INSTRUCTIONAL STRATEGIES FOR CULTURALLY DIVERSE LEARNERS:

A CASE STUDY OF INSTRUCTIONAL DESIGNERS

by

Becalo Utuk

BARBARA LEWIS, PhD, Faculty Mentor and Chair

LISA KAHLE-PIASECKI, PhD, Committee Member

JAMES MCDERMOTT, PhD, Committee Member

Curtis Brant, PhD, Interim Dean, School of Education, Interim Dean, School of Education

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Capella University

July 2018

Abstract

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and designer-by-assignment faculty members on the use of instructional strategies to support culturally diverse online learners. The study explored various instructional strategies in the light of Geert Hofstede's research, which examined multiple cultural dimensions. The focus was to determine how instructional designers and designer-by-assignment faculty members meet the needs of learners with diverse cultural values learning together in an online arena. Various approaches consisting of online survey questionnaires, in-depth interviews, and think-aloud/talk-aloud exercises were used in answering questions to help fill this gap in literature. Two research questions drove the study: (a) How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values? and (b) what instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members, that can meet the needs of culturally diverse online learners? Findings for the first research question showed that the culture of learners impacted how and what instructional strategies are used in meeting needs of diverse online learners. Culture affected variables such as the role of the teacher in the classroom and the relevance of learning methods, strategies, and expectations. Findings from the second research question showed that Hofstede's cultural dimensions were not central to decision making; rather, strategies such as scaffolding, group work, cultural awareness, and flexibility allowed for instruction and teaching based on the learners' analyzed needs.

Dedication

This dissertation is dedicated first to God, who made this possible.

Secondly, this dissertation is dedicated to the memory of my late father, Mr. Effiong Asanga Udo Utuk. Dad made a wish on his sickbed back in 1964 as I stood watching him. He said to my mother, "Grace, please send my daughter to school," and she did. Dad, you believed in female education; you believed in me. I am now the first woman in my family and immediate community to get to this level of education. Your last words gave me the necessary zeal and hope to believe this was possible even though decades had elapsed. This dissertation is for you and Mother. My sweet mother, Mrs. Grace Utuk, you are truly my hero, intercessor, and mentor. Your price is far above rubies; my sister was 3 weeks old, my brother was 2 years old, and I was 4 years old when Dad passed away. You kept Dad's dying wish; today, all of us are college graduates. So, this is for you and my late father. You were denied the opportunity of a formal education because of being a woman but you vowed not to deny us. Thank you for upholding Dad's dying wishes.

Lastly, I dedicate this dissertation to my wonderful children, Otobong and Michael. I am not sure what I would have done without both of you. It is an honor to be called your mother. You are the source of my joy. Thank you for being by my side and helping me cross all the red lights and stop signs that were so glaring on this journey.

Acknowledgments

I would like to acknowledge my fantastic mentors, Dr. Ann Armstrong and Dr. Barbara Lewis, faculty chair who took over from where Dr. Armstrong stopped. I am very grateful to Dr. Lewis for her excellent feedback and guidance and how she handled the transition. Special thanks to my committee members, Dr. Lisa Kahle-Piasecki and Dr. James McDermott for teaming with Dr. Lewis and working actively and behind the scenes to ensure a smooth doctoral journey for me.

To all the research participants, I say thank you, even to those who for one reason or another did not make it to the end. For those participants that met the criteria and were available and willing to participate in the entire study, thanks for sharing your time, knowledge, and experience. Also, for the field experts who committed their time to review my dissertation proposal and made recommendations, the time, knowledge, and experience you shared are greatly appreciated. I extend my gratitude and appreciation to my peers and friends, Mbomette, Nathan Rogers, Beatrice Lovett, Uche Ubechu, Theresa Nnodum, and others whose names are not mentioned here; your unwavering support throughout this journey is highly appreciated. Thanks to my family—brother, Effiong Utuk; sisters, Joy Ukpong and Francisca, and others; there is nothing like a loving family. Your love and many others made this journey possible.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

Background of the Study

The advancement in Internet technology and computer communication has led to a corresponding increase in online learning worldwide (Allen & Seaman, 2013, 2014, 2017; Bedenlier, 2016).Allen and Seaman (2017) noted that in the United States, the number of students taking at least one online course had risen from1.6 million in 2002 to over six million by 2015. According to Allen and Seaman (2017), the number of students enrolled in at least one online course showed a 3.9% growth, representing about an 11.0% increase from 2012 to 2015. The trend showed, a 25.9% in 2012, 27.1% in 2013, 28.3% in 2014, and 29.7% as of Fall 2015 (Allen & Seaman, 2017). During the same period, those institutions exclusively offering traditional classroom courses continued to witness a drop of 3.2% in enrollment (Allen & Seaman, 2017).Outside of the United States, developing countries in Asia and Africa, among others, are increasing online education initiatives due to increased demands for access to higher education and speedy economic growth (Lai, Li, & Wang, 2017; Liu, Liu, Lee, & Magjuka, 2010; Tarhini, Teo, & Tarhini, 2016).

As a result, people with diverse cultural values, traditions, and beliefs are learning together in online learning environments in different parts of the world. These learners arrive at their respective learning environments with significant individual and group differences in values, beliefs, and interpretations; yet, they face similar educational expectations and employment demands. However, the differences in cultural values may influence how learners

process information, communicate, perform activities, and solve problems (Paralejas, 2013; Rajaram, 2013).

In most cases, the learners' values may differ from those of their course designers, faculty members, peers, and even the technologies used for learning (D. Davis, 2015; V. Davis, 2014; Grant, 2013; Palermo-Kielb & Fraenza,2017).As a result, designing instruction for online learners with diverse cultural values is progressively getting complicated as designers have to select from different modules and strategies to find those that best support their learners (Rajaram, 2013; Yeo & Pang,2017). The focus of this study was on the beliefs of professionals such as instructional designers and designers-by-assignment (DBA) faculty members on how instructional strategies could be used to support online learners with diverse cultural values.

Culture is an inherent part of learning and is a significant part of the work of instructional designers (Henderson, 1996). The centrality of culture in the field of instructional design for online learning has been established by several researchers who found compelling associations between culture, instructional design, and learning (Hagar, 2014; Kinuthia, 2012; Smith, 2014; Tarhini et al., 2017). For instance, Kinuthia (2012) recommended that although it is impracticable for instructional designers and DBA faculty members to address cultural issues of all learners, identifying key cultural values that may influence instructional design in the online learning environment warranted further studies.

Tyson (2012) identified four such cultural values in a study of international African nurses in the United States, which included the culture of silence, collectivist culture, respect of the elders, and inability to challenge authority. Similarly, Smith (2014) examined students' perception of cultural values about course design, utility, and engagements using quantitative methods and emphasized the need for further research using qualitative design. The much-

publicized works of Hofstede (1980, 1986, 2011) with International Business Machine

employees during the 1960s best explained how cultural differences could impact learning,

learning environments, and the participants of online learning environments.

Hofstede (2011) proposed five cultural dimensions: power distance,

individualism/collectivism, masculinity/femininity, uncertainty/avoidance, and long-term

orientation versus short-term orientation. These cultural dimensions increased the understanding

on how learners from non-Western countries such as Nigeria in Africa and China in Asia differ

from those in the United States in how students interact and engage in learning (Grant, 2013;

Hando, 2014; Jones, 2013). Values such as respect for the elders, silence, and inability to

question or challenge those in authority are hallmark values that differentiate learners from

countries with high power distance from those with the low power distance in Hofstede's cultural

dimensions (Hagar, 2014).

Although studies such as those by Hofstede (1980, 1986, 2011), Kinuthia (2012), Tyson

(2012), and Smith (2014) contributed in expanding the body of literature on the role of culture in

learning, there is a dearth of information on the use of instructional strategies to support

culturally diverse online learners. Understanding cultural dimensions is relevant because most

online environments and instructional and learning tools are embedded in the Western culture

and learners from non-Western cultures are evaluated based on the same performance and

expectations as their Western counterparts (Smith, 2014).

Multiple studies have been conducted in the field of instructional design for online

learning, culture, and instructional strategies (Beres & Woloshyn, 2017; Hagar, 2014; Jung,

Becker, & Nobre, 2012; Richey, Klein, & Tracey, 2011; Smith, 2014;Thomas, 2003). These

studies have allowed a greater understanding of the topic and the challenges. Several studies

have shown that differences in context do exist, and that such differences do impact learning and how instruction is designed (Bedenlier, 2016; Hartescu, 2012; Sharif & Gisbert, 2015).

Similarly, a study by Waugh and Su (2015) affirmed that in the context of designing instruction for online learners, a single instructional approach or strategy may not be adequate for all students who may be significantly different in style, values, or preferences. This suggests the need to consider the best way of meeting the needs of learners from all backgrounds. However, despite new research in this field, there is still a gap in the literature as scholars differ on the best approach to designing instruction for online learners.

For instance, some scholars have called for a culturally inclusive pedagogy (Beres & Woloshyn, 2017; Gay, 2013; Henderson, 1996; Milheim, 2017a; Yeo & Pang, 2017); others have emphasized instructional methods, not culture (Rienties, Alcott, & Jindal-Snape, 2014; Tracey & Unger, 2012). Researchers such as Messiou and Ainscow (2015) proposed that cultural issues should primarily be resolved by the learners as it would be almost impossible to consider every learner's cultural values in a single design. Others, such as Kinuthia (2012), agreed with the challenges of considering each learner's cultural values. Nonetheless, Kinuthia (2012), supporting prior findings by Rogers, Graham, and Mayes (2007), affirmed that course designers cannot be excluded from such responsibilities as designing instruction is culturally embedded and, as a result, inseparable from the design process or the designers.

Several researchers have noted that instructional designers and DBA faculty members are not immune to cultural biases and personal preferences, as their beliefs, perspectives, and preferences may influence design decisions (Davis, 2014; Milheim, 2017b; Palermo-Kielb & Fraenza, 2017). It is known that a person's country of origin and cultural background might be an important factor in determining the individual's cognitive styles, which may impact their

approach in instructional design, ultimately affecting student learning (Cheng, Andrade, & Yan, 2011; Wang, Hou, & Wu, 2017). The impact of these differences is further underscored by the fact that in most online environments, instructional and learning tools are designed based on a Western cultural framework (DeLorme, 2014; Passey et al., 2016).

Similarly, learners from non-Western cultures are evaluated based on the same performance and expectations (Abbas, 2016; Passey et al., 2016). As a result, DeLorme (2014) noted that the learners from nondominant cultures may attempt to adapt to models and strategies that may not align with their way of thinking or acting. The differences in values, beliefs, and interpretations affect the work of instructional designers, complicating the process of creating instruction designs that are sensitive and fair to learners of all backgrounds. Therefore, there is a need to fill the gap in the existing knowledge in online learning and instructional practices that are sensitive to cultural diversity by considering the beliefs of instructional designers and DBA faculty members.

Need for the Study

The need for conducting this study was based on the identified problem and implications. The general problem addressed was that, despite the significance of the role of instructional designers and DBA faculty members, there is a lack of research focusing on the personal beliefs and approaches used in meeting needs of culturally diverse online learners. The specific problem that was the focus of this study was that the number of culturally diverse learners in the online environment is growing. There is therefore an urgent need to design instruction that meets academic needs of this group of students (Alabdullaziz, 2015; Milheim, 2017a). This study explored and described what and how instructional designers and DBA faculty members used instructional strategies to support and meet the needs of their culturally diverse online learners.

5

The study also built upon and expanded on the recommendations of prior studies on culture and instructional design (Alabdullaziz, 2015; Davis, 2014; Parrish & Linder-VanBerschot, 2010; Sharif & Gisbert, 2015; Sommers, 2014).

Irrespective of the differences in a learner's cultural background, academic requirements, and the expectations from their real-life work environments remains the same (Hawkins-Jones, 2017; Li, 2017). Despite the evidence from multiple studies affirming the impact of cultural differences on learners' experiences and learning (Colferai & Gregory, 2015; Jensen, Hautopp, Nielsen, & Madsen, 2017; Sommers, 2014), students from diverse backgrounds are expected to learn and apply learned skills equally to compete in a highly competitive and rapidly changing global job market. This puts them at a great disadvantage and further limits their individual capabilities.

Instructional designers and DBA faculty members are responsible for not only meeting learners' academic needs when designing instructions but also maintaining sensitivity to the impact of their cultural values and differences in course design decisions (Beres & Woloshyn, 2017; Biraimah, 2016; Rogers et al., 2007; Sharif & Gisbert, 2015). These challenges are significant due to the broadness and complexities of culture and cultural values, and the difficult task of selecting universal instructional strategies that could support their learners in the online environment (Rajaram, 2013). Young (2014) argued that cultural concerns about online learning have not been widely researched compared to the compelling need for the global economy and the diverse nature of online learning environments. Young's statement aligns with those of Richey et al. (2011) who recommended continuing research on learning via the Internet for exploration of best practices and ethical considerations.

Several empirical studies have recognized the problem confronting educators on meeting the needs of learners with diverse cultural values and have thus developed plans to solve it (Asino, Giacumo, & Chen, 2017; Grant, 2013; Hagar, 2014; Honebein, 2017; Jung et al., 2012; Richey et al., 2011; Smith, 2014; Smith, 2012; Thomas, 2003; Young, 2014). However, these scholars vary in their methods and approaches of solving this specific problem, and in most instances had conflicting research findings. For instance, Li (2017) analyzed the academic integration experiences of college-level Chinese students in Germany. The focus of the study was on the challenges the Chinese students encountered during their academic studies in terms of interactions, and what strategies they employed to negotiate between social and academic interactions. The study reviewed language barriers, knowledge gaps, pedagogical differences, and cultural differences and found that sociocultural interaction was a significant factor in promoting academic integration. However, the findings by Yu, Lee, and Mak (2016) were contradictory. Yu et al. (2016) showed that although there were cultural differences in practice and beliefs on the aspect of culture, such differences did not inhibit peer interactions or activities. These differences in findings also shape the differences in views regarding best practices in instructional strategies to support online learners.

There remains a gap in the literature on how the beliefs and approaches of the instructional designers and DBA faculty members have been considered, highlighting the need for this study. The findings from this study will not only add to the sparse literature on culturally diverse online learning but may also provide recommendations from the personal beliefs and experiences of instructional designers that could be used to create and adopt online learning instructions that are sensitive to learners of diverse backgrounds and cultures.

Purpose of the Study

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and DBA faculty members on how instructional strategies can be used to support online learners with diverse cultural values. Studies conducted in the field of online learning have failed to adequately address the impact of cultural differences in learning on learners when considering the selection of best practiced instructional strategies for designing online instruction that is both sensitive to the cultural differences of various learners and acknowledges the fact that online environments and instructional tools are embedded in Western culture. Thus, learners from non-Western cultures are evaluated based on the same performances and expectations as their Western counterparts (Colombo, 2015; Grant, 2013; Young, 2014).

Significance of the Study

Culture plays a significant role in designing instructional environments and content, especially in the context of technology-enhanced learning (Grant, 2013). Understanding the beliefs of instructional designers and DBA faculty members on how instructional strategies can be used to support online learners with diverse cultural values is significant for both practical and theoretical purposes. Prioritizing culture in selecting instructional strategies that meet the needs of online learners is significant for both ethical and academic reasons (Parrish & Linder-VanBerschot, 2010; Sobodić, Balaban, & Tomašević, 2017). The findings of this study could provide new insights that will help with the design and adoption of instructional strategies that align and meet the needs of online learners from diverse cultural backgrounds.

The findings of this study could also expand the existing literature on cultural diversity and online learning. Although studies such as those by Hofstede (1980, 1986, 2011), Kinuthia (2014), Smith (2014), and Tyson (2012) have contributed in expanding the body of literature on

the role of culture in learning, there is a dearth of information on the use of instructional

strategies to support culturally diverse online learners. Thomas (2003) argued that the

responsibilities of instructional designers consist of good design, good theory, and doing well.

Thomas also noted that the work of instructional designers must go beyond focusing on

effectiveness to include altruistic agenda, which involves designers being mindful of not only the

effectiveness of their designs on learners but also the effects and consequences of designed

instructions on learners from different backgrounds. In a broader sense, increasing cultural

awareness is an educational duty that is inseparable with ethical principles of doing good to

make the world a better place through good design, good theory, and good acts (Thomas, 2003,

p. 34). Therefore, the findings of this study may be significant for both expanding the existing

literature and providing practical recommendations. This study provides instructional design for

online learning practitioners with guidance to modify, update, or further explore interventions on

how instructional strategies can best be used to meet the needs of multicultural online learners in

their practice.

Research Questions

Based on the identified problem and the purpose of the study, the following two research

questions were formulated, and these guided the entire study:

RQ1. How do instructional designers and designer-by-assignment faculty members

describe their experience-based beliefs on the role of instructional strategies in

supporting online learners with diverse cultural values?

RQ2. What instructional strategies can be used, according to instructional designers and

designer-by-assignment faculty members that can meet the needs of culturally

diverse online learners?

Definition of Terms

   Cultural awareness. A deliberate effort made by individuals to understand the role that culture plays in their relationship and interaction with others, and how such awareness informs their thinking, communication, and practices with other individuals who may differ from them. It overlaps with taking perspectives and being sensitive as one interacts with people and situations that differ from one's culture and experience (Baker, 2015).

   Cultural dimension. The framework for conceptualizing culture developed by Geert Hofstede. The dimensions describe various behavioral attributes, values, and beliefs expressed in different groups and how such values impact behaviors, communications, interactions, and activities of group members within and outside the group. Such dimensions include individualism/collectivism, high power distance/low power distance, masculinity/femininity, high uncertainty/low uncertainty avoidance, and long-term/short-term orientation (Hofstede, 2011).

   Cultural diversity. Jones, Dovidio, and Vietze (2013) defined cultural diversity as the "variety and extent of cultural differences that exists in each setting, institution or society, and the nature of the interactions that occur between and among them" (p. 381). For this study, these differences focus on cultural values (Hofstede, 2011, p. 3).

   Cultural empathy. Understanding others through their perspective or "standing in somebody else's shoes" (Zhu, 2011, p. 116). Intercultural empathy may influence how designers make the decision to design instruction for those who are different from them**.**

   Cultural sensitivity. "Awareness and understanding of cultures different from one's own" (Bennett, 2013, p. 325).

10

Culture. Tylor (1889) first used the word culture around 1871 when he published his seminal work titled Primitive Culture in 1920. Since then, the term culture has assumed various labels and definitions. For example, Hofstede (2011) defined it as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (p. 3).

Designer-by-assignment (DBA). Merrill (2007) first defined a faculty member or other subject matter expert who designs instructional content but is not trained as an instructional designer.

Field. Schwandt (1997) affirmed that technology has redefined the concept of field to include "a place or situation where some particular social action transpires whether or not the enquirer is present" (p. 51).

Globalization. A complex term often associated with the significant shift among state and national agencies and institutions. It epitomizes the transformation in the global market bringing the world together and changing the ways humans view and interact with people, places, and things. It alters geographical boundaries and social and economic activities worldwide (Covi, 2016).

Instruction. Driscoll (2005) defined instruction as a "deliberate arrangement of learning conditions to promote the attainment of some intended goal" (p. 345). The purpose of instruction is for learners to construct learning and knowledge (Gagné, Wager, Golas, & Keller, 2005).

Instructional design. "The systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation" (Smith & Ragan, 2005, p. 4).

Instructional designer. Individual with formal training in the field of instructional design who is responsible for creating and using instructional material for pedagogical purposes (Clark, 2015; P.L. Smith & Ragan, 2005). Instructional designers' competencies equip them with skills to analyze, synthesize, and apply learned knowledge and skills for real work problem-solving situations (Rothwell & Kazanas, 2008**).**

Instructional design theory. Reigeluth (1999) defined instructional design theory as "a theory that offers explicit guidance on how to better help people learn and develop" (p. 5). Instructional design theories are design oriented rather than verbal. Hence, theories are deemed invaluable by providing the guidelines in creating courses that consider the content, context, materials, learners' uniqueness and styles, implementation and evaluations, and effectiveness in meeting learners' goals. Instructional design theories facilitate prescriptive decision-making and guidance in designing inclusive instructions for diverse online learners.

Learning. Although there is no single agreed definition of learning, Schunk (2012) defined learning as "an enduring change in behavior, or in the capacity to behave in a given fashion, which results from the practice or other forms of experience" (p. 3).

Learning theory. Encompasses principles aimed at explaining changes in human performance, providing a set of instructional strategies, tactics, and techniques from which to select, and the foundation for how and when to choose and integrate these strategies. Furthermore, it predicts the results of using these strategies (Schunk, 2012).

Multiculturalism. A situation in which people from diverse cultures, beliefs, religion, language, and customs dwell together in a society while recognizing their differences but maintaining their uniqueness (Colombo, 2015).

Online learning. Relates to an education that is technologically mediated. It could be offered either offline (asynchronously) or online (synchronously), which enables virtual interaction via audio visual technologies. Allen and Seaman (2013) noted that online learning occurs in institutions in which over 80% of course contents are delivered online. When online learning is operated simultaneously with face-to-face learning, it is termed blended teaching or hybrid teaching (Allen & Seaman, 2013).

Warm-up exercise. Involves practice activities of the think-aloud/talk-aloud protocol (Dees, 2015).

Research Design

Yin (2014) described research design as "a logical sequence" (p. 28) that connects empirically collected data with the research question, then to the findings and conclusion. In alignment with the purpose of this study, the research question is focused on how instructional strategies could best support learners with diverse cultural values. Merriam (2009) noted that qualitative research is a systematic methodology for conducting investigations in the natural context. A qualitative design was preferred instead of a quantitative design because qualitative method of research inquiry is employed by various educational and social scientists who seek understanding of how individuals perceive, interpret, and make meanings of the experiences that confront them in life (Merriam, 2009). The way people interpret and make sense of their experiences differs greatly; as a result, the task of defining qualitative research is challenging. Despite the complexities in defining qualitative research, it is primarily effective in collecting textual data and not focused on statistical data or predicting values (Lodico, Spaulding, & Voegtle, 2010; Maxwell, 2013).

Yin (2014) defined a *case study* as an investigation of a contemporary issue or problem (the case/s) in its natural setting, especially when such a phenomenon is not well defined. A case study can be single, such as when one case is investigated, or multiple, involving two or more cases (Stake, 2013). The multiple case study design was selected for this study as it was deemed best in collecting data with respect to the identified problem and the diverse contexts of data collection methods (Merriam, 2009; Yin, 2014). Various researchers have utilized the qualitative case study in the context of sociocultural phenomena, such as exploring issues of meeting the needs of culturally diverse online learners (Ben-Hador, 2016; Dees, 2015; Grant, 2013; Tyson, 2012). The purpose and the research questions forming the basis for this study were found to be appropriately aligned with the use of a qualitative multiple case study details of which are further elaborated in Chapter 3.

Assumptions and Limitations

Assumptions

The study is based on two assumptions. The first assumption is that cultural values substantially impact learning and, as a result, influence the efficiency and effectiveness of instructional strategies required to meet the needs of a culturally diverse group of learners. The theoretical value of cultural background as a significant factor in the learning process is based on the evidence available in existing literature (Hofstede, 1980, 1986, 2011; Kinuthia, 2012; C. Smith, 2014; Tyson, 2012). It was assumed that this theoretical understanding, based on empirical evidence, was accurate, and therefore was an appropriate guide for the framing of the problem statement, purpose, and the research questions.

The second assumption was that culture impacts course designers' decisions and choices; therefore, practicing and new instructional designers and DBA faculty members from Western

cultures may lack the experience in using instructional strategies to support learning needs of those in non-Western cultures, and vice versa. In this case study, it was assumed that the responses provided by the instructional designer participants were forthright and honest and that these responses were based on their personal experiences and beliefs.

Limitations

The study had three major limitations. First, the findings will not be generalizable to the entire population as the study is not quantitative in nature. The main goal of conducting the study is to obtain meaningful personal experiences and descriptions of the beliefs of the participants to provide recommendations based on those experiences. In this study, the data collection was performed through electronic instruments, which assisted in maintaining and enhancing the transparency, objectively, and transferability of study findings.

The second limitation of the study was associated with the limit in selecting the population and the sample. The participants in the study from non-Western countries were limited to Nigeria and the Caribbean. For a more robust perspective, additional research will be needed in which the perspectives of participants from other countries, especially from the Asia, Africa, North America, Europe, and South America continents must be included. This limitation resulted from an inherent aspect of the qualitative research design in which data are collected from a limited number of participants due to the nature of the research design and the availability of resources for the study.

The third limitation was that instructional design strategies, as a subcomponent of the instructional design process is a broad and complex subject area as is the concept of culture. The scope of the current study was not broad enough to capture either all instructional design strategies or cultural value nuances that could support culturally diverse online learners. This

15

limitation was both conceptual and methodological, and difficult to exhaustively examine a concept as diverse and complex as culture or instructional design strategies in one study. The focus of this study was narrow, as the data were collected only through the perspective of the instructional designers and DBA faculty members who consented and willingly participated in the study.

Organization of the Remainder of the Study

This chapter introduced the study with the goal of establishing the foundation for the research problem and the purpose of the study and outlining the research methodology. Chapter 2 is a review of the literature, consisting of the methods used in searching for the literature, a discussion of the theoretical framework for the study, the literature review, a synthesis of the research findings, and a critique of research methods used in the literature review. The literature review provided a framework for analyzing, synthesizing, and critiquing various seminal works related to the problems identified and elaborated in Chapter 1.

Chapter 3 provides information about the research methodology, which also includes details on how the key research questions were answered via multiple sources to address the problem identified in the study. Chapter 4 provides information on the method of analysis used for the data collected. Chapter 5 includes discussions of the results and consists of the following sections: Discussion and interpretation of findings, Limitations, implications for practice, implication for theory and research, making recommendations for further research, and the conclusion.

CHAPTER 2. LITERATURE REVIEW

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and designers-by-assignment (DBA) faculty members on the use of instructional strategies to support culturally diverse online learners. The general problem addressed was that, despite the significance of the role of instructional designers and DBA faculty members, there is a lack of research focusing on the personal beliefs and approaches used in meeting needs of culturally diverse online learners. The specific problem the study addressed was building on prior studies recommendations. The study explored and described how instructional designers and DBA faculty members used instructional strategies to support online learners with diverse cultural values (V. Davis, 2014; Grant, 2013; I. Jensen et al., 2017). Based on the identified problem and the purpose of the study, two research questions were formulated to guide the study:

RQ1. How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values?

RQ2. What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members that can meet the needs of culturally diverse online learners?

Chapter 2 is a review of empirical literature on the identified topic and consists of five main sections: Methods of Searching, Theoretical Orientation for the Study, Review of the

Literature, Synthesis of the Research Findings, and Critique of Previous Research Methods. The review concludes with a summary highlighting the main findings.

Methods of Searching

The method used in searching involved a comprehensive search of peer-reviewed articles that were relevant to instructional strategies for culturally diverse online learners. An effort was employed to focus on articles published within the last 5 years (2013 to 2018); however, in most occasions, older articles were deemed best fit in expounding the historical perspective on the subject. The Capella University library served as a foundational search engine that provided access to several peer-reviewed journals, periodicals, books, and dissertations related to the current study. Most published peer-reviewed journals outside the Capella University library were also used. The reference section of sources was also mined to find other related articles. Databases such as Education Research Complete, Summons, Academic Search Premier, Sage Research Method, ERIC, PsycARTICLES, Google Scholar, and ProQuest Central. Keywords used were *instructional strategies*, *cultural diversity*, *online learners, cultural values*, *online learning*, and computer-assisted learning yielded articles relevant to the study. RefWorks was useful in collecting, organizing, and storing citations directly from the database.

Theoretical Orientation for the Study

The theoretical orientation for the study was formed by a combination of three major concepts—instructional strategies, culture-cultural values, and instructional designer—and two cultural perspectives—Western and non-Western cultural contexts—as depicted in Figure 1.

.

Instructional design strategies

Western-oriented culture: Context A (United States, Europe, Canada)

Non-Western-oriented culture: Context B (Nigeria, India, China)

Instructional designer/designer-by-assignment beliefs
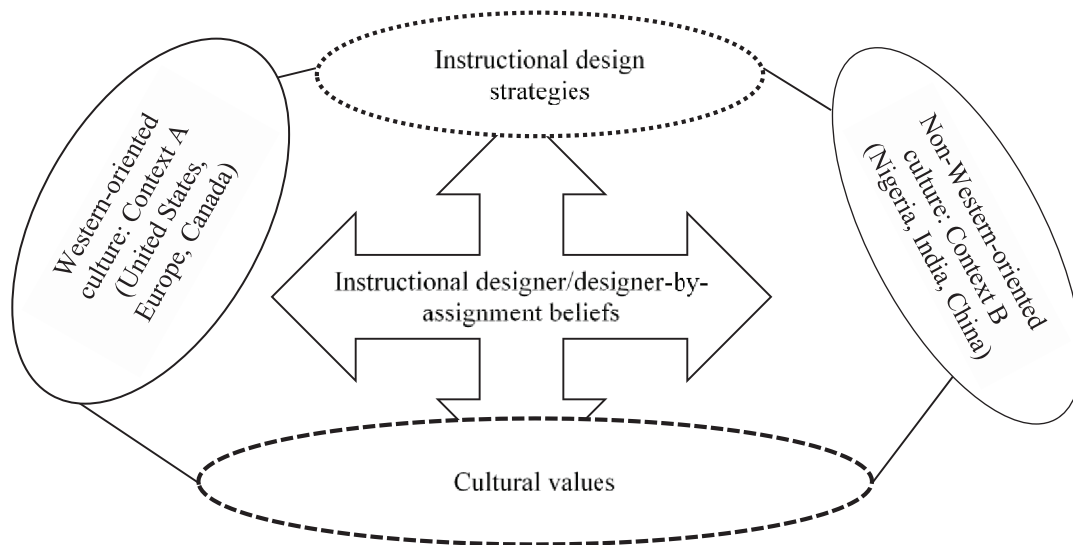
Cultural values

Figure 1. Theoretical framework

Figure 1. Theoretical framework.

These three concepts provided a theoretical understanding of the major concepts to ground the study. The first of these three major concepts is culture-cultural values. Culture forms the major construct for the theoretical framework of this research. Tylor (1889) first used the term *culture* to denote the complex phenomenon involving various facets such as beliefs, morals, knowledge, art, law, customs, and other manifestations of human intellectual achievements considered collectively (Sharif & Gisbert, 2015).

Studies have shown a link between cultural values, learning preferences, and the development of critical thinking (Ashbaugh, 2013; V. Davis, 2014; Manalo, Kusumi, Koyasu, Michita, & Tanaka, 2013; Sobodić et al., 2017; Tarhini et al., 2016). Research suggests that differences in cultural values do ultimately impact performance (Jensen et al., 2017). Based on

the existing literature, the concept of culture-cultural values provides a significant theoretical orientation to the study by suggesting that cultural sensitivity should be considered when cases are used as instructional strategies (Russell, Kinuthia, Lokey-Vega, Tsang-kosma, & Madathany, 2013; Tarhini et al., 2016). The second concept forming the theoretical orientation of the study is instructional strategies. Instructional strategies differ based on their use in Western and non-Western contexts in meeting the needs of online learners. Instructional strategies are based on learning and instructional design theories that inform instructional designer's decisions such as behaviorism, cognitivism, constructivism, connectivism, and eclecticism. Cultural conceptual frameworks that inform instructional strategies include differentiated instruction, intercultural communication theory, and culturally responsive pedagogy. Instructional design knowledge base offers both theoretical and practical orientations that guide learning and the design of instruction (Boling et al., 2017; K. Mohammed & Ihsan, 2016; Richey et al., 2011; York, Cindy, & Ertmer, 2016). Instructional strategies are used to support culturally diverse learners; therefore, the concept was used to form the theoretical orientation of this study, which focuses on the specific case of diverse learners in the context of online learning.

