2010), which further supports the “getting out in the world” (Brown, 2009, p. 230) part of the design thinking culture.

(CC-EM) Theme two: All four design educators believed the critique experience was an effective global competence teaching and learning tool. All four design educators believed the critique experience was an effective global competence teaching and learning tool. The critique methodology and practice is central to design education (Buster & Crawford, 2007; Hokanson, 2012). The critique typically takes place in a collaborative studio art-based learning environment where design students present their work. The work is criticized by faculty and practitioners (the learned) and peers (other learners). Ultimately the critique is a constructive evaluation teaching
and learning ritual where student design works’ “virtues and failures are debated” (Hokanson, 2012, p. 71). The design educator’s role in the critique is “to deconstruct the object [project or idea] and evaluate its parts with an eye to offering the student practical solutions to perceived deficiencies” whereas the design student’s role is to “distance himself enough from the work to that he can ‘constructively participate’ in its demise” (p. ix). The critique experience is subjective, fluid, and contextualized and like global competence teaching and learning, involves historical context and critical voice (Buster & Crawford, 2007). Critique is a central feature of design education (Hokanson, 2012) and the self-reflection outcome of critique is an important factor in a designer’s development (Cross, 2006; Schön, 1985).

For example, Grace believed the critique experience developed critical analysis skills, self-awareness, communication, innovation, and encouraged empathetic growth-oriented learning environments. Dolce believed his experiences as the recipient of criticism allowed him to gain greater self-awareness and to build courage. Maria believed her student’s experience with criticism from others aided in a more effective ability to accept objective multiple points of view. Like Grace and Dolce, Robert believed the critique experience heightened self-awareness. Also like Grace, Robert believed the critique process inspired innovation through the ability to constantly make new connections.

(CC-EM) Theme three: All four design educators connected their role as an educator to their global competence development. All four design educators connected their role as an educator to their global competence development. The literature communicates a lack of motivation for faculty to engage in global competence development (Reimers, 2009; West, 2012) with proposals to go as far as “rewarding faculty for adding new global elements to their courses, through release time, recognition, promotion, and tenure systems or monetary awards (West,
In this cross-case, all faculty displayed intrinsic motivation towards their global competence development, especially as they reflected on their role as an educator. Leung et al. (2008) observed intrinsic motivation as a key attitude among design thinkers. For example, Grace believed she needed to be aware of global issues because, “[global issues] are “necessary in the classroom when it comes to the fashion industry.”” Dolce described the necessity to be knowledgeable in many issues, including global issues, especially when a student “pushes you, as an educator to really be knowledgeable to answer those questions.” Dolce also described his belief in an educator’s role as a co-learner when he stated, “If I don’t know the answer, I’m not just going to give you some random answer to your question. If I don’t know it, we’ll look it up and learn ourselves, together.” Like Dolce, Maria modeled accountability as a co-learner to her students. She communicated the valued of life-long learning and reiterated her role of not having “all the answers” numerous times during our conversation. Maria also expressed her desire to continue to teach as a way to “keep relevant and current in my world.” Robert believed his role as an educator required him to become “hypersensitive” to global issues as a way to be accountable to his students. Robert described a discovery during our conversation. “It’s funny, when you start teaching architecture, that’s a teacher in you. Believe it or not, you’ve learned this being a teacher.”

(CC-EM) Theme four: All four designers described how they shift to different modes of perception as ways to process information and recognize qualities in other people, places, and objects. All four designers described how they shift to different modes of perception as ways to process information and recognize qualities in other people, places, and objects. Edwards (1999) describes these shifts in different modes of seeing as shifts in consciousness to heighten awareness and refers them to “artist’s ways of seeing” (p. 4) or R-mode right-brained thinking.
Edwards (1999) and Lawson (2006) both refer to the act of drawing as a way to gain “greater perceptual span” (Lawson, 2006, p. 299). Lawson (2006) refers to Schön’s (1985) work and further articulated critical reflective process when he described how “designers have conversations” with drawings (or sketches, diagrams) or any other representation they use to “organizing things …layer by layer …is very much a dialogue” (p. 279).

For example, Grace believed visual people need “to see things to really understand them.” She further expressed her need for visual expression when she described her need to create fashion illustrations as a way to represent personal qualities she experienced for her Master’s program portfolio. Dolce preferred to communicate with students and colleagues in face-to-face settings rather than virtually as a way to visually process facial gestures and body language. Maria described her goal to teach students and expressed joy in “helping the students see things differently”; she believed “design is a language, and to learn language, you have to learn to see things.” She also described her learning experiences as a student and design practitioner that involved actual site visits. These experiences opened her mind to “just look” or to “just see ordinary things” and ultimately sharpened the ways she observed others. These site visits also allowed her to evaluate multi-sensory spatial experiences, including visual experiences. Robert expressed his views of the critical and essential practice to teach architecture students “to learn to see” as a way to think about situations and issues differently. For example, he taught students how to rethink by abstracting ideas and to look beyond the visual experience, like Maria, to capture multi-sensory occurrences. Furthermore, Robert utilized the story of the “loon” to reinforce “tuning in” and an analysis assignment where students rethink the perception of a cup to teach students how to be “super-perceptive” as ways to inspire deeper levels of understanding. Expression of qualities, language communication in
verbal and non-verbal ways, and seeing situations and issues differently are design thinking skills that parallel global competence skills.

(CC-EM) Theme five: All four design educators identified an act of making as a way to express an element of global competence teaching or learning. Brown (2009) described how design thinkers, “think with their hands” (p. 106). Consequently, all four design educators identified an act of making as a way to express an element of global competence teaching or learning. For example Grace expanded her image selection activity to include making a final image on her own as a way to share her vision, which she believed is part of global competence. She also expressed her urge as a designer to make a visual portfolio and craft pieces of apparel as a way for her to creatively express her experience as an education major graduate student in a visual representation. Like Grace’s goal to represent a message, Dolce described two learning activities that involved students making a representation in project form. For example, he described a public service announcement learning activity with “lots of [visual] presentation” as a way for students to work together to represent issues of global competency and engage in critique. He also described a student project example that used typography in a historical way to re-make a communication message. Maria referred to a story of how the expectation and appreciation for making through quality craft was a way to gain cross-cultural communication and respect. Likewise, Robert described his use of “making” and “craft” as a way to inspire holistic patterns of thinking, critical analysis, ethical considerations, and care for others.

Overarching Discoveries

Upon the analysis of the cross-case themes, I reread each of the four design educator’s single cases. Then, I contemplated the cross-case themes I identified and revisited the cross-case accounts. Based on this synthesis of the entire multiple case study, I arrived at three overarching
discoveries that contribute to the knowledge base of global competence teaching and learning, grounded in the data.

1. Design educators use mindshifts as a way to develop global competence;
2. Design educators are makers of their global competence development; and
3. Design educators are mature motivators of global competence development.

Moreover, in the spirit of “bricolage” (Patton, 2002, p. 400), I remained adaptable to the naturalistic inquiry process and remained open to new possibilities. So I ducked back into the literature to gain additional insights. As a result, a passage about “self-authorship” (Kegan, 1994, p. 185) from King and Baxter Magolda (2005) immediately resonated with my impressions of the design educators’ and their holistic approaches to life, work, and education practices,

Using this way of organizing one’s life, individuals act as authors of their lives (not just the stage on which their lives are played out), balancing external influences with their individual interests and those of others around them. (p. 574)

I found the design educators to be consummate “authors of their lives”. I also found the design educators demonstrated what Mansilla and Gardner (2007) defined as global consciousness, or “the capacity and the inclination to place [their selves] and the people, objects, and situations with which [they] come into contact within the broader matrix of [their] contemporary world” (p. 58).

All in all, I recognized how my discoveries echoed the three dimensions of student development found in the literatures on holistic student development (Braskamp et al., 2008; Gillespie et al., 2009; Kegan, 1994) and similar dimensions found in King and Baxter Magolda’s (2005) work on intercultural maturity development and Chickering and Braskamp’s (2009) work on global perspective development. I illustrated how these dimensions of development connect
to the cross-case core theme statements and my overarching discoveries in Table 11. In the next section, I explain the meanings of my three overarching discoveries.

**Discussion of Overarching Discoveries**

**Design educators use mindshifts as a way to develop global competence.** The first overarching discovery addressed the cognitive dimension of development, or the ways one gains and understands knowledge and creates meaning (Gillespie et al., 2009; Kegan, 1994; King & Baxter Magolda, 2005). The four design educators expressed ways they gain knowledge and create meaning as dynamic and fluid. They demonstrated integrated thinking and “widened the scope of issues” and described “nonlinear and multidirectional relationships as a source of inspiration, not contradiction” (Brown, 2009, pp. 85-86).

For example, I discovered how all four design educators identified a position of awareness as a way to describe themselves as globally competent, particularly how they constantly reflect on and seek new information and relate meaning in interconnected ways. Additionally, I discovered how all four design educators described shifts to different modes of perception as ways they process information and recognize qualities in other people, places, and objects. Therefore, this work offers validation to Goldman et al.’s (2012) “mindshifts” (p. 13) concept. Collectively, the four design educators clearly expressed their disposition to learn global competence as an *emergent journey*, with “various levels of sophistication, transformation, application, and integration” (p. 15).

