

2018

# Instructional Practices in Holistic Education for Patients with Cancer

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# Walden University

College of Education

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Alicia M. Oberle

has been found to be complete and satisfactory in all respects,  
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Walden University  
2018

Abstract

Instructional Practices in Holistic Education for Patients with Cancer

by

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MEd, Westminster College, 2013

BA, Westminster College, 2011

Doctoral Study Presented in Partial Fulfillment

Of the Requirements for the Degree of

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Walden University

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## Abstract

During the past few decades, holistic education has increasingly emerged in academia. However, limited research has been conducted on how holistic education impacts instructional practices in real life situations like the well-being of cancer patients. The purpose of this qualitative study was to explore how a holistic education program impacts instructional practices designed to improve the well-being of cancer patients. The conceptual framework was based on transformative learning theory and learner-centered teaching. This single case study was conducted at a non-profit cancer center in the Western United States which emphasizes multiple dimensions of well-being for cancer patients, including holistic education. Participants included four instructors at the center. Data were collected from individual interviews with these instructors, reflective journals that they maintained, and documents and archival records related to the center and its education programs. Data analysis involved line-by-line coding and categorization to identify patterns and themes. Results revealed that holistic education improves the knowledge, comfort, self-efficacy, and empowerment of cancer patients. Results indicated that it would be useful to conduct more studies to explore the impact of holistic instructional practices on patients with cancer. This study contributes to social change by providing instructors and health professionals with a deeper understanding of holistic instruction and how it can be used to improve whole-person healing.

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## Dedication

This dissertation is dedicated to the many victims of cancer and to those good people who are helping to find a cure.

## Acknowledgments

I want to acknowledge my wonderful committee members for all their insight and expertise, including Dr. Donna Russell, Dr. Deanna Boddie, Dr. Cheri Toledo, Dr. Paula Dawidowicz, and Dr. Shereeza Mohammed. I want to acknowledge the non-profit cancer center site for this study. The work that they are doing is groundbreaking, and I urge them to keep fighting that great fight to combine integrative medicine and holistic education. I also want to acknowledge my partner John Farmer, our beautiful children, and our wonderful family and friends who have cheered me on throughout this journey. And I especially want to thank my son Tyrell Oberle, who catalyzed this study with his strength.

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## Chapter 1: Introduction to the Study

A mother falls to the floor in tears upon the news that her 16-year old son has Ewing's sarcoma, a rare form of bone cancer. While the disease has been caught early, fear and uncertainty pervade her son's mind: He is just a boy trying to cope with the struggles of being a teenager, and now he must face the life-changing diagnosis of a potentially terminal illness. Despite the initial shock, the outlook is good; the boy's oncologist recommends 9 months of chemotherapy and multiple surgeries, lest the aggressive cancer enter the blood, bone marrow, or lungs. The oncologist is confident that the boy will survive the illness but warns him and his family of a long road ahead. In addition to the side effects from chemotherapy, the family must plan ways in which to help the boy—and themselves—maintain their well-being throughout this complex, uncertain, and terrifying time.

To assist cancer patients and their families with their overwhelming concerns, numerous holistic education programs have emerged across the United States that encourage whole-person healing, which includes the physical, the psychological, the social, and the spiritual. These holistic education programs are considered a part of integrative medicine. According to the Arizona Center for Integrative Medicine (2016), integrative medicine is defined as a "healing-oriented medicine that takes account of the whole person, including all aspects of lifestyle. It emphasizes the therapeutic relationship between practitioner and patient, is informed by evidence, and makes use of all appropriate therapies" (para. 1). As of 2012, 30 medical treatment centers actively used some version of integrative medicine. The number of integrative medicine centers

continues to grow across the United States (Horrigan, Lewis, Abrams, & Pechura, 2012), which is a testament to how important holistic healing is for cancer patients and their families. Furthermore, current empirical evidence in multiple fields suggests that holistic healing benefits all aspects of patient health (Büssing, Janko, Baumann, Hvidt, & Kopf, 2013; Dobos, Voiss, Schwidde, Choi, Paul, Kirschbaum, & Kuemmel, 2012).