The third concept forming the theoretical orientation of the study is instructional designer. According to Tracey, Hutchinson, and Grzebyk (2014), instructional designers are, "active and reflective agents of innovation whose storehouse of design precedents feeds professional judgment and action in the design space" (p. 316). In the context of the role of culture in the selection of instructional strategies, this definition provides guidelines on the process in which course designers translate the various instructional principles into a process that enables online learners to achieve their learning objectives. Several studies have shown that learning, in general, is entwined by cultural activities; as a result, the belief of course designers

may influence their instruction decisions, impacting the online learner's overall experience (Boling et al., 2017; Burger, 2013; DeLorme, 2014; Grant, 2013; Passey et al., 2016). Due to the significant role instructional designers play in impacting the experience of diverse online learners' experience, this formed the third construct of the theoretical orientation of this study.

Review of the Literature

The review of literature focuses on providing a discussion of existing literature related to the identified problem and the purpose of the study. This section is divided into several subsections, discussing culture, cultural values, instructional design, and instructional designers.

Culture

Tylor (1889) used the term *culture* to denote the complex phenomenon involving various facets such as beliefs, morals, knowledge, art, law, customs, and other manifestations of human intellectual achievements considered collectively (Sharif & Gisbert, 2015). The term culture has assumed various labels and definitions. For example, Hofstede (2011) defined culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (p. 3). Like Hofstede, Watson, Ho, and Raman (1994) and Sharif and Gisbert (2015) emphasized that culture embraces collective thoughts, actions, feelings, actions, and beliefs, morals, myths, custom, and other habits that collectively distinguish one group from others. Grant (2013) added more clarity to the concept of culture by going beyond the context of teaching, learning and designing instruction and placing it as an integral part of human existence. Grant reiterated that culture is not separated from who individuals are and what they do. Thus, the decision-making process of instructional designers in designing instruction or selecting instructional strategies is not culturally exclusive.

Grant's (2013) position is supported by other scholars (Asino et al., 2017; Guy, 1999; Guy, 2016; Yu et al., 2016). For instance, Guy (2016) noted that culture plays a significant role in human interaction and socialization as it provides the guidelines for what could be considered acceptable moral living of society. Culture, therefore, significantly impact the instructional design process including the decision of selecting goals and objectives, materials, media, and instructional strategies (Sharif & Gisbert, 2015). Following Vygotsky's (1977) sociocultural theory, Yu et al. (2016) reiterated that culture is contextual and inseparable from the true social being of a person, including the course designers, teachers or the learners. In similar vein, Asino et al. (2017) emphasized that culture should not be taken as an afterthought, but rather, should be inclusive and made an integral part of each phase of the design process. In fact, Gómez-Rey, Barbera, and Fernández-Navarro (2016) reiterated that although cultural diversity should be celebrated for its individual and collective enrichment, it may also result in conflict and misunderstanding, which may impact teaching and learning. Gómez-Rey et al. urged that caution should be exercised in designing instruction by being mindful of how people's cultural background impact what and how they learn, and what they feel is important to them.

The definitions of *culture* discussed so far reflect the overall context of this study. Based on a synthesis of these definitions, *culture* is defined in the context of this study as a group's overt or implied ways of life, attitudes, shared beliefs, symbols, language, and core values that inform the group's struggle for identity, adaptation, survival, interpretations, and making of meaning in a way unique to the group. As earlier suggested by Hofstede(2011), these collective thoughts, actions, feelings, and beliefs distinguish one group from the others. Understanding how these struggles for identity, adaptation, survival, and the construction of meanings which are informed by ones' cultural beliefs impact others is relevant to this study.

Yeo and Pang (2017) noted that multiculturalism is driven and informed by Western cultural reasoning, and often the way the West understand and define freedom, human right, and democracy might differ from how others view it. Hence, Yeo and Pang asserted that looking and addressing cultural issues only from the lens of Western perspective may undermine the understanding of an already overly complicated concept like culture. Passey et al. (2016) in the same vein echoed that digital content that support curricula and educational software is mainly developed in the West. Thus, instructional designers, DBAs, or learners from non-Western must strive to gain understanding of the underlying culture to achieve the intended educational benefits. Such cultural issues may also mitigate against the inclusiveness of non-Western audience (Sobodić et al., 2017).

Various scholars have noted that it is imperative to explore the complexities of culture and find ways to not only identify the differences, group tendencies, frame of references, and characteristics of the learners but also influence culture on the design process and learning experience (Russell et al., 2013; Sobodić et al., 2017; Tarhini et al., 2016). Selection of instructional strategies is embedded in the culture and beliefs of the designers; and the success of e-learning, including acceptance and usage of technology is also culture dependent (Sobodić et al., 2017). Therefore, understanding the cultural factors influencing online education, especially in selecting culturally inclusive instructional strategies becomes very critical. In this context, the challenges of designing for a diverse online group, is at the forefront. Finding solutions for cultural differences is also attracting attention of several researchers in the online education field (Passey et al., 2016; Sobodić et al., 2017). Various scholars have noted the complexity of culture, questioning how various instructional formats and strategies can be adapted to meet the needs of all online students (Lie, 2017; Milheim, 2017b; Patel, 2017). On this note, Milheim (2017b)

urged designers and teachers to formulate instructional design from the perspective of the student rather than on an established prescriptive instructional theory.

In conclusion, the influence of culture on the learning process has been discussed by researchers in the past, highlighting the significance of understanding the cultural background in responding to the academic need of the learner. As noted by Kinuthia (2014), although it is not practical to understand and integrate every learner's cultural difference into a given course, understanding the dynamic impact of culture in meeting learners need is a significant step. Kinuthia urged that cultural factors which directly impact instruction and learning should not be ignored. These factors are more broadly discussed in the context of cultural values.

Hofstede's cultural dimensions. Geert Hofstede is acknowledged as a pioneer in the performance of large-scale experiments on culture and thus illuminating the intricacies involved in facilitating intercultural relations (Gómez-Rey et al., 2016). The study which was conducted in 40 countries first started with four and later five dimensions. These dimensions have become viable tools for understanding the influence of culture on instructional design (Hando, 2014). The dimensions are as follows: power distance, individualism/collectivism, masculinity, uncertainty/avoidance, and the long/short term.

Power distance. Power distance can be high or low. High power distance relates to the degree a culture accepts and tolerates power distribution. A high-power distance culture accepts some form of dictatorship from those in authority. Such may include referencing their teachers as gurus and not challenging the elders in the community. Thus, they look up to parents, teachers, and those in authority to direct them. A low power distance culture has few distinctions between those in authority and the constituents. A low power distance culture believes in equity and equality (Whalen, 2016). According to Hando (2014), course designers from this background

may apply these educational beliefs in designing instruction for their learners. For instance, in high power distance culture, students expect correct answers from their teachers and the teachers are expected to give detailed instructions on what and how students should perform assigned tasks.

Uncertainty avoidance. Uncertainty avoidance can be low or high. It relates to the extent to which members of a culture accept and handle new, ambiguous, or uncertain situations or events (Gómez-Rey et al., 2016; Hofstede, 2011). Whalen (2016) noted that in low uncertainty avoidance culture, students hesitate to ask questions in an open classroom, often preferring to meet faculty immediately after class. Gómez-Rey et al. (2016) noted that in high uncertainty culture, students focus on getting correct answers from teachers, whereas those in low uncertainty cultures, learners are more open-minded, and instructors often encourage students to participate and contribute.

This privacy mode or the inability to answer challenging questions is embedded in high uncertainty culture of face-saving. Whalen (2016) explained that *face-saving* is avoiding anything that causes embarrassment or disharmony. Hence, students are more concerned with saving face by being in harmony with others instead of confrontational. Uncertainty avoidance is relevant and should be considered when selecting instructional strategies to meet needs of culturally diverse online learners. This study inquired about how course designers use instructional strategies to meet the needs of learners who are assertive and those who are not forthcoming.

Individualism/collectivism. Relates to cultures in which people are driven by individual needs, competition, and unilateral assertiveness. They honor individual achievements whereas in

a collectivistic culture, the group interest outweighs individual needs with a focus on family, community interest, ethnic and village goals (Sobodić et al., 2017).

Masculinity/femininity. This dimension focuses on how society stresses achievement or nurture. Masculinity deals with facts whereas femininity deals with values expressed as emotions and feelings. Masculinity does not play a role in students' performance; rather individual personality determines success in the online learning environment (Tankari, 2014; Yu et al., 2016).

Long term versus short term. This dimension is somewhat ambiguous. However, it relates to the extent to which society regards life events in the present time or a future time (Hando, 2014).

Although several studies using cultural frameworks, including Hofstede's (2011) cultural dimensions, have supported the relationship of cultural values to the context and learners in that learning context (Gómez-Rey et al., 2016; Hando, 2014; Hartescu, 2012), some do not. For instance, the mixed study method by Tankari (2014) revealed that participants' cultural orientation did not play a prominent role in their online learning experiences.

Cultural Values

According to Gelbrich, Stedham, and Gäthke (2016), too often, cultural values and cultural practices are not correctly distinguished, thus blurring the effort to conceptualize and manage cultural differences accurately. Cultural values are beliefs, norms, cognition, socialization, interactions, language, experiences, and other intangible factors. Parrish and Linder-VanBerschot (2010) noted that "cultural values are acquired early in life and are the deepest and most enduring aspects of culture" (p. 6); hence, they are considered more enduring than cultural practices. Cultural practices are those fluidly rituals and observable practices of a

group which are considered which are performed as because of who they are or their beliefs and can easily change, such as, traditional practices, habits, and other visible or practices by a group (Gelbrich et al., 2016).

In the context of this study, learners see cultural values as a greater part of their learning because learning is considered inseparable from their values and ways of thinking (Young, 2014). Similarly, Davis (2014), in trying to effectively reach diverse online learners in his organization, made errors often made by most Western organizations. One such error is the assumption that U.S.-based learning paradigms transcend all cultural boundaries. Such a mindset often gives some educators and agencies a false sense of believing they know how to educate learners from diverse cultures.

Cultural values may become a challenge for online learning when there is an incompatibility between cultural values and the instruction design for learning. Such cultural challenges, as reiterated by Lalla (2015), include the fact that in the online environment, it is difficult to assess or understand learner's gender or cultural background. Earlier studies such as Kinuthia's (2012) on selecting strategies to support culturally diverse students and a more recent study by Dietz et al. (2017) examined how graduates of cross-cultural management courses tackled issues of international and culturally diverse learners. Findings showed that although interest in integrating culture into design work was on the rise, the process of carrying out such integrations remained daunting. Stoessel, Ihme, Barbarino, Fisseler, and Stürmer (2015) noted that one of the factors responsible for the high level online student dropout included cultural value differences amongst other sociodemographic factors.

One reason for the challenge was the lack of a uniform framework for conceptualizing and prioritizing sociocultural issues, and the inability to identify which cultural issues to address,

and how best to address them (Gelbrich et al., 2016). These findings can be critically analyzed in a theoretical context using Hofstede's (2011) cultural dimensions. Hofstede's model of cultural dimensions clearly elucidates the understanding of the impact of culture on instructional designers' work. Accordingly, it does not matter where instructional designers come from, especially in the field of online learning; they are likely to design instruction for those who differ from them or their peers. Thus, the literature on cultural values suggests that there is a challenge in online learning in synthesizing the cultural diversity of learners within the instructional design, although some researchers such as (Affolter, 2017; Hofstede, 1980) have argued that instructional designers can design instruction for those who differ from them.

The study by Affolter (2017) investigated the impact of culturally responsive intervention for teachers in K–5 in a U.S. Pacific Northwest school. The findings showed teachers strength and commitment was central to the success of culturally diverse learners, irrespective of the experience level of the teacher. Additionally, the study noted the central role of faculty in the success or failure of education, which of course includes online learning. Affolter continued that, given adequate support and strategies, teachers will improve their commitment and quality of their practices in meeting the needs of diverse learners. Affolter metaphorically emphasized how this was possible with a tree metaphor: "Trees of different species can communicate and nourish each other by sharing nutrients through their root systems. Trees, of all types, can work to heal and strengthen each other from below ground, up" (p.136). Therefore, just as the tree, educators, including designers can strive by meeting needs of learners from diverse backgrounds. This supports prior study findings of Gelbrich et al. (2016) and Davis (2014), who suggested that the process of carrying out integration between cultural diversity and compatible instructional design was possible but poses a challenge.

Lalla (2015) suggested that designing instruction that is "priceless or genderless" (p.199) could mitigate the problem. Although it is impracticable to understand and attended to each online learner's cultural values and preferences, Sobodić et al. (2017) equally stressed that understanding some antecedent factors that influence student's acceptance and use of online learning system may increase success. Similarly, Gómez-Rey et al. (2016) added that, despite the inclusion challenges for creating effective culturally sensitive instruction, specific factors such as cultural awareness of significant differences, flexibility in teaching activities, and the use of a variety of activities and approach should not be ignored. The concepts of instructional design, theory, and strategies are explored briefly as follows.

Instructional Design

According to Smith and Ragan (2005),"Instructional design refers to the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation" (p. 4). Although there are many other definitions of instructional design, the preceding is the best fit for the current study because of its capacity to capture the fundamentals of the instructional design processes. Instructional design processes are conceptual frameworks that describe the phases within a design model (Gagné et al., 2005). Affirming the preceding, Seel, Lehmann, Blumschein, and Podolskiy (2017) described *instructional design* as systematic procedure of developing education and training programs to improve learning.

Focusing this inquiry on instructional designers and DBAs is not an accident, as Tracey et al. (2014) viewed instructional designers as "active and reflective agents of innovation whose storehouse of design precedents feed professional judgment and action in the design space" (p. 316). In considering the role of culture when selecting instructional strategies, this definition of

instructional *designers* adequately captures the process of translating the various instructional principles into a process that enabled online learners to achieve their learning objectives. However, the study's findings have shown that learning in general is entwined by cultural activities; therefore, the culture of course designers may influence and impact their instruction decisions and affect online learners' experiences (Burger, 2013; Grant, 2013; Milheim, 2017b; V. R. Smith, 2012). Course designers are informed by various learning and instructional theories.

Instructional design theories. Reigeluth (2013) defined *instructional design theory* as "an integrated set of principles or set of models that are related to conditions and outcomes" (p. 24). Instructional theories are design oriented and prescriptive rather than descriptive, thus serving as a useful guide for learning and development of courses (Reigeluth, 1999).As a prescriptive tool, instructional design theories offer the guide that specifies the course layout, the alignment of content, context, materials, technology, and it effectiveness in meeting the students learning goals. In considering instructional effectiveness, there is an increasing call by many scholars for an alternative or an improvement to the traditional instructional design models geared towards cultural diversity (Mohammed & Akor, 2017; Sommers, 2014; Tarhini, Hone, Liu, & Tarhini, 2017; Young, 2014).

Instructional design model. The instructional design model is the blueprint of the instruction itself, which is often confused with the instructional development model. Reigeluth (2013) noted that whereas the former is the blueprint, the latter describes the steps that allow instruction to be made (Reigeluth, 2013, p.24). The most basic instructional design process is the ADDIE model, which consists of five stages, namely analysis, design, development, implementation, and evaluation. These processes are systematic and based on problem solving;

collectively, they provide the best conceptual underpinnings for designing, implementing and delivering instructions (Gagné et al., 2005).

The analysis phase focuses on assessing the learners' needs and characteristics (attitude, prior experience, preferences, and prior knowledge). The learning objectives and goals, and context/environment in which learning will be carried out and applied are identified in the analysis phase. In the design phase, the objectives, content, teaching and learning activities, types of selected media, strategies, including delivery methods are specified. The development phase entails the creation of instructional tools, materials, environment and instructional activities. The implementation phase, according to the seminal work of Gagné et al. (2005), involves launching what has been developed by pilot testing or full implementation of the final design (Dick, Carey,& Carey, 2009; Gagné et al.,2005). The evaluation phase entails both formative and summative evaluations. The formative phase is ongoing throughout the process of design, whereas, the summative evaluates the completed implemented product and assesses the effectiveness of the design on learner's outcome. The use of the ADDIE instructional model differs based on the learning framework that informs the model. The Dick and Carey model (Dick et al., 2009) model is like the ADDIE model but more elaborate. Although other contending models are effective in the online world, the focus of the study is on culturally based models.

For instance, Wang, Callaghan, Singer, Sun, and Learn (2016) expounded on the cultural adaptation process model of Edmundson (2007). Wang et al. (2016) noted that the cultural adaptation process model is an extension of the first phase of the ADDIE model, especially the analysis phase. Edmondson's cultural adaptation process model informs cultural learning, and considers areas of instruction that impact content, media, materials, technology, and culturally

inclusive strategies to aid learners meet expected outcome. Edmundson (2007) also described cultural adaptation process as a set of guidelines or steps that adapt online instruction to the specific needs of online learners based on the course and profile of the target learners.

Another important model of instructional design is the seminal work of Young (2008b), who proposed the culture-based model of instructional design. This model considers aspects of cultural integration to (a) enhance diverse learners to focus, (b) management of projects, (c) team roles, (d) utilize assessment and reviews detailed decision-making process, (e) learner-centered learning outcome, (f) culturally sensitive factor, and (g) required skills for design team. Asino et al. (2017) reiterated that when the question of how is raised about integrating culture into instructional design, culture-based model is designed to offers the example. The culture-based model calls for instructional designers to considers diversity in each phase of the design, exercise flexibility when need arise to modify instruction to meet learners needs and include students in the design process (Asino et al., 2017; Young, 2014).

Soto (2013) explored which instructional design models course designers' use in the virtual world and what informs their decisions. Forty-six of the 61 participants (75.4%) believed the traditional ADDIE model was most ideal for the online world amongst other contending commonly used models were the Dick and Carey (Dick et al., 2009); the attention, relevance, confidence, satisfaction design model of Keller (1987); Gagné's nine events of instruction (Fouts, 2015; Gagné et al., 2005; Gerjets, Walter, Rosentiel, Bogdan, & Zander, 2014); and rapid prototyping (Tripp & Bichelmeyer, 1990). The ADDIE model was deemed fit as it summarized the instructional design process. Despite the choice, the result also showed some course designers suggested that the traditional instructional design models such as ADDIE and Dick and Carey were too linear, inflexible, and process oriented, unfit to meet needs of the virtual world

32

and some recommend amendments (Soto, 2013). Some researchers believe models should be based on circumstances because one specific instructional design model may not meet the needs of all learners (Hartescu, 2012). These findings showed variations in how to approach solution. The complexities in the subject of culture and instructional strategies further add to the problem of implementing strategies that meet the needs of online learners.

Hartescu's(2012)study admitted to the need to amend current models but fell short of including a lack of cultural values consideration as a primary element that must not be absent in course designers' decisions and actions in their work. Any of the several instructional design models, including a modified ADDIE model, may be used for designing and developing e-learning (Orey, 2010; Uzunboylu & Kosucu, 2017; Young, 2014). Therefore, the analysis, selection of objectives, goals, task sequencing, and learning environment depend on the choice of model. For example, the constructivist model emphasizes a rich learning environment and focuses only on general goals and objectives; allowing the specific course objectives to emerge with engagement (Duffy & Cunningham, 2012; Huerta-Kelley, 2017). However, the instructional implications of a sound culture-based design model are that cultural issues will be identified and addressed (Young, 2008a, 2014). The Dick and Carey model (Dick et al., 2009; see Figure 2) is widely used and is comparable to the ADDIE model, except that it is more comprehensive and utilizes a nine-step system approach to developing one of the most popular instructional models. The steps are

1. Identify instructional goals and objectives which are critical in the overall design and learning process.

2. Perform instructional analysis.

3. Identify entry level behavior and learners' characteristics, style and preference.

4. Write performance objectives.

5. Develop criterion-referenced test items.

6. Revise and rewrite instruction as needed

7. Develop instructional strategies.

8. Develop and select Instructional materials/media.

9. Develop and conduct formative evaluation.

10. Develop and conduct summative evaluation.
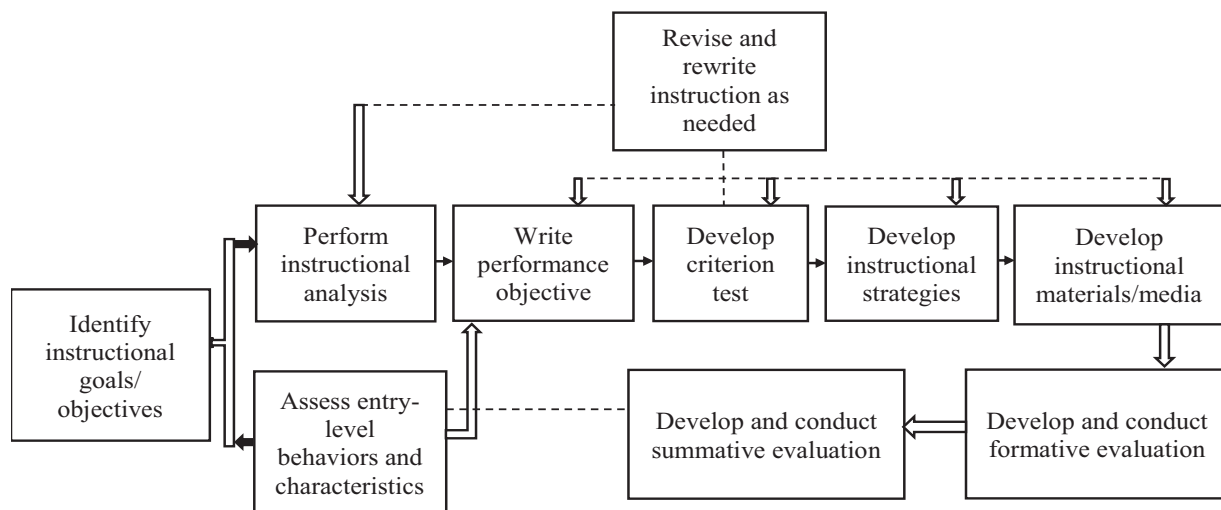
Figure 2. Dick and Carey model. *Note.* From *Fundamentals of Multinational Finance* (p.1),by M. H. Moffett, A. I. Stonehill, I. Arthur, and D. K. Eiteman, 2015, New York, NY: Pearson. Copyright 2015 by Pearson Education. Adapted with permission.

The current study did not intend to explore each phase of this model; rather, it examined how the instructional strategies were used to meet the needs of culturally diverse learners.

Instructional Design Strategies

Instructional strategies are the tools or techniques employed by educators and instructional designers for facilitating instruction (Reigeluth, 2013; S.M. Wang et al., 2017).

Rothwell and Kanzanas (2008) considered instructional strategies as a blue print of instruction, comparing it to the blueprint that informs architects who designer construction projects. Just as blueprints for building construction, instructional designers strategically design content and context that equip learners with verbal information, cognitive, intellectual, and motor skills and develop the new attitudes required for problem solving in a complex world. Instructional strategies are informed by various learning theories, one of which is culturally responsive pedagogy (Baldwin, 2015; K. Mohammed & Ihsan, 2016; Ragoonaden& Mueller, 2017; Reigeluth, 2013),which is relevant to this study.

Culturally Responsive Pedagogy

Culturally responsive pedagogy has been a significant topic in scholarly discourse in the last two decades (Baldwin, 2015; Ragoonaden & Mueller, 2017). The term *culturally responsive pedagogy* is often used interchangeably with other terms such as *multiculturalism*, *culturally mediated*, *culturally congruent*, *culturally diverse*, *culturally appropriate*, and *culturally relevant*; however, they all have the ultimate purpose of maximizing multiculturalism for all learners (Gay, 2010; Lawrence, 2017; Wang et al., 2017).

Culturally responsive was found to be the most ideal fit for this study because of the goal of understanding and describing how instructional strategies could best support culturally diverse learners. Culturally responsive pedagogy is an instructional strategy that recognizes, responds to, and celebrates diversity by offering equitable access and opportunity to learners from all cultures (Wang et al., 2017). Ladson-Billings(1995) noted that culturally responsive pedagogy is an instructional strategy that "empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes" (pp. 17-18).Culturally responsive pedagogy benefits education by recognizing, respecting, and using the

learners' unique identity and background as a resource repertoire for creating meaningful, culturally responsive pedagogy(Hawkins-Jones, 2017; Lawrence, 2017).

Beyond the respect and having empathy and sensitivity towards learners' needs, culturally responsive pedagogy involves three facets. The first facet holds that evidence of student academic success must be present. Ladson-Billings (1994, 1995) noted that by integrating the rich elements of culture into the learner's curriculum, it creates the platform for making the connection to achieve success. Academic success also relates to teachers or course designers addressing learners' needs of quality education, having high expectations without divorcing them from their cultural identity (Hawkins-Jones, 2017). In the same vein, Gay (2010) noted that instructional designers and DBAs must have unwavering faith in their students' dignity, and intellectual capabilities. Academic success also demands the use of instructional strategies that "validates, facilitates, liberates, and empowers ethnically diverse students by simultaneously cultivating their cultural integrity, individual abilities, and academic success" (Gay, 2010, p. 46).

The second facet of culturally relevant pedagogy is cultural competence, which entails skills of the interrelationship of students with others, giving students the ability to student to maintain their uniqueness (Ladson-Billings, 1995). Culturally responsive pedagogy social elements appear to be well aligned with the sociocultural constructivist principles of Lev Vygotsky (Boon & Lewthwaite, 2015; Yu et al., 2016). The third facet is critical consciousness, which Ladson-Billings (1995) urged students to develop. This critical consciousness involves the ability of learners to develop wider perspectives of identifying, understanding, and critiquing societal issues and inequalities (Hawkins-Jones, 2017; Ladson-Billings, 1995; Meka, 2015).

Culturally responsive pedagogy forms the second pillar that underpins this study as it encompasses the ability to respect the culture of those with similar cultures and those with dissimilar cultures to one's own (Biraimah, 2016; Meka, 2015).According to Ladson-Billings (1995), in a culturally diverse environment, "teachers utilize students' culture as vehicle for learning" (p.160). Using students' unique culture as a means of connection is particularly important to the study as the instructor should work towards achieving the goals that focus on equity for all.

Computer-Mediated Communication

The focus of this study was on strategies that support online learners. *Computer-mediated communication* refers to the use of digital technology tool and the Internet to share ideas, options, and emotions (Mehri & Izadpanah, 2017). It entails the exchange of information between two or more individuals using some form of computer networking tools in the online environment either synchronously (in time) or asynchronously.

The use of these innovative digital media and multimedia is managing to offset the social presence that is often lacking in the online learning environment (Mykota, 2017; Panina & Kroumova, 2015). Interaction in the online forum using computer-mediated social presence and communication is a vital element of using computer-mediated communication for culturally diverse learners. *Social presence* is defined as the extent to which people perceived themselves as real persons using computer-mediated communication tools and hence related to the extent that a certain media can enable social interaction (Akiyama& Saito, 2016; Mehri & Izadpanah, 2017). Social presence, or *social existence*, as Mehri and Izadpanah (2017) put it, involves the extent "to which students perceive themselves as real people engaged in communications and interactions with others" (p.1)

Mehri and Izadpanah (2017) investigated the effect of computer-mediated communication in an Iranian online setting. One group of the participants was taught via a synchronized computer-mediated communication tools (experimental group) and the remaining group was taught conventionally (control group); findings revealed that the mean score of those who received the synchronized learning tool was higher than those in the control group. Burger (2013) investigated student perceptions of social presence arising from interactions and communication using various computer-mediated communication technologies with culturally diverse online learners. The study sought to inquire how students' cultural values influenced the choice of computer-mediated communication tools. The study's findings affirmed the impact of the tools selected and used among multicultural online learners on religion and other cultural values.

Various tools such as webcams, video, and audio conferencing create a real impact on users as the use of voice and seeing one another limits traditional interaction in the classroom, except for touching and feeling one another. Such visualization of another's image provides a rich, natural, and enlivened interaction. Community of practice learning informs the use of computer-mediated communication. A community of practice constitutes a group of like-minded people with common interests in what they do (Scurr, 2017). Such a community brings with it a strong sense of belonging, which enhances collaboration and engagement. In expressing emotion, the study showed that some participants used reflective journals, discussion posts, and comments/feedback to convey emotions. Vygotsky's (1977) social learning theory aligns with the community of practice mostly by encouraging interactions, collaborations, affirmations, feedback, and assistance to members. Practices such as using computer-mediated communication tools and environment such as Google Drive, cloud-based computing, and other strategies that

support building a sense of community are beneficial for learners and teachers (Scurr, 2017).

Online learning is found to be significantly beneficial in some contexts. For instance, Musa,

Mohamed, Mufti, Latiff, and Amin (2015) investigated the effectiveness of using computer-

mediated communication versus a face-to-face project. The primary goal was to ascertain the

challenges students face using computer-mediated communication. Musa et al. noted that

computer-mediated communication activities such as discussion and collaborative activities

increased learner's motivation and encouraged new strategies and positive attitudes required for

social interactions. Despite the benefit of using computer-mediated communication for group

projects, the study's findings showed that computer-mediated communication could not provide

optimum support common in face-to-face communication.

Akiyama and Saito's (2016) study alluded to the growing body of research affirming the

equal positive experiences in face-to-face interactions and computer-mediated communication

environments. The study involved 30 Japanese participants in United States taking video-based

tandem course in global language comprehensibility. Findings revealed that telecollaborative

interactions may impact and enhance language and grammar learning. Hence, the same

experience of negotiation for meaning, corrective feedback, and modified output that occurs in

face-to-face is also found in computer-assisted settings. This finding supports the equalization

view of computer-mediated communication (Mustafa, Hamid, Ahmad, & Siarap, 2012; Tarhini

et al., 2017).

Mustafa et al. (2012) explored intercultural versus intracultural conditions on developing

a relationship using computer-mediated communication versus a face-to-face setting. A total of

140 randomly selected participants took part in the study. Findings showed no significant

statistical differences between asynchronous and synchronous learning. The results support the

equalization view of computer-mediated communication. No significant effect was noted on relationship type as was stated in the synchronous computer-mediated communication group. Thus, perceptual barriers that were once believed to be hindrances to virtual learning are mitigated by the use of innovative computer-mediated communication. These findings furthers owed that increasing intercultural face-to-face contact did not increase trust or intimacy, or improve relation; rather, the study saw online media such as chatting and instant messaging as great learning tools for the future.

The findings by Mustafa et al. (2012) were affirmed by Akiyama and Saito (2016), who alluded to the growing body of research upholding the equality of positive experiences in face-to-face interactions as well as computer-mediated communication environments. Thus, the instructional focus should be on not only technology but also sociocultural factors. Tarhini et al. (2017) examined the effects of individual culture on the acceptance and adoption of technological tools by students in Lebanon based on the technology acceptance model. Quality of life was also included as a construct as well as four of Hofstede's (2011) cultural dimensions (individualism, uncertainty, power distance, and femininity). Data from 569 students affirmed that "e-learning should focus on the social and cultural context rather than just on the technological solution" (Tarhini et al., 2017, p. 323).

While exploring the historical/cultural factors that impacted students' selection of technological tools in the online multicultural learning environment, most respondents in this study stressed religion. For instance, most Muslim participants voiced concerns about communicating with women, cautioning that, their local cultural values prohibit communicating with women with their faces open, especially if they are not properly dressed (Burger, 2013; Hardaker, Sabki, & Iqbal, 2017). A study by Hardaker et al. (2017) on the perception of

inequalities in access and usage of Internet communication technologies found that female Muslim participants "felt that the range of resources were limited because of their gender and religion, and wanted greater access to [Internet communication technologies], and more online collaboration and social communication" (p. 1). The study by Hardaker et al. (2017) was an extension of the work of Burger (2013) and underscored the impact of cultural beliefs and religion on communication with diverse cultures online.