Finally, during the image-elicitation activity, all four design educators demonstrated a “shift from physical to abstract and back again” (Brown, 2009, p. 87), and surprisingly all four design educators associated a notion of physicality with their meaning of global competence. Brown further explains this shift as a “fundamental process by which [design thinkers] explore
the universe, unlock [their] imagination, and open [their] minds to new possibilities (2009, p. 87).

**Design educators are makers of their global competence development.** The second overarching discovery addressed the intrapersonal dimension of development, or the ways one understands one’s own beliefs, values, and sense of self, and uses these to guide choices and behaviors (Gillespie et al., 2009; Kegan, 1994; King & Baxter Magolda, 2005). Throughout the analysis of my discoveries the design educators described an active participation in the ways they teach and learn global competence. Like teaching and learning design, the design educators described experiential ways to teaching and learn global competence or by doing (Brown, 2009). They described information gathering, observation, framing questions, and the act of making as examples of active teaching and learning methods.

In addition, the four design educators identified the act of making with a component of global competence. Design educators reference to making was not a surprise since the act of making is embodied in design (Upitis, Smithrim, Garbati & Ogden, 2008). However, there is power in making (Brown, 2009). For example, participants in Upitis et al.’s (2008) study commented on how “involvement in art-making brought them closer in touch with their physical beings” (p. 17). Observations revealed in the same study described how adult learners relate more to the arts or making things rather than conventional subjects or forms of learning, especially as a way to break through routine and convention. Also, Grierson (2011) argued for the power of art-making to conceive ideas, expose cultural experiences and understanding, and to take risks. Similarly, Brown (2009) believed the act of making or prototyping promotes experimentation and improvisation skills.
Furthermore, Davis-Maigulte, Yorks, and Kasl (2006) described how engagement in “expressive ways of knowing” (p. 27) or expressive activities such as visualization exercises, drawing, collage-making, clay modeling, music, dance, drama, metaphor, and storytelling provided insights for the discovery of underlying thoughts, feelings, attitudes, and perceptions and precipitates the transformative learning process. Moreover, the four design educators believed a formal learning experience facilitated a perspective transformation of the ways they view the world and others. Therefore, this work offers validation to Taylor’s (1994b) and Badley’s (2000) models of intercultural and global competence transformational learning.

**Design educators are mature motivators of global competence development.** The third overarching discovery addressed the interpersonal dimension of development, or the ways one views oneself in relationship to and with other people (Gillespie et al., 2009; Kegan, 1994; King & Baxter Magolda, 2005). I derived the meaning of term “mature” from King and Baxter Magolda’s (2005) concept of intercultural “maturity” as a way to describe a person who demonstrates “complex understandings of cultural differences, the capacity to accept and not feel threatened by cultural differences, and the capacity to function interdependently with diverse others” (p. 574). I also expand the meaning of the term “mature” from Howard, Senova, and Melles’ (2015) view of “design maturity” as a way to describe designers use of intuition and flexibility “to adapt to the situation at hand. . . and draw upon their broad domain of knowledge, and toolkit of breadth and depth, to respond appropriately” (p. 196). The four design educators demonstrated mature approaches in the ways they viewed relationships with other people, choices, and behaviors.

In addition, the design educators described ways they motivated positive change in themselves and others. For example, all four design educators represented meanings and
interpretations of global competence as empathetic and human-centered. This discovery was no
surprise; however, Brown connected this discussion to additional opportunities for active
participation, “The intrinsically human centered nature of design thinking points to the next step:
we can use our empathy and understanding of people to design experiences that create
opportunities for active engagement and participation” (2009, p. 115).

Also, all four design educators believed a cross-cultural experience with others and travel
to other places was critical to global competence development. The idea of getting out into the
world (Brown, 2009, p. 230) is no surprise to the discussion of global competence development,
but it does support the emotional, human-centered, and relational qualities that promote
integration and innovation, which are core principles of design thinking. The need for
experiences abroad validates the four design educators’ preferences to engage in face-to-face
interactions with diverse others and actual travel to other places (as opposed to virtual methods)
as an effective way to gain global competence attitudes and skills.

Furthermore, the four design educators demonstrated their capacity to not feel threatened
by others when they connected their role as an educator as an essential motivator for their global
competence development. For example, all four design educators expressed their personal
responsibility as an educator to develop their global competence as a way to model behavior and
be accountable to their students. Therefore, this work validates Dweck’s growth mindset or
people’s belief “that hard work will make them better” (Brown, 2013, p. 22). Consequently, I
was surprised to find how the four design educators did not commonly refer to knowledge or use
of global competence accreditation standards. Grace and Dolce were not aware of such
standards and Maria and Robert were aware of their design specialization standards, but did not
elaborate on the explicit use of these standards. Rather, all four design educators spoke of global
themes as inherent in their field and naturally included themes of global competence in their teaching and learning practices. This finding further confirms their mature level of responsibility towards both their students and professional design community.

Finally, the four design educators believed the critique experience was an effective global competence teaching and learning tool. The critique is central to design education (Hokanson, 2012) and is educative, evaluative, and reflective. The literature presented multiple purposes for the critique. For example, Hokanson (2012) described the critique as a way to distribute learning through social interaction and engagement. In addition, Percy (2004) described the critique as a way to socialize or acculturate others. In this inquiry, the four design educators demonstrated a mature and motivating approach to their view of the critique. More specifically, Grace, Dolce, and Robert believed criticism helped them gain greater self-awareness and empathy. Maria believed criticism helped her students accept others’ points of view. Overall, the four design educators viewed the critique experience as a way to foster positive collaboration, which is a central component of global competence (Hunter et al., 2006).

Summary

In this chapter, I made the data from four design educators’ reflections on global competence teaching and learning visible through descriptions and interpretations of my discoveries, grounded in the data. I organized this chapter in two segments. The first segment described each of the four design educator single cases. The second segment described the commonalities across all four cases through a cross-case analysis.

Furthermore, I structured the presentation of core themes for each segment according to the data collection method from which the core theme emerged. For example, core themes emerged from my three data collection methods (a) interview questions aligned with my research
questions, (b) the image-elicitation activity, and (c) my reflective memos. I presented all the core themes into emphatic storylines for both the single case and cross-case analyses.

Ultimately, I synthesized the cross-case common themes and constructed three overarching conclusions about the ways four design educators’ knew and believed about global competence teaching and learning. In the next chapter, I provide an overview summary of my inquiry and further discuss discovery conclusions. I also describe implications for action and make recommendations for future inquiries.

Table 11

*Connections between Dimensions, Cross-case Core Themes, and Discoveries*

<table>
<thead>
<tr>
<th>Dimension of holistic development</th>
<th>Relevant Cross-case Core Theme Statement</th>
<th>Overarching Discovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive dimension</td>
<td>Awareness</td>
<td>Design educators use mindshifts as a way to develop global competence</td>
</tr>
<tr>
<td>Inquires: <em>How do I know?</em></td>
<td>Shift to different modes of perception as ways to process information</td>
<td>Information Gathering</td>
</tr>
<tr>
<td>Focus on how one constructs one’s view and decides what is important and true.</td>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td>Intrapersonal dimension</td>
<td>Act of making</td>
<td>Design educators are makers of their global competence development</td>
</tr>
<tr>
<td>Inquires: <em>Who am I?</em></td>
<td>Formal learning experience as perspective transformation</td>
<td>Critique experience</td>
</tr>
<tr>
<td>Focus on how one understands one’s own beliefs, values, sense of identity, purpose, and how one uses these to guide choices and behaviors.</td>
<td></td>
<td>Information Gathering</td>
</tr>
<tr>
<td>Interpersonal dimension</td>
<td>Role as an educator</td>
<td>Design educators are mature motivators of global competence development</td>
</tr>
<tr>
<td>Inquires: <em>How do I relate to others?</em></td>
<td>Critique experience</td>
<td>Experience with people and places abroad as an effective way to teach</td>
</tr>
<tr>
<td>Focus on how one views oneself in relationship with and responsibility to other people (their views, values, behaviors, etc.)</td>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Physical connection of togetherness</td>
<td></td>
</tr>
</tbody>
</table>
Chapter Five: Summary and Conclusions

When I left art school, I saw design as a deeply personal art. I certainly did not worry about its connection with business, engineering, or marketing. Once I entered the real world of professional practice, however, I found myself immersed in projects whose interdisciplinary complexity reflected the world around me and began to discover aptitudes I’d never known I had. I’m convinced that given the opportunity—and the challenge—most people will have the same experience and will be able to apply the integrative, holistic skills of the design thinker to business, society, and life. (Brown, 2009, p. 228)

Initiating nurses and administrators (or executives and clerks, or branch managers and bank tellers. . .) into the mysteries of design thinking can unleash passion and energy and creativity. (Brown, 2009, p. 174)

In this chapter, I summarize my inquiry journey and formulate conclusions concerning the four design educators’ reflections about global competence teaching and learning. I begin with a review of the purpose of my inquiry, my research questions, and the methods I used to analyze the data. Additionally, I synthesize connections between my discoveries and the overall goals of this inquiry. As a result, I illustrate a model for design education global competence development as a way to articulate my conclusions.