The site for this study was a nonprofit cancer center in the Western United States, which offers an innovative education program that provides emotional support, spiritual support, and mind/body healing for cancer patients through an emphasis on eight dimensions of holistic healing: (1) emotional, (2) spiritual, (3) intellectual, (4) physical, (5) social, (6) environmental, (7) financial, and (8) occupational. In providing innovative education to cancer patients, these programs may assist patients and their families in making informed decisions for short-term and long-term care (Dobos et al., 2012; Frenkel & Cohen, 2014). As of 2010, 44% to 76% of patients sought out integrative care, yet their needs were often unmet because they were not aware of the various options for seeking such care (McCreery, 2010). As the field of medicine continues to evolve and health practitioners increasingly understand the value of whole-person healing, holistic education programs will need to be aligned with advances in medicine to offer the best care possible to cancer patients.

This qualitative study was needed because it is expected to advance knowledge in the field of holistic education by examining research that combines newly emerging concepts regarding instructional practices in holistic education with integrative medicine. Multiple scholars have emphasized the importance of holistic education in addressing all

dimensions of what it means to be human, including the emotional, the social, the rational, and the spiritual (Goswami, 1996; Sinclair, 2010; Schunk, Meece, & Pintrich, 2014; Turner, Goodin, & Lokey, 2012). The original contribution of this study consisted of examining a specific holistic education program to determine its impact on instructional practices designed to improve the well-being of cancer patients. Currently, qualitative studies that describe this impact do not exist. The relevance of this study to positive social change is that it may raise awareness about the importance of instructional practices in holistic education that support the healing of patients diagnosed with a terminal illness. In the grand search for a cancer cure, perhaps consideration of the whole person may contribute to the well-being of cancer patients and all of those around them who are affected by the disease.

This chapter is an introduction to the study on instructional practices in holistic education for patients with cancer. In this chapter, a brief summary of the research literature on the background and scope of this study will be presented. The background and scope will include a brief review of research on the multidimensional benefits of holistic instructional methods for cancer patient care. In addition, the problem statement, the purpose of the study, the central and related research questions, and the conceptual framework for this study will be presented. The nature of the study, relevant definitions, assumptions, scope and delimitations, limitations, and significance will also be discussed.

### **Background**

Recent studies have revealed that consideration of the whole person has the potential to improve patients on both physiological and psychosocial levels (Bussing et

al., 2013; Cramer, Lauche, Paul, & Dobos, 2012; Moritz et al., 2006; White, Verhoef, Davison, Gunn, & Cooke, 2008). In a cross-sectional study, Büssing et al. (2013) examined the spiritual needs of patients living with chronic pain and cancer in a secular society. Büssing et al. described the multidimensional needs of cancer patients, including existential well-being, empowerment and hope, stress relief, and meaning-making. Büssing et al. found that holistic and spiritual healing benefits cancer patients in the following ways: It (a) increases a sense of meaning-making, inner peace, and equanimity; (b) relieves fear, stress, depression, fatigue, anxiety, and stress; (c) enhances a sense of empowerment, confidence, and an active role in the healing process; and (d) promotes coping strategies, control, and resilience.

This research is relevant because the purpose of this study is to understand how a holistic education program impacts instructional practices designed to improve the well-being of cancer patients. Additionally, it is relevant because of all patients who suffer from the nature of the disease. In a meta-analysis of the [name the area?] literature, Cramer et al. (2012) examined mindfulness-based stress reduction for breast cancer and found that it is influential in the healing of breast cancer. In an earlier and significant study, Moritz et al. (2006) conducted a randomized, controlled trial and found that home study-based spirituality education programs decreased emotional distress and increased quality of life. The study also revealed that spiritual healing programs improve stress, cognitive functioning, fatigue, and depression for mood-disturbed patients. The current study is relevant because holistic education has been found to support the overall health of cancer patients.

In other research, White, Verhoef, Davison, Gunn, and Cooke (2008) determined that some men with prostate cancer choose complementary and alternative medicine (CAM) over conventional cancer treatments because CAM addresses all dimensions of well-being. White et al. discussed the importance of the whole person and the need for integrative medicine for the well-being and confidence of cancer patients, and for control over their healing processes. In a related study about how holistic education benefits students, Greenstein (2012) found that a balanced curriculum that includes all aspects of what it means to be human is becoming increasingly relevant in today's educational climate. These studies are important because their findings emphasize the importance of holistic treatment and education. The research problem addressed in this study was the value of holistic educational responses to cancer patients to support their healing.