Equally, Lai et al.'s (2017) study noted that learners' beliefs, learning goals, learning habits, and practices impacted their perception, engagement and the use of technology. In the same vein, El-Masri and Tarhini (2017) found that in order to enhance the acceptability and usage of technology, students needed to understand the relevance and usefulness of the technology presented to them. The same experiences of negotiation for meaning, corrective feedback, and a modified output that occur face-to-face were also found in computer-assisted settings (Akiyama & Saito, 2016). Abbas (2016) affirmed that although technology used for e-learning is global, users are local; hence, the effectiveness of technological products in learning should be measured locally. Culture and technology are central to the design of effective instruction for online learners and informs the selection of appropriate instructional strategies and are thus very critical for this study.

Because culture is relevant to knowing, accepting, and using technology, factors such as academic status, age, gender, lack of inclusiveness, religion, beliefs, and other factors have been noted to impact the online use of technology (Agbatogun, 2013; El-Masri & Tarhini, 2017; Hao, Dennen, & Mei, 2017; Mohammed & Akor, 2017; Palermo-Kielb & Fraenza, 2017). Considering the social, material, and cultural dimensions of students' life, some studies have emphasized the lack of equity in the use of technology (El-Masri & Tarhini, 2017). These studies

noted that learners from developing countries are often exposed to unequal contexts whereas expectations or learning outcomes are measured using the same standards (Biraimah, 2016; El-Masri & Tarhini, 2017; Gay, 2010). Some have questioned the legitimacy of globalized distance education considering the growing heterogeneously diverse groups of learners.

Wildemeersch and Jütte (2017) described how skepticism is growing due to the double-edged nature of digitalization, especially how the unprecedented nature of the digital transformations will impact individuals and society. Therefore, the warning of Mastrian, McGonigle, Mahan, and Bixler (2010) must be heeded; they urged carefulness in applying technology and that practices should be based on the analysis of learning styles. It becomes very important to integrate the right media in the right context for the right learners.

Instructional Designers/Designers-by-Assignment

This section explores the values of instructional designers from Western and non-Western cultures on how instructional strategies are used in supporting the needs of multicultural online learners. This study was focused on instructional designers by design as Tracey et al. (2014) viewed instructional designers as "active and reflective agents of innovation whose storehouse of design precedents feeds professional judgment and action in the design space" (p. 316). In considering the role of culture when selecting instructional strategies, this definition aptly captured the process in which course designers translate the various instructional principles into a process that enables online learners to achieve their learning objectives.

However, several studies have shown that learning, in general, is entwined in cultural activities, hence the culture of course designers may influence their instruction decisions, and thus impact the overall online learner's experience (Asino et al., 2017; Burger, 2013).The instructional designer's work is inseparable from culture, and therefore has a tendency to impact

42

the outcome of instruction (Carbonell, 2012; Grant, 2013; Palermo-Kielb & Fraenza, 2017).The alignment of culture and instructional strategies is more critical, given the fact that the concept of culture is extensively broad and complex to be conceptualized. Its complexity is expressed in its spread from values, beliefs, laws, custom, sex, religion, age, tradition, language, and others. Culture varies both locally and nationally, and may even differ between individuals in the same group (Guy, 2016). This study focused on just the cultural value aspect of culture.

Research has shown that learners whose cultural values differ from the instructional design approach or strategy may experience discomfort or conflict (Carbonell, 2012, 2016; Hawkins-Jones, 2017; Jung et al., 2012; Mccafferty, 2016).One objective of designers is to leave learners with an enduring learning effect that prepares them for global integration into the 21st-century economy and job market. As a result, modern studies continue to recommend exploration of the best practiced instructional strategies to achieve such goals, especially in the online learning environments (Akiyama & Saito, 2016; Asino et al., 2017; V. Davis, 2014; Honebein, 2017; Honebein & Sink, 2012). Cultural differences in the online environment mandate that designers acquire the skills to develop strategies for coalescing multiple viewpoints with matching instructional theories to design ethical and culturally inclusive instructions (Honebein, 2017; Reigeluth, 2013; Sheehy, 2017).

Teachers may hold views about diverse student population which may in turn devalue the cultural, social, and economic capital possessed by the students. According to Swain (2011), "like money, the sociological concept of cultural, social, and economic capital are currently assigned virtues based on who possesses them" (p. 61). Swain noted that, although most teachers recite the mantra "all children can learn" (p. 62), cultural deficits and attitudes prevent many of these same teachers from actualizing this mantra in their teaching practices. In actualizing this

mantra, Wang and Schlichtenmyer (2017) noted that too often, educators and designers find themselves in the position of developing instruction for learners whose cultural backgrounds are very different from their own.

Sharif and Gisbert (2015) reiterated that designers as wells as other educators were not culture neutral as their beliefs, values, and who they are impact their design work and, hence, their learners. It is known that instructional designers have various skills and the ability to systematically specify appropriate research-based instructional strategies and create a learning environment that produces optimum results by aligning learning style and content with the learner (Ashbaugh, 2013; Kelly, 2016; Reigeluth, 2013).This important role of instructional designers in how their beliefs and practices impact their learners makes a strong case for this study. Therefore, this study focused on the investigation of bestmatched strategies that instructional designers and DBA faculty members from Western and non-Western backgrounds believe can support learners of diverse cultural values.

Western and Non-Western Course Designers and Culture

In a study conducted by V. Davis (2014) to explore best strategies that could support and enhance diverse learners in his organization, several errors often made by most educators and organization in Western nations were noted. For one, most of the technology and learning frameworks were Western-oriented. Most U.S. educators often believe the Western-oriented paradigm transcends all other cultures and geographical regions. Such a mindset often creates a false sense of confidence in educators or organizations who believe they know how to reach and educate learners of diverse cultures and emphasize assimilating them (Davis, 2014). In addition to emphasizing conformity or assimilation, Davis (2014) noted the lack of research on specific geographic needs, lack of accessing and using local resources, and lack of appropriate

communication with local contacts in cultures in which learners are embedded, are few of the many errors that jeopardize educators and businesses from succeeding in online global domains. Due to the broad and complex nature of culture, this background makes it compelling to investigate directly from course designers from both a Western and non-Western context about their views on instructional design strategies that best support culturally diverse online learners.

Learners whose cultural values differ from the instructional designers may experience discomfort or conflict (Biraimah, 2016; Hawkins-Jones, 2017; Jung et al., 2012; Lai et al., 2017; Velliaris, 2016). Hagar (2014) also noted a lot of challenges including language, discomfort with online format, and differences in cultural values that form an expectation of teaching and learning in the context of online learning. Writing in English was another salient challenge for international students especially those with English as a second language. Another study exploring the consequences of cultural values was conducted by Sharif and Gisbert (2015), suggested that instructional designers make both explicit and implicit decisions when designing instruction. They noted explicit decisions as those that are objectively made such as developing instructional and learning objectives. The implicit decisions may constitute personal assumptions, preferences such as how often interaction should occur in a course module (Sharif & Gisbert, 2015). Such implicit decisions may not be devoid of personal biases.

Sharif and Gisbert (2015) recognized the impact of different cultures on instructional design, hence, they stressed the diverse nature of the instructional design field and that designers have varied approaches, worldviews, and perspectives, thus, it makes it daunting to explore all the relevant topics. The study's findings however admitted differences in focusing learner's attention but held that such differences did not impact the quality of online learning in different contexts and countries. Similarly, Hando and others found that non-Western learners such as

Asian, Middle East, and Africans may prefer taking notes rather than participate in constructivist-based discussions (Hando & Ahern, 2012; Biraimah, 2016; Hawkins-Jones, 2017; Lai et al., 2017; Rao, 2017; Velliaris, 2016). Most non-Western learners from Africa, Asia, Middle East, India, China, and Latin America may prefer instructor-led, authority-based discussions based on the respect for authority whereas the Western-oriented learners may prefer individualized project discussions. North Americans prefer the learners to be involved in content building, problem solving, whereas countries like Iran, China and other non-Western countries may prefer to provide content, teacher led approaches (Hawkins-Jones, 2017; Lai et al., 2017; Rao, 2017; Sharif & Gisbert, 2015).

The growing and evolving nature of learning in online environments makes it critical that instructors and instructional designers develop skills to deliver culturally sensitive and inclusive instruction. Colferai and Gregory (2015) examined factors that foster increased attrition in online degree courses. Findings show that cultural issues, motivation, use of a learning management system, and online pedagogy were primary factors for students dropping out of their courses. Given that culturally adaptive skills are not automatically learned or practiced by instructional designers or DBAs and the fact that most instruction and technology are embedded in Western-cultural perspectives, knowing how to meet needs of all learners becomes more relevant (Abbas, 2016). It becomes compelling for course designers to develop skills that enhance their ability to create culturally sensitive and culturally adaptive instruction (Abbas, 2016; Gómez-Rey et al., 2016; Jensen et al., 2017; Parrish & Linder-Vanberschot, 2010; Wang et al., 2017).

Instructional Design Strategies and Culture

Palermo-Kielb and Fraenza (2017) noted that culture was a significant part of success. They acknowledged that whereas some cultural norms promote interdependence, others, such as

those in the United States, are more individualistic. Palermo-Kielb and Fraenza identified various factors that impact online learners, and that "a well-designed course is absolutely necessary if an instructor has any hope of building a positive and effective learning community" (p.101). Otherwise, Palermo-Kielb and Fraenza (2017) affirmed that both instructors and students may become very overwhelmed and frustrated, thus, a negative learning experience and outcome. In reducing learning frustration, they suggested a few text based resources such as videos, podcasts, and differential assessments, which are known to reduce written assignments including peer-to-peer strategies and learning communities' strategies to support diverse online learners.

Because instructional strategies can impact the outcome of learning for culturally diverse learners, designers ought to think cautiously in their design decisions. For instance, Liu et al. (2010) examined the use of cases as instructional strategies between U.S. and Chinese students. Their results showed that learners might not fully understand the symbols and sociocultural elements embedded in the cases and hence may prevent some learners from fully understanding the implications. Some participants in the study expressed concerns about the use of case examples that were solely Western-oriented. The study recommended that any case used as an instructional strategy should be culturally sensitive. Most of the cultural challenges have instructional and learning implications; hence require an elaborate explanation of how similar examples may apply to other cultural contexts (Abbas, 2016; Liu et al., 2010), to other cultural contexts (Liu et al., 2010).

Although the core concern of instructional designers is to achieve quality and efficient learning outcomes irrespective of context, they differ on how to achieve such goals. Although designers may work individually, often they work in groups or collaboratively, which calls for an examination of multiple perspectives; at times, each team member may have different

worldviews or personal perspective and biases (Rogers et al., 2007; Sobodić et al., 2017). In the same vein, Sobodić et al. (2017) asserted that, though it may be difficult to understand each learner's cultural nuances, understating certain factors that influence their acceptability, engagement, and interaction will enhance success.

It is now commonly accepted that culture is an acceptable norm, inseparable from learning and the learning outcome (Hartescu, 2012; Sobodić et al., 2017). Culture, therefore, determines what is learned, expected, and taught, and how learning is assessed (Hartescu, 2012; Sobodić et al., 2017). Besides, culture is also known to impact how learners relate to peers, tutors, and materials (Gómez-Rey et al., 2016; Milheim, 2017a; Young, 2014). Studies like that of Tarhini et al. (2017) have suggested that culture is pivotal for quality and effective instructional design. Thus, instructional designers are urged to devise strategies that consider cultural factors in meeting learning needs of diverse audiences (Barrio et al., 2017; Kinuthia, 2012, 2014; Lawrence, 2017; Sommers, 2014; Tarhini et al., 2017). On the contrary, others argue that such a responsibility should rest more with the learners (Messiou & Ainscow, 2015).

Messiou and Ainscow (2015) underscored the increased challenge of keeping account of each learner cultural, religion, language, and values. They proposed that designers should engage learners' views and support them in managing diversity issues as they hold the key about what is and what should be their learning. Not all scholars accept this view. Rienties et al. (2014) explored the effect of letting students manage their cultural issues and compared the effect to the facilitator's taking responsibility in managing the integration process. Rienties et al.'sstudy involved two groups of students. In group work strategy, the first group was allowed to select whom they preferred to be in their group whereas the facilitator managed the selection in the second group. Findings showed that students favored their friends and those culturally and

linguistically similar to them whereas the facilitator's group randomly selected also developed friendships and bonds. The randomly selected group gained more knowledge from those different from them and equally developed strong bounds. This finding shows the importance of faculty's and designers' taking responsibility in designing content and selecting strategies and delivery approaches that honor and respect learner diversity.

Whereas technology is the driving force for online education, there is also a growing skepticism about what and how technology interacts across cultures and human lives. Recently, Wildemeersch and Jütte (2017) described how skepticism is growing due to the double-edged nature of digitalization, especially what and how the unprecedented nature of the digital transformations will impact individuals and society. Wildemeersch and Jütte (2017) noted that, some important group of intellectuals in the universities, media, scholars, businesses, and churches in Germany have expressed concern about the changes posed by digitalization. Such concerns about the invasive nature of technology may be experienced by learners and may impact how they interact online. Despite the variation in study findings, the skepticism, and varied opinions, the call to address diversity issues for online learners continues to grow, especially as increased enrollments (Allen & Seaman, 2017) are also met with increased attrition (Colferai & Gregory, 2015; Palermo-Kielb & Fraenza, 2017).According to Palermo-Kielb and Fraenza (2017), despite the increased attrition rate attributed to cultural differences in the online environments, some educators were still assuming that because diversity is expected and is an integral part of online learning, specific instructional strategies to address inclusiveness was not necessary or needed. Despite the conflicting study findings, there is a growing need to find solutions to the needs of culturally diverse learners, including selecting instructional strategies that support their needs.

For instance, Gay (2010) suggested that, to achieve culturally responsive educational goals, teachers must have "unequivocal faith in the human dignity and intellectual capabilities" (p.45) of their students". Gay noted that use of culturally responsive pedagogy validates, facilitates, liberates, and empowers ethnically diverse students and at the same time supports their cultural integrity and optimizes their abilities and a positive academic outcome.

In the same vein, Koch (2015) advocated for teachers and designers to reflect on their cultural awareness; challenge their understanding and move towards respecting and understanding values of a diverse culture. Altuwaijri (2016) added that such opportunities force instructional designers and DBAs to consider the cross-cultural gaps of learners and anticipate their learning needs and then design effective and quality instruction to meet those needs (Altuwaijri, 2016, p.23).

Similarly, Hartescu (2012) responded that instructional designers are still responsible for designing the activities that would allow the learners to identify, select and construct their relevant contents. Echoing Hartescu's position, Asino et al. (2017) noted that the next focus for instructional designers should be to include culture in every aspect of their design practices including the selection of goals, objectives, implementation, and evaluation. The instructional design task of selecting culturally inclusive instructional strategies or technology is not exclusive. Hence, teachers' and instructional designers' responsibility is to ensure their learners succeed. The way forward in achieving culturally inclusive pedagogy for culturally diverse learners is not an easy one. For one, the concept of culture and instructional design theories are complex, interrelated, and often with multiple perspectives. Recently, Milheim (2017a) echoed what other scholars (Grant, 2013; Hartescu, 2012; Kinuthia, 2012; Rogers et al., 2007) have said all along, that including sociocultural factors in designing instructions brings extra burdens on

designers, especially in the analysis phase. However, many other scholars agree that culture;

beliefs, values, experience, and who we are remains inseparable from one's practice, hence

instructional designers should be flexible in their designs and embrace diversity (Adkins, 2017;

Gelbrich et al., 2016; Milheim, 2017a).

Like the target audience of this study, instructional designers come from diverse cultural,

academic, and professional backgrounds that shape their thinking and decision making. Rogers et

al. (2007) emphasized that mere acknowledgment of cultural influence on design without

accompanying such with action was of no value to learning. Hence, Rogers et al. argued that "at

the very least, even though people of all cultures find themselves learning and teaching in formal

instructional settings; who they are and what they bring to these settings can make large

differences in how design is approached"(p. 2).

Scholars continue to generate palpable arguments about the intertwined nature of culture

and the work of the designers. Ragoonaden and Mueller (2017), Wang et al. (2017), and

Lawrence (2017) asserted that one common area of focus for online educators is the ability to

differentiate instruction and ensure effective practices for online learner's experience, equity, and

satisfaction. They also agreed on the need for a pedagogical model such as culturally responsive

pedagogy, which considers the learning needs of culturally diverse learners. The arguments by

Rogers et al. (2007) emphasized that although people of different cultural backgrounds find

themselves teaching or learning in formal instructional environments, who they are, influences

what they bring to the learning settings and impacts their work. Rogers et al. also stressed that

there is a vast difference between being influenced by cultural aspects and being aware of the

process and impact of such influence. Continuing that, despite the apparent difficulties,

overlooking cultural issues by instructional designers was not the best approach. Hence, Rogers

et al. (2007) argued that designers themselves "should be aware of their cultural blinders, if they embrace the view that responsibility" (p. 2) rests on the learners.

After careful analyses of these arguments, it seems daunting to imagine how instructional designers could address the numerous cultural differences that learners bring to learning domains; however, ignoring vital cultural factors could lead to legal, ethical, and emotional implications. For instance, Landers (2017) noted how globalization had accelerated the movement and speed of everything including people, information, money, and economies across local and international borders in an unprecedented way. This led to many more people from diverse cultures connecting and interacting, hence without intercultural skills to avoid cultural crashing, one may fall a victim to one even when designing instruction or selecting strategies that may conflict with learners' customs or values. Landers gave an example of a 2013 incident in which the president of Microsoft, Bill Gates, innocently insulted the president of South Korea by keeping his hands in his pockets, and another event in 2016 in which Lionel Messi offended Egyptians by donating his used shoes to raise funds for an Egyptian charity.

In Bangladesh, making the thumbs-up sign could be considered offensive (Khan, 2005) whereas in other cultures, it is a sign of approval. Whereas, these incidents are not explicitly instructionally related, it shows how easily one can miss the mark by presenting a strategy that conflicts with the students' values. Designers should therefore, consider the consequences of ignoring certain cultural differences in their design and design instruction that enables learners to embrace learning that is not in conflict with their cultural values and beliefs.

Most of the studies reviewed in the literature were conducted using small sample sizes. A large sample study conducted by Rajaram (2013) that involved about 400 Singaporean business students examined the ease of utility and effectiveness of knowledge transfer of the commonly

used instructional strategies (passive and active). From effective to least effective, the study findings showed instructor-led as the most effective followed by case studies, group projects, videos, guest speakers, classroom presentations, individual research projects, and textbook reading as least effective. Chinese students regarded their teachers as all-knowing, so they respect and revere their teachers' authority without any objections. Rajaram (2013) noted a shift in Chinese culture in which the Chinese have begun to appreciate learner-centered learning. In addition, Shi (2006) reported very little differences between the Chinese and their Western counterparts who are active and more interactive. However, Rajaram (2013) posited that Confucianism culture had a profound impact on the learning outcome of Chinese learners, whose principles stress love for humanity and reverence for parents dominates their practices. Some educational systems are fashioned after a group's beliefs; hence, such beliefs may influence the learning preference of students.

Echoing the findings of Rajaram (2013), Chuang (2012) described Confucian principles as a broad philosophy or religion of Asian countries (China, Japan, Korea, Taiwan, Vietnam, and Thailand) that emphasize social harmony, respect for authority, goodwill, and spirituality. Contrasting these non-Western values of collectivism, hierarchical and authoritarian leadership with the individualistic values of Western cultures poses a design challenge for course designers (Whalen, 2016). Instructional strategies emphasizing active or passive features may not be very effective when comparing one culture to another. Some scholars caution that designers be mindful of the diversity of learners' characteristics and apply instructional strategy contextually based on prior knowledge, cognitive level, values, and beliefs (Chuang, 2012; Rajaram, 2013; Yu et al., 2016). On the same note, Jensen (2013) emphasized the need for educators to be involved in managing the impact of designing instruction for Western and non-Western learners.

53

Likewise, Knowles, Holton, and Swanson (1998, 2012) had earlier affirmed that educators who acknowledge and respect such differences enhance a learner's ability to self-dignity.

Some scholars argued that educational practices are not culturally neutral; hence, instructional designers' beliefs, values, impacts their design decisions and practices (Lawrence, 2017). The literature also showed the need for instructional designers and teachers to get to know their learners promotes discourse among and with students and to ensure that instruction is culturally inclusive to meet the quality and satisfaction of all learners (Lai et al., 2017; Wang & Schlichtenmyer, 2017). In the same vein, some scholars added that culture should in fact inform every design decision and process (Parrish & Linder-VanBerschot, 2010; Sharif & Gisbert, 2015). As a result, designers should focus on best practice instructional strategies irrespective of culture (Zoch, 2017). In this vein, Barrio et al. (2017), Gay (2010, 2013), and Ragoonaden and Mueller (2017) have argued that instructional designers should deeply consider the underlying operational principles of any given research based on an instructional strategy. Such deep consideration will guide instructional designers' and DBAs' decisions about whether some of its prescribed tactics or strategies could be altered to make them more efficient and inclusive to learners of other cultures.

Although the studies of Smith (2012), Sobodić et al. (2017), and Tarhini et al. (2016) show the relationship between culture and learning, others do not (Tankari, 2012). Tankari (2012) examined the sociocultural learning theory and sought to understand the differences between personal, cultural orientation and online learning satisfaction. The mixed methods study findings showed that participants' cultural orientation did not play a significant role in their online learning experience. Equally, Yu et al. (2016) investigated the role of Chinese traditional culture in peer feedback in English as a foreign language Chinese program. Factors such as

54

collectivism and group harmony, face-saving, power distance, and factors that shape their cultural beliefs were examined. Although there was evidence of cultural differences in beliefs and practices, such cultural issues did not constraint learning or peer feedback activities. Despite these findings, numerous studies continue to find the interwoven role of culture in learners' outcome and experience.

For instance, some study findings (Lai et al., 2017; Milheim, 2017a; Young, 2014) supported the position that there are cultural differences that impact instructional design and learning. It is known that numerous instructional strategies and learning theories are not separate from course designers' cultural values, preferences, and worldviews (Guy, 2016; Honebein, 2017; Wang et al., 2016; Wang & Schlichtenmyer, 2017). Evidence from the review also showed that scholars are seeking a solution by increasing research on new models and approaches for addressing the needs of a culturally diverse group of learners (Adkins, 2017; Gay, 2013; Lalla, 2015; Lawrence, 2017; Ragoonaden& Mueller, 2017; Wang et al., 2016). What is not known is how best to meet such goals. Given the variations in perspectives and the fast-growing number of online learners, the answers to these study questions are expected to fill this knowledge gap in literature.

Synthesis of the Research Findings

The literature on cultural values suggested that the significant challenge in the online learning field is the ability to synthesize the cultural diversity of all learners within an instructional design. Based on the literature, researchers such as Hofstede (1980) and M. Wang and Schlichtenmyer (2017) argued that instructional designers can design instruction for those who may differ from them. Nonetheless, the findings of Lalla (2015) and V. Davis (2014) suggested that the process of carrying out such integration between cultural diversity and

55

compatible instruction design remains a challenge. Evidence shows, it is practically challenging to analyze the cultural background of all students (Abbas,2016; Beech,2017).Research suggested that learners whose cultural values differed from the instructional design approach or strategy may experience discomfort or conflict (Carbonell, 2012; Jung et al., 2012; Lai et al.,2017).

Although designers may work individually, often they work in groups or collaboratively, which calls for the examination of multiple perspectives. At times, each team member may have different worldviews or personal perspective and biases (Asino et al., 2017; Yu et al., 2016). Culture is pivotal to the effectiveness of the instructional design. Hence, instructional designers are urged to devise strategies which consider cultural factors in meeting the needs of culturally diverse online learners (Barrio et al., 2017; Guy, 2016; Honebein, 2017; Milheim,2017b). On the contrary, others argue that such a responsibility should rest with the learners (Messiou & Ainscow, 2015; Purarjomandlangrudi, Chen, & Nguyen, 2016).

Some scholars have urged designers to be mindful of the diversity of learners' characteristics and apply instructional strategies contextually based on prior knowledge, cognitive level, values and beliefs (Asino et al., 2017; El-Masri & Tarhini, 2017; Palermo-Kielb & Fraenza, 2017; Sharif & Gisbert, 2015; Rajaram, 2013). In the same vein Jensen (2013) emphasized the need for educators to be involved in managing the impact of designing instruction for Western and non-Western learners. Jenson's assertion aligns with Knowles et al.'s (1998) earlier concern about learners' diversity. Knowles et al. (1998) showed that educators who acknowledged and respected learners' diversity and differences in characteristics enhanced such learners' self-dignity and confidence.

Many of the study findings support the position that there are cultural differences that impact instructional design and learning (Sobodić et al., 2017; Tarhini et al., 2017). Evidence

from the review also showed that there is increasing research effort on new models and approaches to address the needs of a culturally diverse group of online learners (Gómez-Rey et al., 2016; Lai et al., 2017; Tarhini et al., 2016; Young, 2014). What is not known is how best to meet such goals. Given the variations in perspectives and the fast-growing number of online learners, the answers to the questions posed in this study are expected to fill this knowledge gap.

Despite the bleak observations of unequal access and utilization of technological infrastructure, there has been intent/effort by countries in the West such as the United States, United Kingdom, Australia, Canada, and others to support developing countries (Beres & Woloshyn, 2017; Lawrence, 2017; Rye & Støkken, 2012). Instructional designers in various higher educational institutions are increasingly being compelled to design instruction that meets the needs of learners with different cultural values and backgrounds. The literature was replete with the accelerated advancement of a globalized universe, and the evolution of the learning environments is a strong indication of a continuous need for cultural awareness and competency. It shows how such knowledge and competency are required by designers to tackle the problem of integrating cultural elements in their design to not only help learners succeed in academics but also equip them for the global job market and maintain cultural integrity while fostering global unity (Beres & Woloshyn,2017; Burger, 2013; York et al., 2016).

The review of a few seminal works explicitly supports the overarching necessity for this study. The literature review expounded on what is already known such as the centrality of culture to learning. Evidence from several studies showed that differences in context do exist and that such differences impact designing and learning (Gómez-Rey et al., 2016; Hartescu, 2012; Rao, 2017; Sharif & Gisbert, 2015); what is still unknown is how best to support these learners in the face of these mounting differences.

Critique of Previous Research Methods

The review of existing literature on online learning in the context of instructional design suggested that this research has been conducted using several methods. For instance, Smith (2014) examined students' perception of cultural values about course design, utility, and engagements using quantitative methods and emphasized the need for further research using qualitative design. Another quantitative study conducted by Rajaram (2013) examined learning in a foreign culture with 400 Singaporean students majoring in a business program. Key areas examined were the ease of utility and effectiveness of knowledge transfer of the frequently used instructional strategies (passive and active).

Yu et al. (2016) used a multiple case study to examine the role of Chinese cultural issues on peer feedback. The findings showed that although there were individual differences in the students' beliefs and practices about the cultural issues, overall, the cultural aspects did not constrain their group peer feedback activity. This finding contrasts with other study findings.

Hao et al. (2017) used a 27-item survey using exploratory factor analysis among 292 students in a Chinese university. Findings showed that pedagogical factors had a more significant effect on students' intention to adopt and use mobile learning. Social influences such as social image, subjective norms, and role-play also impacted adoption behavior. The findings by Yu et al. (2016) using a multiple case study with only four participants compared to that of Hao et al., who used a quantitative approach with more participants may give reasons to pursue further studies on Chinese learners which may likely unearth findings which may apply to other non-Western cultures.

On the contrary, researchers who conducted their studies on topics like that of this study used the qualitative method. For instance, Kinuthia (2012) attempted to integrate sociocultural

58

issues into instructional design and using online qualitative questionnaires (open-ended) to

determine how cultural issues were integrated into course designs and found that the interest in

integrating culture into design work was on the rise. Similarly, Liu et al. (2010) used a case study

design like this study to examine the effects of cultural differences on international students'

learning experiences. The findings indicated that any meaningful research design by instructional

designers should be devoid of cultural barriers such as, language, communication tools,

plagiarism, time zone differences, and a lack of multicultural content, which may affect

international students' learning performances (Liu et al., 2010). Based on the existing literature,

a qualitative design approach was preferred over a quantitative design because of its use by many

researchers in the existing literature to understand the meaning of experiences. Additionally, the

use of the case study approach in addition to an online survey has been shown to be successful in

past studies to answer guiding interviews questions (Dees, 2015).

Summary

This chapter provided a review of empirical literature on the identified topic and

consisted of five main sections. In the section on the methods of searching the relevant literature,

the databases and keywords used to access studies were described. The theoretical orientation for

the study was based on the three concepts of instructional strategies, culture-cultural values, and

instructional designer with two cultural perspectives of Western and non-Western cultural

contexts. In the section on the review of the literature, studies on the concepts of culture, cultural

values, instructional design, instructional design strategies, computer-mediated communication,

and instructional designers were discussed. The section on the synthesis of the research

suggested that there was a challenge in online learning of synthesizing the cultural diversity of

learners within the field of instructional design. Instructional designers in various higher

educational institutions are increasingly being compelled to design instruction that meets the needs of learners with different cultural values and backgrounds. The critique of the previous research methods suggested that studies similar to the present research used qualitative case studies with successful outcomes but were not focused on the use of instructional strategies.

CHAPTER 3. METHODOLOGY

This chapter contains the description of the methodology and the rationale for the methodology. Within the chapter is an explanation of the rationale for choosing a qualitative multicase study design in answering the research questions. Additionally, it provides information on the population sample, data collection, setting, and ethical principles and procedures guiding the credibility and transferability of this study through a qualitative multicase study design.

Purpose of the Study

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and designers-by-assignment (DBA) faculty members on how instructional strategies can be used to support online learners with diverse cultural values. A sample of instructional designers and DBA faculty members participated in the online survey followed by interviews to explore and describe their design or teaching decisions in using instructional strategies to support culturally diverse online learners.

Research Questions

Based on the nature of the identified problem and the purpose of the study, the following two research questions were formulated to guide the study:

RQ1. How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values?

RQ2. What instructional strategies can be used, according to instructional designers and

designer-by-assignment faculty members, that can meet the needs of culturally

diverse online learners?

Research Design

This section provides an overview of the methodology of the study. A qualitative

approach was deemed best in understanding how instructional strategies best support learners

with diverse cultural values could. Various educational and social scientists who seek to

understand how individuals perceive, interpret, and make meanings of the experiences that

confront them, use the qualitative research approach (Merriam, 2009). How people interpret and

make sense of their experiences differs significantly, thus making the task of defining qualitative

research challenging. Despite the complexities in defining qualitative research, it is primarily

effective in collecting textual data and not focused on crunching statistical data or predicting

values (Lodico et al., 2010; Maxwell, 2013).

Yin (2014) defined a *case study* as an investigation of a contemporary issue or problem

(the case/s) in its natural settings, especially when such phenomenon is not well defined. Yin

recommended three conditions that should guide researchers' decisions in selecting and using a

case study. They are (a) questions, (b) researcher's involvement, and (c) contemporary nature of

the issue. When studies require exploration or description (what) may be needed, whereas, when

an explanation is a focus (why and how) question is best in probing how phenomena occur. The

second recommendation is the extent of control the researcher may have in manipulating events

as in experimental design. In qualitative case studies, the researcher has no ability to manipulate

variables (Yin, 2014). Lastly, the issue under investigation is a contemporary issue, not

historical. Based on these recommendations, the case study design was deemed best for

collecting detailed interview data from study participants to uncover the beliefs of instructional

designers and DBA on how certain instructional strategies could best meet needs of culturally

diverse learners.