The chapter progresses with a description of how higher education faculty members and curriculum designers might apply the information presented in this inquiry. Furthermore, I present recommendations for future higher education global competence teaching and learning research. Prior to closing, I review limitations of my inquiry. Finally, I close with remarks of personal insights, beliefs, and inspirations as a result of conducting my inquiry.
Purpose of the Inquiry

Over the years as a designer, design educator, and world traveler I observed similar characteristics among design thinkers and global citizens. Additionally, during my doctoral course studies I read about the attitude and skill development of design thinkers and those deemed “globally competent”, which confirmed my original observations. I was ecstatic and pondered on the ways design thinking could influence global competence teaching and learning. However, the literature illustrated how educational settings often overlooked the integration of design thinking as a cross-discipline teaching and learning resource. At the same time, I read about challenges of global competence curriculum design in United States higher education and how programs continue to produce poor global competence outcomes, especially in non arts-based programs. The more I read about the effective influences of design thinking and my personal transformational experiences in design education, I pressed on.

I wanted to explore four design educators’ reflections on what they knew and believed about global competence teaching and learning for two main reasons. First, I wanted to share the reflections of four design educators as a way to inspire other educators to relate the global dimensions of their disciplines to teaching and research practice. Secondly, I wanted to discover the ways design educator’s teach and learn global competence teaching and learning to serve as a resource for curricula designers across a wide range of academic disciplines. Ultimately, I wanted to add to the body of knowledge of global competence teaching and learning and promote design thinking as a viable paradigm in curricula development.

Research Questions

Four research questions guided my inquiry:

1. In what ways do design educators describe themselves as globally competent?
2. How do design educators integrate global competence into their teaching practice?

3. What factors contribute to the development of global competence attitudes and skills among design educators?

4. What role does transformative learning have in the development of global competence among design educators?

Review of Methods

I wanted to explore the role of design educators’ personal-life, professional work, and educational experiences in their views of global competence and global competence attitude and skill development; therefore, I created a qualitative research design and used a phenomenological case study approach. More specifically, I followed a descriptive multiple-case study approach (Patton, 2002; Yin, 2003) comprised of four design educator case study participants. I used three critical reflection data collection methods, (a) in-depth interviews, (b) image artifact, and (c) my reflection memos. Consequently, I used a constant comparative analysis data analysis method in a grounded theory approach (Glaser & Strauss, 1967) to make meaning from the collected data. Furthermore, I used three systematic coding stages (a) open coding, (b) axial coding, (c) selective coding to actively sort, organize, and order concepts (Creswell 2009; Ju-Yu Ho, 2012; Maxwell, 2013). First, I analyzed the data separately for each design educator single case, and then I conducted a cross-case pattern analysis (Patton, 2002; Stake, 1978) to uncover thematic commonalities across all four single cases. Ultimately, I used this data analysis process to synthesize common core themes grounded in the data (Strauss & Corbin, 1998). I presented all the core themes into emphatic storylines for both the single case and cross-case analyses.
Summary of Discoveries

From a single case perspective, each design educator expressed deep and meaningful conversations about how the role of their personal-life, professional work, and educational experiences shaped their global competence. As a result, each of the design educator single cases revealed volumes of rich, tightly woven accounts of their perceptions, meanings, and interpretations of global competence and the ways they teach and learn global competence attitudes and skills. These accounts considerably informed the cross-case analysis.

From a cross-case analysis perspective, I categorized the four design educators’ core theme statements according to each of my four research questions and found four cross-case pattern common core themes and two subthemes. I discovered how all four design educators (a) diverged from a common description of global competence and used terminology from other globally oriented concepts to articulate their global competence, (b) primarily identified awareness as a way to describe them as globally competent, (c) believed both active learning and information gathering activities were effective ways to teach global competence, (d) believed interaction with others from different backgrounds contributed to their development of global competence attitudes and skills, and (e) believed a formal education environment experience facilitated a perspective transformation in their view the world and empathize with others.

Furthermore, I investigated commonalities across all of the design educators’ core themes regardless of theme categorization to a specific research question and found five additional emergent themes. Consequently, five additional common cross-case themes emerged. These emergent themes revealed how the design educators believed (a) opportunities with people and places abroad were effective ways to teach and learn global competence, (b) the critique is an effective global competence teaching and learning tool, (c) their role as an educator facilitated
personal global competence development, (d) the role of perception processes facilitated ways to recognize quality of other people and places, and (e) identified the act of making as a way to express an element of global competence teaching or learning.

Finally, I analyzed the design educator’s image artifact core theme statements and discovered two cross-case pattern themes. Across all cases, the design educators’ images represented meanings and interpretations of global competence as human-centered and expressed a physical connection of togetherness.

Based on this synthesis of the entire multiple case study, I arrived at three overarching discoveries that contribute to the knowledge base of design education global competence teaching and learning, grounded in the data.

1. Design educators use mindshifts as a way to develop global competence;

2. Design educators are makers of their global competence development; and

3. Design educators are mature motivators of global competence development.

Conclusions

Ultimately, I wanted to inspire educators to promote global competence development and relate the global dimension of their disciplines to their current teaching and research practice. Therefore, I crafted each design educator’s single case with thoughtful information-rich narratives, as a means to awaken reflection and action in other educators. Moreover, I wanted to inform the global competence body of knowledge. More specifically, I wanted to further respond to the pressing need to explore innovative and cost-effective global competence curricula resources (ACE “Events”, 2015), for both arts-based and non arts-based curricula designers. Therefore, I created a holistic model of design education global competence
development, based on a synthesis of the entire multiple-case study and grounded in the data and literature (Figure 6).

The three dimensions of holistic development, grounded in the literature, organize the model, (a) cognitive, (b) intrapersonal, and (c) interpersonal. The dimension meanings are explained and connected in a triangle shape to signify structure and strength. Overarching discoveries about the ways the four design educators teach and learn global competence are arranged in the outer circle. The circle shape with arrow symbols is used to signify human development, global competence, and design thinking as an iterative and continuous process. At the center of the model and encased by the structural model, are implications for teaching and learning action, which further support the core of design educator global competence development.

Figure 6. Design education global competence development model. The model illustrates the three dimensions of student development, overarching inquiry discoveries, and implications for action.
Furthermore, each dimension of the holistic model of design education global competence development connects to an emerging concept of higher education teaching and learning implication (a) mindfulness, (b) maker movement, and (c) mindsets. Curricula designers can incorporate practices from these emerging areas to further innovate interdisciplinary global competence curricula reform. Additionally, arts-based and non-arts based curricula designers and educators can apply insights from these emerging areas to inform their own global competence development and their students’ global competence development.

What I concluded from my inquiry has practical implications for professional practice. In the following section, I further explain three implication areas for action based on each of the emergent concepts of higher education teaching and learning.

**Implications Areas for Action**

**Mindfulness.** From a cognitive dimension perspective, I discovered how the four design educators use dynamic mindshifts of awareness and consciousness to recognize and construct global competence knowledge and meaning. Mindfulness is a “conscious, purposeful way of tuning into what is happening in and around us” (Schoberlein & Sheth, 2009, p. 1). Furthermore, mindfulness is an emerging teaching and learning method (Hyland, 2011). Mindfulness uses “the practice of being consciously aware of the present moment” (Burke & Hawkins, 2012, p. 37) to cultivate “paying attention in a sustained and particular way …Non-judgmentally …in the service of realizing the full range of our humanity and of our relationships to others and the world (Katbat-Zinn, 2012, p. 1). Meditation practices such as sitting meditation, walking meditation, and walking with words, and mindful breathing are examples of mindful teaching and learning techniques (Schoeberelein & Sheth, 2009). Edwards (1999) further described drawing as a meditative or mindful act when she stated, “drawing puts them into a somewhat
altered state of awareness…feeling transported ‘at one with the work,’ able to grasp relationships that they ordinarily cannot grasp… almost a mystical activation of the mind” (p. 4).

Moreover, the literature supports notions of mindfulness related to global competence themes. For example, Nardi (2001) described self-awareness, a prime principle of global competence development, as “operating consciously and mindfully in the big picture” (p. 93). Additionally, Mansilla and Garder posited, “Learning should be inspired by the goal of developing global consciousness—a mindful way of being in the world today” (2007, p. 48). More importantly, a quality of mindfulness practice contributes to desired global competence outcomes and strengthens emotional balance (Schoeberlein & Sheth, 2009). For example, “the capacity for kindness, empathy, compassion, and deep caring are supported by mindfulness” (Schoeberlein & Sheth, 2009, p. 2). In addition, Kabat-Zinn outlined and the role of mindfulness in the formation of ethics and morality, which were themes found in the design educator single cases,

> Generosity, trustworthiness, kindness, empathy, compassion, gratitude, joy in the good fortune of others, inclusiveness, acceptance and equanimity are qualities of mind and heart that further the possibilities of well-being and clarity within oneself, to say nothing of the beneficial effects they have in the world. They form the foundation for an ethical and moral life. (2012, p. 103)

Clearly, the implementation of mindfulness teaching and learning practices is a way to develop global competence attitudes and skills. Furthermore, the literature links general cognition to art-making and mindful art experiences as ways to enhance teaching and learning practices (Patterson, 2015). However, mindfulness teaching and learning implementation will not flourish without faculty commitment, enthusiasm and role modeling support (Hyland, 2011). Therefore, educators across all disciplines need to engage and hone their own mindfulness skills through meditative practices and provide purposeful opportunities for their students to do the same.
Design educators use drawing practices as an example of a meditative practice (Edwards, 1999), which might be useful to other disciplines.

**Maker movement.** From an intrapersonal perspective, I discovered how the four design educators authored their global competence development, in other words, they demonstrated their role as active participants in the ways they shape or make their understanding of self and use their values and beliefs to guide the choices they make about their global competence teaching and learning. I also discovered how the four design educators connected the act of making to a meaning they associated with global competence such as sharing visions and the care and respect of others. Furthermore, I discussed how learning-by-doing methods pervades design education and promotes integrative thinking.

The maker movement or maker culture is a prime example of an emergent and innovative constructivist learning approach to promote self-efficacy, persistence, exploration, and collaboration (Halverson & Sheridan, 2014; Kayler, Owens, & Meadows, 2013), which are themes connected to global competence attitudes and skills. The maker culture refers to “a growing community dedicated to making their own functional devices, or nearly any other aspect of physical life (Kayler et al., 2013). The maker movement expands the definition of the maker culture to include three components, “making as a set of activities, makerspaces as communities practice, and makers as identities of participation” (Halverson & Sheridan, 2014, p. 501).

Makerspaces are physical spaces, or “innovation places” (Johnson & Halverson, 2015, p. 1) designed to bring communities together to make things, and in essence tackle problems, create, and innovate. In the process, makers learn about themselves and others. The literature revealed wide acceptance of makerspaces in library, museum, and education environment settings (Meyer & Fourie, 2015). Furthermore, makerspace learning environments afford
students critical reflective practice, opportunities for iteration, and feedback through critique (Johnson & Halverson, 2015).

Clearly, engagement in the maker culture is a way to develop global competence attitudes and skills. Dougherty (2012) stressed that everyone is a maker, “no matter how we live our lives or what our goals might be” (p. 12). Therefore, arts-based and non arts-based students and educators need to be active participants in their global competence development and engage in the maker movement. They need to make things, reflect on the making process, and share ideas with others.

**Mindsets.** From an interpersonal perspective, I discovered how the four design educators approached and related to others in accepting, growth-oriented, and non-threatening ways. They described and displayed a desire to motivate meaningful contributions to their own and others’ global competence development. The notion of mindset considers how one approaches situations and is an emerging discourse in academia (Brown, 2013; Dweck, 2007; Howard et al., 2015; Javidan & Bowen, 2013).

Brown (2013) defined mindset as “a person’s perception of, attitude toward, and desired reaction to the world around them” (p. xxix). Similarly, Howard et al. (2015) summarized mindset as “the perspective that informs how people approaches and interacts with the world” (p. 183) and formulated mindsets for design thinking. Brown (2013) described effective designer mindsets schemes. Javidan and Brown (2013) postulated the term “global mindset…an individual’s capability to influence others unlike themselves” (p. 145). As a group, effective design and global mindsets influenced qualities of growth, adaptability, collectivity, assertiveness, and positive change.
Belief about a person’s ability to change is at the root of mindset development (Brown, 2013). Therefore, learners develop effective mindsets by engaging in situations out of their norm, which resonates with disorientating dilemma component of transformative learning (Mezirow, 1978). Learners need to step out of their comfort zone and take risks to change or transform deep-rooted fixed mindsets to growth mindsets (Brown, 2013). Mindset development is further achieved through coaching (Javidan & Brown, 2013) and mentoring. Educators and colleagues can influence and motivate effective mindsets. Brown (2013) also described the constructive feedback and critique experiences as a way to cultivate a growth mindset and connected the role of a growth mindset to effective conflict resolution and collaboration.

Furthermore, Howard et al. (2015) explored different approaches to mindset among design thinkers. For example, they found designers who viewed their design thinking mindset as a way-of-life displayed greater optimism, curiosity, and holistic thinking than others who viewed their design thinking mindset as a mere way-of-work. In other words, a way-of-life approach underpinned mindset purpose.

Clearly, a person’s mindset affects the ways they interact with the world and capability to influence others. Therefore, educators across all disciplines need to embrace a growth “way-of-life” mindset and coach their students to cultivate their own globally oriented growth mindsets to maximize effective outcomes with complex situations and affect positive change. For example, educators might facilitate opportunities to move students out of their comfort zone and accept constructive feedback through critique. Furthermore, educators and students need to travel to other places, observe, and interact with people from different cultures.
Recommendations for Further Research

When I embarked on my inquiry journey, I questioned what design educators knew and believed about global competence teaching and learning and discovered fulfilling insights along the way. However, as my journey ends, I realize I am left with more questions. In the following section, I outline recommendations for future inquiries.

For one, this inquiry confirmed Li’s (2013) claim that “the higher education community has not yet reached an agreement on the operational definition of global competence” (p. 126). I wonder how the U.S. higher education community continues to view the meaning of global competence and how global competence is situated among other globally oriented teaching, learning, and development terminology found in the literature.

All in all, my inquiry focused on four particular design educator specialization areas: fashion design, graphic design, interior design, and architecture. I wonder how my discoveries might connect to other design specialization areas.

Additionally, a main goal of my inquiry sought to transfer knowledge and practices from arts-based ways of teaching and learning to non-arts based disciplines. I wonder how non-arts based educators teach and learn global competence.

Also, Maria and Robert clearly expressed conviction towards their religious affiliations and how the role of morality contributed to their global competence development. Conversely, I acknowledge how current social views consider, “the traditional religious notions. . . of right action, right livelihood, right effort, etc.” (Walker, 2013, p. 103) taboo. However, I wonder about perceptions of the role of spiritual traditions in global competence development since “all great spiritual traditions are concerned with the transformation of the individual” (Walker, 2013,
p. 97) and the concept of global stewardship, or “individual accountability and responsibility is common to all major faiths” (Bennett et al., 2012, p. 40).

Similarly, I noticed how all the design educators, when asked to give examples of global issues, identified issues of political origin (Table 11). Furthermore, Dolce indicated on numerous occasions how he avoids discussions about political issues with students and colleagues. I wonder about perceptions of the role of politics and power in global competence development, especially since politics is consistently included as a dimension of society (i.e., social, political, economic, geographic, and environmental) in the literature (Hunter et al., 2006).

In addition, my discoveries challenged the findings in the literature about virtual experiences as effective ways to interact with others abroad. For instance, the four design educators primarily described their preference to interact face-to-face. Additionally, the four design educators emphasized their critical view of visual information processing to understand qualities of other people and places. Furthermore, the four design educators expressed physical togetherness in their interpretations of global competence. I wonder what other disciplines believe about the role of technology, communication, and physicality when they interact with others abroad.

Furthermore, I was surprised to find how the four design educators did not commonly refer to knowledge or use of global competence accreditation standards. I wonder about the perceptions and role of design program accreditation standards in the development of global competence development among administrators, faculty, and students.

Finally, I presented a theoretical model for design education global competence development grounded in the data and the literature. I recommend testing these emerging concepts with additional fieldwork and empirical inquiry.
Limitations

Researcher subjectivity permeates the qualitative inquiry process. My life experiences, role as a design educator, and my personally and professionally held biases influenced the ways I made the data visible. Additionally, Patton (2002) affirmed hermeneutic considerations “are now fundamental, even basic, in qualitative inquiry” and argues,

That one can only interpret the meaning of something from some perspective, a certain standpoint, a praxis, or a situational context, whether one is reporting on one’s own findings or reporting the perspectives of people being studied (and thus reporting their standpoint or perspective). (Patton, 2002, p. 115)

Therefore, I made numerous attempts to expose myself in the inquiry. For example, I situated myself in the inquiry, further expressed a reflective self-biography, and shared personal views through my reflective memos. Furthermore, the design educators might have recalled their experiences in error or relayed self-serving responses. Hence, the design educators reviewed their interview transcripts and my descriptions and discoveries of the data as a way to validate the discoveries and findings and clarify any misinterpretations.

Concluding Remarks

Throughout this inquiry I allowed complexity to exist, thus I embraced the mess (Brown, 2009). In the process I engaged in meaningful dialogue exchanges with the four design educators. The rich descriptions of their experiences illuminated my single case and cross-case discoveries. Ultimately, I discovered how design educators shift to different modes of perception, are active participants in their global competence development, have the capacity to accept and not feel threatened by cultural differences, and function interdependently with diverse others. Accordingly, I was motivated to “duck back into the literature” to search for emergent concepts to link my discoveries to innovative practical application. As a result, I created a theoretical model for design education global competence development and connected this
development to fresh approaches to teaching and learning such as: mindfulness, the maker movement, and growth mindsets.

As the maker of this inquiry, I wanted to contribute practical resources to innovate global competence teaching and learning and motivate others to connect the global dimensions of their disciplines to their teaching and research practice. Brown (2009) stated, “There is nothing as seductive to a true innovator as optimism” (p. 232). I am optimistic about the contribution of the discoveries and practical implications revealed through this inquiry across higher education disciplines. After all, “the skills that make for a great design thinker--the ability to spot patterns in the mess of complex inputs; to synthesize new ideas from fragmented parts; to empathize with people different from ourselves--can all be learned” (Brown, 2009, p. 86).