A case study can be single, such as when one case is investigated or multiple, such as

when more than one is examined (Stake, 2013). Similarly, Stake (2013) added three types of case

studies: intrinsic, in which the phenomena are of interest to the researchers; instrumental, in

which the study is used to gain an in-depth understanding of a broader phenomenon as in this

study; and collective (also known as *multiple case study* and *comparative case study*),in which

more than one case is investigated at a time and a comparison made to understand a unit of

analysis. The qualitative multiple case study method illuminated views and best practiced

strategies used by instructional designers and DBAs in meeting needs of online learners.

One hallmark of a case study approach is its boundedness. Merriam (2009) defined a

bounded system as the ability to delimit or fence off the areas outside the central case or object to

be studied. This defining focus is illustrated by what is termed the *unit of analysis* (Lodico et al.,

2010). Many qualitative researchers have stressed that it is the unit of analysis, not the topic that

underpins a case study. Simply, such a unit of analysis could be one or many individuals, groups,

processes, objects, or an institution or phenomenon (Lodico et al., 2010; Stake, 2013).

Boundedness is pivotal to exploring issues of the online learning environment, in which there are

competing challenges that impact the success of diverse online learners. Miles and Huberman

(1994) illustrated case boundedness as a circle with a heart in the center. The center of the heart

represents the central issue under study whereas the area around the circle represents other

factors that could be investigated to add further clarity, support the evidence, and thus validate

the research findings. Stake (2013) named that central object or issue the *quintain* of the case.

In a multiple case study, the quintain may be one or many objects, individuals or programs under study, whereas the areas or issues surrounding the quintain may be cases that serve for comparison and replication thus making it easy to understand the quintain with replicable evidence. Yin (2014) explained replication as the utilization of multiple cases and comparing them independently to confirm or disconfirm a position or a rival one. This study was an emerging or contemporary event that explored beliefs of experienced instructional designers and DBA faculty members on how instructional design strategies could support learners whose cultural values are different. The research questions and the nature of the problem being investigated inform the need for selection of the multiple case study design. This approach supported the examination of the participants separately in different contexts and circumstances; it also allowed the analysis and triangulation of the multiperspective data to obtain robust holistic conclusions.

Research Approach

The multiple case study design was deemed best matched for the current research study. Stake (2013) noted that most often educational or social programs differ significantly in context and practice. Therefore, the multiple case study design, which comes with various labels (multisite, collective case studies, cross-case, and comparative case study), is deemed best in collecting data in diverse contexts (Merriam, 2009; Yin, 2014). This study adopted a multiple case study research approach as it enabled the examination of the individual cases separately, following which data collected from the various cases were compared and cross-examined to gain an in-depth understanding of the issues at hand.

Merriam (2009) defined a case study as "an in-depth description and analysis of a bounded system" (p. 43). Merriam noted that a *bounded system* is a boundary that delimits or

puts a fence around a case. The fenced-in section represents the unit of analysis or the case to be studied. The units of analysis for this study were instructional designers and DBA faculty members. The individual instructional designer and DBA faculty members from Context A and Context B represent the cases that were collected separately and triangulated for more robust evidence.

Yin (2014) defined research design as "a logical sequence" that connects empirically collected data with the research question, then to the findings and conclusion. However, Yin urged that a multiple case study should follow replication logic, not sampling logic. A multiple case study is like conducting multiple experiments. However, rather than focus on a number-driven sampling logic, in which numerical data of samples are pooled from the entire universe or group for generalization, a multiple case study focuses on replication logic. Per Yin, replication logic denotes the ability to repeat a sequence of events methodologically and obtain a similar result literal replication or dissimilar theoretical replication. When a replication yields similar results while comparing the sequence of events, it is termed *literal replication*, whereas those having different results are called *theoretical replication (*Yin, 2014). The unit of analysis within a multiple case study may be holistic or embedded.

It is challenging to understand the difference between a holistic and an embedded multiple case study. Baxter and Jack (2008) noted that the difference lies in the context of each case. Thus, a multiple case study enables an examination of the case within and across cases. For instance, variables in Context A were examined and compared with those in Context B cross-case (Yin, 2014). However, when an in-depth analysis of data of a single case is carried out as a stand-alone entity, it is called *within-case analysis*.

The cross-case triangulation was used for this study. The multiple case study approach allows the researcher to understand the similarities and differences in the cases. Per Yin (2014), such cross-referencing may enable the prediction of similar results or findings. Yin named such predictability (literal replication), or it may predict variations or differences in cases (theoretical replication). Despite the advantages of a multiple case study, researchers are warned of the danger of collecting too much data (Baxter & Jack, 2008; Yin, 2003). In recent years, computer software such as NVivo have mitigated some of the burdens of managing exercise data from researchers (Fielding, 2012).

The philosophy underlying the qualitative case study method makes this approach unique and best matched for the current study. Generally, the qualitative research assumes a social constructivist framework also termed as an *interpretive framework* or a *naturalistic framework* (Denzin & Lincoln, 2011; Lodico et al., 2010). Social constructivism argues that phenomena are best understood as complex units linked by a socioeconomic, historical, and natural context in which such phenomena are embedded (Stake, 1995; Yin, 2003). Thus, Vygotsky (1977) stressed that individuals understand, interpret and make meanings of phenomena by interacting with their environments.

The interpretive framework is deemed the best fit for this study because the study seeks detailed thick, rich, descriptive data to aid the investigation of instructional strategies that could be used to best support online learners with diverse values. This framework aligns with a culturally responsive framework. The qualitative study is based on multiple perspectives, subjectivity, open-ended questions that allow meaningful construction of new knowledge (Creswell, 2013). The use of a case study enables the different perspectives and worldviews of the course designers to be examined and triangulated to make robust, holistic conclusions. The

approach further facilitates researchers'/participants' rapport that enhances researchers' ability to gain an understanding of the phenomenon from the participants' perspectives (Baxter & Jack, 2008).

Designing a qualitative case study could be a rigorous and time-consuming activity. Thus, Patton (2002) recommended developing an analysis plan before data collection. Similarly, Yin (2014) proposed that a research plan should first be developed. The five phases of a research plan include

1. Study questions

2. Propositions, if any

3. Unit/s of analysis

4. Logic linking data to propositions

5. Criteria for interpreting findings

These five components were elaborated throughout in this section. The type of issue in view was contemporary, requiring instructional designers' and DBA faculty members' intervention. Therefore, the proposition for the study was to gather in-depth information specifically on how instructional strategies could be used to support online learners who differ in values and understanding. A multiple case study with two units of analysis was preferred to increase the robustness of understanding the phenomena (Miles & Huberman, 1994; Stake, 2013). Yin (2014) also affirmed that using a multiple case study enhances the robustness and credibility of research studies. The entire process of collecting and analyzing thick, rich data helped in providing answers to the research inquiries and a better understanding of the phenomena under study.

Target Population and Sample

Population

The target population for this multiple case study included instructional designers and DBA faculty members from different countries residing anywhere in the globe. Based on the criteria for eligibility, half of the estimated six to 12 participants represent Western-oriented participants such as the United States, Canada, and Europe. The other half were non-Western cultures such as Nigeria, India, China, Japan, and others. Participants had to have a graduate degree in instructional design for instructional designers and a graduate-level degree in their related fields for DBA faculty members. Participants also had to have a minimum of three years' practical experience in designing instruction for multicultural online learners in higher education. The other half of the participants were DBA faculty members with a graduate-level degree in the field in which they teach with at least three years of designing and teaching experience in higher education with culturally diverse learners.

Sample

Multiple sampling strategies were used to enhance the recruitment of highly qualified and experienced participants with valuable, rich data worthy of readers' especially regarding the phenomena under study. These strategies included purposeful sampling, convenience, maximum variation sampling strategy, and snowballing (Miles &Huberman, 1994). Efficient recruitment is critical for a successful research study, analysis and conclusions as data from the respondents helped in illuminating the phenomena under study (Tellis, 1997).

Purposive sampling is best suited for a qualitative case study (Patton, 2002). In addition, Lodico et al. (2010) noted that purposefully selected sampling entails selection of participants with in-depth knowledge for collecting rich and meaningful data about the central phenomenon

under study. This study focused on two groups of professionals, instructional designers and DBA faculty members, with graduate level degrees with at least three years' experience in designing instruction or teaching multicultural online learners.

Thus, in addition to purposeful sampling, convenience sampling was used. Participants were conveniently enrolled as members of one or more selected professional associations or social network organizations, as well as a network of potential participants known to the researcher (Patton, 2002) but only those that met the criteria outlined in this study were enrolled.

Maximum variation sampling strategy (Creswell, 2013; Miles & Huberman, 1994) allowed the greatest possible diversity in characteristics and experience regarding the issue under study. Maximum variation sampling strategy facilitated variable perspectives from instructional designers and DBA faculty about instructional strategies that could best support culturally diverse online learners. Creswell (2013) saw the maximum variation sampling strategy as best aligned with multiple or collective case study designs as it enhances the description of the phenomenon from multiple perspectives. Maximum variation sampling strategy facilitated is particularly useful in producing a high-quality description of each case due to its ability to illuminate similarities and differences (Patton, 2002).

Patton, (2002) also noted that the use of the maximum variation sampling strategy heightens capacity to identify shared patterns across cases and conclusions considered highly credible based on heterogeneous comparison and considerations of shared patterns. Thus, the maximum variation sampling strategy is pivotal in understanding inquiries as in the current study. Such rigorous features make the findings worthy of informing decisions of a wider audience of instructional designers and DBAs (Suri, 2011). Maximum variation sampling

strategy facilitated allowed the researcher to obtain variation in perspective between instructional designers and DBAs of which some were from Western and non-Western cultures.

Snowball sampling. Because the data were collected from participants from different geographical and cultural backgrounds, the snowball sampling method was used (Miles & Huberman, 1994). The snowball strategy entails seeking information from key participant recruits about other information-rich cases (M. Patton, 2002). Therefore, this approach identifies cases from individuals who may know other people with adequate knowledge to answer questions relevant to the research inquiries (Miles & Huberman, 1994).

Sample size. A sample size of six to 12 participants was estimated for the study. According to one participant, the Caribbean is an island of about 12 countries within the Western Hemisphere, yet its culture is more like the African or Asian cultures and little of regular Western culture (Participant LG). Therefore, for the sake of this study, one participant from the Caribbean and three participants from Nigeria made up four members from the non-Western group. The study had estimated approximately three to six participants in each group to be instructional designers whereas the remaining three to six participants were to be DBAs in both Contexts A and B (see Figure3). Equal representation enabled researchers the opportunity to obtain responses that were comparable and more robust with both contexts under study.

Determination of qualitative sample size is a highly debated topic among trailblazers in the field of education and research; with some having different views (Creswell, 2013). According to Patton (2002), qualitative research is filled with uncertainties and with the absence of a specific set of rules for qualitative research sample size. Patton (2002) added that sampling should rest on the "purpose, usability, credibility, and time and financial resources" (pp. 242-243).Creswell (2013) noted it might require one or two individuals, or even up to 30 or 40 cases,

but recommended a sample size of four to five.

.
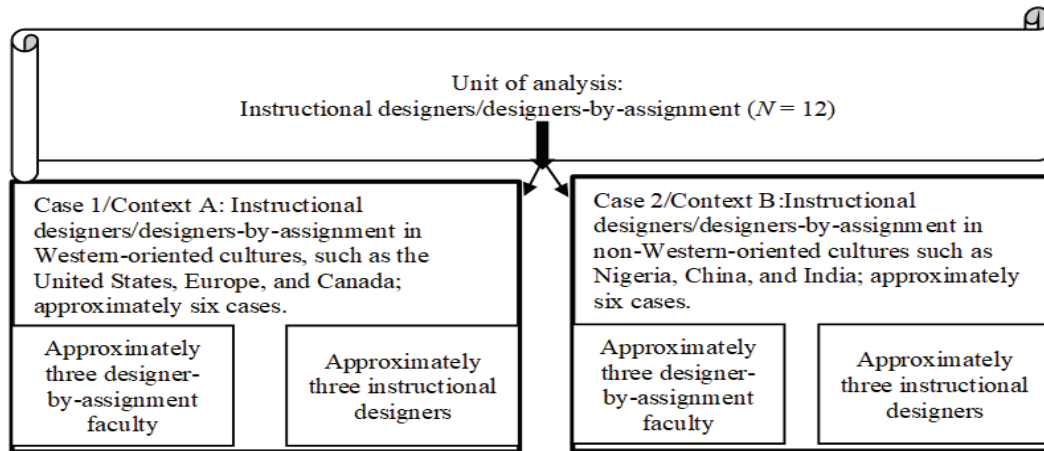
Figure 3. Multiple case study (holistic type).

Lincoln and Guba (1985) and Lodico et al. (2010) affirmed the lack of parameters for determining minimum sample sizes; rather, they call for recruitment to the point of saturation. Saturation is a stage in research in which the researcher feels that sufficient data are collected for replicability trustworthy evidence-based findings (Lodico et al., 2010). Merriam (2009) recommended that sample size determination be based on questions asked, data collected, analysis progress, and available resources. Yin (2003) noted a sample size of six to 10 is adequate and that sample size limits should be discretionary with no verbatim-prescribed size.

Sandelowski (1995) advocated that an appropriate sample size is one that is not too large to enable in-depth, thick, rich data for a case focus analysis and not too small to undermine the understanding of the phenomena. This study deemed a sample size of six to 12 adequate and in line with expert recommendations. Such a small sample size provided the opportunity for the

researcher to obtain a thick, rich description of instructional designers' and DBAs' beliefs about

the phenomena (Lodico et al., 2010; Merriam, 2009).

<div align="center">**Procedures**</div>

Participant Selection

Participant recruitment was done using a professional association for technology-focused

educators and digital social networking websites such as LinkedIn. These digital or social

network members included those that meet the criteria outlined in this study. The interviews and

think-aloud/talk-aloud sessions were recorded for those in the Western region, and one from the

Caribbean; however, participants from Nigeria had difficulties because of network and power

challenges and thus were interviewed over the phone. The online data collection removed the

limitation of fixed location. The researcher and participants were at different locations of choice,

and thus research participants' selection, communications, and interactions were carried out via

digital information technologies as follows:

1. Purposeful sample criteria were established (Miles & Huberman, 1994). The sample
   criteria involved instructional designers and DBAs.

2. Multiple sampling strategies used included, purposeful sampling, convenience,
   maximum variation sampling strategy, and snowball sampling.

3. Recruitment of participants was initiated by identifying the setting and contacts of
   persons that provided key informants for the study, key informants being those with
   in-depth knowledge about the phenomena under study (Lodico et al., 2010).

4. Requests for permission was sent via e-mails to educational associations with public
   sites that do not require prior permission to access target audiences. These

associations have members who are instructional designers and DBAs that met the criteria outlined in this study.

5. Contact information, including e-mail addresses, phone numbers, and self-addressed stamped envelopes, were provided to potential participants for ease of response.

6. Once approval was given to use the site, a prequalification questionnaire with both open-ended and close-ended questions to solicit those who were interested in participating was published on the associations' public sites. The prequalifying questionnaire inquired about eligibility standards as specified in the study, including educational level, experience in designing instruction for culturally diverse learners as trained designers or DBAs, qualifications, and years in practice.

7. Once the survey responses indicated that conditions were met and potential participants were willing to join, an invitation letter with attached informed consent was e-mailed to them. The consent form described the purpose and scope of the study. It included a detailed description of the expected duration, role, and commitment expected of each potential participant. The consent form also indicated any risk potential, permission to use audio-visual recording, and freedom to withdraw from the study at will without repercussions. At the bottom of the consent form was the option for signing to participate or decline to participate. It was essential to receive a signed, dated copy of the consent form before engaging the study. Based on the availability of Internet services, some participants signed and e-mailed the hard copy of the consent form whereas some faxed in the signed copy. Signing these forms indicated that participants acknowledged their understanding and unpressured willingness to participate in the study.

8. Refusal to sign a consent form was also an indication of no desire to participate. Consequently, for these individuals, the study process was immediately terminated. Those candidates who consented to participate received a thank-you letter after the study.

Protection of Participants

A potential risk to the human subjects on whom and for whom the research was conducted was not foreseen. The participants were adults; therefore, was limited or no risk or vulnerability to protected status participants. The participants were provided informed consent before administering research. Such consent form explained the purpose of the study without pressuring them to participate. Participants understood they had the full right to withdraw at any time without coercion or repercussion for withdrawal. The participant consent form thoroughly expressed the freedom to withdraw from the study at any stage. Participants' anonymity and confidentiality were guaranteed, and privacy was protected by installing software to delimit hackers and protect confidentiality of participants' information. Passwords were used for technological data storage to protect participant information and codes were used for participants to ensure confidentiality and privacy. Rigorous measures were taken such as the use of passwords, installation of security software and use of pseudonyms to ensure participants confidentiality and privacy.

Expert Review

Prior to data collection, a field testing of the developed research protocols was conducted with three instructional designers for online learning. The experts reviewed questions and protocols to ensure alignment of questions, purpose, participants, and data analysis process.

Revisions were made based on feedback and recommendations from experts to obtain an aligned, trustworthy instrument that was valid and reliable for answering the interview questions.

Data Collection

The data collection procedure was initiated after the signed consent forms from the identified and invited potential participants were received. In the current study, a multiple case study method was used with the Internet as a primary data collection method. Data collection was scientific, credible and unbiased. The data in this study was collected using three major data collection approaches, beginning with a prequalifying questionnaire. This prequalifying questionnaire conducted online was used for collecting demographic data for eligibility such as sex, age, qualification, certification, experience, and cultural disposition (Appendix A).

Following the prequalifying questionnaire, the Instructional Strategies/Cultural Values Survey Questionnaire was used to explore how instructional strategies were used to support culturally diverse target audiences (Appendix B). Appendix B contains definitions of terms, an optional tool that aided participants in recalling the terms in the instrument. A qualitative survey was created via SoGoSurvey containing close-ended questions with the Likert Scale format. Although this tool is like a quantitative instrument, it was meant to collect qualitative data. The link to survey questionnaires was sent via e-mails to the participants with informed consent at the bottom indicating their voluntary participation. The survey allowed the collection of qualitative data that helped readers in understanding the beliefs of course designers and DBA faculty members in various contexts on how instructional strategies could be used to support learners with different cultural backgrounds and different values.

In addition to the survey questionnaire, critical incident technique interview questions were used in this study for data collection. This open-ended interview questionnaire enabled

participants to ask questions, make comments and iteratively build on their points without the rigidity of close-ended questions (Lodico et al., 2010). The interviews were conducted over Skype with attached audiovisual recording; however, those without Skype accounts or with Internet connection problems did the interview via telephone. Following the interviews, a think-aloud/talk-aloud protocol was used for the debriefing sessions. This qualitative data collection method enabled participants to speak freely about what was on their minds.

During the data collection procedures, a systematic, transparent, and accurate record was ensured (Lodico et al., 2010). Data were collected from Western-oriented and non-Western participants; however, the responses were subjective based on individual designers or DBAs cultural backgrounds and experience. Secondly, experience and practices of trained instructional designers and DBA from Western as well as the non-Western culture may need to be examined and compared in future research. Future studies can explore DBAs use of instructional strategies within non-Western culture and instructional designers in the same non-Western background. Similar studies can be repeated for Western-oriented cultures with a focus on instructional strategies, which is the blueprint of instruction. Such studies may clarify whether the competencies of professional instructional designers make any difference in their cultural responsive and instructional strategies decisions over the DBAs who have no official training in instructional designing.

Data Analysis

Qualitative data analysis was iterative and was an ongoing process with the data collection process, rather than at the end of data collection as common in quantitative studies (Yin, 2003). Data analysis can be done using different methods. Yin (2003) proposed five techniques of data analysis, such as (a) pattern matching logic, (b) linking data to the proposition,

(c) time series analysis, (d) logic model, and (e) cross-case synthesis. Stake (2013) included category aggregation and direct interpretation of the technique for analysis. However, Miles and Huberman (1994) urged that qualitative researchers should first develop a theoretical framework on which the evidence collected is based.

Irrespective of the model used, Yin (2003) urged researchers to pay attention to opposing propositions and threats to internal validity. Yin proposed four principles for achieving high-quality analysis:

1. Attend to all evidence and address and focus on all research questions.

2. Consider rival interpretation, search, rebut, restate, confirm, or contrast on other evidence with alternative explanations about the problem.

3. Focus on the most significant aspect of the case study; avoid diverting attention.

4. Demonstrate ownership before expert knowledge and current thinking about the issue.

The current study utilized cross-case analysis, that is, from data, setting, sampling and use of numerous collection methods, the study then iteratively compared and triangulated data to achieve the maximum rigor possible. This process fits with the constant comparative method of data analysis. Glaser and Strauss (1967) were the first two who proposed using this method for developing grounded theory studies. Nonetheless, because the constant comparative method is also inductive and comparative, it is also widely used by qualitative researchers for nongrounded theory studies (Glaser & Strauss, 1967).

Qualitative data analysis is inductive and occurs concurrently through the process of data collection (Lodico et al., 2010). It is inductive because pieces of information from multiple

sources are combined to make a meaningful and holistic conclusion. Therefore, preliminary data analysis in qualitative research occurs through the data collection process (see Figure 4).

It is critical in case study analysis to ensure the analysis incorporates a convergence of the entire data collected from various sources and methods. The instruments were created based on the review of several texts and journals (Dees, 2015; Stake, 2013; Yin, 2014). For instance, Yin (2014) noted that many potential analytical difficulties could be limited with a general analytical strategy, which creates a systematic sense of critical elements of what is worth analyzing and how the analysis should proceed.

The next step is developing the initial list of start codes that informed the data analysis. Analysis entailed the transcription of the audio-Skype/telephone interviews, think-aloud/talk-aloud document in Microsoft Word documents. The survey data and developing a preliminary list of start codes was aided by use of the NVivo 11 Pro for Windows software. NVivo enabled coding, saving, and analyzing the data at the same time. Major themes were developed based on the underlying conceptual frameworks. Meanings and interpretations were drawn from the thick, rich descriptions of people, places, and activities based on the study questions, emerging themes, and conceptual framework depicted in the analysis.
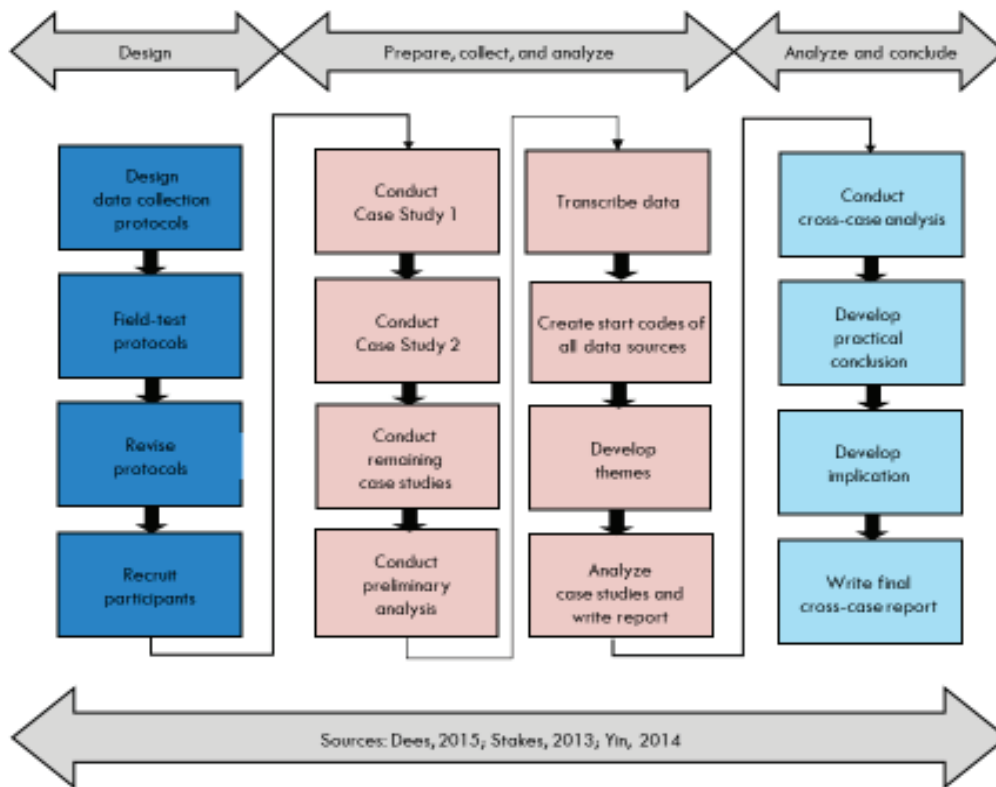
Figure 4. Qualitative multiple case study design.

Lodico et al. (2010) explained that thick description involves the integration of field notes, interviews, and the identified codes into an interwoven thick description of people, places, and events in the study. In the analysis, it is important to ensure meanings obtained align with views of participants and context (Yin, 2014). The entire process entails reading, rereading, revising, listening to recordings, immersing in data, and engaging in deep reflection while verifying themes, contexts, conditions, and consequences (Glaser & Strauss, 2009).

Although, technology takes off the burden of manual data analysis, the researcher is ultimately responsible for the efficiency of the research to ensure that what is analyzed does indeed represent the views of the participants. The strength is that what is analyzed aligns and is

understood in the natural context. As a result, the researcher rigorously immersed themselves in the data, spending the time to read, reread, and reflect on the data for meaning.

Credibility, Dependability, and Transferability

Various frameworks and criteria for evaluating the quality or rigor of qualitative studies have been proposed (Lincoln & Guba, 1985). The integrity of any research determines its usability (Patton, 2002). However, the criteria for assessing qualitative research differ from a quantitative one. Many researchers such as Yin (2014), Creswell (2013), Merriam (2009), and Stake (2013) agreed with the effectiveness of the commonly used steps for establishing and maintaining qualitative research rigor, including

- Triangulation—Comparing information from multiple sources

- Member checks—Reviewing information with participants or peers for feedback

- Engagement—Immersing self in the data

- Peer review—Compare and review data with others with experience or knowledgeable peers

- Thick descriptive text

- The researcher's position or reflexivity—Reflecting on personal beliefs and how that impacts the study

The term *rigor* represents research attributes that are exceptionally thorough, detailed, and credible (Thomas & Magilvy, 2011). It points to the significance of conducting a trustworthy, transparent, and unbiased research that could leave a trail for others to follow and arrive at similar conclusions. The three criteria for judging validity, reliability, and generalizability are explained as follows.

Validity/Credibility

In qualitative research, validity relates to whether the study is believable and if it represents the actual situation as presented by the participant (Lodico et al., 2010). Qualitative research rigor urges scholars to reveal their data source, theory, models, and methodology that informs their research and conclusions (Creswell, 2013; Lincoln & Guba, 1985; Merriam, 2009; Yin, 2014). Otherwise, it is hard to trust the study and findings (Creswell, 2013). The study employed similar rigor for credibility. Multiple data sources such as prequalifying survey questionnaires, semi-structured critical incident technique interviews was conducted. A think-aloud/talk-aloud sessions administered post interview enhanced the researcher's ability in triangulations and thus the study's credibility. In addition, the use of multiple case study approach established credibility by aligning research questions, data collection, and analysis to the conclusion that aligns with participant's perspectives. For example, Tootoonchi (2014) ensured that their findings represented the perspectives and understanding of the participants by conducting follow-up interviews with 50% of participants to clarify areas of ambiguities and possible misinterpretations in responses. Similarly, for this study, the researcher returned transcribed data to participants to confirm its accuracy and ensured that content did not deviate from participants' perspectives. Tootoonchi (2014) also engaged a colleague as a peer examiner to mitigate researcher's human biases. Per Lodico et al. (2010), credibility answers the question of "whether the participant's perception of the setting or the events matched up with the researcher's portrayal of them" (p. 169).

Reliability/Dependability

In qualitative studies, dependability is similar to quantitative reliability that refers to the confidence that a scholar, studying a similar problem and following a similar trail has the

likelihood of arriving at the same conclusion (Moravcsik, 2010, 2014). The literature review for this study showed that researchers utilized diverse methods to achieve reliability. Digital data collection and analysis enhances transparency and audit trails with date and time stamped records of events (Linton, 2014; Lodico et al., 2010; Mann & Stewart, 2000; Sparkes & Smith, 2009; Tracy, 2010). Thus, the researcher used best-practiced examples from literature to optimize dependability of the study. The essence of a qualitative design is meaningfulness and relevance of the findings to stakeholders and end users (Fielding, 2012; Lincoln & Guba, 1985; Sandelowski, 1993). If the research results are ambiguous or frivolous, the research loses its essence and by implication, meaning and usability.

Transferability and Generalizability

Generalizability of quantitative studies differs from qualitative whose primary goal is not for making inferences about a population (universe) for the sake of empirical investigations (Yin, 2014). Rather, qualitative generalizability is based on how knowledge of a phenomenon could be meaningful, applicable or transferable to a similar or different context or situation (Burger, 2013; Schreiner & Gaiser, 2009). One strategy for qualitative transferability includes the use of multiple or cross-case analysis, in which different views or perspectives can be compared.

Such comparative views and findings enable course designers and other readers of diverse contexts to determine what such findings mean to them in making instructional decisions for multicultural audiences. The generalizability of qualitative research is a matter of usability, which is based on how the meanings and conclusions of the researcher relate to reader's situations (Moravcsik, 2014). This correlation means that the use of technology could eventually narrow the line between qualitative and quantitative design. For example, Thomas and Usher (2009) replicated their study with two different samples and contexts. The first study was in

African American women, and they later used the same process and method to conduct another study on Hispanic women. The findings yielded similar results within the margin of generalizability between the quantitative and qualitative studies.

The sophistication and increased use of computer-mediated communication technologies have created a platform for online qualitative research (Richey et al., 2011). Online approach software such as Skype, e-mails for data collection, and data analysis software such as NVivo have further strengthened and legitimized the qualitative research process and findings (Fielding, 2012, 2014; Moravcsik, 2010, 2014). For this reason, Wilkerson, Iantaffi, Gray, Bockting, and Rosser (2014) recently affirmed that online qualitative design is preferred than face-to-face mostly due to the immediate availability of transcripts. Collected data can be traced to participants and transcription presents minimal errors (Wilkerson et al., 2014).

The credibility, dependability, and transferability of the current study were heightened by engaging qualified, experienced researchers. Such experts included the mentor, members of the dissertation team, and other experts to peer-review the entire process and findings for trustworthiness and usability. Based on this insight, it could be argued that although qualitative evidence is not geared for generalization as quantitative evidence, the heightened transparency and traceability enhances its credibility, usability, and meaningfulness. Thus, readers who can find meaning in the evidence can apply it in their instructional practice beyond the scope of the demographics covered in this study.

Expected Findings

The findings of this study are expected to illuminate key instructional strategies as used by experienced instructional designers and DBA to support learners of diverse cultural background in their practice. In a broader sense, this study will increase cultural awareness,

which is deemed a central educational duty that is inseparable from ethical principles of doing good to make the world a better place through good design, good theory, and good acts (Thomas, 2003). Therefore, it is believed that findings from this study will mandate current and prospective course designers to reflect on their current views and practices when selecting instructional strategies for learners from diverse cultural backgrounds. It is expected that answers from this study and online instructional strategies cultural values questionnaires, interviews, and think-aloud/talk-aloud responses will provide instructional designers for online learning practitioners with guidance to modify, update or further explore interventions on how instructional strategies can be used in meeting the needs of multicultural online learners in their practice.

Instruments

Instrumentation for this study describes where and how the instruments used in collecting data were created and used (Lodico et al., 2010; Miles & Huberman, 1994). This qualitative research utilized multiple data sources, and as a result, multiple instruments. Yin (2014) recommended four types of data collection approaches: (a) prequalifying survey, (b) Instructional Strategies/Cultural Value Survey Questionnaire, (c) critical incident technique interview questions, and (d) think-aloud/talk-aloud protocol (Appendix C).