Finally, for multiple reasons, I close this work with a quote by Carl Gustav Jung, the infamous founder of analytical psychology. For one, Jung’s quote resonates with me and expresses the reflective process of this investigative inquiry. What's more, the quote speaks to the spirit of holistic student development and the positive, constructive engagement of global stewardship. For example, global stewardship requires a person to situate one’s self amongst others “while seeking harmonious, responsible change for society, rather than disruption for its own sake” (Bennett et al., 2012, p. 40). As a final point, Jung’s quote sheds promising light on the critical climate of global matters, all too familiar at the time of this writing,

The best political, social, and spiritual work we can do is to withdraw the projection of our shadow onto others (Purushotahaman, 2014, p. 133).
References


Appendix A: Research Invitation

Dear Design Educator:

Re: Reflections on Global Competence by Four Design Educators
IRB Protocol number, #22555

My name is Phil Bulone and I am a doctoral candidate in the Higher Education Administration program in the College of Education at USF. I am conducting research on design educator perceptions of global competence. My major professor is Dr. Kathleen King.

The purpose of this study is to investigate the ways design educators describe how their personal-life experiences, professional practice experiences, and educational experiences support their ability and nature to understand and act on issues of global significance. Ultimately, the intent is to disseminate the outcome of this study and:

- Serve as a resource for both arts-based and non arts-based curricula designers and inform inventive and cost-effective global competence curricula reform strategies.
- Inspire non arts-based higher education educators to relate the particular global dimensions of their own experiences to present teaching and research practice.

The study has inclusion criteria. I believe you might meet the following criteria:

- You have an earned degree in higher education from an accredited institution located in the United States, with a major in at least one of the following design fields: architecture, fashion design, graphic design, interior design;
- You have a minimum of one year of teaching college level design courses; and
- You have a minimum of two years of professional practice experience in at least one of the following design fields: architecture, fashion design, graphic design, interior design.

If you meet the criteria and are willing to participate, I would be very grateful. Your participation would require two interview sessions. Both interviews will take approximately one hour to complete at a place conducive to interviews and convenient for you. The goal is to complete both interviews prior to August 15, 2015. Participation is voluntary. Data will remain confidential. I will use pseudonyms to remain anonymity.

I have included the approved informed consent form for your review and signature. Should you have any questions, please contact me at pbulone@mail.usf.edu. If you are willing to participate, please complete the attached informed consent form and return to Phil Bulone via email.

Thank you for your consideration. I look forward to your reply.

Sincerely,

Phil Bulone
Appendix B: Informed Consent Form

Informed Consent to Participate in Research Involving Minimal Risk
Information to Consider Before Taking Part in this Research Study

Pro # 23555

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called:
Reflections on Global Competence by Four Design Educators
The person who is in charge of this research study is Phil Bulone. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. He is being guided in this research by Dr. Kathleen King.
The research will be conducted at a place conducive to interviews and convenient for you.

Purpose of the study:
The purpose of this study is to investigate the ways design educators describe how their personal-life experiences, professional practice experiences, and educational experiences support their ability and nature to understand and act on issues of global significance. Ultimately, the intent is to disseminate the outcome of this study and:

- Serve as a resource for both arts-based and non-arts-based curricula designers and inform inventive and cost-effective global competence curricula reform strategies.
- Inspire non-arts-based higher education educators to relate the particular global dimensions of their own experiences to present teaching and research practice
Why are you being asked to take part?

We are asking you to take part in this research study because you have:

- An earned degree in higher education from an accredited institution located in the United States, with a major in at least one of the following design fields: architecture, fashion design, graphic design, interior design.
- You have a minimum of one year of teaching college level design courses.
- You have a minimum of two years of professional practice experience in at least one of the following design fields: architecture, fashion design, graphic design, interior design.

Study Procedures:

If you take part in this study, you will be asked to participate in two interview sessions.

Both interviews will take approximately one hour to complete at a place conducive to interviews and convenient for you. The goal is to complete both interviews prior to August 15, 2015.

The first interview will include 11 open-ended questions. These questions will be sent to you prior to the interview to allow you time for self-reflection.

The second interview will include personal reflections on a visual image activity. I will give you a written description of the visual image activity prior to the follow-up interview.

The interviews will be digitally audio-recorded by the principle investigator. Once the recordings are completed, they will be sent to an outside party for transcription. There will be no identifying information included in the interviews to maintain some anonymity. A digital copy of the visual image will be collected and retained. Both the audio-recordings and copy of the visual image(s) will be maintained as password protected digital files with the primary investigator for 5 years after the Final Report is submitted to the IRS. After 5 years, the files will be permanently deleted.

You will have the opportunity to review the verbatim transcripts of the interview and related analysis for the accuracy of your responses and accuracy of the meaning associated with your responses.

Total Number of Participants

About four individuals will take part in this study.

Alternatives / Voluntary Participation / Withdrawal

You do not have to participate in this research study.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study.

Benefits

The potential benefits of participating in this research study include insights and contribution to the body of knowledge of global competence among design educators.
Risks or Discomfort
This research is considered to be minimal risk. That means that the risks associated with this study are
the same as what you face every day. There are no known additional risks to those who take part in this
study.

Compensation
You will receive no payment or other compensation for taking part in this study.
The findings from this research may result in the future development of products that are of
commercial value. There are no plans to provide you with financial compensation or for you to share in
any profits if this should occur.

Costs
There are minimal costs associated with this study. Examples of potential costs may include:
• Transportation costs to and from the first and second interview meeting location.
• Cost to make copies of visual images used in the second interview.

Privacy and Confidentiality
We will keep your study records private and confidential. Certain people may need to see your study
records. Anyone who looks at your records must keep them confidential. These individuals include:
• The research team, including the Principal Investigator, study coordinator, and all other
  research staff.
• Certain government and university people who need to know more about the study, and
  individuals who provide oversight to ensure that we are doing the study in the right way.
• Any agency of the federal, state, or local government that regulates this research.
• The USF Institutional Review Board (IRB) and related staff who have oversight
  responsibilities for this study, including staff in USF Research Integrity and Compliance.

We may publish what we learn from this study. If we do, we will not include your name. We will not
publish anything that would let people know who you are.

You can get the answers to your questions, concerns, or complaints
If you have any questions, concerns or complaints about this study, or experience an unanticipated
problem, call Phil Bulone at 813-601-1688.

If you have questions about your rights as a participant in this study, or have complaints, concerns or
issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.
Appendix C: Participant Interview Guide

Thank you for your consent to participate in the study titled, Reflections on Global Competence by Four Design Educators.

The following definition of global competence and interview question guide are provided in advance to allow you time for self-reflection.

Global competence. For purposes of this study, global competence is defined as, “the capacity and disposition to understand and act on issues of global significance” (Mansilla & Jackson, 2011, p. xiii). Furthermore, global competence is generally described in three ways: knowledge, attitudes, and skills. Global competence knowledge refers to the historical, social, political, economic, geographic, and environmental interconnectedness of society. The following table outlines typical attitudes and skills associated with global competence, which align with typical attitude and skill characteristics of designers/design educators:

<table>
<thead>
<tr>
<th>Learning Domain</th>
<th>Global Competence Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>Open minded</td>
</tr>
<tr>
<td>Attitude</td>
<td>Risk takers</td>
</tr>
<tr>
<td>Attitude</td>
<td>Empathetic</td>
</tr>
<tr>
<td>Attitude</td>
<td>Comfortable with ambiguity and unfamiliarity</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to critically analyze</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to interact and communicate with those from other background</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to listen, observe, and relate</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to gather information beyond one’s environment</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to be critically self-aware</td>
</tr>
<tr>
<td>Skill</td>
<td>Able to constantly make new connections</td>
</tr>
</tbody>
</table>

The following is a list of interview questions for guidance:

1. How would you describe your interest in global issues?

2. What does it mean to you, to be globally competent?

3. Please illustrate examples of global competence as related to your career practice.

4. Describe your level of awareness of global competence accreditation standards for academic design programs.

5. How does global competence influence your teaching philosophy and teaching methods as a design educator?
Appendix C (Continued)

6. What do you believe are effective ways you incorporate global competence in your design classes? Any ineffective ways?

7. Tell me about the importance of global competence in the education of design thinkers today?

8. What has contributed to your global competence attitudes?

9. What has contributed to your global competence skills?

10. Please describe any major events in your life that significantly influenced your understanding and/or appreciation of issues of global significance.

11. Tell me of any turning points when you have experienced any disorientation, disequilibrium, or disruptions in your values, beliefs, or expectations of global issues.
   - Based on these turning points, in what ways do you now experience views of global issues that are different than you used to?

12. What information/experiences do you believe you need to continue to develop your global competence?
Appendix D: Background Questionnaire Information

Participant pseudonym __________________________

What is your gender? __________________
What is your age? __________________
To which racial group(s) do you identify? __________________
To which ethnic group(s) do you identify? __________________

Please describe how you meet the inclusion criteria of this study:
Do you have an earned degree in higher education from an accredited institution located in the United States, with a major in at least one of the following design fields: architecture, fashion design, graphic design, interior design? If so, please note institution(s) name, location and major(s):

Do you have a minimum of one year of teaching college level design courses? If so, please note institution(s) name, location and program discipline:

Do you have a minimum of two years of professional practice experience in at least one of the following design fields: architecture, fashion design, graphic design, interior design. If so, please describe type(s) of professional practice/positions held and location(s):

Please forward your current resume/CV to phulone@mail.usf.edu

Principle Investigator initials and date _______________
Appendix E: Interview Protocol

**Introduction:** Thank you for your time and participation in this study. As you recall, I am conducting research on global competence among design educators, in particular, the common ways in which four design educators describe how their personal-life experiences, professional practice experiences, and educational experiences contribute to their capacity and disposition to understand and act on issues of global significance.

**Interview Guide**

**Interview Question One (IQ1):** How would you describe your interest in global issues? (social, political, economic, environmental)

**Interview Question Two (IQ2):** What does it mean to you, to be globally competent? (propensity to understand and work with others; language skills; place knowledge in world context)

**Interview Question Three (IQ3):** Please illustrate examples of global competence as related to your career. (human resources, operations, financial, exchange of goods/services, customer/client relationship)

**Interview Question Four (IQ4):** Describe your level of awareness of global competence accreditation standards for academic design programs. (NAAB, CIDA, NASAD, explicitly address in your classes)

**Interview Question Five (IQ5):** What do you believe are effective ways you incorporate global competence in your design classes? Any ineffective ways? (subject matter context, use of technology, methods of instruction, class dynamics)

**Interview Question Six (IQ6):** Tell me about the importance of global competence in the education of design thinkers. (impact on self, others, profession)

**Interview Question Seven (IQ7):** What has contributed to your global competence attitudes? (open minded, risk taker, empathetic, comfort with unfamiliarity)

**Interview Question Eight (IQ8):** What has contributed to your global competence skills? (analyze, communicate those with different backgrounds, listen, self-awareness, make connections)
Appendix E (Continued)

Interview Question Nine (IQ9): Please describe any major events in your life that significantly
influenced your understanding and/or appreciation of issues of global significance.
(births, deaths, relocation, travel, rites of passage, “aha moments”, self-reflection, relationships,
work, education)

Interview Question Ten (IQ10): Tell me of any turning points when you realized your values,
beliefs, or expectations of global issues changed.
(births, deaths, relocation, travel, rites of passage, “aha moments”, self-reflection, relationships,
work, education)

Based on these turning points, in what ways do you now experience views of global
issues that are different than you used to?

Interview Question Eleven (IQ11): Interview Question Twelve (IQ12): What
information/experiences do you believe you need to continue to develop your global
competence?

Interview Question Twelve (IQ12): What should I have asked you, which I did not think to ask,
about the role of the experiences that shape your global competence attitudes and/or skills?

Closing: Thank you for your time today and the rich experiences you have shared with me. If
you have any additional thoughts please contact me either by phone or email.
Appendix F: Follow-up Interview Image-elicitation Activity Instructions to Participants

Thank you for your participation in our initial interview.

For our follow-up interview, please bring a minimum of one (1) image or a maximum of three (3) images. The image(s) should be used to promote a conversation about how the meanings and interpretations of the image contribute to your nature to understand and act on issues of global significance.

You may choose from a variety of types of images, including but not limited to: photographs, collage, paintings, advertisements, newspaper or magazine article images, cartoons, or any other visual image you deem appropriate.

You may create this image or you may select this image from another source. Please also provide image source information.

I would like to make these instructions open to your creative interpretation. Please contact me by phone or email, should you have any questions or recommendations.

Thank you,

Phil Bulone
pbulone@mail.usf.edu
Appendix G: Member Check Protocol

Dear _______________,

Thank you for the insightful interviews. Attached, please find a draft copy of the verbatim transcripts of the interview and related analysis (I highlighted parts related to you).

Please review both the transcription for the accuracy of your responses. Also, please review the data analysis for the accuracy of the meaning associated with your responses.

Please respond to me via email with your confirmation of accuracy and/or any feedback.

Feel free to contact via email at pbulone@mail.usf.edu should you have any questions.

Thank you again for your time and willingness to participate in this study.

Sincerely,

Phil Bulone
pbulone@mail.usf.edu
## Appendix H: Single Case Research Question Core Theme Statements

### Table H1. Grace List of Single Case Core Theme Statements

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Single Case Core Theme Statement</th>
<th>Subtheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grace identified her critical awareness and open attitude toward other views as a way to describe her as globally competent</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Grace identified her desire to share a vision as a way to describe her as globally competent</td>
<td>Subtheme: Beauty is a way to bring people together</td>
</tr>
<tr>
<td>2</td>
<td>Grace utilized global ramification topics as a way to teach awareness of global issues related to the fashion industry</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Grace utilized lessons in history as a way to connect global issues to culture, time, and place</td>
<td>Subtheme: Research never stops</td>
</tr>
<tr>
<td>2</td>
<td>Grace used active learning approaches to teach students effective information gathering skills</td>
<td>Subtheme: Research never stops</td>
</tr>
<tr>
<td>2</td>
<td>Grace believed education abroad activities were effective ways to teach students open mindedness and comfort with unfamiliarity</td>
<td>Subtheme: Seeing is critical to understanding</td>
</tr>
<tr>
<td>2</td>
<td>Grace believed critique was an effective way to teach critical analysis skills</td>
<td>Subtheme: Builds self-awareness</td>
</tr>
<tr>
<td>2</td>
<td>Grace believed global competence issues were inherent in fashion design education</td>
<td>Subtheme: Cultivates communication skills and inspires innovation</td>
</tr>
<tr>
<td>2</td>
<td>Grace utilized communication tools to teach students effective ways to globally share ideas</td>
<td>Subtheme: Need to learn other languages</td>
</tr>
<tr>
<td>2</td>
<td>Grace believed students should first approach global issues at a small scale as a way to make an impact</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Grace believed global teaching resource partnerships could offer more effective ways to teach global competence attitudes and skills</td>
<td>Subtheme: Face-to-face vs. virtual experiences</td>
</tr>
<tr>
<td>2</td>
<td>Grace believed entrepreneurial spirit</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grace believed living in metropolitan New York City strengthened her multicultural awareness</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grace believed the encouragement of individual effort afforded to the Gen X generation added to the confidence in her ability to make a difference in the world</td>
<td>Subtheme: Entrepreneurial Spirit</td>
</tr>
<tr>
<td>3</td>
<td>Grace believed her urge to make things added to her ability to make new connections</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grace believed her interaction with overseas fashion manufacturers created her need for flexible and clear communication styles</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grace believed her experiences as a graduate student strengthened her information gathering and research skills</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Grace believed her international travel experiences as a young adult altered her appreciation for other places and cultures</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Grace believed her experience moving away from New York City converted her world view in broader ways</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Grace believed unconstructive experiences associated with critiques changed the ways she views open and empathetic learning environments</td>
<td></td>
</tr>
</tbody>
</table>
### Table H2. Dolce List of Single Case Core Theme Statements.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Single Case Core Theme Statement</th>
</tr>
</thead>
</table>
| 1                 | Dolce described his self-awareness to connect with the outside world as a way to describe him as globally competent  
**Subtheme:** Connection to personal values  
**Subtheme:** Treat people as I like to be treated                                                                 |
| 1                 | Dolce identified his interest in communication as a way to describe him as globally competent  
**Subtheme:** Listening                                                                                                                                                                                                     |
| 2                 | Dolce utilized discussions about acceptance and understanding to teach open-mindedness and inclusiveness                                                                                                                      |
| 2                 | Dolce expressed a careful approach to the instruction of sensitive global issues  
**Subtheme:** Boundary-free project assignments  
**Subtheme:** Self-awareness                                                                                                                                                                                                  |
| 2                 | Dolce believed information gathering or research were effective ways to teach students attitudes of open-mindedness and risk-taking  
**Subtheme:** Historical and social representation                                                                                                                   |
| 2                 | Dolce believed collaborative learning activities were effective ways to teach students interpersonal communication  
**Subtheme:** Public service announcement project                                                                                                                   |
| 3                 | Dolce believed his resourceful ways contributed to his ability to gather information                                                                                                                                             |
| 3                 | Dolce believed his role as an educator gave him a greater spirit of inquiry and challenged him to take risks                                                                                                                  |
| 3                 | Dolce believed his interactions with colleagues from other countries added to his self-awareness and interpersonal communication skills                                                                                   |
| 3                 | Dolce believed his experiences in musical theater contributed to his outgoing personality and ability to influence others  
**Subtheme:** Criticism                                                                                                                                            |
| 4                 | Dolce believed his experiences with students and educator colleagues altered a changed in his views of empathy                                                                                                                 |
| 4                 | Dolce believed his experiences as a multiple brain surgery survivor transformed a new appreciation for life and ability to be more aware of the outside world                                                                |
| 4                 | Dolce believed his experiences with both face-to-face and distance learning platforms altered his views of effective communication techniques                                                                                       |
### Appendix H (Continued)