A prequalifying questionnaire for eligibility was used for collecting demographic data such as sex, age, qualification, certification, experience and cultural disposition, and years of experience in teaching or instructional designing (Deakin & Wakefield, 2014; Onwuegbuzie, Leech, & Collins, 2010). The responses guided the eligibility and designing of the interview questions. The qualitative online survey instrument was created via SoGoSurvey, and the link to survey questionnaires was sent to participants via e-mails. The creation of the survey

questionnaire was informed by various research-based literature (Boon & Lewthwaite, 2015; Hando, 2014; Parrish &Linder-VanBerschot, 2010; Tan, 2010).

The critical incident technique was one of the main instruments for data collection in this study. The instrument and interview technique come from the work of Sir Francis Galton but was put into the spotlight by John Flanagan and has since become used as a research approach (Flanagan, 1954). Per Flanagan (1954), the critical incident technique represents a study of a specific significant incident or memorable experience in a participant's life. An essential element of the instrument is that it focuses the interview process on specifics. , The use of the critical incident technique enables the participant to recall details of specific relevant events, such as the nature of the incident, those involved, when it happened (Flanagan, 1954). Additionally, it can allow participants state what lesson they learned from the incident (Collins, Arthur, Brown, & Kennedy, 2015; Flanagan, 1954; Phelan, 2012; Sharoff, 2008). The interview was administered via Skype conferencing software. However, those without Skype applications or data in their Skype account had their study administered via telephone. Because Skype has no recording capability, iFree Skype recorder was used. The iFree Skype recorder is a free software that integrates with Skype communication and records both interviewer and interviewee.

Recorded interviews were stored in a Gmail account that could be accessed using a password. The audio communications from the interview were transcribed verbatim using one iFree Skype recorder to mediate computer communication software NVivo (Creswell, 2013; Miles & Huberman, 1994). Use of the critical incident technique interview enabled the researcher to focus the interview with instructional designers and DBAs in Context A and Context B (see Figure3). Transcribed scripts were given to participants for further verifications

and accurate representations. The recorded interview process also allowed the researcher to obtain detailed analysis that facilitated the identification of differences, similarities, and patterns.

A think-aloud/talk-aloud protocol was also used to enrich the data. Think-aloud/talk-aloud is a qualitative data collection method that enables participants to speak freely about their thoughts unhindered. Aitken, Marshall, Elliott, and McKinley (2011) compared the best data collection strategy between observations and think-aloud/talk-aloud. Findings showed that 130 decisions were identified following observations whereas 209 were identified using think-aloud/talk-aloud (Aitken et al., 2011).

The Role of the Researcher

The researcher's role was primarily data collection including assuming responsibility and leadership in order to enhance the integrity, quality, and usability of the study findings. Although the study method and design were technologically driven, the researcher decided on the role and level of involvement with participants and made an effort to develop a trusting researcher–participant rapport. Acquiring this rapport was beneficial as it allowed the participants to open up and providing the researcher with in-depth answers to the questions of this study. Although this topic was of interest to the researcher, she rigorously controlled and avoided biases by using online methods for the study, asking direct probing questions, and listening attentively to each participant even though they were in different parts of the world. Thus, researchers must be skilled in collecting complex data from multiple sources and managing personal bias and beliefs from influencing the study process at any level (Xu & Storr, 2012). The researcher acknowledged the role differences between her and the participants, as the participants were those in authority or those with many years of experiences in the online learning or instructional design field.

The researcher has been a director and administrator of various healthcare ventures with over 20 years of experience in conducting skilled observations, assessments, and making critical decisions that pertain to human life in clinical settings. In addition, the researcher taught in a private nursing institution and collaborated with other instructors to develop courses or revise existing ones. The researcher has a Texas teacher certification in health science and currently teaches Grades K–12. Part of the motivation for this study is to improve the experiences of online learners irrespective of their cultural backgrounds. The competency of instructional designers and DBAs is central to education; therefore, inputs from designers and teachers and their practical experiences guided this study. The researcher is an online learner from a non-Western background with a firsthand experience on how instructional strategies could impact learners from diverse cultures. The researcher utilized online data collection and analysis methods and rigorously ensured that her personal experiences and biases did not impact the integrity of the study. The researcher's role is anchored on the fact that the usability of the study findings is based on her efforts, which included rigor in employing extreme transparency and to ensure replication of the study by other researchers.

Guiding Interview Questions

The primary research question guided the development of the prequalifying questionnaires and semi structured critical incident technique interview questions. Thus, the primary interview question sought to understand and describe the beliefs of instructional designers and DBA faculty members on how instructional designers could best support culturally diverse online learners. The critical incident technique as proposed by Flanagan (1954) was the interview approach deemed the best fit in seeking answers to the research questions. It provides evidence-based data for interpretation of events that align with how and why decisions are made

in certain activities (Flanagan, 1954). The critical incident technique interview technique was originally the work of Sir Francis Galton and was put into research use by Flanagan, who brought it into spotlight.

Key elements of the instrument include the ability to focus the interview process on specifics. According to Flanagan (1954), the use of the critical incident technique enables participants to recall details of specific relevant events, such as the nature of the incident, those involved, and when it happened. Additionally, it can allow participants state what lessons they learned from the incident (Collins et al., 2015; Flanagan, 1954; Phelan, 2012). Per Flanagan (1954), the critical incident technique represents a study of a specific significant incident or memorable experience in a participant's life. Thus, it focused the interview questioning process on details and allowed the researcher to compare differences and similarities. The five steps of creating critical incident technique interviews include(a) establish the purposes, (b) specify plans and terms, (c) collect critical incident data, (d) analyze and interpret, and (e) report (Flanagan, 1954).

Ethical Considerations

Ethical issues are inseparable with all aspects of the research process, but mostly with qualitative research; which is often criticized for its subjectivity (Maxwell, 2013; Yin, 2014). Ethical concerns in research have taken a new turn in recent years due to technological advancement and the use of the Internet. Mertens and Ginsberg (2009) noted that issues of ethics have expanded beyond U.S. federal guidelines to include consideration of global contextual factors. Lincoln (2009) described four major ethical frameworks that emphasize the (a) ethical consideration of those the research is conducted on,(b) context (site of study), (c) ethical globalized context (diversity factors),and (d) ethical considerations in the entire process, from

preparation, data collection, data analysis, and interpretation, preparation and dissemination of reports. These guidelines matched those that were used in the current study as it involved diverse participants engaged in designing instruction for culturally diverse online learners. This researcher adhered to Lincoln's four guidelines as follows:

1. Ethical consideration of those the research is conducted on: This researcher did not foresee any potential risk to the human subject on whom and for whom the research was done. The participants were adults, and therefore, there were limited or no vulnerability to protected status participants or participants with such characteristics.

    a. Informed consent was provided to participants prior to beginning the study and the purpose of study was explained to them without insisting they participated.

    b. Participants had the right to withdraw at any time without coercion or repercussion for withdrawal. Such consent shall express the freedom to withdraw from the study at any stage.

    c. Participants' anonymity or confidentiality was paramount to the extent possible when using online technologies. The rigorous effort for participants' privacy protection included the installation of software to delimit hackers and protect confidentiality and seeking consent before releasing information.

    d. The researcher used passwords to protect information.

    e. The researcher used codes or pseudonyms for subjects to ensure confidentiality and privacy.

    f. The researcher did not provide or share participants' information with a third party and rigorously ensured participants anonymity.

2. Context/site of the study: The primary site for this study was Internet network technologies using tools such as e-mails for recruitment; Skype, Google Forms, Survey Monkey, Messenger, and other digital social websites for data collection; and digital software for data analysis and report. The use of the World Wide Web has revolutionized the qualitative research process by heightening the transparency and traceability of the research process, thus mitigating against ethical concerns (Fielding, 2012). However, this process may entail downloading files through the Internet. Therefore, the researcher was committed to employing maximum possible procedures in ensuring ethical practice of dignity, privacy, and confidentiality of participant information. Although a full guarantee of confidentiality cannot be promised by using the Internet (Fielding, 2012; Moravcsik, 2014), the researcher employed the strategies listed as follows to ensure the safeguard of participants' electronic data:

   a. Digitally collected data were only stored on the computer. Afterwards, all electronic data were deleted from all sites.

   b. The researcher ensured the safety of electronic data with digitally secure storage, passwords, and reasonable anti hacker software.

3. Ethical globalized context: Diversity factors

   a. Ensured informed consent and used terms, examples, and words familiar to participants from a diverse culture.

   b. Exercised caution during the process and in making inquiries about culture, religion, gender, and other sociocultural factors to be respected, including knowing when and how to research certain demographics (concerns of electricity, the Internet, etc.).

90

c. Used e-mail contacts when Skype or phone communication was not possible.

4. Ethical considerations in the entire process: The researcher conducted a credible and trustworthy research study by employing rigorous ethical considerations from planning, sample recruitment practices, sample size, study site, analysis, interpretation, and dissemination of findings, and being mindful of conflict of interest (Creswell, 2013; Yin, 2014). This research study employed the following ethical process:

a. Researchers received approval from Capella University's Institutional Review Board on the process used to protect participants and limit conflict of interest.

b. Potential conflict of interest risk for this study was considered low or limited as the sample was drawn from members of the researcher's professional networks with qualified participants with no direct affiliation with the researcher.

Thus, this study upheld higher ethical standards from the beginning to the end of the study as set forth by the Capella University Institutional Review Board (Lincoln, 2009).

Summary

This section described the research methodology deemed appropriate for answering the research questions of this study. The study explored the beliefs and practices of instructional designers and DBA faculty in higher institutions on how instructional design is used to support culturally diverse online learners. The section also described the use of a qualitative multicase study as the best-matched design for answering the research questions posed in this study. Various sampling approaches were used including purposive sampling, convenience, snowballing, and the maximum variation sampling strategy, which allowed the selection of participants with characteristics and experience that matched the criteria set for the study.

91

Furthermore, the section showed how online survey questionnaires, interviews followed by think-aloud/talk-aloud session were used to collect data to answer the research questions. This chapter also showed how the use of online data collection approach could limit the researcher's role and influence in the research process and set aside researcher bias during the study. Finally, it emphasized the optimum possible precautionary strategies that the researcher took to protect participant's identity and information with the goal of producing credible and ethical findings that others could apply to their situations.

CHAPTER 4. PRESENTATION OF THE DATA

Introduction: The Study and the Researcher

This chapter contains a presentation of the data collected in this study. This chapter also discusses the study sample and the research methodology as applied to data analysis. The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and designer-by-assignment (DBA) faculty members on how instructional strategies can be used to support online learners with diverse cultural values. The data from the interviews, think-aloud/talk-aloud and the online surveys were analyzed to understand and describe instructional strategies that instructional designers and DBA faculty members used in supporting culturally diverse online learners. Given the focus of the central phenomenon under study, the following research questions were asked:

RQ1. How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values?

RQ2. What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members that can meet the needs of culturally diverse online learners?

Description of the Sample

Participants were recruited using various professional and digital social networking websites and professional associations whose membership included sampling that meets the criteria outlined in this study. Thirty participants responded to the prequalifying survey,

11completed the questionnaire, but only eight met the criteria outlined for the study and were available and willing to complete the entire study. Likewise, 27 participants responded to the Instructional Strategies/Cultural Values Survey Questionnaire, 13 completed the study but only eight who met the criteria consented and returned the signed hard copy via fax or e-mail. These eight participants also participated in the Skype-recorded interview or telephone interview (for those participants with network and power challenges). These were mainly those participants in non-Western countries. Four of the eight participants were from Western countries such as the United States and Europe; the other four were from non-Western nations.

Although the Caribbean is in the Western region, the cultural values in the Caribbean Islands were complex and similar to those values commonly exhibited in non-Western cultures such as the Africa, India, and so on (Olwig, 1990; Safa, 1987). Participant LG, just as Olwig (1990), affirmed that, there are many similarities in values of the Caribbean values to that of the other non-Western values. The participants were active as DBA faculty members and practicing instructional designers. Four participants, TH, LG, SR, and ST indicated they were currently active instructional designers and were all university faculty members. Participants LU, NU, FA, and ME qualified because of their roles as DBA faculty members. All but one participant (seven in total) had doctoral degrees and one of the participants was currently in the process of getting a doctoral degree in the field of instructional design for online learning. All eight participants met the 3years' minimum experience set for the study, as either an instructional designer or a DBA faculty member. As noted previously, Participant SR clarified that she had over 3–5years as a DBA and only 1–3 years as an instructional designer. Table 1 is a list of the participants' demographics.

Table 1.

Participant Demographics

Participant code	Currently active as a designer-by-assignment faculty?	Currently active as an instructional designer?	Academic qualifications	Years of experience
FA	Yes	Yes	PhD	5 or more
LG	Yes	No	PhD	3–5
LU	Yes	Yes	PhD	5 or more
ME	Yes	Yes	PhD	3.5
NU	Yes	Yes	PhD	5 or more
SR	No	Yes	Master's degree	1–3
ST	Yes	Yes	PhD	5 or more
TH	No	Yes	PhD	5 or more

Research Methodology Applied to the Data Analysis

A multiple case study design was deemed best matched for this study. This research approach enabled the examination of each of the individual cases separately. In keeping with this principle, each interview transcript was read in its entirety and coded individually. This approach allowed the researcher to form initial thoughts on each individual case before reflecting on the cases. Following this initial examination, data collected from the various cases was converged, compared, and cross-examined to gain an in-depth understanding of the issues at hand. After each case was coded separately, the codes were compared across all the cases to examine themes, similarities, and differences across the cases.

Data were collected via online surveys (see Appendices A and B). Additional data were collected via an online survey using the Instructional Strategies/Cultural Values Survey

Questionnaire (see Appendix B). This survey was followed by interviews conducted via Skype and telephone for those with difficulties connecting to Skype. Two guiding questions directed the creation of the nine-question interview protocol. The first guiding question was: How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values? The second question was: What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members that can meet the needs of culturally diverse online learners? The guiding questions informed the development of the interview protocol for the study. The critical incident technique interview questions (Appendix D) included nine questions that were followed by a brief think-aloud/talk-aloud session.

Critical Incident Technique Interview Question 1

Critical Incident Technique Interview Question 1 was: Describe the highlights of your experiences as a teacher or course designer for culturally diverse online learners.

The participants experience with online learners varied as course designers or teachers. Their expertise impacted their design work and how they interact with their learners. According to Participant LG, some participants were challenged by cultural differences in which students take the centered approach as the teacher is lazy or incompetent. One participant expressed structure with clarification of expectations and meaning as the key, and he highlights this when students are successful.

Critical Incident Technique Interview Question 2

Critical Incident Technique Interview Question 2 was: Describe the low points of your experiences teaching or designing courses for culturally diverse learners.

Participants' low points differed based on context. For instance, Participant FA stated, "One low point is finding a solution to the technophobia plaguing online education and technology-driven learning. Desensitization of every stakeholder is critical, from the school administration, teachers, and learners, including the public." Technophobia could be challenging as it may lead to resistance in investing in technological infrastructure or supporting the online education program, especially from faculty and the leadership. Another participant was deeply concerned about being addressed as *Miss*, after several reminders to call her by her correct title. Other participants stated that, rather than try to understand all students' culture, time is spent in directing the students to the university, social, and universal culture.

Critical Incident Technique Interview Question 3

Critical Incident Technique Interview Question 3 was: What surprises you the most about teaching or designing courses for culturally diverse learners?

One participant stated that she had no surprise designing instruction for culturally diverse learners. According to Participant FA, other than "the fact that, we try to maintain the concept of cultural imperative where the content is the same, that is content strictly adheres to the basic principles of quality education." To others, the instructional strategies and methodologies, materials, and delivering approach may be based on the learners' cultural background. Culture is used to inform course design to adhere and ensure quality content and learner's satisfaction.

Critical Incident Technique Interview Question 4

Critical Incident Technique Interview Question 4 was: What is the most challenging thing about teaching or designing courses for Western and non-Western learners in the same environment?

The challenges expressed by participants varied. One participant said education is about change; hence, selecting instructional strategies that addresses the needs of learners and academic standards, and equally adapt to values of different learners is a daunting task. Again, the Participant FA said, "We focus on cultural imperatives, which do not undermine academic quality but flexible to respect individual cultures." Participant FA continued, saying,

> In designing courses or teaching students from diverse backgrounds, certain challenges including culture itself are difficult to define and hard to change. Even ineffective values may be difficult to change, collaboration or teamwork, does not mean cheating. Sharing information does not mean plagiarism, a culture of silence, and respecting elders does not mean accepting wrong answer forms as truth.

> Hence, instructional designers and teachers are duty bound to teach students how to explore several resources, make decisions based on critical analysis of the facts, and argue out or defend the reason for their beliefs or answers. The ability to get students to explore resources independently is sometimes a challenge. Another participant reiterated the difficulty in their writing course especially with non-English natives who struggle to write in an appropriate manner.

Critical Incident Technique Interview Question 5

Critical Incident Technique Interview Question 5 was: Describe how your own beliefs impact the instructional strategies used for culturally diverse learners.

Participant SR responded that "behind every teacher, instructional designer or even administrative staff of an institution is an underlying cultural value or belief system." These values are implicitly or openly entwined in the content of the delivery system. In the same vein of designers' values and belief system, Participant FA noted, "My love for presentation or

debates on key concepts is based on my own educational history. That's how I learn the most."On the same question, Participant TH added that "while expertise and experience are incredibly valuable, you cannot let expertise and experience turn into elitism. You have to stay open to inputs from various places. That's critical."

Critical Incident Technique Interview Question 6

Critical Incident Technique Interview Question 6 was: How should designers use instructional strategies to support learners whose cultural values predispose them to be passive, dependent, and unable to question authority or consider alternative views (Tyson, 2012)?

Participants noted that the use of collaboration was efficient for passive and dependent learners. Also, the use of collaborative technological environments is helpful for the less passive students; it increases interaction and may make them to become active learners. Some participants said the use of mannequins or robotic personae were effective instructional strategies for the less vocal or passive learners. Otherwise, most participants said discussions, case-based learning and project-based learning were useful in helping students solve problems while discussing their findings. Participant NU noted that passive learners are everywhere and refute the assumption that non-Western learners are more passive than Western learners. However, posing questions and engaging learners in problem solving and open communication are very effective for passive learners irrespective of the context.

Critical Incident Technique Interview Question 7

Critical Incident Technique Interview Question 7 was: Describe some instructional strategies that you have used successfully in teaching culturally diverse learners.

Participants recognized there were tons of strategies, but only those deemed to enhance learning and quality education that could be applied in real-life settings globally were employed. Irrespective of the instructional model used in selecting strategies, Participant FA stated,

> There is no right or wrong strategy in my experience, just as there is no right or wrong culture, being culturally sensitive in designing instruction and ensuring that the content is clarified, so it does not look foreign to one group and normal to another should be the guiding principle for any teacher.

Critical Incident Technique Question 8

Critical Incident Technique Interview Question 8 was: Describe how Geert Hofstede's cultural dimensions could be useful in selecting instructional strategies that support culturally diverse audiences.

Most participants said they never explicitly used Hofstede's (2011) cultural dimensions as a guide to design instruction. Thus, strategies often used such as, collaboration, group study, individual assignments, and student-centered strategies may be implicitly intertwined with Hofstede's cultural dimensions.

Critical Incident Technique Interview Question 9

Critical Incident Technique Interview Question 9 was: Describe what instructional strategies best support students with respect-of-elders values who may feel uncomfortable asking direct questions or considering alternative views.

Participants acknowledged cultural differences and the respect for elders practices (Tyson, 2012).Participant TH noted that because some of the students in college were already matured and set in their ways, respect for elders applies less frequently to them. Accordingly, most of them agreed that the key is getting to know one's students. However, Participant FA

noted that the values of respecting elders or authority are contextual as those in the city are more independent than those in rural areas; hence, as students with respects of elders values transition to online or blended learning environments, teachers ensure they receive high scaffolding until they can cope with student-centered learning.

Overall, the think-aloud/talk-aloud exercise, and the preceding critical incident interview question responses showed that most instructional designers and DBA faculty differed on how they tackle the issue of orienting a novice instructional designer to succeed in selecting the most appropriate instructional design strategies to support diverse students. Many of the participants said flexibility, quality education, language consideration, the adaptation of content when necessary, and the use of multiple methods have proven very effective in reaching culturally diverse online learners.

Presentation of Data and Results of the Analysis

The following sections discuss the data collected in this study through the lens of the study's central research questions. Although each case presented individualized data, some themes emerged across multiple cases. These themes helped inform the study's purpose and gave insights into answering the research questions.

RQ1: Instructors' Experience Using Instructional Strategies for Diverse Learners

Research Question 1asked: How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values? Although all participants reported differing experiences and beliefs regarding the role of instructional strategies in supporting online learners, some themes emerged from the data that was shared by many participants. Those themes included Teacher-Centeredness, Language, and Relevance.

Teacher-Centeredness. Seven participants reported that their students approached learning through a teacher-centered approach. Participants described students in a teacher-centered environment as more passive learner than students in a more student-led environment. Participant FA indicated that teacher-centered learning is not always possible in an online learning environment and that she prioritized assisting students to adjust to a more student-led style of learning. According to Participant FA, "The usual teacher-centered lecture where students only passively listen is no longer possible in the online environment; hence, students are compelled to learn independently while the teacher facilitates."

Participant LG reported a similar experience to Participant FA. Participant LG indicated that she too discovered many of her students approached learning through a teacher-centered lens. Participant LG mentioned that she often had to encourage her students to discover answers for themselves, rather than asking her to spell out the answers for them. Participant LG said that the Caribbean approach to education was "very paternalistic, very old-fashioned," in which the teacher lectured while the students took notes.

Participant LU indicated that students who rely on teacher-led learning were often passive learners. He indicated that with passive learners, there were certain educational strategies that encouraged these students to seek answers for themselves. He mentioned that he used a variety of techniques and that it was important to choose the strategy that works best for each student. According to Participant LU, passive learners often depend on teacher-led learning. Participant LU claimed,

> Strategies that encourage teamwork, interactions, individual work, collaboration, self-exploration, and providing multimode of delivery is effective. Flexibility in choosing and selecting what works is ideal for passive and nonpassive students. I am not boxed in by a

single theory; rather, I believe teachers should have the flexibility to choose based on a student's style, preference, and cultural disposition. Passive and independent learners are encouraged to be self-directed but with high-level scaffolding till mastery.

Language. Four participants reported that language factored into the experience of teaching a culturally diverse group. These participants reported that language barriers were hurdles that needed to be overcame, both in terms of fluency and in terms of colloquial understanding. Participant ME stated that he worked to ensure the language he used could be understood by a variety of students from different cultural backgrounds. He indicated that

> At times, I've had students who, because of their English as their second language or maybe they have cultural biases, or they have cultural perspectives, come to class not capable of understanding the colloquial language when presented in class. As an example, if we walk into class and start talking in manners that are colloquially fluent and some of the students may not have been grounded in the quote and unquote Western style to learn the idioms and to learn the shortcuts to make language smooth in Western cultures. So, in some cases, we have to go through that; and even pronunciations matter a lot. One example is my experience from learning that in some cases, I would say, that the body is not made of metal. The students would think that the *metal* is m-e-d-a-l instead of m-e-t-a-l. So that pronunciation changes the dynamic of things.

Participant ME went on to say that language perception was also an important factor in teaching students from a varied cultural background. He indicated that it was important not to assume that a student's capability was dictated by their English language fluency. He indicated that because communication was "a very central element in selecting instructional strategies," his

103

teaching strategies were chosen to foster communication. Furthermore, establishing communication may increase student engagement and independent learning.

Similarly, Participant TH also reported that language needed to be critically considered when developing instructional strategies. Participant TH found that giving students enough time to formulate their thoughts fully was important when language could be a challenge. According to Participant TH,

I have had classes where I would have an African American student, a Nepalese student, a Chinese student or two, and a bunch of kids from Central Minnesota. Making the connection especially for those who recently come to the United States is very interesting and challenging. Part of it for me is getting past language issues to substantive things. For second language learners, it's useful for them and in an asynchronous situation to be able to formulate their thoughts and write them carefully. I find that I can help with second language writing issues either in the context of assignments or in one-to-one personal discussion basis to help them think about my big bugaboos.

Relevance. Five participants reported that the relevance of instructional strategies needed to be considered when teaching an ethnically diverse group. These participants indicated that the content of lessons needed to be tailored to the understanding of the group being taught. Participant FA indicated that providing relevant content was the key to fostering learning. According to Participant FA,

In behavioral learning theories, such as Gagné's nine events, Merrill's first principles, the key is to have content that is academically sound. However, in getting a student to learn, the content presented must be meaningful and relevant to the learners, it should be presented in a way that it activates prior experience and could be applied and

104

incorporated in real work environments. Thus, both cognitivist strategies that enable students to journal, reflect, and rehearse content, or constructivists theories that enable problem solving, debates, and analyzing data are used depending on the concept being taught, and the audience it is being taught to.

Participant NU also reported the benefits of using relevant examples in teaching. He indicated that he attempted to find examples that were "not too foreign" for his students and that using local examples was ideal. Using relevant examples may enhance student engagement and understanding. In addition, Participant NU noted that "the teacher's goal is to ensure every student engages and understands the expectations. Structure, clarification of expectations and instruction that is meaningful and relevant to the student's goal is the key."

Participant NU said that, "based on experience, teachings and instructional designers should draw from the university's academic, social, and universal culture" rather than teachers' trying to understand the differences among all students taking online courses. The researcher asked Participant NU to clarify what he meant by *universal culture*. NU explained that, in mathematics, 2+2 =4 is a universal standard. Similarly, sciences such as biology and physics are also universal standards. Likewise, quality education and expectation for global job markets are considered to be among many universal cultures. As the culture of the setting and the diverse background of the learners differed, good teaching, therefore, entails orienting students to this universal culture and shared interest.

For passive learners, Participant NU strongly asserted,

I do not believe the notion that non-Western learners are passive learners. There are passive students everywhere. However, the onus is on the designer to design instruction to motivate the passive learners in tasks that are meaningful and relevant. Such projects

should include open communication with, problem-solving requiring critical thinking, analyzing, asking questions and finding solutions to problems are effective strategies for passive learners.

Participant ST reported that relevance also came into play relating to the cultural learning system in general. She reported that different cultures approached learning differently and that practices that are common in one culture may seem irrelevant and unimportant in others. Participant ST indicated that "the attitude toward learning" in the country was dependent on "memorization and studying for the exit exam, and there's a whole para-educational system here." Participant ST claimed that the students had "trouble going from just memorizing things to seeing the bigger picture of how those things affect them."

Relating to differences, Participant SR noted that she had a problem with culturally diverse learners not understanding the differences between collaboration and plagiarism. Participant SR claimed,

> When they think they are helping each other, they would rather, one person does a piece of work, the other does the next piece, and then they just copy them to each other, in what was most challenging about designing and teaching online learners.

In clarifying what aspect of group work was challenging, Participant SR replied, "Students leaving work for others, expecting others to do the work and they share the credit be it online or in class. This is a serious challenge."

RQ2: Instructional Strategies for Culturally Diverse Learners

Research Question 2asked, What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members, that can meet the needs of culturally diverse online learners? Although all participants reported unique experiences, several

themes emerged from the data that was shared by many participants. These themes include

Hofstede's (2011) Cultural Dimensions, Scaffolding, Group Work, Cultural Awareness, and

Flexibility.

Hofstede's Cultural Dimensions. A few participants indicated that although they did not

intentionally adopt Hofstede's (2011) cultural dimensions into their teaching plan, they had

considered the cultural dimensions in their teaching. Many participants indicated that the

research on Hofstede dimensions was not nuance or specific enough to be used in the creation of

lesson plans. Participant FA indicated that although some of Hofstede's cultural dimensions were

apparent in her students, students varied widely even within the same culture. Other factors, such

as socioeconomic status, also affected how her students learned and interacted within a learning

environment. According to Participant FA,

> The Hofstede dimensions in online learning are based on context and upbringing. For
>
> instance, the concept elaborates on individualism, collectivism, power distance, and
>
> uncertainty avoidance high and low. These values are prevalent; however, if a student
>
> lives in a more affluent city and enrolls in the online program, their values will be
>
> different from those in the city even though they are Nigerians or Africans. Most of the
>
> Nigerians in the city are more assertive, almost like those in the West. Whereas, those in
>
> the remote areas with little access to technology to experience the features mentioned in
>
> Hofstede dimension (power distance may be more prevalent in this group). Then up in
>
> Northern Nigeria, with the Islamic population, the values may also be deeper than those
>
> in a remote part of the South. Hence, the cultural values as expressed in education is
>
> contextual, and not merely a Western or non-Western issue.

Participant SR noted that the first time she became acquainted with Hofstede's (2011) cultural dimensions was from the document she received from this study. However, she noted that some elements of the dimension such as individualism/collectivism were prevalent in her design work such as group or independent work, which was an activity everybody did. On respect for elders, she asserted that she once collaborated with a Chinese man who refused to look her in the eyes.

Other participants, such as Participant LG indicated that Hofstede's (2011) cultural dimensions were simply another tool that could be adapted and used. Participant LG mentioned that she sometimes considered Hofstede's cultural dimensions but that she liked to adopt them as they suited her class. Like Participant LG, Participant ST indicated that she used Hofstede's cultural dimensions as a tool. Participant ST indicated that the dimensions were a good way to foster discussion or as a starting point in a lesson. According to Participant ST,

> Sometimes while teaching, I consider it because we had a test a little bit about that, so we could talk about it with the learners and talk about how they see their country and how I see their country. I had not considered it as an instructional designer where it would be useful to know some of these things, the hierarchical, the individual or collectivism. As a designer, I might structure a discussion board a way just assuming that it will be okay that way, depending on the questioning authority and the individual or collective dimensions, no one may answer it.

Participant ST noted that it might be a complete disaster if the learners are afraid to participate because of the way the sentence or the prompt was written.

Scaffolding. Six participants indicated that they used scaffolding as a teaching strategy. Many of these participants indicated that scaffolding could be particularly useful to encourage

108

passive learners to take a more active approach to learning, or that it could be used to support a student until they were more capable of directing their own learning. Participant LU indicated that until students have demonstrated mastery in certain areas, high-level scaffolding is used to support their learning. Participant ST also indicated that scaffolding was a key educational strategy she used in her work to support her students. According to Participant SU, using templates as scaffolding for her students was more helpful to them than simple verbal directions. Templates reduced the students' focus on the structure, and increased the focus on the content, which Participant SU believed increased learning.

Participant NU, like Participants ST and LU, indicated the scaffolding was a useful tool to utilize to help students build mastery. According to Participant NU, scaffolding was one of many strategies she utilized when teaching her students. Participant NU stated,

> For instance, gaining the attention of online students require presenting strategies that make them want to engage, of course, such must be something meaningful and relate to the student's future career. Scaffolding—guiding students, giving students enough time to complete tasks, demonstrates the concept under study.

Group Work. Four participants indicated that group work was a teaching strategy they used to great effect in their online classroom. Some participants said that group work was embraced by their students whereas others reported that it was a difficult concept for the students to grasp. Participant LG indicated that group work was an effective tool for creating active learners, and for getting students to rely on each other instead of the teacher. According to Participant LG, group work fostered collaborative learning. Participant LG expressed that "by the time they are at the end of the program, and you say, 'Okay, this is a collaborative group

project,' it runs itself. It goes completely on autopilot. I think that's probably the most important strategy."