**Table H3. Maria List of Single Case Core Theme Statements.**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Single Case Core Theme Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maria identified her awareness of world interconnectedness as a way to describe her as globally competent</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Role as an educator</td>
</tr>
<tr>
<td>1</td>
<td>Maria identified her responsibility to take action as a way to describe her as globally competent</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Role of morality</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Social Justice</td>
</tr>
<tr>
<td>1</td>
<td>Maria identified her receptivity toward learning as a way to describe her as globally competent</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Changing views over time</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Challenge ways to see the world</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Avoid capsulation</td>
</tr>
<tr>
<td>2</td>
<td>Maria taught her students about the ability of design to make a difference in the world</td>
</tr>
<tr>
<td>2</td>
<td>Maria utilized the design process programming phase to teach students about the global impact of design decision-making</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Thoughtful effort reflects care for others</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Trends affect change</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Research promotes proper assumptions of others</td>
</tr>
<tr>
<td>2</td>
<td>Maria believed active learning experiences and global teaching resource partnerships could offer more effective ways to teach and learn global competence</td>
</tr>
<tr>
<td>2</td>
<td>Maria utilized a human factors course to expand awareness of global issues</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Phenomenology of Place</td>
</tr>
<tr>
<td>2</td>
<td>Maria believed feedback students receive from others through critique is an effective way to teach objective points of view</td>
</tr>
<tr>
<td>2</td>
<td>Maria believed the promotion of life-long learning is an effective way to inspire inquisitiveness and build community awareness</td>
</tr>
<tr>
<td>3</td>
<td>Maria believed her Catholic religious and Hispanic ethnic background contributed to the ways she frames her point of view</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Psychological and spiritual components of design</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Personal values</td>
</tr>
<tr>
<td>3</td>
<td>Maria believed her openness to relationships and willingness to learn from other people adds to her ability to listen, observe, and relate</td>
</tr>
<tr>
<td>3</td>
<td>Maria believed exposure to energy crisis issues in college ignited her awareness of sustainability and responsible design</td>
</tr>
<tr>
<td>4</td>
<td>Maria believed her experiences as a design student altered the ways she looks at things</td>
</tr>
<tr>
<td>4</td>
<td>Maria believed her early design practice experiences converted her ability to critically analyze ethical behavior and self-awareness</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Caring role models</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Different cultural expectations</td>
</tr>
<tr>
<td></td>
<td><em>Subtheme</em>: Personal dignity</td>
</tr>
<tr>
<td>4</td>
<td>Maria believed her role as a mother transformed her views of world legacy issues</td>
</tr>
</tbody>
</table>
## Appendix H (Continued)

### Table H4. Robert List of Single Case Core Theme Statements.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Single Case Core Theme Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Robert identified his awareness of what’s going on in the world as a way to describe him as globally competent</td>
</tr>
<tr>
<td>1</td>
<td>Robert identified his empathetic nature as a way to describe him as globally competent</td>
</tr>
<tr>
<td>1</td>
<td>Robert identified the need to define value systems as a way to describe his and other’s assumptions of global competence</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Human dignity as a personal value assumption</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Perceptions of other’s value systems</td>
</tr>
<tr>
<td>1</td>
<td>Robert identified his belief to create ethical or moral boundaries as a way to confront difficult global issues of conflict</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Impact of design decisions on others</td>
</tr>
<tr>
<td>1</td>
<td>Robert identified his holistic approach to thinking and acting as a way to balance conflicting viewpoints and remain encouraged to solve vast global issues</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Think globally; act locally</td>
</tr>
<tr>
<td>2</td>
<td>Robert identified research as an effective way to teach the ability to gather information beyond one’s environment and look beyond immediate boundaries</td>
</tr>
<tr>
<td>2</td>
<td>Robert utilized the design studio setting as a way to teach the ability to make new connections and interact with those from other backgrounds</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Critique</td>
</tr>
<tr>
<td>2</td>
<td>Robert identified the practice of making as an effective way to teach students a way to teach students holistic patterns of thinking, critical analysis, and care for others</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Balance of sacrifice</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Care and beauty of craft</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Value and joy in making</td>
</tr>
<tr>
<td>2</td>
<td>Robert believed lessons in perception were effective ways to teach students to think about things differently and inspire deeper levels of understanding and experience</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Abstraction</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> See beyond the visual experience</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Super-perception: Be like the loon</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Super-perception: Autobiography of a cup</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Question meaning associations: Furry cup</td>
</tr>
<tr>
<td>2</td>
<td>Robert believed lessons in history were effective ways to teach students to critically analyze global issues</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Peaceful coexistence</td>
</tr>
<tr>
<td>2</td>
<td>Robert incorporated international travel education programs as an effective way to teach students critical self-awareness and relate to those from other backgrounds</td>
</tr>
<tr>
<td>3</td>
<td>Robert believed his religious upbringing experiences contributed to his capacity and disposition for empathy</td>
</tr>
<tr>
<td>3</td>
<td>Robert believed travel experiences expanded his awareness of world system issues and needs of others</td>
</tr>
<tr>
<td>3</td>
<td>Robert believed exposure to energy crisis issues in college added to his awareness of ecological and sustainability issues</td>
</tr>
<tr>
<td>4</td>
<td>Robert believed his role as an educator made him hypersensitive towards the ways he views global issues</td>
</tr>
<tr>
<td>4</td>
<td>Robert believed his experience as a student converted new world views</td>
</tr>
<tr>
<td></td>
<td><strong>Subtheme:</strong> Study abroad experience</td>
</tr>
</tbody>
</table>
## Appendix I: Cross-case Core Theme Statements

**Table I.** List of Cross-case Core Theme Statements.

<table>
<thead>
<tr>
<th>Cross-case (CC) Designation Code</th>
<th>Core Theme Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CC-IE)</td>
<td>All four design educators’ image selections represented meanings and interpretations of global competence as human-centered.</td>
</tr>
<tr>
<td>(CC-IE)</td>
<td>All four design educators’ image selections expressed a physical connection of togetherness.</td>
</tr>
<tr>
<td>(CC-RQ1)</td>
<td>All four design educators diverged from a common description of global competence and used language and terminology from other globally oriented concepts to articulate their global competence.</td>
</tr>
<tr>
<td>(CC-RQ1)</td>
<td>All four design educators primarily identified a position of awareness as a way to describe themselves as globally competent.</td>
</tr>
<tr>
<td>(CC-RQ2)</td>
<td>All four design educators believed active learning activities were effective ways to teach global competence.</td>
</tr>
<tr>
<td></td>
<td>Subtheme: Collaborative</td>
</tr>
<tr>
<td></td>
<td>Subtheme: Information Gathering</td>
</tr>
<tr>
<td>(CC-RQ3)</td>
<td>All four design educators believed a cross cultural experience contributed to their development of a global competence attitude and/or skill.</td>
</tr>
<tr>
<td>(CC-RQ4)</td>
<td>All four design educators believed a formal learning experience facilitated a perspective transformation of the ways they view the world and others.</td>
</tr>
<tr>
<td>(CC-EM)</td>
<td>All four design educators connected an experience with people and places abroad as an effective way to teach and learn global competence.</td>
</tr>
<tr>
<td>(CC-EM)</td>
<td>All four design educators believed the critique experience was an effective global competence teaching and learning tool.</td>
</tr>
<tr>
<td>(CC-EM)</td>
<td>All four design educators connected their role as an educator to their global competence development.</td>
</tr>
<tr>
<td>(CC-EM)</td>
<td>All four designers described how they shift to different modes of perception as ways to process information and recognize qualities in other people, places, and objects.</td>
</tr>
<tr>
<td>(CC-EM)</td>
<td>All four design educators identified an act of making as a way to express an element of global competence teaching or learning.</td>
</tr>
</tbody>
</table>
Appendix J: IRB Study Approval

June 23, 2015

Philip Bulone
L-CACHE - Leadership, Counseling, Adult, Career & Higher Education Tampa, FL 33612

RE: Expedited Approval for Initial Review
IRB#: Pro00022555
Title: Reflections on Global Competence by Four Design Educators


Dear Mr. Bulone:

On 6/23/2015, the Institutional Review Board (IRB) reviewed and APPROVED the above application and all documents outlined below.

Approved Item(s):
Protocol Document(s):
IRB Protocol v1 06 02 15.docx

Consent/Assent Document(s)*:
PRO 22555 SB Adult Minimal Risk without HIPPA 06 18 15.docx.pdf

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:
Appendix J (Continued)

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D., Chairperson
USF Institutional Review Board
Appendix K: USF Fair Use Worksheet for Images

INSTRUCTIONS

Check all boxes that apply, and keep a copy of this form for your records. If you have questions, please contact the USF General Counsel or your USF Tampa Library Copyright Librarian.

Name: Philip Bulone  Date: 4/5/16

Class or Project: PhD Final Dissertation

Title of Copyrighted Work: Vogue image

PURPOSE AND CHARACTER OF THE USE

<table>
<thead>
<tr>
<th>Likely Supports Fair Use</th>
<th>Likely Does Not Support Fair Use</th>
</tr>
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<tbody>
<tr>
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NATURE OF THE COPYRIGHTED MATERIAL

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AMOUNT AND SUBSTANTIABILITY OF MATERIAL USED IN RELATION TO WHOLE

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LeEtta Schmidt, jschmidt@usf.edu and Drew Smith dsmith@usf.edu

Reviewed by USF General Counsel 08/21/2015
Overall, the amount and substantiality of material used in relation to the whole supports fair use or does not support fair use.

**EFFECT ON THE MARKET FOR ORIGINAL**

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<tr>
<td>☐ No significant effect on the market or potential market for the original</td>
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<tr>
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Overall, the effect on the market for the original supports fair use or does not support fair use.