Whereas, Participant NU's experience with group work was more challenging than the experience reported by Participant LG. Participant NU reported that although group work was a valuable tool, it was challenging to get students to collaborate evenly in the group project. According to Participant NU,

Based on my experience, the element of surprise is the attitude of students—how students' project entails students working together. Designing of a group project is highly encouraged even for students from diverse backgrounds, but it surprises me to see students pass the buck of work to peers yet expect to share the grade. One major challenge is having students to work together. Although collaboration and team work are highly promoted and have proven effective, it is also problematic as students tend to pass the buck of work to others. Hence, designing a group project, collaborative or cooperative learning is sometimes daunting.

Participant TH reported that group work was effective in encouraging students to try different roles than their natural inclination. Participant TH indicated that he used group work to pull students out of their comfort zone. Participant TH claimed to "try and force" the students to rotate tasks and perform different roles in the group.

Cultural Awareness. Five teachers indicated that practicing cultural awareness was one of the most important teaching strategies they utilized when teaching a diverse group of online learners. Participant LU indicated that practicing cultural awareness did not simply make instruction easier for students, but more effective as well. He indicated that students performed better when examples, instructional methods, and teaching strategies were familiar to them.

110

Participant ST also reported that practicing cultural awareness was a skill she developed over time and due to necessity. She indicated that it was important to consider her students' background when teaching. Participant ST said that

> Maybe 80%–85% of the students in the classroom are Greek, but always there are a handful of students who are from the Middle East, Egypt, Saudi Arabia, or Jordan. That has affected my thinking in the classroom. It affects how I—if I want to give an example of something because those are things that we just come up with off the top of our heads. I have to stop more and make sure that my example would, one, be something that's understandable by all the cultures, and, two, something that wouldn't be misunderstood or offensive. I really want to make sure that the language is clear.

> Participant NU reported similar experiences as the other participants. He indicated that utilizing cultural awareness by using local examples, being able to adjust the structure of the instructions for clarification has helped improve his interaction with students and his students' experiences in the classroom.

> **Flexibility.** Flexibility was a strategy discussed by four participants. This theme was often related to cultural awareness, and cultural differences were often the reason flexibility was important for the success of an online classroom. Participant FA indicated that flexibility in the selection of strategies was critical to the success of an online classroom. According to Participant FA,

> Education is about change—thus for learners—attempting to select strategies that address need of learners, meet academic standards, and equally adapt to values of different learners are daunting tasks. In selecting strategies, we focus on cultural imperative— which does not undermine academic quality but flexible to respect individual cultures.

111

Participant LU also indicated that when choosing educational strategies, flexibility was essential. Participant LU stated that one educational approach did not work for all students and that having the flexibility to adapt teaching methods to different students was what led to his success. According to Participant LU,

Thus, we often prepare our students to apply learned skills in an authentic work environment. As stated earlier, eclecticism, which considers various strategies such as the first principle, Gagné's nine events of instruction, role playing, storytelling, gaming, problem-based learning, mastery learning, and others are effective. The flexibility to choose, rather than being confined to a single learning or instructional theory has been found to be effective. It boils down to having instructional strategies that would not offend the student's cultural values, but rather, is relevant and meaningful to support the student's life's objectives or goals.

Similarly, Participant LG indicated that when working with a group of diverse learners with varying backgrounds and experiences, utilizing flexibility in lesson plans and due dates allowed for a more effective learning environment. Participant LG indicated that, occasionally, certain lessons and projects took longer than she initially planned for, and in such instances, she was flexible and worked with her students, rather than trying to force the group to adhere to the original plan. According to Participant LG,

A lot of it, too, is just going in there and tweaking things sometimes. Being flexible, making adjustments. I have to adjust some due dates on a couple of times in two classes a couple of weeks ago because it just wasn't sinking in. It's really a matter of just going with the flow and doing what I have to do and managing my time well, and being very

sure, so this is an online program that I always get back to my students through Skype or e-mail promptly. You just can't leave anybody out there hanging.

The flexibility assertion aligned with Participant NU's views during think-aloud/talk-aloud. He noted that it was not right to box oneself into a specific instructional theory and concepts, adding that the focus should be on academic culture, clarifying expectations, and scaffolding students to mastery.

Online Survey Findings

Twenty-five participants acknowledged receipt and attempted the Instructional Strategies/Cultural Values Survey Questionnaire but only 13 completed it, eight of whom met the criteria and completed the follow-up interviews. The instrument supported the interview findings in which instructional strategies for meeting needs of culturally diverse online learners were based on needs of students, background of instructional designers and teachers and not on theory.

In behavioral theory, using Robert Gagné's nine events of instruction as an example, the *extremely useful* score ranged between 75% and 100%, with stimulate recall and feedback scoring the highest at 100%. This means that 8of the 8participants believed these strategies worked well with culturally diverse online learners, whereas, within the same behavioral theory, some strategies, such as reward and reinforcement, scored 37.5% and 25.0% respectively (see Table 2).

Table 2.

Instructional Strategies/Cultural Values Survey Questionnaire Data

Question	1. Not useful (n/%)		2. Least useful (n/%)		3. Useful (n/%)		4. Extremely useful (n/%)		5. Unknown (n/%)		Did not respond (n/%)		Total
1. Behaviorist strategies (Gagné's nine events of instructions [Elander & Cronje, 2016; Ertmer & Newby, 2013; Gagné et al., 2005; Skinner, 2012])													
1a Gain attention	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
1b Inform of objectives	0	0.0%	1	12.5%	2	25.0%	5	62.5%	0	0.0%	0	0.0%	8
1c Stimulate recall	0	0.0%	0	0.0%	0	0.0%	8	100.0%	0	0.0%	0	0.0%	8
1d Stimulus materials	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
1e Provide guidance	0	0.0%	0	0.0%	1	12.5%	6	75.0%	0	0.0%	1	12.5%	8
1f Elicit performance	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
1g Provide feedback	0	0.0%	0	0.0%	0	0.0%	8	100.0%	0	0.0%	0	0.0%	8
1h Assessment	0	0.0%	0	0.0%	4	50.0%	4	50.0%	0	0.0%	0	0.0%	8
1i Enhance retention and transfer	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
1j Mastery learning	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
1k Behavioral shaping	0	0.0%	3	37.5%	2	25.0%	2	25.0%	1	12.5%	0	0.0%	8
1l Role-playing	0	0.0%	1	12.5%	5	62.5%	2	25.0%	0	0.0%	0	0.0%	8
1m Examples	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
2. Other behaviorist strategies (Dick et al., 2009)													
2a Mastery learning	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
2b Behavioral shaping	0	0.0%	3	37.5%	2	25.0%	2	25.0%	1	12.5%	0	0.0%	8
2c Role-playing	0	0.0%	1	12.5%	5	62.5%	2	25.0%	0	0.0%	0	0.0%	8
2d Examples	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
3. First principles of instruction (Merrill, 2009)													
3a Activation	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
3b Demonstration	0	0.0%	0	0.0%	3	37.5%	5	62.5%	0	0.0%	0	0.0%	8
3c Application	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
3d Integration	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
4. Cognitivist instructional strategies (Ausubel, 1978; Blayney, Kalyuga, & Sweller, 2015; Gignac, 2015; Martinez, 2010)													
4a Activating prior knowledge	0	0.0%	0	0.0%	6	75.0%	2	25.0%	0	0.0%	0	0.0%	8
4b Chunking and organization of information	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
4c Mnemonics	0	0.0%	1	12.5%	4	50.0%	2	25.0%	1	12.5%	0	0.0%	8
4d Deep rehearsal	0	0.0%	0	0.0%	2	25.0%	5	62.5%	1	12.5%	0	0.0%	8
4e Metacognitive	0	0.0%	1	12.5%	3	37.5%	4	50.0%	0	0.0%	0	0.0%	8

114

Table 2.

Instructional Strategies/Cultural Values Survey Questionnaire Data (continued)

Question	1. Not useful (n/%)		2. Least useful (n/%)		3. Useful (n/%)		4. Extremely useful (n/%)		5. Unknown (n/%)		Did not respond (n/%)		Total
5. Constructivist instructional strategies (Archuleta-Moon, 2014; Conradie, 2014; Driscoll, 2005; Jonassen, 1991, 1999, 2011; Pena-Sandoval, 2015; Yetkin Özdemir, 2011)													
5a Ill-defined problems with minimal guidance	5	62.5%	1	12.5%	2	25.0%	0	0.0%	0	0.0%	0	0.0%	8
5b Computer-supported collaborative learning environments	0	0.0%	1	12.5%	5	62.5%	2	25.0%	0	0.0%	0	0.0%	8
5c Problem-based learning	0	0.0%	0	0.0%	1	12.5%	7	87.5%	0	0.0%	0	0.0%	8
5d Student-centered learning	0	0.0%	0	0.0%	4	50.0%	4	50.0%	0	0.0%	0	0.0%	8
5e Inquiry-based instruction	0	0.0%	0	0.0%	3	37.5%	5	62.5%	0	0.0%	0	0.0%	8
6. Other constructivist instructional strategies (Driscoll, 2005; Huerta-Kelley, 2017; Nelson, 2017; Stoltz, Piske, D'Aroz, de Freita, & Machado, 2015)													
6a Simulations	0	0.0%	1	12.5%	4	50.0%	1	12.5%	2	25.0%	0	0.0%	8
6b Gaming strategies	1	12.5%	0	0.0%	5	62.5%	2	25.0%	0	0.0%	0	0.0%	8
6c Collaborative learning	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
6d Case-based learning	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
6e Cognitive apprenticeship, internships, and services learning	0	0.0%	1	12.5%	4	50.0%	3	37.5%	0	0.0%	0	0.0%	8
7. Connectivist strategies (Natt och Dag, 2017; Papert, 1987; Siemens, 2005; Sitti, Solera, & Sompong, 2013)													
7a Analyze and synthesize relevant information	0	0.0%	0	0.0%	2	25.0%	6	75.0%	0	0.0%	0	0.0%	8
8. Eclecticism strategies (Bedrossian, 2018; Reigeluth, 1999)													
8a Integration of various approaches and techniques	0	0.0%	0	0.0%	3	37.5%	5	62.5%	0	0.0%	0	0.0%	8
9. Culturally relevant strategies (Burkett, 2013; Dixon, Yssel, McConnell, & Hardin, 2014; Ladson-Billings, 2013; Thakkar, 2011; Vidergor & Eilam, 2012; Yang, Huiju, Cen, & Huang, 2014; Yoo, Donthu, & Lenartowicz, 2014)													
9a Differentiated instruction	0	0.0%	1	12.5%	3	37.5%	3	37.5%	1	12.5%	0	0.0%	8
9b Adaptive learning	0	0.0%	1	12.5%	2	25.0%	5	62.5%	0	0.0%	0	0.0%	8

Table 2.

Instructional Strategies/Cultural Values Survey Questionnaire Data (continued)

Question	1. Not useful (n/%)		2. Least useful (n/%)		3. Useful (n/%)		4. Extremely useful (n/%)		5. Unknown (n/%)		Did not respond (n/%)		Total
10. Culturally relevant strategies (Burkett, 2013; Fouts, 2015; Gerjets et al., 2014; Hill-Miller, 2011; Kendrick-Weikle, 2015; Nnoruka, 1990; Sikkema & Sauerwein, 2015)													
10a Differentiated instructional strategies	0	0.0%	2	25.0%	2	25.0%	3	37.5%	1	12.5%	0	0.0%	8
10b Adaptive learning	0	0.0%	0	0.0%	3	37.5%	5	62.5%	0	62.5%	0	0.0%	8
10c Folktales and storytelling	1	12.5%	2	25.0%	1	25.0%	4	50.0%	0	50.0%	0	0.0%	8
11. Motivation strategies (Aldunaten & González-Ibáñez, 2017; Bandura, 1977; Keller,1987, 2008)													
11a Relevant and meaningful instruction	0	0.0%	1	12.5%	2	25.0%	0	62.5%	0	0.0%	0	0.0%	8
12. Hofstede's cultural dimensions/strategies (Gómez-Rey et al., 2016; Hall,1976; Hofstede, 2011)													
12a Individualism/collectivism	0	0.0%	3	37.5%	1	12.5%	4	50.0%	0	0.0%	0	0.0%	8
12b Masculinity/femininity	1	0.0%	5	62.5%	0	0.0%	2	25.0%	0	0.0%	0	0.0%	8
12c Uncertainty avoidance	1	12.5%	2	25.0%	4	50.0%	1	12.5%	0	0.0%	0	0.0%	8
12d Power distance	0	0.0%	4	50.5%	4	50.0%	4	50.0%	0	0.0%	0	0.0%	8
12e Long-term/short-term orientation	0	0.0%	3	37.5%	3	37.5%	4	50.0%	0	0.0%	0	0.0%	8

Because the objective of the study was to explore the strategies that instructional designers/DBAs believe were useful in supporting culturally diverse learners, the use of the table and percentage were not focused on the statistical data, rather on the message behind the data. The position supported Jansen (2010), who noted that the use of survey in qualitative research is not for "establishing frequencies, means or other parameters but to determine the diversity of some topic of interest within a given population" (p. 3).

Regarding Merrill's (2009) first principle, participants showed *extremely useful* 87.5% for application, integration 75.0% respectively. For cognitivist strategies, *extremely useful* ranged from 62.5% to 87.5%, with chunking and deep rehearsal scoring the highest, and activation prior knowledge seen as useful at 75.0% but not extremely helpful.

Constructivist strategies ranged between 62.0% and 87.5% as extremely useful. Likewise, problem-based learning was 87.5%, inquiry learning 62.5% as extremely useful whereas computer-supported learning was believed by five participants (62.5%) as useful. Only two participants believed computer-supported learning was extremely useful.

Unexpected scores were found from the ill-defined problem with minimal guiding, with five participants (62.5%) who believed it was not useful and none who believed it was extremely useful. These scores were in line with the constructivist theorists' advocacies of ill-structured problem with minimal guidance. Herndon (2016), in a recent study, noted that problem-based learning is an essential learner-centered instructional strategy that learners group together to solve an authentic ill-structured problem with or without the right answer.

Connectivism scored 75.0%. Eclecticism scored 62.5% as extremely useful and 37.5% as useful. Interestingly, most participants hold that they needed the flexibility in selecting strategies rather than being boxedin to a theory. Flexibility became a major theme in the study.

The entire study has been about instructional strategies and cultural values. However, the scores for culturally relevant strategies were almost divided in two, ranging from 62.5% for adaptive learning as extremely useful and 37.5% for differentiated instruction as extremely useful. Folktales and storytelling scored 62.5%. The culturally relevant strategies had equal scores with motivation strategies, which emphasized meaningfulness and relevance at 62.5%. Interestingly, Hofstede's cultural dimensions showed a split, with 50% of the highest score. Four

participants believed individualism/collectivism was extremely useful, three (37.5%) said it was least useful, and one said it was useful.

Summary

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and DBA faculty members on how instructional strategies can be used to support online learners with diverse cultural values. To address this purpose, the following research questions were asked:

RQ1: How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values?

RQ2: What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members, that can meet the needs of culturally diverse online learners?

Themes relevant to the first research question included Teacher-Centeredness, Language, and Relevance. Participants indicated that their experiences using educational strategies were affected by the language used by the group as well as the culture of the students in the classroom. Culture affected variables such as the role of the teacher in the classroom and the relevance of learning methods, strategies, and expectations.

The themes relevant to the second research question included Hofstede's (2011) Cultural Dimensions, Scaffolding, Group Work, Cultural Awareness, and Flexibility. Participants indicated that Hofstede's cultural dimensions played a nominal role in their teaching, and that strategies such as scaffolding, group work, cultural awareness, and flexibility allowed participants to teach to a diverse group of online learners.

CHAPTER 5. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This chapter includes a summary of the study findings presented in Chapter 4 and discussion of the study results. The chapter also discusses the limitations and implications of the study, explores areas for further research, and provides a conclusion.

Summary of the Results

The purpose of this qualitative multiple case study was to understand and describe the beliefs of instructional designers and designer-by-assignment (DBA) faculty members on how instructional strategies can be used to support online learners with diverse cultural values. The result showed no preferred design strategies for western and non-Western learners; however, the invaluableness of empathy, cultural awareness and flexibility was underscored as ignoring learners' cultural values would delimit and undermine learning outcome for culturally diverse online learners.

In order to address this purpose, two primary research questions were asked:

RQ1. How do instructional designers and designer-by-assignment faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values?

RQ2. What instructional strategies can be used, according to instructional designers and designer-by-assignment faculty members, that can meet the needs of culturally diverse online learners?

Discussion of the Results

This section contains a discussion of the interpretation of the findings based on the interviews and survey data in relation to the theoretical framework and the related literature. Themes emerged from the reported experiences of participants and their unqiue beliefs regarding how instructional strategies can be used to support online learners with diverse cultural values. These themes were common experiences and beliefs reported by many participants. Interpretation of the themes provided insights into the experience of using instructional strategies to support online learners.

Instructors' Experience Using Instructional Strategies for Diverse Learners

Research Question 1focused on how instructional designers and DBA faculty members describe their experience-based beliefs on the role of instructional strategies in supporting online learners with diverse cultural values. Themes relating to this research question included Teacher-Centeredness, Language, and Relevance.

Teacher-Centeredness was a theme that appeared throughout many of the cases. Participants expressed the belief that many of their online learners relied heavily on their teacher, rather than directing their own learning as students. Participants often referred to students who relied heavily on the instructor for guidance and instruction as *passive learners*. Although not explicitly stated, participants indicated that there were several reasons why participants in their class may have been passive learners. Cultural behaviors surrounding learning and education often played into this predilection. One participant indicated that students from countries with rigorous exit exams were focused on test preparation rather than knowledge and skill development. Other participants indicated that students from countries with strong beliefs

surrounding respect of authority figures were less willing to question their teacher or move beyond passively following the instructor's guidance.

Many of the instructional strategies discussed by participants had special significance in supporting passive learners. This relationship between the reported prevalence of passive learners and favorite instructional strategies indicate that participants prioritized developing active learners. Participants indicated that scaffolding, flexibility, and group work were particularly important in supporting passive learners.

Language and Cultural Relevance were related themes that appeared throughout the cases. Participants indicated that their instructional strategies were focused on overcoming language barriers, as well as more nuance elements of culture and fluency that related to cultural relevance. Participants expressed that communicating effectively with students from varied cultural background was more complicated that speaking a shared language. Participants indicated that students learned more effectively when examples and educational strategies were relevant to their experiences. When teaching a diverse group of students, relevance and language may be individualized rather than shared as a class. In this way, language and cultural relevance related to the theme of Flexibility. Participants indicated that a single instructional strategy was not always equally effective for a diverse class. Furthermore, several authors have suggested that providing relevant examples highlighted culturally responsive pedagogies in which learning was increased through recognizing, respecting, and using the learners' unique identity and background as a resource repertoire for creating meaningful, culturally responsive pedagogy for online learners (Greenwood, 2011; Koch, 2015; Velliaris, 2016).

Instructional Strategies for Culturally Diverse Learners

Research Question 2focused on what instructional strategies instructional designers and DBA faculty members used most in meeting the needs of culturally diverse online learners. Themes relating to this research question included Hofstede's (2011) Cultural Dimensions, Scaffolding, Group Work, Cultural Awareness, and Flexibility.

The participants expressed mixed opinions of Hofstede's (2011) cultural dimensions. Although only a few participants indicated that they neither used nor considered Hofstede's cultural dimensions, neither did participants fully embrace the theory. The majority of the participants indicated that Hofstede's cultural dimensions was an interesting theory to contemplate, or that it had limited meaning and value when used in a practical sense. Participants often expressed that the theory was a tool they could use as they saw fit, but that it was no more or less important to them than other instructional strategies.

Although participants expressed only limited use of Hofstede's (2011) cultural dimensions, they did almost universally report the need for cultural awareness or relevance. Although Hofstede's cultural dimensions may not have provided participants with the cultural roadmap, participants echoed Hofstede's theory in the sense that they saw the need for cultural awareness in education. Participants indicated that cultural awareness was vital when teaching an online group of learners. Participants expressed that good intentions were generally insufficient when teaching culturally diverse individuals. They found that it was easy to accidently offend their students when cultural awareness was not considered. In addition, teaching instructions were perceived to be generally more effective when the teachers acknowledged the different cultural backgrounds. This finding aligns with prior studies that showed a link between cultural values, learning preferences, and the development of critical thinking (Davis, 2014; Manalo et

al., 2013; Parrish & Linder-VanBerschot, 2010; Xin, 2016), and that cultural values may have an influence on performance (Li, 2010). It further affirmed suggestions by Russell et al. (2013) that cultural sensitivity in instructional strategies may be beneficial to a diverse classroom audience.

Scaffolding was one of the most discussed educational strategies utilized by participants. Participants indicated that scaffolding was an effective way to support passive learners and to build skills in a way that allowed students to have success independently of direct teacher guidance. Participants indicated that scaffolding could be highly structured, as in the case of remedial students who needed additional support, or as simple as providing examples or layouts for students to follow. Participants indicated that this kind of scaffolding was more effective for students than verbal instructions, and that it cut down on the number of questions teachers received outside of class time.

Participants also reported that group work and collaboration was an educational strategy that could be used to great effect in the teaching of diverse online learners. In many ways, participants described group work as another form of scaffolding. Participants indicated that group work encouraged students to rely on each other, rather than on the instructor. Group work also gave participants a vehicle in which to push their students out of their comfort zone. Students could be given unique roles within the group that could build leadership or public speaking skills. Group work also provided students with additional support as they practiced active learning. Although participants did not have the instructor to rely on, they did have other students to collaborate. This eased the transition from passive to active learning and gave students the feeling of comfort and confidence.

Participants indicated that flexibility was important when teaching culturally diverse students. Flexibility was important for both the teacher when learning the nuances of their

student's cultures as well as in planning lessons and assignments. Participants indicated that they needed to be flexible when working with a group of diverse students. Instructional strategies that worked for one group of students may be less effective when applied to another group of students. Similarly, lessons and activities may take more or less time than the instructor intended. Participants indicated that addressing student needs in a flexible manner was more effective than trying to remain firm using a timeline or instructional strategy that was not being received as it was intended. In this sense, flexibility was both an instructional strategy and method teachers used to connect with students from a variety of cultural backgrounds.

The findings were in line with the concept of instructional strategies, which was the second major concept in the theoretical framework of this study. Instructional strategies based on the context and culture of Western and non-Western learners were based on learning and instructional design theories, which guided instruction designers' decisions. Theories included behaviorism, cognitivism, constructivism, connectivism, and eclecticism. Instructional strategies based on cultural framework include differentiated instruction, intercultural communication theory, and culturally responsive pedagogy (Karagiorgi & Symeou, 2005; Patton, 2017; Richey et al., 2011).

In addition, the concept of instructional designers, which was the third major concept in the theoretical framework of this study, was indirectly highlighted by the participants in terms of the themes under instructional strategies. The instructional strategies were intentionally planned and implemented by the instructional designers and teachers in order to accommodate the needs of learners from diverse cultures. As actions were intentional, the findings fulfilled the definition of *instructional designers* by Tracey et al. (2014) mentioned as "active and reflective agents of

innovation whose storehouse of design precedents feeds professional judgment and action in the design space" (p. 316).

In conclusion, culture was generally perceived to be entwined with learning (Affolter, 2017; Burger, 2013; Grant, 2013; Palermo-Kielb& Fraenza, 2017; Smith, 2012). Instructional strategies planned by instructional designers were believed to have an impact on the diverse online learners' learning experience. Creating culturally responsive pedagogies in the case of this study involved Hofstede's (2011) cultural dimensions, scaffolding, group work, cultural awareness and flexibility, and may fulfill the ultimate purpose of maximizing multiculturalism for all learners (Affolter,2017; Gay,2010; Greenwood, 2011; Koch, 2015; Lawrence,2017).

Limitations

Although steps were taken to address and overcome potential limitations of the study, some limiting factors remained. Although not uncommon for qualitative case studies, the number of participants represented in this study was limited. However, although the participants may be limited in number, the researcher believes data saturation was attained, as the final cases did not present data that was unrepresented in the rest of the sample. Steps were also taken to minimize or eliminate researcher bias; the interpretative nature of qualitative case studies means that the researcher's experience and opinions cannot be completely removed from consideration. To minimize researcher bias, the researcher followed a careful process of coding and interpreting the data through an objective lens that did not color participants' experiences with experiences personal to the researcher.

Implications for Practice

The study findings have various practical implications for online education in general and the field of instructional design for online learning in particular. Overall, this study will provide a

wealth of data for instructional designers and DBA practitioners in designing instruction that reflects cultural inclusiveness. It is believed that the study findings will mandate current and prospective course designers to reflect deeply on their current views and practices on designing or teaching a culturally diverse population.

According to Ashbaugh (2013), instructional designers need to update their competencies, including cultural competency in order to design instruction that promotes the development of critical thinking and problem-solving skills, in order to equip learners with job skills for the global era. Participant FA noted that this is the era of diversity and instructional designers should consider the beliefs, values, religion, and communication (language) of learners when designing instruction for learners from diverse cultures. Although it is impracticable to cater to each online learner's cultural values and preferences when selecting instructional strategies, Sobodić et al. (2017) reiterated that certain factors such as cultural awareness of major differences, flexibility in teaching activities, and using a variety of activities and approach should not be ignored.

It is not just enough to have high-level pedagogical knowledge and compassion for culturally diverse students. These traits need to be complemented with "careful self-analysis" (Gay, 2010, p. 70)of what the teachers believe about culture, ethnicity, and learners' academic ability expectation and how these beliefs impact their instructional decisions and ultimately their students. It is hoped this study will guide instructional designers for online learning to modify, update, or further explore interventions on how instructional strategies can best be used to meet the growing needs of multicultural online learners. The discussion that follows details areas of possible impact from the study results.

Empathy Regarding Technology and Communication

Differences in language, communication, and technology in selecting and using instructional strategies were a major concern for most non-Western participants. This calls for empathy and consideration in finding alternative ways of completing tasks, as Internet and electricity are not readily available in non-Western nations, further making online learning difficult for this group of learners. Abbas (2016) noted that the issue of technology should be considered, as technology and Internet, although embedded in the Western culture, are not readily available to non-Western cultures.

For example, Jensen (2013) emphasized the need for educators to be involved in designing instruction for Western and non-Western learners. Knowles, Holton, and Swanson (1998) stated that educators who acknowledge and respect such differences enhance the learner's self-dignity. According to Yeo and Pang (2017), instructional designers would do better if they understood certain cultural elements and symbols to avoid making costly mistakes. Through effective instructional strategies that promote awareness, students may be forthcoming as opposed to a face-to-face office discussion. Against this backdrop, results from this study will not only improve how designers make instructional design decisions when selecting instructional strategies but also increase scholarly discussions and debates on the topic.

Attrition

Although content is critical to fostering cognitive development, critical thinking, and problem-solving skills, just having content knowledge and intercultural competency is not enough for instructional designers. Instructional designers should reflect on the metacognitive reflections of their own beliefs and values, and how their design decisions impact such beliefs about students' cultural background impact and ultimately their expectations of students.

Although this study did not set out to study attrition of culturally diverse learners, the findings and literature review revealed that there is a surge in enrollment in online learning just as the level of attrition which may in part be attributed to cultural factors (Alabdullaziz, 2015; Colferai & Gregory, 2015).

Cultural Awareness

The study findings will improve cultural awareness leading to an understanding of a learner's cultural values as much as possible, especially those aspects that may impact learning. Knowledge of instruction level and method, interactions capability and context can be translated into useful tools for developing strategies that support this audience. Culture, as noted in this study significantly impacts the instructional design process and as it determines what is included or excluded in the design. Accordingly, Asino et al. (2017) reiterated that culture should not be taken as an addendum but preferably be kept at the forefront of the entire design process. Culture should not only guide the quality of education but also help learners transit to a real-world work environment. This could be achieved by ongoing or iterative evaluation of the design phases to ensure that learner norms and values are not neglected, or examples used are clarified to learners to ensure all learners receive equitable learning opportunities, quality education outcome, and satisfaction.

Because teachers and course designers are not culturally neutral, their personal biases may impact what they design. It is therefore essential to consider the effect culture may have on the design product and the students (Sharif & Gisbert, 2015). Similarly, Sobodić et al. (2017) added that the study findings of the past 30years had supported the fact that culture has significantly affected education, acceptance, and the use of technology. Milheim (2017a) noted that instructional designers are not separated from their backgrounds, hence who they are and

what they believe influences what strategies they ultimately select and apply to support their online learners. No wonder, Sobodić et al. noted that it is impracticable to understand and attend to all the diverse cultures represented online, their cultural values and preferences. Therefore, certain factors should be brought to the forefront primarily significant differences in the cohort of learners.

One problem common to online educators is the belief that because diversity is what defines online education, there is no need to develop specific strategies to accommodate their needs (Palermo-Kielb & Fraenza, 2017). To the contrary, several this study findings have corroborated prior studies (Alabdullaziz, 2015; Asino et al., 2017; Biraimah, 2016; Li, 2017; Palermo-Kielb & Fraenza, 2017), to affirm the need to consider cultural factors in designing instruction, including selecting instructional strategies to support diverse learners. Yet, with a cautionary note to exercise flexibility and allowing course designers to stick to what works for them. What works in one context may not work in another, irrespective of the geographical background of the learners (Rogers et al., 2007; Sharif & Gisbert, 2015). As one participant noted, a significant objective of educators, including course designers is to leave an enduring impact on their learners that impact their success in and out of school. To achieve such enduring impact, one participant discussed four principles that have proven effective with his audience, including culturally diverse learners: context matters; magic number seven, plus or minus two; metacognition; and zone of proximal distance.

First, the participants noted that the magic number rule proposed by Miller (1994) showed that there is a limit to what one can process in short-term memory; hence, this rule guides the selection of instructional strategies. Second, the metacognition is thinking about what one is thinking (Chua & Ng, 2017). The participants noted that such metacognitive strategies are

effective to enhance a course designers' ability to think, reflect, revise, or makes changes to any content, material or strategies to ensure inclusiveness and design a product that is not at conflict with learners' cultural backgrounds. Third, the zone of proximal distance informs teachers of the level of support to give to their learners and when to allow the students to take responsibility for their learning's, being mindful of diversity and level of needs.

It is believed these instructional strategies and many recommendations from this study will add to the repertoire of instructional designers' and DBAs' toolbox to enhance practitioners' effort in meeting needs of diverse learners. The study findings showed that being fixed on a theory was not advisable as the online environment is continually changing. What works in one setting may not work in another, hence analyzing the audience and using strategies based on learners' analyzed needs is considered to be good practice. It is hoped this study guide instructional designers and teachers to be more reflective and mindful of cultural differences in selecting instructional strategies for their learners.

Implications for Theory and Research

This research has several implications for theory and research. The research indicates that less formal instructional strategies, such as scaffolding and group work, may be more likely to be applied by teachers in a diverse online environment than more formal methods and theories, such as Hofstede's (2011) cultural dimensions. In a testament to this, participants indicated that flexibility was one of the most important strategies they utilized. The study findings agree with those of Yu et al. (2016) and revealed that despite the presence of individual differences in beliefs and practices among culturally diverse students, the cultural issues did not delimit them from interacting with others and no constraint was observed in receiving feedback or giving feedback.

The data also indicate that Hofstede's (2011) cultural dimensions may not be applicable to practical application in a culturally diverse learning environment. Participants indicated that Hofstede's cultural dimensions was of some consideration, but that when put into practice, the dimensions either were not specific enough to be utilized in the classroom or that actual cultural groups varied too much to fit into the dimension's outline. Participants reported that other factors, such as the student's age, socioeconomic status, and educational background needed to be taken into consideration when interpreting the needs of the student and that student's perception.

Recommendations for Further Research

The data collected in this study elicited questions that would benefit from further research. Addressing these questions would contribute to the body of knowledge and would better understand and describe the beliefs of instructional designers and DBA faculty members on how instructional strategies can be used to support online learners with diverse cultural values. These questions, along with a brief discussion of each, follow:

- What skills can be improved in passive learners to allow them to take a greater role in their learning, thus transitioning them into active learners?

  Participants indicated that many of their instructional strategies were chosen specifically for their effectiveness in developing passive learners into active learners. Further research into educational strategies to specifically address passive learning would benefit instructional designers and DBA faculty members.

- Are students more likely to reach educational goals if an instructor who is familiar and knowledgeable of the student's cultural background teaches them?

  Participants indicated that cultural relevance and language make education not only

possible but also more effective. Participants indicated that even when students and teachers spoke a common language, nuanced language and cultural barriers could hinder the effectiveness of education if cultural sensitivity and awareness were not rigorously applied. Further research into the importance of shared background and relatability between students and teachers would be a credit to the body of knowledge and useful to instructional designers and DBA faculty members alike.

Conclusion

The data indicated that the role of instructional strategies in supporting online learners with diverse cultural values is mainly to support students in developing as active learners. Participants experience using instructional strategies to each diverse group of online learners was built upon cultural awareness and flexibility. Participants indicated that they were more effective as instructors when they took the time to relate to and understand their student's culture, and that taking an individualized approach was key when addressing a diverse group. This study finding also showed that flexibility, scaffolding, group work, and universal culture were deemed effective for online learners irrespective of culture background. A universal culture here relates to good teaching and quality education that prepares students for the global job market.

Participants indicated that scaffolding, group work, practicing cultural awareness, and flexibility were the most effective instructional strategies instructional designers and DBA faculty members could apply when teaching a diverse group of students. More formal instructional strategies, such as Hofstede's (2011) cultural dimensions were less favored by participants. Instructional strategies that were heavily favored by participants were also said to be particularly effective when teaching passive learners or learners with less comfort directing their own experience and education. In order to further the research inquiries presented in this study,

132

the following questions need to be addressed. What skills can be improved in passive learners to allow them to take a greater role in their learning, thus transitioning into active learners? Are students more likely to reach educational goals if an instructor who is familiar and knowledgeable of the student's cultural background teaches them?

REFERENCES

Abbas, T. (2016). Social factors affecting students' acceptance of e-learning environments in developing and developed countries. *Journal of Hospitality and Tourism Technology*, *7*(2), 200–212. doi:10.1108/jhtt-11-2015-0042

Adkins, C. M. (2017). *Instructional strategies that promote cultural competence in nutrition and dietetics education* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10262348)

Affolter, E. A. (2017). *"Staying woke" on educational equity through culturally responsive teaching* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10289350)

Agbatogun, A. O. (2013). Interactive digital technologies' use in Southwest Nigerian universities. *Educational Technology Research and Development*, *61*(2), 333–357. doi:10.1007/s11423-012-9282-1

Aitken, L. M., Marshall, A., Elliott, R., & McKinley, S. (2011). Comparison of 'think aloud' and observation as data collection methods in the study of decision making regarding sedation in intensive care patients. *International Journal of Nursing Studies*, *48*(3), 318–325. doi:10.1016/j.ijnurstu.2010.07.014

Akiyama, Y., & Saito, K. (2016). Development of comprehensibility and its linguistic correlates: A longitudinal study of video-mediated telecollaboration. *The Modern Language Journal*, *100*(3), 585–609. doi:10.1111/modl.12338

Alabdullaziz, F. (2015). *Cultural diversity in massive open online courses: The correlation between cultural indicators and students' attrition* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3728952)

Aldunaten, N., & González-Ibáñez, R. (2017). An integrated review of emoticons in computer-mediated communication. *Frontiers in Psychology*, *7*, 2061. doi:10.3389/fpsyg.2016.02061

Allen, I. E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in United States. Retrieved from https://files.eric.ed.gov/fulltext/ED541571.pdf

Allen, I. E., & Seaman, J. (2014). Grade change: Tracking online education in the United States. Retrieved from http://www.onlinelearningsurvey.com/reports/gradechange.pdf

Allen, I. E., & Seaman, J. (2017). Distance education enrollment report 2017. Retrieved from https://onlinelearningsurvey.com/reports/digtiallearningcompassenrollment2017.pdf

Altuwaijri, A. A. (2016). *Investigating cultural aspects of online instruction for adult learners in two Saudi online learning programs: An instructional design focus* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10103293)

Archuleta-Moon, M. (2014). *The inclusion of preassigned roles in online problem-based learning to increase social presence and student achievement* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3618705)

Ashbaugh, M. L. (2013). Expert instructional designer voices: Leadership competencies critical to global practice and quality online learning designs. *Quarterly Review of Distance Education*, *14*(2), 97–118. Retrieved from ERIC database. (EJ1145200)

Asino, T. I., Giacumo, L. A., & Chen, V. (2017). Culture as a design "next": Theoretical frameworks to guide new design, development, and research of learning environments. *The Design Journal*, *20*(Suppl. 1), S875–S885. doi:10.1080/14606925.2017.1353033

Ausubel, D. P. (1978). In defense of advance organizers: A reply to the critics. *Review of Educational Research*, *48*(2), 251–257. doi:10.2307/1170083

Baker, W. (2015). Research into practice: Cultural and intercultural awareness. *Language Teaching*, *48*(1), 130–141. doi:10.1017/S0261444814000287

Baldwin, T. A. (2015). Culturally responsive pedagogy: A transformative tool for CCCU educators in multicultural classrooms. *Christian Education Journal*, *12*(1), 97–117. doi:10.1177/073989131501200108

Bandura, A. (1977). *Social learning theory*. New York, NY: General Learning Press.

Barrio, B. L., Miller, D., Hsiao, Y., Dunn, M., Petersen, S., Hollingshead, A., & Banks, S. (2017). Designing culturally responsive and relevant individualized educational programs. *Intervention in School and Clinic*, *53*(2), 114–119. doi:10.1177/1053451217693364

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, *13*(4), 544–559. Retrieved from http://nsuworks.nova.edu/tqr/vol13/iss4/2

Bedenlier, S. M. (2016). Culture and online learning: Global perspectives and research. *The International Review of Research in Open and Distributed Learning*, *17*(2), 256–258. doi:10.19173/irrodl.v17i2.2492

Bedrossian, L. (2018). Understand and promote use of universal design for learning in higher education. *Disability Compliance for Higher Education*, *23*(10), 7. doi:10.1002/dhe.30435

Beech, S. E. (2017). Adapting to change in the higher education system: International student mobility as a migration industry. *Journal of Ethnic and Migration Studies*, 44(4), 610–625. doi:10.1080/1369183x.2017.1315515

Ben-Hador, B. (2016). Coaching executives as tacit performance evaluation: A multiple case study. *Journal of Management Development*, *35*(1), 75–88. doi:10.1108/JMD-08-2014-0091

Bennett, S. V. (2013). Effective facets of a field experience that contributed to eight preservice teachers' developing understandings about culturally responsive teaching. *Urban Education*, *48*(3), 380–419. doi:10.1177/0042085912452155

Beres, J. L., & Woloshyn, V. E. (2017). Instructional insights gained from teaching a research methods course to Chinese international graduate students studying in Canada. *Journal of International Students*, *7*(3), 728–747. doi:10.5281/zenodo.570030

Biraimah, K. L. (2016). Moving beyond a destructive past to a decolonised and inclusive future: The role of Ubuntu-style education in providing culturally relevant pedagogy for Namibia. *International Review of Education*, *62*(1), 45–62. doi:10.1007/s11159-016-9541-1

Blayney, P., Kalyuga, S., & Sweller, J. (2015). Using cognitive load theory to tailor instruction to levels of accounting students' expertise. *Journal of Educational Technology & Society*, *18*(4), 199–210. Retrieved from ERIC database. (EJ1078240)

Boling, E., Alangari, H., Hajdu, I. M., Guo, M., Gyabak, K., Khlaif, Z., &Techawitthayachinda, R. (2017, October). Core judgments of instructional designers in practice. *Performance Improvement Quarterly*, *30*(3), 199–219. doi:10.1002/piq.21250

Boon, H. J., & Lewthwaite, B. (2015). Development of an instrument to measure a facet of quality teaching: Culturally responsive pedagogy. *International Journal of Educational Research*, *72*, 38–58. doi: 10.1016/j.ijer.2015.05.002

Burger, W. P. (2013). *Exploring the complex computer-mediated communication needs of learners in a multilingual, multicultural online learning environment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3575604)

Burkett, J. A. (2013).*Teacher perception on differentiated instruction and its influence on instructional practice* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3588271)

Carbonell, P. A. (2012). International mindfulness instructional design. *Academic Research International*, *3*(1), 23–29. Retrieved from http://www.savap.org.pk/journals/ARInt./Vol.3(1)/2012(3.1-02).pdf

Carbonell, P.A. (2016).*International mindfulness instructional design (IMID): Podcasting impact on Florida Latino-American college online reading scores* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10134333)

Cheng, H., Andrade, H. L., & Yan, Z. (2011). A cross-cultural study of learning behaviours in the classroom: From a thinking style perspective. *Educational Psychology*, *31*(7), 825–841. doi:10.1080/01443410.2011.608526

Chua, R. Y., & Ng, K. Y. (2017). Not just how much you know: Interactional effect of cultural knowledge and metacognition on creativity in a global context. *Management and Organization Review*, *13*(2), 281–300. doi:10.1017/mor.2016.32

Chuang, S. (2012). Different instructional preferences between Western and Far East Asian adult learners: A case study of graduate students in the USA. *Instructional Science*, *40*(3), 477–492. doi:10.1007/s11251-011-9186-1

Clark, D. S. (2015).*Operationalizing creativity: Desired characteristics for instructional designers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3685029)

Colferai, E., & Gregory, S. (2015). Minimizing attrition in online degree courses. *The Journal of Educators Online*, *12*(1), 62–90. doi:10.9743/JEO.2015.1.6

Collins, S., Arthur, N., Brown, C., & Kennedy, B. (2015). Student perspectives: Graduate education facilitation of multicultural counseling and social justice competency. *Training and Education in Professional Psychology*, *9*(2), 153–160. doi:10.1037/tep0000070

Colombo, E. (2015). Multiculturalisms: An overview of multicultural debates in Western societies. *Current Sociology Review*, *63*(6), 800–824. doi:10.1177/0011392115586802

Conradie, P. W. (2014). Supporting self-directed learning by connectivism and personal learning environments. *International Journal of Information and Education Technology*, *4*(3), 254–259.doi:10.7763/IJIET.2014.V4.408

Covi, G. (2016). Local systems' strategies copying with globalization: Collective local entrepreneurship. *Journal of the Knowledge Economy*,*7*(2), 513–525. doi:10.1007/ s13132-014-0225-4

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Los Angeles, CA: Sage.

Davis, D. J. (2015). *The design of online learning environments* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1587275)

Davis, V. (2014). An *examination of how to effectively reach diverse learners through online education*(Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1557373)

Deakin, H., & Wakefield, K. (2014). Skype interviewing: Reflections of two PhD researchers. *Qualitative Research*, *14*(5), 603–616. doi:10.1177/1468794113488126

Dees, W. F. (2015). *Rapid-prototyping: A qualitative case study of perceived value for instructional designers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3701577)

DeLorme, C. M. (2014). *Decolonizing instructional design through auto/ethnography* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3620312)

Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.

Dick, W., Carey, L., & Carey, J. O. (2009). *The systematic design of instruction* (7th ed.). Upper Saddle River, NJ: Pearson.

Dietz, J., Fitzsimmons, S. R., Aycan, Z., Francesco, A.M., Jonsen, K., . . . Osland, J. (2017). Cross-cultural management education rebooted: Creating positive value through scientific mindfulness. *Cross Cultural & Strategic Management*, *24*(1), 125–151. doi:10.1108/ccsm-01-2016-0010

Dixon, F. A., Yssel, N., McConnell, J. M., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *Journal for the Education of the Gifted*, *37*(2), 111–127. doi:10.1177/0162353214529042

Driscoll, M. P. (2005). *Psychology of learning for instruction* (3rd ed.). Boston, MA: Pearson Education.

Duffy, M. T., & Cunningham, J.D. (2012). Constructivism: Implications for the design and delivery of instruction. In D.H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 170–198). New York, NY: Simon &Schuster.

Edmundson, A. (2007). The cultural adaptation process (CAP) model: Designing e-learning. In A. Edmundson (Ed.), *Globalized e-learning cultural challenges* (pp. 267–290). Hershey, PA: Idea Group.

Elander, K., & Cronje, J. (2016). Paradigm revisited: A quantitative investigation into a model to integrate objectivism and constructivism in instructional design. *Education Technology Research and Development*, *64*(3), 389–405. doi:10.1007/s11423-016-9424-y

El-Masri, M., & Tarhini, A. (2017). Factors affecting the adoption of e-learning systems in Qatar and USA: Extending the unified theory of acceptance and use of technology 2 (UTAUT2). *Educational Technology Research and Development*, 65(3), 743–763. doi:10.1007/s11423-016-9508-8

Ertmer, P. A., & Newby, T. J. (2013, December). Behaviorism, cognitivism, and constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, *26*(2), 43–71. doi:10.1002/piq.21143

Fielding, N. (2012). The diverse worlds and research practices of qualitative software. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*,*13*(2), Art. 12. Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1845/3369

Fielding, N. G. (2014). Qualitative research and our digital futures. *Qualitative Inquiry*, *20*(9), 1064–1073. doi:10.1177/1077800414545237

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, *51*(4), 327–358. doi:10.1037/h0061470

Fouts, B. C. (2015).*Development of the differentiated instruction assessment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3717346)

Gagné, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2005). *Principles of instructional design* (5th ed.). Belmont, CA: Wadsworth/Thomas Learning.

Gay, G. (2010). *Culturally responsive teaching: Theory, research and practice* (2nd ed.). New York, NY: Teachers College.

Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry*, *43*(1), 48–70. doi:10.1111/curi.12002

Gelbrich, K., Stedham, Y., & Gäthke, D. (2016, April). Cultural discrepancy and national corruption: Investigating the difference between cultural values and practices and its relationship to corrupt behavior. *Business Ethics Quarterly*, *26*(2), 201–225.

Gerjets, P., Walter, C., Rosentiel, W., Bogdan, M., & Zander, T. (2014). Cognitive state monitoring and the design of adaptive instruction in digital environments: Lessons learned from cognitive workload assessment using a passive brain-computer interface approach. *Frontiers in Neuroscience*, *8*,24–45.doi:10.3389/fnins.2014.00385

Gignac, G. E. (2015). The magical numbers 7 and 4 are resistant to the Flynn effect: No evidence for increases in forward or backward recall across 85 years of data.*Intelligence*, *48*, 85–95. doi:10.1016/j.intell.2014.11.001

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine de Gruyter.

Glaser, B. G., & Strauss, A. L. (2009).*The discovery of grounded theory: Strategies for qualitative research*. Piscataway, NJ:Transaction.

Gómez-Rey, P., Barbera, E., & Fernández-Navarro, F. (2016). The impact of cultural dimensions on online learning. *Journal of Educational Technology & Society*, *19*(4), 225–238. Retrieved from ERIC database. (EJ1115708)

Grant, J. (2013). *Exploring the realm of culture within instructional design* (Master's thesis). Retrieved from https://spectrum.library.concordia.ca/977257/1/Grant_MA_S2013.pdf

Greenwood, S. J. (2011). *Culturally responsive pedagogy: A study of implementation*(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3546134)

Guy, A. (2016). The impact of cultural orientation and higher education on young Israeli Jewish and Arab adults' notion of the adaptive adult. *Children & Society*, *30*(3), 204–219. doi:10.1111/chso.12124

Guy, T. C. (1999). Culture as context for adult education: The need for culturally relevant adult education. *New Directions for Adult and Continuing Education*, *1999*(82), 5–18.doi:10.1002/ace.8201

Hagar, L. D. (2014). *Intercultural learning for international students: Designing a pre-departure orientation* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1553137)

Hall, E. (1976). *Beyond culture*. New York, NY: Anchor Press.

Hando, A. (2014). *Does cultural self-awareness alter instructional design decisions?* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3637599)

Hando, A., & Ahern, T. (2012). Hofstede's model of cultural dimensions: A tool for understanding how background culture affects instructional designers. In *Proceedings of the Society for Information Technology & Teacher Education International Conference* (pp. 1162–1170). Austin, TX: Association for the Advancement of Computing in Education.

Hao, S., Dennen, V. P., & Mei, L. (2017). Influential factors for mobile learning acceptance among Chinese users. *Educational Technology Research and Development*, *65*(1), 101–123.doi:10.1007/s11423-016-9465-2

Hardaker, G., Sabki, A. A., & Iqbal, J. (2017). Perceptions of inequalities in access and usage of ICT in Islamic faith schools. *International Journal of Inclusive Education*, *21*(9),881–893. doi:10.1080/13603116.2017.1296030

Hartescu, I. (2012, April). One size fits all? Cultural diversity reflected in instructional design models. Paper presented at the Eighth InternationalScientificConferenceeLearningand Software for Education, Bucharest, Romania.

Hawkins-Jones, J. (2017).*Identity crisis: Understanding how African American males'
experiences influence their self-perception and educational attainment* (Doctoral
dissertation). Available from ProQuest Dissertations and Theses database. (UMI No.
10270443)

Henderson, L. (1996). Instructional design of interactive multimedia: A cultural critique.
Educational Technology Research& Development, *44*(4), 85–104. doi:10.1007/
bf02299823

Herndon, V. L. S. (2016).*Changing places in teaching and learning: A qualitative study on the
facilitation of problem-based learning* (Doctoral dissertation). Available from ProQuest
Dissertations and Theses database. (UMI No. 10242971)

Hill-Miller, P. (2011).*Different approach, different results: A study of mastery learning
instruction in a developmental reading class at an urban community college* (Doctoral
dissertation). Available from ProQuest Dissertations and Theses database. (UMI No.
3474318)

Hofstede, G. (1980). *Culture's consequence: International differences in work-related values*.
Beverly Hills, CA: Sage.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of
Intercultural Relations*, *10*(3), 301–320. doi:10.1016/0147-1767(86)90015-5

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online
Readings in Psychology and Culture*, *2*(1), Art. 8. doi:10.9707/2307-0919.1014

Honebein, P. C. (2017). The influence of values and rich conditions on designers' judgments
about useful instructional methods. *Educational Technology Research and Development*,
65(2), 341–357. doi:10.1007/s11423-016-9485-y

Honebein, P. C., & Sink, D. L. (2012). The practice of eclectic instructional design. *Performance
Improvement*, *51*(10), 26–31. doi:10.1002/pfi.21312

Huerta-Kelley, N. (2017).*Funds of knowledge: A constructivist study to examine the assets of
culturally and linguistically diverse families* (Doctoral dissertation). Available from
ProQuest Dissertations and Theses database. (UMI No. 10260589)

Jansen, H. (2010). The logic of qualitative survey research and its position in the field of social
research methods. *Forum Qualitative Sozialforschung/Forum: Qualitative Social
Research*, *11*(2), Art. 11. Retrieved from http://www.qualitative-research.net/index.php/
fqs/article/view/1450/2946

Jensen, I., Hautopp, H., Nielsen, L., & Madsen, S. (2017). Developing international personas: A
new intercultural communication practice in globalized societies. *Journal of Intercultural
Communication*, 43. Retrieved fromhttps://www.immi.se/intercultural/

Jensen, L. E. (2013). *Perceptions of non-Native American faculty regarding factors influencing educational practices* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3603536)

Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, *39*(3), 5–14. doi:10.1007/bf02296434

Jonassen, D. H. (1999). Designing constructivist learning environments. Instructional design theories and models. In C.M. Reigeluth (Ed.), *A new paradigm of instructional theory* (Vol. 2, pp. 215–239). Hillsdale, NJ: Erlbaum.

Jonassen, D. (2011). Supporting problem solving in PBL. *Interdisciplinary Journal of Problem-Based Learning*, *5*(2), 95–112. doi:10.7771/1541-5015.1256

Jones, J. M., Dovidio, J. F., & Vietze, D. L. (2013). *The psychology of diversity: Beyond prejudice and racism*. New York, NY: Wiley.

Jones, O. E. M. (2013). *Anglophone West African women in the United States*(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3568864)

Jung, W. L., Becker, K., & Nobre, H. (2012). Impact of culture on online management education. *Cross Cultural Management*, *19*(3), 399–420. doi:10.1108/13527601211247116

Karagiorgi, Y., & Symeou, L. (2005). Translating constructivism into instructional design: Potential and limitations. *Journal of Educational Technology & Society*, *8*(1), 17–27. Retrieved from ERIC database. (EJ844695)

Keller, J. M. (1987). Development and use of the ARCS model of motivational design. *Journal of Instructional Development*, *10*(3), 2–10. doi:10.1007/BF02905780

Keller, J. M. (2008). First principles of motivation to learn and e^3-learning.*Distance Education*, *29*(2), 175–185. doi:10.1080/01587910802154970

Kelly, W. Q. (2016).*Competencies for instructional designers: A view from employers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10190299)

Kendrick-Weikle, K. (2015).*Illinois high school teachers' understanding and use of differentiated instruction*(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3713728)

Khan, B. H.(2016). *Revolutionizing modern education through meaningful e-learning implementation*. Hershey PA: Information Science Reference.

Kinuthia, W. (2012). Reported challenges for socio-cultural curricula in instructional design. *Multicultural Education & Technology Journal*, *6*(2), 87–99. doi:10.1108/17504971211236281

Kinuthia, W. (2014). Trends and issues in the integration of sociocultural content in instructional design and technology coursework. *International Journal of eLearning*, *13*(2), 209–225. Retrieved from ERIC database. (EJ1035985)

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Waltham, MA: Butterworth–Heinemann.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2012). *The adult learner: The definitive Classic in adult education and human resource development* (7th ed.). New York, NY: Routledge, Taylor & Francis Group.

Koch, M. (2015).*University supervisors and culturally responsive teaching*(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3734708)

Ladson-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American children*. San Francisco, CA: Jossey-Bass.

Ladson-Billings, G. (1995). Towards a theory of culturally responsive pedagogy. *American Educational Research Journal*, *32*(3), 465–491. doi:10.2307/1163320

Ladson-Billings, G. (2013). "Stakes is high": Educating new century students. *Journal of Negro Education*, *82*(2), 105–110. doi:10.7709/jnegroeducation.82.2.0105

Lai, C., Li, X., & Wang, Q. (2017). Students' perceptions of teacher impact on their self-directed language learning with technology beyond the classroom: Cases of Hong Kong and U.S.*Educational Technology Research and Development*, *65*(4), 1105–1133.doi:10.1007/s11423-017-9523-4

Lalla, S. (2015, July). *Practicing low-context communication strategies in online course design for international students studying in the U.S.* Paper presented at the International Association for Development of the Information Society. Retrieved from ERIC database.(ED562487)

Landers, M. (2017).*Culture crossing: Discover the key to making successful connections in the new global era*. Oakland, CA: Berrett-Koehler.

Lawrence, A. D. (2017).*Toward culturally responsive online pedagogy: Practices of selected secondary online teachers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10618276)

Li, H. (2017). Academic integration of mainland Chinese students in Germany. *Social Inclusion*, *5*(1), 80–92. doi:10.17645/si.v5i1.824

Li, Z. F. (2010). *Bridging the gap: Intercultural friendship between Chinese and Americans* (Master's thesis) Available from ProQuest Dissertations and Theses database. (UMI No. 1475231)

Lie, A. (2017). English and identity in multicultural contexts: Issues, challenges, and opportunities.*[The Association for the Teaching of English as a Foreign Language in Indonesia] TEFLIN Journal*,*28*(1), 71–92. doi:10.15639/teflinjournal.v28i1/71-92

Lincoln, Y. S. (2009).Ethical practices in qualitative research. In D. M. Mertens & P.E. Ginsberg (Eds.), *The handbook of social research ethics* (pp. 150–169). Thousand Oaks, CA: Sage.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Linton, J. N. (2014). *A qualitative case study of an electronic learning community as a community of practice for new and veteran online teachers* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3637550)

Liu, X., Liu, S., Lee, S.-h., & Magjuka, R. J. (2010). Cultural differences in online learning: International student perceptions. *Educational Technology & Society*, *13*(3), 177–188. Retrieved from ERIC database. (EJ899875)

Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). *Methods in educational research: From theory to practice* (2nded.). San Francisco, CA: Jossey-Bass.

Mann, C., & Stewart, F. (2000). *Internet communication and qualitative research*.doi:10.4135/ 9781849209281

Manalo, E., Kusumi, T., Koyasu, M., Michita, Y., & Tanaka, Y. (2013). To what extent do culture-related factors influence university students' critical thinking use? *Thinking Skills and Creativity*,*10*, 121–132. doi: 10.1016/j.tsc.2013.08.003

Martinez, M. E. (2010). *Learning and cognition*: *The design of the mind*. Upper Saddle River, NJ: Pearson Education.

Mastrian, K., McGonigle, D.,Mahan, W. L., & Bixler, B. (2010). *Integrating technology in nursing education: Tools for the knowledge era*. Sudbury, MA: Jones & Bartlett Learning.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.

Mccafferty, A. J. (2016).*Culturally responsive pedagogy: Mitigating cultural prejudice/bias in educators* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10250274)

Mehri, S., & Izadpanah, S. (2017). The effect of computer-mediated communication tools in online setting on Iranian EFL learners' teaching, social and cognitive existence. *Journal of Language Teaching and Research*, *8*(5), 978–985. doi:10.17507/jltr.0805.20

Meka, J. A. (2015).*Early childhood educators' culturally responsive teaching self-efficacy and teaching practices in classrooms with refugee students: A mixed methods study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3714644)

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation* (2nd ed.). San Francisco, CA: Jossey-Bass.

Merrill, M. D. (2007). The proper study of instructional design. In R.A. Reiser & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (2nd ed., pp. 336–341). Retrieved from http:/mdavidmerrill.com/Papers/ProperStudy.pdf

Merrill, M. D. (2009). First principles of instruction. In C.M. Reigeluth& A.A. Carr-Chellman(Eds.), *Instructional-design theories and models* (pp. 41–56). New York, NY: Taylor & Francis.

Mertens, D. M., & Ginsberg, P. E. (Eds.). (2009). *The handbook of social research ethics*. doi:10.4135/9781483348971

Messiou, K., & Ainscow, M. (2015). Responding to learner diversity: Student views as a catalyst for powerful teacher development? *Teaching and Teacher Education*, *51*, 246–255. doi:10.1016/j.tate.2015.07.002

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Milheim, K. (2017a). A fundamental look at cultural diversity and the online classroom.*eLearn*,*2017*(2), Art. 1. doi:10.1145/3041614

Milheim, K. L. (2017b). Culture and communication online: The inclusion of international and non-native language learners. In K. L. Milheim (Ed.), *Cultivating diverse online classrooms through effective instructional design* (pp. 116–135). Hershey, PA: IGI Global.

Miller, G. A. (1994). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological Review*,*101*(2), 343–352. doi:10.1037/0033-295X.101.2.343

Moffett, M. H., Stonehill, A. I., Arthur, I., &Eiteman, D. K. (2015). *Fundamentals of multinational finance* (5th ed.). New York, NY: Pearson.

Mohammed, K., & Ihsan, E. (2016). Applying learning theories and instructional design models for effective instruction. *Advances in Physiology of Education*, *40*(2), 147–156. doi:10.1152/advan.00138.2015

Mohammed, S. A., & Akor, P. U.(2017). Availability and utilization of electronic information databases for research by agricultural scientists in federal university libraries in North Central Nigeria. *Library Philosophy and Practice*, *2017*, 1–32.Retrieved from https://digitalcommons.unl.edu/libphilprac/1600/

Moravcsik, A. (2010). Active citation: A precondition for replicable qualitative research. *[Political Science & Politics] PS*, *43*(1), 29–35. doi:10.1017/S1049096510990781

Moravcsik, A. (2014). Transparency: The revolution in qualitative research. *[Political Science & Politics] PS*, *47*(1), 48–53.doi:10.1017/S1049096513001789

Musa, F., Mohamed, M., Mufti, N., Latiff, R. A., & Amin, M. M. (2015). Incorporating computer-mediated communication in project work. *International Education Studies*, *8*(5), 150–157. doi:10.5539/ies.v8n5p150

Mustafa, H., Hamid, H., Ahmad, J., & Siarap, K. (2012). Intercultural relationship, prejudice and ethnocentrism in a computer-mediated communication (CMC): A time-series experiment. *Asian Social Science*, *8*(3), 34–49.doi:10.5539/ass.v8n3p34

Mykota, D. (2017). The impact of learner characteristics on the multi-dimensional construct of social presence.*[Turkish Online Journal of Educational Technology] TOJET*, *16*(2), 137–144. Retrieved from ERIC database. (EJ1137812)

Nattoch Dag, K. (2017). A scholar-practitioner perspective on a leadership development program in health care: Integrating connectivism theory. *Advances in Developing Human Resources*, *19*(3), 295–313. doi:10.1177/1523422317712671

Nelson, A. F. (2017).*Constructivist instructional practices and teacher beliefs related to secondary science teaching and learning*(Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10271972)

Nnoruka, I. S. (1990). *Solidarity, a principle of sociality: A phenomenological-hermeneutical approach in the context of the philosophy of Alfred Schutz and an African culture* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. C382701)

Olwig, K. F. (1990). The struggle for respectability: Methodism and Afro-Caribbean culture on 19th century Nevis.*Nieuwe West-Indische Gids [New West Indian Guide]*, *64*(3/4), 93–114. doi:10.1163/13822373-90002018

Onwuegbuzie, A. J., Leech, N. L., & Collins, K. M. T. (2010). Innovative data collection strategies in qualitative research. *The Qualitative Report*, *15*(3), 696–726. Retrieved from https://nsuworks.nova.edu/tqr/vol15/iss3/12/

Orey, M. (2010). *Emerging perspectives on learning, teaching, and technology*. Zurich, Switzerland: Global Text Project.

Palermo-Kielb, K., & Fraenza, C. (2017). Bridging the social, academic, and cultural divide for international students: Using peer-to-peer support. In K.L. Milheim (Ed.), *Cultivating diverse online classrooms through effective instructional design* (pp. 87–101). Hershey, PA: IGI Global.

Panina, D., & Kroumova, M. (2015). Cross-cultural communication patterns in computer mediated communication. *Journal of International Education Research*, *11*(1), 1–6. doi:10.19030/jier.v11i1.9092

Papert, S. (1987). Computer criticism vs. technocentric thinking. *Educational Researcher*,*16*(1), 22–30. doi:10.2307/1174251

Paralejas, C. G. (2013). *A case study of understanding the influence of cultural patterns on international students' perception and experience with online learning* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3611376)

Parrish, P., & Linder-VanBerschot, J. (2010). Cultural dimensions of learning: Addressing the challenges of multicultural instruction. *The International Review of Research in Open and Distributed Learning*, *11*(2), 1–19. doi:10.19173/irrodl.v11i2.809

Passey, D., Laferrière, T., Ahmad, M. Y. A., Bhowmik, M., Gross, D., Price, J., . . . Shonfeld, M. (2016). Educational digital technologies in developing countries challenge third party providers. *Journal of Educational Technology & Society*, *19*(3), 121–133. EJ1107289

Patel, T. (2017). Multiparadigmatic studies of culture: Needs, challenges, and recommendations for management scholars. *European Management Review*, *14*(1), 83–100. doi:10.1111/emre.12089

Patton, M.Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Patton, C. M. L. (2017).*An exploration of challenges facing principals in leading differentiated teaching practices* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10257293)

Pena-Sandoval, C. (2015). *Learning from contexts: A multicase study of secondary preservice teachers in Chile* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3717609)

Phelan, L. (2012). Interrogating students' perceptions of their online learning experiences with Brookfield's Critical Incident Questionnaire. *Distance Education*, *33*(1), 31–44. doi:10.1080/01587919.2012.667958

Purarjomandlangrudi, A., Chen, D., & Nguyen, A. (2016). Investigating the drivers of student interaction and engagement in online courses: A study of state-of-the-art. *Informatics in Education*, *15*(2), 269–286. doi:10.15388/infedu.2016.14

Ragoonaden, K., & Mueller, L. (2017). Culturally responsive pedagogy: Indigenizing curriculum. *The Canadian Journal of Higher Education*, *47*(2), 22–46. Retrieved from ERIC database. (EJ1154077)

Rajaram, K. (2013). Learning in foreign cultures: Self-reports learning effectiveness across different instructional techniques. *World Journal of Education*, *3*(4), 71–95. doi:10.5430/wje.v3n4p71

Rao, P. (2017). Learning challenges and preferred pedagogies of international students: A perspective from the USA. *International Journal of Educational Management*, *31*(7), 1000–1016. doi:10.1108/IJEM-01-2016-0001

Reigeluth, C. M. (1999). *Instructional-design theories and models: A new paradigm of instructional theory*. Mahwah, NJ: Erlbaum.