**CONCLUSION**

The combined purpose and character of the use, nature of the copyrighted material, amount and substantiality of material used in relation to the whole and the effect on the market for the original supports fair use or does not support fair use.

*Note: Should your use of copyrighted material not support fair use, you may still be able to locate and request permissions from the copyright holder. For help on this, please feel free to contact your Copyright Librarian.*

This worksheet has been adapted from:

Cornell University's Checklist for Conducting A Fair Use Analysis Before Using Copyrighted Materials:
https://copyright.cornell.edu/policies/doc/Fair_Use_Checklist.pdf


LeFita Schmidt, lmschmidt@usf.edu and Drew Smith, dsmit3@usf.edu
Reviewed by USF General Counsel 08/11/2015
Appendix K (Continued)

INSTRUCTIONS

Check all boxes that apply, and keep a copy of this form for your records. If you have questions, please contact the USF General Counsel or your USF Tampa Library Copyright Librarian.

Name: Philip Bulone Date: 4/5/16

Class or Project: PhD Dissertation

Title of Copyrighted Work: Children hands holding globe

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Overall, the purpose and character of your use supports fair use or does not support fair use.

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<tr>
<th>AMOUNT AND SUBSTANTIALITY OF MATERIAL USED IN RELATION TO WHOLE</th>
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</table>

LeEtta Schmidt,只剩me@usf.edu and Drew Smith, dsmith@usf.edu
Reviewed by USF General Counsel 08/11/2015
Appendix K (Continued)

Overall, the amount and substantiality of material used in relation to the whole ■ supports fair use or □ does not support fair use.

**EFFECT ON THE MARKET FOR ORIGINAL**

<table>
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Overall, the effect on the market for the original ■ supports fair use or □ does not support fair use.

**CONCLUSION**

The combined purpose and character of the use, nature of the copyrighted material, amount and substantiality of material used in relation to the whole and the effect on the market for the original ■ likely supports fair use or □ likely does not support fair use.

Note: Should your use of copyrighted material not support fair use, you may still be able to locate and request permissions from the copyright holder. For help on this, please feel free to contact your Copyright Librarian.

This worksheet has been adapted from:

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https://copyright.cornell.edu/policies/docs/Fair_Use_Checklist.pdf

http://copyright.columbia.edu/copyright/files/2008/10/Fairusechecklist.pdf

Smith, Kevin; Marcini, Lida A.; Gilmart, Anne. A Framework for Analyzing any Copyright Problem. Retrieved from:  
https://drive.google.com/drive/folders/1R7ZVffkmF8NpKz90r-5KhEajvm9ZG

Loetta Schmidt, lmashmich@usf.edu and Drew Smith djsmith@usf.edu  
Reviewed by USF General Counsel 08/11/2015
### INSTRUCTIONS

Check all boxes that apply, and keep a copy of this form for your records. If you have questions, please contact the USF General Counsel or your USF Tampa Library Copyright Librarian.

#### Name: Philip Bulone  Date: 4/5/16

#### Class or Project: PhD Dissertation

#### Title of Copyrighted Work: Puzzle pieces in circle shape with words

#### PURPOSE AND CHARACTER OF THE USE

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Lettia Schmidt, Lmschmidt@usf.edu and Drew Smith dsmith@usf.edu reviewed by USF General Counsel 08/11/2015
Appendix K (Continued)

Overall, the amount and substantiality of material used in relation to the whole □ supports fair use or □ does not support fair use.

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CONCLUSION

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This worksheet has been adopted from:

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LaEtta Schmidt, lmichmsch@usf.edu and Drew Smith emichmsch@usf.edu  
Reviewed by USF General Counsel 08/11/2015
Appendix K (Continued)

INSTRUCTIONS

Check all boxes that apply, and keep a copy of this form for your records. If you have questions, please contact the USF General Counsel or your USF Tampa Library Copyright Librarian.

Name: Philip Bulone Date: 4/5/16

Class or Project: PhD Dissertation

Title of Copyrighted Work: National Geographic Image

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LaEtta Schmidt, lmschmidt@usf.edu and Drew Smith, dsmith@usf.edu
Reviewed by USF General Counsel 08/11/2015

195
Appendix K (Continued)

Overall, the amount and substantiality of material used in relation to the whole supports fair use or does not support fair use.

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CONCLUSION

The combined purpose and character of the use, nature of the copyrighted material, amount and substantiality of material used in relation to the whole and the effect on the market for the original supports fair use or does not support fair use.

Note: If your use of copyrighted material does not support fair use, you may still be able to locate and request permissions from the copyright holder. For help on this, please feel free to contact your Copyright Librarian.

This worksheet has been adapted from:

Cornell University's Checklist for Conducting A Fair Use Analysis Before Using Copyrighted Materials:
https://copyright.cornell.edu/policies/docs/FairUseChecklist.pdf


Smith, Kevin, Macklin, Lisa A., & Gifford, Anne. A Framework for Analyzing an Copyright Problem. Retrieved from:
https://www.nara.gov/records-management/copyright-principles-

LeEtte Schmidt, lmschmidt@usf.edu and Drew Smith, dsmith@usf.edu
Reviewed by USF General Counsel 08/11/2015
Appendix L: Permission for Image Use

EDIZIONI CONDÉ NAST S.P.A.

UNIVERSITY OF SOUTH FLORIDA
Tampa, FL 326
United States

Milan, April 6th 2016

Subject: permission to reprint Vogue Italia cover with coverlines,
January 2013 issue, realized by Steven Meisel, portraying the
Chinese model Fei Fei Sun inside a thesis

With reference to the request of Mr. Philip Bulone, we are disposal to send
you the high resolution cover of Vogue Italia with coverlines, January
2013 issue, realized by the photographer Steven Meisel (hereinafter the
"Material"), in order to reprint the content in Mr. Philip Bulone’s PHD
dissertation titled “Reflections of Global Competence by Four Design
Educators” and published electronically through the University of South
Florida.

We remember that Edizioni Condé Nast S.p.A. has the copyright to use
cover of coverlines realized by Steven Meisel but the exclusive holder of
moral, economic and exploitation rights relating to the photograph is the
photographer. Consequently, any additional or different reuse not only
have to be re-authorized by Edizioni Condé Nast S.p.A. but it will be your
responsibility to obtain the prior approval of the photographer and the
subjects portrayed in the image.

No commercial or promotional reuse of the Material are permitted.
EDIZIONI CONDÉ NAST S.P.A.

It is understood that the Material must be accompanied by its full credit:
For courtesy of Vogue Italia, Jan. 2013 issue - photo by Steven Meisel.

Please let us return this letter duly signed for acceptance.

Best regards,

For acceptance
UNIVERSITY OF SOUTH FLORIDA
Professor (Tutor /Custaud)

[Signature]
professor of education
Appendix L (Continued)

Permission to reprint photo in my dissertation; referred to you by Conde Nast Milano

Ruk Richards <ru@stevenreisestudio.com>
To: Philip Bulone <pbulone@mail.usf.edu>
Cc: Conde@condenast.it

Wed, Apr 27, 2016 at 11:59 AM

Hi Phil,

Thank you for the information - it sounds like a very interesting topic. You have our approval to reprint the January 2013 cover of Vogue Italia.

Thank you and good luck!

Ruk

On Apr 27, 2016, at 10:38 AM, Philip Bulone <pbulone@mail.usf.edu> wrote:

Hi Ruk,

Thank you for the quick response. I am a PhD candidate at the University of South Florida. Tampa in the College of Education. I conducted a qualitative multiple case study of four design educators; I investigated their perspectives and beliefs of global competence teaching and learning and aimed to inform effective interdisciplinary global competence curricula planning and instruction processes. I used multiple methods to collect data. One method was an image-elicitation activity. I asked my participants to feed an image to elicit conversation and rich dialogue and bring forth information from participants through the use of photographs as memory cues or prompts (Martin & Martin, 2004) - a method adapted from photo-elicitation interviewing techniques (Collier, 1957).

I would like to include the image in the dissertation as a reference. See below for my plan on how to display and credit the image per Conde Nast. The dissertation will be electronically published on the University's Electronic Thesis and Dissertation Resource Center http://www.grad.usf.edu/ETD-nes-main.php

In the future, I also plan to submit parts of my dissertation to various academic journals in my field of design and education.

I appreciate your support and guidance on how you would like me to additionally display and or credit the source, should you grant permission. Thank you, Phil Bulone.
About The Author

Philip A. Bulone earned a Bachelor’s Degree in Psychology from Florida Atlantic University and a Master’s Degree in Interior Design from Florida State University. Philip has nearly 20 years of experience in higher education. His teaching experience includes positions at Palm Beach Community College, Lynn University, the International Academy of Design & Technology and the Rocky Mountain College of Art + Design Online. His higher education administrative and leadership experience includes positions at the International Academy of Design & Technology, Tampa Campus; three years as the Interior Design Department Chairperson and six years as the College Dean/Director of Education.

Philip also serves as an accreditation site visitor specialist for multiple accreditation agencies. Furthermore, he is an avid promoter of global learning experiences. So much so, travel adventures with his students and fellow faculty to Italy, Sweden, France, Turkey, Saudi Arabia, Canada, and the United Arab Emirates energizes his enthusiasm for global stewardship experiences.