Reigeluth, C. M. (Ed.). (2013). *Instructional design theories and models: An overview of their current status*. Hillsdale, NJ: Erlbaum.

Reigeluth, C. M., & Carr-Chellman, A. A. (2009). Understanding instructional theory. In C. M. Reigeluth & A. A. Carr-Chellman (Eds.), *Instructional-design theories and models* (pp. 3–26). New York, NY: Taylor & Francis.

Richey, R., Klein, J. D., & Tracey, M. W. (2011). *The instructional design knowledge base: Theory, research, and practice*. New York, NY: Routledge.

Rienties, B., Alcott, P., & Jindal-Snape, D. (2014; 2013;). To let students self-select or not: That is the question for teachers of culturally diverse groups. *Journal of Studies in International Education*, *18*(1), 64–83. doi:10.1177/1028315313513035

Rogers, P.C., Graham, C.R., & Mayes, C.T. (2007). Cultural competence and instructional design: Exploration research into the delivery of online instruction cross-culturally. *Educational Technology Research and Development*, *55*(2), 197–217. doi:10.1007/s11423-007-9033-x

Rothwell, W. J., & Kazanas, H. (2008). *Mastering the instructional design process: A system approach* (4th ed.). San Francisco, CA: Pfeiffer.

Russell, L. R., Kinuthia, W. L., Lokey-Vega, A., Tsang-kosma, W., & Madathany, R. (2013). Identifying complex cultural interactions in the instructional design process: A case study of a cross-border, cross-sector training for innovation program. *Educational Technology Research and Development*, *61*(4), 707–732. doi:10.1007/s11423-013-9291-8

Rye, S. A., & Støkken, A. M. (2012). The implications of the local context in global online education. *International Review of Research in Open and Distance Learning*, *13*(1), 191–206. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1010/2084

Safa, H. I. (1987). Popular culture, national identity, and race in the Caribbean.*Nieuwe West-Indische Gids[New West Indian Guide]*,*61*(3/4), 115–126. doi:10.1163/13822373-90002047

Sandelowski, M. (1993). Rigor or rigor mortis: The problem of rigor in qualitative research revisited. *Advances in Nursing Science*, *16*(2), 1–8. doi:10.1097/00012272-199312000-00002

Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing&Health*, *18*(2), 179–183. doi:10.1002/nur.4770180211

Schreiner, A. E., & Gaiser, T. J. (2009).*Guide to conducting online research*. London, England: Sage.

Schunk, D. H. (2012). *Learning theories: An educational perspective*. Boston, MA: Allyn & Bacon.

Schwandt, T. A. (1997). *Qualitative inquiry: A dictionary of terms*. Thousand Oaks, CA: Sage.

Scurr, A. C. G. (2017). *Teacher learning in online communities of practice* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10623309)

Seel, N. M., Lehmann, T., Blumschein, P., & Podolskiy, O. A. (2017). *Instructional design for learning*. doi:10.1007/978-94-6300-941-6_1

Sharif, A., & Gisbert, M. (2015). The impact of culture on instructional design and quality. *International Journal of Instruction*, *8*(1), 143–156. Retrieved from ERIC database. (EJ1085297)

Sharoff, L. (2008). Critique of the critical incident technique. *Journal of Research in Nursing*, *13*(4), 301–309. doi:10.1177/1744987107081248

Sheehy, K. (2017). Ethics, epistemologies, and inclusive pedagogy. In C. Forlin & A. Gajewski (Eds.), *Ethics, equity, and inclusive education* (pp. 59–78). Bingley, England: Emerald.

Shi, L. (2006). The successors to Confucianism or a new generation? A questionnaire study on Chinese students' culture of learning English. *Language, Culture and Curriculum*,*19*(1), 122–147. doi:10.1080/07908310608668758

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology & Distance Learning*, *2*(1). Retrieved from http://www.itdl.org/Journal/Jan_05/article01.htm

Sikkema, S. E., & Sauerwein, J. A. (2015). Exploring culture-specific learning styles in accounting education. *Journal of International Education in Business*, *8*(2), 78–91. doi:10.1108/jieb-08-2015-0019

Sitti, S., Solera, S., & Sompong, N. (2013). Development of instructional model based on connectivism learning theory to enhance problem-solving skill in ICT for daily life of higher education students. *Procedia Social and Behavioral Sciences*, *103*, 315–322. doi:10.1016/j.sbspro.2013.10.339

Skinner, B. F. (2012). The experimental analysis of behavior. *American Scientist*, *100* (1). Retrieved from https://www.americanscientist.org/article/the-experimental-analysis-of-behavior

Smith, C. (2014). *Culturally relevant pedagogy in multicultural teacher education: A paradoxical objective* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3643691)

Smith, P. L., & Ragan, T. J. (2005). *Instructional design*. Hoboken, NJ: Wiley.

Smith, V. R. (2012). *Designing online instruction for internationally educated nurses* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3548123)

Sobodić, A., Balaban, I., & Tomašević, M. (2017). The impact of cultural dimensions on student's use of e-learning system. In *Proceedings of 28th Central European Conference on Information and Intelligent Systems* (pp. 1–8). Retrieved fromhttp://bib.irb.hr/datoteka/897455.The_Impact_of_Cultural_Dimensions_on_Students_Use_of_E-learning_System.pdf

Sommers, C. L. (2014). Considering culture in the use of problem-based learning to improve critical thinking —Is it important? *Nurse Education Today*, *34*(7), 1109–1111. doi:10.1016/j.nedt.2014.03.010

Soto, V. J. (2013). Which instructional design models are educators using to design virtual world instruction? *MERLOT Journal of Online Learning and Teaching*, *9*(3), 364–375. Retrieved from http://jolt.merlot.org/vol9no3/soto_0913.pdf

Sparkes, A. C., & Smith, B. (2009). Judging the quality of qualitative inquiry: Criteriology and relativism in action. *Psychology of Sport and Exercise*, *10*(5), 491–497. doi:10.1016/j.psychsport.2009.02.006

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Stake, R. E. (2013). *Multiple case study analysis*. New York, NY: Guilford Press.

Stoessel, K., Ihme, T. A., Barbarino, M., Fisseler, B., & Stürmer, S. (2015). Sociodemographic diversity and distance education: Who drops out from academic programs and why? *Research in Higher Education*, *56*(3), 228–246. doi:10.1007/s11162-014-9343-x

Stoltz, T., Piske, F. H. R., D'Aroz, M. S., de Freita, M. de F. Q., & Machado, J. (2015). Creativity in gifted education: Contributions from Vygotsky and Piaget.*Creative Education*,*6*(1), 64–70. doi:10.4236/ce.2015.61005

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, *11*(2), 63–75. doi:10.3316/qrj1102063

Swain, A. N. (2011).*21st century freedom fighters: African descent teachers' use of culturally relevant pedagogy as a tool of liberation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3471649)

Tan, F. (2010). *A cross-cultural study of adult English as a second language (ESL) students: Cultural differences and instructional strategy preferences* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3404717)

Tankari, M. (2012). *Online learning satisfaction: Does culture matter*? (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3509829)

Tankari, M. (2014). Cultural orientation differences and their implications for online learning satisfaction. In J. Keengwe, G.Schnellert, & K. Kungu (Eds.),*Cross-cultural online learning in higher education and corporate training*(pp. 20–26). doi:10.4018/978-1-4666-5023-7

Tarhini, A., Hone, K., Liu, X., & Tarhini, T. (2017). Examining the moderating effect of individual-level cultural values on users' acceptance of e-learning in developing countries: A structural equation modeling of an extended technology acceptance model. *Interactive Learning Environments*, *25*(3), 306–328. doi:10.1080/10494820.2015. 1122635

Tarhini, A., Teo, T., & Tarhini, T. (2016). A cross-cultural validity of the e-learning acceptance measure (ElAM) in Lebanon and England: A confirmatory factor analysis. *Education and Information Technologies*, *21*(5), 1269–1282. doi:10.1007/s10639-015-9381-9

Tellis, W. M. (1997). Introduction to case study. *The Qualitative Report*, *3*(2), 1–14. Retrieved from http://www.nova.edu/ssss/QR/QR3-2/tellis1.html

Thakkar, D. (2011). Social and cultural contexts of Chinese learners: Teaching strategies for American educators. *Multicultural Education*, *19*(1), 51–54. Retrieved from ERIC database. (EJ986897)

Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, *16*(2), 151–155. doi:10.1111/j. 1744-6155.2011.00283.x

Thomas, E., & Usher, L. (2009). One more hurdle to increasing mammography screening: Pubescent, adolescent, and prior mammography screening experiences. *Women's Health Issues*, *19*(6), 425–433. doi:10.1080/0748118090307043

Thomas, M. K. (2003). Designers' dilemmas: The tripartheid [sic] responsibility of the instructional designer. *TechTrends*, *47*(6), 34–39. doi:10.1007/bf02763282

Tootoonchi, N. S. (2014). *College students' perceptions of the learning environment in online mathematics classes: A qualitative study* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3626318)

Tracey, M. W., Hutchinson, A., & Grzebyk, T. Q. (2014). Instructional designers as reflective practitioners: Developing professional identity through reflection. *Educational Technology Research and Development*, *62*(3), 315–334. doi:10.1007/s11423-014-9334-9

Tracey, M. W., & Unger, K. L. (2012). A design-based research case study documenting a constructivist ID process and instructional solution for a cross-cultural workforce. *Instructional Science*, *40*(3), 461–476. doi:10.1007/s11251-011-9184-3

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, *16*(10), 837–851. doi:10.1177/1077800410383121

Tripp, S. D., &, Bichelmeyer, B. (1990). Rapid prototyping: An alternative instructional design strategy. *Educational Technology Research and Development*, *38*(1), 31–44. doi:10.1007/bf02298246

Tylor, E. B. (1889).*Primitive culture: Researches into the development of mythology, philosophy, religion, language, art and custom*. doi:10.1037/12987-001

Tyson, D. L. (2012). *The experience of African students studying nursing in the United States in relation to their use of critical thinking* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3506239)

Uzunboylu, H., & Kosucu, E. (2017). Comparison and evaluation of Seels & Glasgow and ADDIE instructional design model. *Ponte International Journal of Science and Research*, *73*(6), 98–112. Retrieved from https://www.researchgate.net/publication/319078903_Comparison_and_Evaluation_of_Seels_Glasgow_and_ADDIE_Instructional_Design_Model

Velliaris, D. M. (2016). Culturally responsive pathway pedagogues: Respecting the intricacies of student diversity in the classroom. In K. González & R. Frumkin (Eds.), *Handbook of research on effective communication in culturally diverse classrooms* (pp. 18–38). doi:10.4018/978-1-4666-9953-3.ch002

Vidergor, H. E., & Eilam, B. (2012). Israeli teachers' perceptions of gifted teachers' desired characteristics: A case of cultural orientation. *Roeper Review*, *34*(1), 26–37. doi:10.1080/02783193.2012.627550

Vygotsky, L. S. (1977). The development of higher psychological functions. *Russian Social Science Review*, *18*(3), 38–51. doi:10.2753/rss1061-1428180338

Wang, M., Callaghan, V., Singer, E., Sun, H., & Learn, S. I. (2016). Design engaging mobile learning for the global audience: International Conference on Education in Mathematics, Science & Technology. In *the Eurasia Proceedings of Educational & Social Sciences (EPESS)* (Vol.4, pp. 1–7).Retrieved from http://dergipark.gov.tr/download/article-file/423927

Wang, M., & Schlichtenmyer, S. (2017). Exploring the cultural dimensions of instructional design: Models, instruments, and future studies. In M. Orey& R. Branch (Eds.),*Educational media and technology yearbook* (Vol. 40, pp. 149–167). New York, NY: Springer International.

Wang, S.M., Hou, H. T., & Wu, S. Y. (2017). Analyzing the knowledge construction and cognitive patterns of blog-based instructional activities using four frequent interactive strategies. *Educational Technology Research and Development*, *65*(2), 301–323. doi:10.1007/s11423-016-9471-4

Watson, R. T., Ho, T. H., & Raman, K. S. (1994). Culture. *Communications of the ACM*, *37*(10), 44–55.doi:10.1145/194313.194320

Waugh, M. L., & Su, J. (2015). Online instructional program design one size may not fit the needs of all. *Quarterly Review of Distance Education*, *16*(1), 1–10.Available from https://search.proquest.com/openview/105bf82c43c853009865d73166ba6187/1?pq-origsite=gscholar

Whalen, J. M. (2016). *TheHofstede model and national cultures of learning: A comparison of undergraduate survey data* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 10149811)

Wildemeersch, D., & Jütte, W. (2017). Digital the new normal- Multiple challenges for the education and learning of adults. *European Journal for Research on the Education and Learning of Adults*, *8*(1), 7–20. doi:10.3384/rela.2000-7426.relae13

Wilkerson, J. M., Iantaffi, A., Grey, J. A., Bockting, W. O., & Rosser, B. T. S. (2014). Recommendation for Internet-based qualitative health research with hard-to-reach populations. *Qualitative Health Research*, *24*(4), 561–574. doi:10.1177/1049732314524635

Xin, S. (2016). How the diversity of values matters in intercultural communication. *Theory and Practice in Language Studies*, *6*(9), 1836–1840. doi:10.17507/tpls.0609.16

Xu, M. A., & Storr, G. B. (2012). Learning the concept of researcher as instrument in qualitative research. *The Qualitative Report*, *17*(21), 1–18.

Yang, J., Huiju, Y., Cen, S.-J., & Huang, R. (2014). Strategies for smooth and effective cross-cultural online collaborative learning. *Educational Technology & Society*, *17*(3), 208–221. Retrieved from ERIC database. (EJ1039064)

Yeo, S. L., & Pang, A. (2017). Asian multiculturalism in communication: Impact of culture in the practice of public relations in Singapore. *Public Relations Review*, *43*(1), 112–122.doi:10.1016/j.pubrev.2016.10.014

Yetkin Özdemir, E. I. (2011). Self-regulated learning from a sociocultural perspective. *Education and Science*, *36*(160), 298–308. Retrieved from http://egitimvebilim.ted.org.tr/index.php/EB/article/viewFile/889/277

Yin, R. K. (2003). *Case study research design and methods* (3rd ed.). Thousand Oaks, CA: Sage.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Washington, DC: Sage.

Yoo, B., Donthu, N., & Lenartowicz, T. (2011). Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing*, *23*(3/4), 193–210. doi:10.1080/08961530.2011.578059

York, P., Cindy S., & Ertmer, P. A. (2016). Examining instructional design principles applied by experienced designers in practice. *Performance Improvement Quarterly*, *29*(2), 169–192. doi:10.1002/piq.21220

Young, P. A. (2008a). The culture based model: Constructing a model of culture. *Educational Technology & Society*, *11*(2), 107–118. Retrieved from ERIC database. (EJ814099)

Young, P. A. (2008b). The culture based model: A framework for designers and visual ID languages. In L. Botturi & T. Stubbs (Eds.), *Handbook of visual languages for instructional design: Theories and practices* (pp. 52–74). Hershey, PA:IGI Global.

Young, P. A. (2014). The presence of culture in learning. In J. Spector, M. Merrill, J. Ellen, & M. Bishop (Eds.), *Handbook of research on educational communications and technology* (pp. 349–361). New York, NY: Springer.

Yu, S., Lee, I., & Mak, P. (2016). Revisiting Chinese cultural issues in peer feedback in EFL writing: Insights from a multiple case study. *The Asia-Pacific Education Researcher*, *25*(2), 295–304. doi:10.1007/s40299-015-0262-1

Zhu, H. (2011). From intercultural awareness to intercultural empathy. *English Language Teaching*,*4*(1), 116–119. doi:10.5539/elt.v4n1p116

Zoch, M. (2017). "It's important for them to know who they are": Teachers' efforts to sustain students' cultural competence in an age of high-stakes testing. *Urban Education*, *52*(5), 610–636. doi:10.1177/0042085915618716

STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

> Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct (p. 1).

> Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium (p. 2).

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

> Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results (p. 1).

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name

and date

Becalo Utuk,10/31/2017

APPENDIX A. RESEARCHER-DESIGNED PREQUALIFYING

SURVEYQUESTIONNAIRE

1. Please provide us with your demographic information to ensure we can contact you for invitation if you are eligible to participate in this study and to mail you the consent form.

   Fax
   Title
   First and last initials
   E-mail address

2. Are you currently active as a designer-by-assignment faculty in your institution? (Select one option)

   Yes
   No

3. Are you currently active as an instructional designer in your institution? (Select one option)

   Yes
   No

4. What demographics are learners in your school? (Select one option)

   a. Western
   b. Non-Western
   c. Other (Please specify)

5. Which Western country? (Select one option) [Answer this question only if answer to Question 4 is a. Western]

   United States
   Canada
   Australia
   Europe
   Other (Please specify)

6. Which non-Western country? (Select one option) [Answer this question only if answer to Question 4 is b. Non-Western]

   India
   China
   Japan
   Nigeria

Other (Please specify)

7. Major mode of communication in your institution (Select one option)

   English primary
   English secondary
   Other (Please specify)

8. Instructional designer academic qualifications (Select one option)

   Bachelor's
   Master's
   PhD
   Postdoctoral

9. Designer-by-assignment teacher academic qualification (Select one option)

   Bachelor's
   Master's
   PhD
   Postdoctoral

10. Years of experience as an instructional designer in which you have designed instruction for culturally diverse online learners in higher educational institutions (Select one option)

    1–3
    3–5
    5 or more

11. Years of experience as a designer-by-assignment faculty in which you have taught or design instruction for culturally diverse online learners in higher educational institutions (Select one option)

    1–3
    3–5
    5 or more

12. Nature of your academic institution (Select one option)

    Online learning
    Blended

13. Is your practice of instructional designing or teaching influenced by? (Select one option)

    Western culture

Non-Western culture

14. Do you consider a study that explores how instructional strategies could best support culturally diverse online learners important? (Select one option)

a. Yes
b. No

15. Do you know other instructional designers or teachers with over 3 years' experiences in designing or teaching culturally diverse online learners in higher educational institution? (Select one option)

a. Yes
b. No

16. Will you be interested in recommending and inviting them to participate in the study? (Select one option)

a. Yes
b. No

Thank you for your participation. If you have additional questions about this survey, please e-mail butuk@capellauniversity.edu.

Definitions:

Instructional designers: Those professional training with training and competencies for "translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation" (P. Smith & Ragan, 2005, p. 4).

Designers-by-assignment (DBAs): Those with professional training as instructional designers but do design instruction because of their jobs as teachers (Merrill, 2007).

Instructional strategies: Tools or techniques commonly used by educators including instructions designers for designing and facilitating learning (Gagné et al., 2005, p. 225). Considered the overall plan that governs content and how teaching is efficiently conducted (Rothwell & Kazanas, 2008, p. 231)

APPENDIX B. RESEARCHER-DESIGNED INSTRUCTIONAL DESIGN

STRATEGIES/CULTURAL VALUES SURVEY QUESTIONNAIRE

Instructions and Definition of Terms:
1. Please use the 5-point Likert scale 1 = *not useful*, 2 = *least useful*, 3 = *useful*, 4 = *extremely useful*, and 5 = *unknown* in selecting the instructional strategies that best support culturally diverse online learners.
2. The survey questionnaire will take about 30 minutes to complete (just check the box that applies to you).
3. In case you need clarification in use of the terms in the survey (optional), please click this link.

1. BEHAVIORIST STRATEGIES (Gagné's nine events of instructions [Elander & Cronje, 2016; Ertmer & Newby, 2013; Gagné,Wager, Golas, &Keller,2005; Skinner, 2012])

(a) Gain attention: How useful are strategies that help learners gain attention? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(b) Inform of objectives: How useful are strategies that inform learners of objectives, goals, expectations, and criteria for acceptable performance before beginning instruction? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(c) Stimulate recall: How useful are strategies that help learners recall prior learning and draw from prior problem-solving skills and experience to solve new problems? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(d) Stimulus materials: How useful are strategies that ensure instructional content and materials are organized and chunked to align with the objectives? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(e) Provide guidance: How useful are strategies that support scaffolding or helping students learn new skills? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(f) Elicit performance: How useful are instructional strategies that support and provide learners with plenty opportunities to recall, practice or demonstrate newly acquired or knowledge? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(g) Provide feedback: How useful are strategies that support giving timely and constructive feedback to increase learning? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(h) Assessment: How useful are instructional strategies that promote ongoing assessments such as embedding quizzes or questions throughout instruction; instead of occasional assessments? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5
(i) Enhance retention and transfer: How useful are instructional strategies that enhance retention and help learners master and transfer new knowledge to life practice? (Select one option)
　　　　　1　　　　2　　　　3　　　　4　　　　5

(j) Mastery learning: How useful are instructional strategies that promote mastery learning? (Select one option)

     1   2   3   4   5

(k) How useful are strategies that use behavioral shaping such as rewards and reinforcements to promote learning? (Select one option)

     1   2   3   4   5

(l) How useful are strategies that include role-playing? (Select one option)

     1   2   3   4   5

(m) How useful are strategies that include examples (Select one option)

     1   2   3   4   5

2. OTHER BEHAVIORIST STRATEGIES (Dick, Carey,& Carey, 2009)

(a) Mastery learning: How useful are instructional strategies that promote mastery learning? (Select one option)

     1   2   3   4   5

(b) How useful are strategies that use behavioral shaping such as rewards and reinforcements to promote learning? (Select one option)

     1   2   3   4   5

(c) How useful are strategies that include role-playing? (Select one option)

     1   2   3   4   5

(d) How useful are strategies that include examples (Select one option)

     1   2   3   4   5

3. FIRST PRINCIPLES OF INSTRUCTION (Merrill, 2009)

(a) Activation: How useful are strategies that use recalls of prior knowledge or experience as a foundation for new knowledge? (Select one option)

     1   2   3   4   5

(b) Demonstration: How useful are instructional strategies that support demonstration of learned skills or knowledge? (Select one option)

     1   2   3   4   5

(c) Application: How useful are instructional strategies that focus on using or applying learned knowledge in a real work setting for culturally diverse learners? (Select one option)

     1   2   3   4   5

(d) Integration: How useful are strategies that enable learners incorporate their new knowledge to their daily life work practices? (Select one option)

     1   2   3   4   5

4. COGNITIVIST INSTRUCTIONAL STRATEGIES (Ausubel, 1978; Blayney, Kalyuga, & Sweller, 2015; Gignac, 2015; Martinez, 2010)

(a) Activating prior knowledge: How useful are cognitivists' strategies such as use of inquiries, encodings, and cues? (Select one option)

     1   2   3   4   5

(b) How useful are strategies that use chunking and organization of information to increase the amount of information stored in the brain? (Select one option)

                1   2   3   4   5

(c) How useful are strategies that use mnemonics to improve recall? (Select one option)

                1   2   3   4   5

(d) How useful are strategies that use deep rehearsal and practice to enhance retention? (Select one option)

                1   2   3   4   5

(e) How useful are metacognitive strategies that help learners monitor their learning, such as reflection, self-talk, and journaling? (Select one option)

                1   2   3   4   5

5. CONSTRUCTIVIST INSTRUCTIONAL STRATEGIES (Archuleta-Moon, 2014; Conradie, 2014; Driscoll, 2005; Jonassen, 1991, 1999, 2011; Pena-Sandoval, 2015; Yetkin Özdemir, 2011)

(a) How useful are strategies that present learners with ill-defined problems with minimal guidance? (Select one option)

                1   2   3   4   5

(b) How useful are instructional strategies that use computer technologies to enhance collaboration and learning (computer-supported collaborative learning environments)? (Select one option)

                1   2   3   4   5

(c) How useful are strategies that support problem-based learning such as brainstorming, debates, and negotiations? (Select one option)

                1   2   3   4   5

(d) How useful are instructional strategies that emphasize student-centered learning (self-directed learning)? (Select one option)

                1   2   3   4   5

(e) How useful are instructional strategies that use inquiry-based instruction to trigger thinking? (Select one option)

6. OTHER CONSTRUCTIVIST INSTRUCTIONAL STRATEGIES (Driscoll, 2005; Huerta-Kelley, 2017; Nelson, 2017; Stoltz, Piske, D'Aroz, de Freita, & Machado, 2015)

(a) Simulations: How useful are instructional strategies that enable students to learn subjects, ideas or behaviors or skills using a mannequin or robot, microworlds, or a virtual or physical person? (Select one option)

                1   2   3   4   5

(b) Gaming strategies: How useful are instructional strategies that focus on learning from games to invoke critical thinking, competition, and problem solving? (Select one option)

                1   2   3   4   5

(c) Collaborative learning: How useful are collaborative strategies in teaching or designing instruction for online learners? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

(d) How useful is case-based learning for teaching or designing for online learners? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

(e) How useful are strategies that emphasize cognitive apprenticeship, internships, and services learning for the online learning audience? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

7. CONNECTIVIST STRATEGIES (Nattoch Dag, 2017; Papert, 1987; Siemens, 2005; Sitti, Solera, & Sompong, 2013)

(a) How useful are strategies that help learners develop skills to analyze and synthesize relevant information by interacting with others in the learning community? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

8. ECLECTICISM STRATEGIES (Bedrossian, 2018; Reigeluth, 1999)

(a) How useful are strategies that support the integration of various approaches and techniques for teaching or designing instruction? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

9. CULTURALLY RELEVANT STRATEGIES (Burkett, 2013; Dixon, Yssel, McConnell, & Hardin, 2014; Ladson-Billings, 2013; Thakkar, 2011; Vidergor & Eilam, 2012; Yang, Huiju, Cen, & Huang,2014; Yoo, Donthu, & Lenartowicz, 2011)

(a) How useful are differentiated instructional strategies in maximizing the learning experience of learners despite their cultural differences? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

(b) Adaptive learning: How useful are strategies that adapt content and materials to accommodate learners' differences? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

10. CULTURALLY RELEVANT STRATEGIES (Burkett, 2013; Fouts, 2015; Gerjets, Walter, Rosentiel, Bogdan, & Zander, 2014; Hill-Miller, 2011; Kendrick-Weikle, 2015; Nnoruka, 1990; Sikkema & Sauerwein, 2015)

(a) How useful are differentiated instructional strategies in maximizing the learning experience of learners despite their cultural differences? (Select one option)

| 1 | 2 | 3 | 4 | 5 |

(b) Adaptive learning: How useful are strategies that adapt content and materials to accommodate learners' differences? (Select one option)

               1   2   3   4   5

(c) How useful are strategies that use folktales and storytelling in meeting multicultural learners' needs? (Select one option)

               1   2   3   4   5

11. MOTIVATION STRATEGIES (Aldunaten & González-Ibáñez, 2017; Bandura, 1977; Keller, 1987, 2008)

(a) How useful are relevant and meaningful instructional contents in motivating online learners of diverse cultures? (Select one option)

               1   2   3   4   5

12. HOFSTEDE'S CULTURAL DIMENSIONS/STRATEGIES (Gómez-Rey et al., 2016; Hall, 1976; Hofstede, 2011)

(a) Individualism/collectivism: How useful are instructional strategies that reflect group work, interactions, and relationship values over individual learner's interest? (Select one option)

               1   2   3   4   5

(b) Masculinity/femininity: How useful are instructional strategies that support competition among learners? (Select one option)

               1   2   3   4   5

(c) Uncertainty avoidance: How useful are instructional strategies that enable students to explore the unknown even with less specific rules to dictate learning? (Select one option)

               1   2   3   4   5

(d) Power distance: How useful are instructional strategies that allow students to control learning and teachers as facilitators whose views can be questioned or challenged? (Select one option)

               1   2   3   4   5

(e) Long-term/short-term orientation: How useful are instructional strategies that focus on deadlines and fixed goals for tasks completion over mastery and achievements? (Select one)

Thank you for your participation. If you have additional questions about this survey, please e-mail butuk@capellauniversity.edu.

APPENDIX C. RESEARCHER-DESIGNED THINK-ALOUD/TALK-ALOUD PROTOCOL

Instruction: This exercise follows immediately after the interview. It begins briefly with a warm-up exercise, which involves practiced activities of the think-aloud/talk-aloud process followed by the actual exercise.

The first phase is a practice exercise, also known as the warm-up exercise. The warm-up exercise does not have to be the actual study problem. At this point, the participants are asked to say out aloud what they are thinking and what comes to mind during the exercise. This exercise aids the researcher in identifying what and how participants arrive at their answers and conclusions. In this warm-up exercise, you are to describe the process that is involved from waking up and going to work in the morning. Please give detailed explanation of each step as much as you can. Now, the participants are asked to verbalize everything that comes to mind from when each question is asked until they arrive at their final answer. Therefore, they are to constantly talk aloud, and if they do stop talking, they are prompted to continue talking. It is okay if participants' statements are just fragments of sentences or if some statements appear illogical at the time. Except for prompting participants to keep talking and in periods needing clarifications, they are to continue talking without interruptions. It should be as if they were soliloquizing or talking to themselves with the researcher remaining unobtrusive and calm during the entire process. Participants are made to understand that the main research focus is not an evaluation of their thoughts nor the accuracies of their answers; rather, the goal is to evaluate their thinking process and how they arrive at their final answers. After the instructions, participants are asked if they have any questions. At this moment, we will now proceed with the actual study exercise.

Describe the process or steps that you would go through when advising a novice instructional designer or designer-by-assignment on designing instruction for culturally diverse learners. In solving the actual study problem, you are to think aloud as you reflect on possible interventions that could be applied in solving the problem. You are to think aloud throughout the process. Please give detailed explanation of each step as much as you can. The process is like the just-concluded warm-up. Questions are welcome at any time during the process.

APPENDIX D. RESEARCHER-DESIGNEDCRITICAL INCIDENT TECHNIQUE

INTERVIEW QUESTIONS

Instruction: The interview will take 15–30 minutes to complete. The interview session will be followed by a brief 10-minute think-aloud/talk-aloud session.

1. Describe the highlights of your experiences as a teacher or course designer for culturally diverse online learners.

2. Describe the low points of your experiences teaching or designing courses for culturally diverse learners.

3. What surprises you the most about teaching or designing courses for culturally diverse learners?

4. What is the most challenging about teaching or designing courses for learners of Western and Non-Western learners in the same environment?

5. Describe how your own beliefs impact the instructional strategies used for culturally diverse learners.

6. How should designers use instructional strategies to support learners whose cultural values predispose them to be passive, dependent, and unable to question authority or consider alternative views (Tyson, 2012)?

7. Describe some instructional strategies that you have used successfully in teaching culturally diverse learners.

8. Describe how Geert Hofstede's cultural dimensions could be useful in selecting instructional strategies that support culturally diverse audience.

9. Describe what instructional strategies best support students with respect-of-elders values who may feel uncomfortable asking direct questions or considering alternative views.