### **Problem Statement**

Cancer is a complex and tragic epidemic that impacts over 1.5 million individuals per year (American Cancer Society, 2015). While attempting to deal with the shock that comes with such a terrifying diagnosis, patients may experience fear, identity displacement, anxiety, depression, and stress (White et al., 2008). Recent empirical studies reveal the need for integrative healing for cancer patients that involves acknowledgement of the whole person (Bussing et al., 2013; Cramer et al., 2012; Moritz et al., 2006; White et al., 2008). This integrative healing attempts to bridge Western and Eastern medicinal practices and involves a concern for mind, body, and spirit (Graham & Runyon, 2006). However, a gap exists in the literature about the impact of holistic education programs on instructional practices designed to improve the well-being of

cancer patients. The impact of holistic education programs on instructional practices is unknown. Therefore, the purpose of this qualitative study was to describe how a specific holistic education program, located in the Western United States, impacts the instructional practices designed to improve the well-being of cancer patients.

Little research exists that specifically explores how holistic education programs that value all dimensions of the human experience impact the instructional practices that are used to improve the well-being of cancer patients and their families (Dobos et al., 2012; Frenkel & Cohen, 2014). In particular, the curriculum and instruction that instructors use in these groundbreaking programs warrants further exploration in order to determine whether they could add to the multidisciplinary body of literature in the fields of education and medicine.

Therefore, a need exists to examine the impact of these holistic education programs that are becoming increasingly popular as cancer treatment options on the instructional practices that improve the well-being of cancer patients. Programs that emphasize the holistic dimensions of whole-person healing have the potential to help the community as well as society at large, as healers and educators work together to help patients find ways to cope with such a complex epidemic and disease.

### **Purpose of the Study**

The purpose of this qualitative study was to describe how a holistic education program impacts instructional practices that are designed to improve the well-being of cancer patients. To accomplish that purpose, I explain how instructors in a holistic education program describe the instructional practices that they use to improve the well-

being of cancer patients. I also describe their beliefs about the effectiveness of these practices in improving the well-being of cancer patients. In addition, I describe what documents and archival records related to this holistic education program reveal about the impact of this program on instructional practices designed to improve the well-being of cancer patients.

### **Research Questions**

The research questions for this study were based on the conceptual framework and the literature review.

#### **Central Research Question**

How does a holistic educational program impact instructional practices designed to improve the well-being of cancer patients?

#### **Related Research Questions**

1. How do instructors in a holistic education program describe the instructional practices that they use to improve the well-being of cancer patients?
2. How do instructors in a holistic education program reflect on the effectiveness of their instructional practices to improve the well-being of cancer patients?
3. What do documents and archival records reveal about the impact of a holistic education program on instructional practices designed to improve the well-being of cancer patients?

### **Conceptual Framework**

The conceptual framework for this study has two parts. The first part was based on Mezirow and Taylor's transformative learning theory (Mezirow & Taylor, 2011),

whose major tenets include a learner's disorienting dilemma, exploration of this dilemma, and transformation of the learner based on changes in perspective (Mezirow & Taylor, 2011). Other tenets of this theory include shedding harmful habits of mind and transforming perspectives about one's experiences by becoming aware of internal and external influences (Taylor & Cranton, 2012). The tenets of transformative learning theory will be described in more detail in Chapter 2, including how this theory is articulated and expanded in current research.

Mezirow and Taylor's (2011) transformative learning theory was relevant to this study because when patients are diagnosed with cancer, they experience a disorienting dilemma and must cope with sudden, and often terrifying, life changes. By learning to shift their perspectives, which involve both internal and external influences, patients learn coping mechanisms and can make meaning from their place in the world (Mezirow & Taylor, 2011). For cancer patients, learning to transform their perspectives about cancer may improve their sense of well-being, create a feeling of empowerment, build confidence, ameliorate the harmful physiological effects of stress on the immune system, and help them to make meaning during an uncertain and transitional time period (Mezirow & Taylor, 2011). In this holistic education program, and in this transformative learning process, instructors may be able to offer cancer patients multiple perspectives that encourage paradigm shifts in their thinking and meaning-making schemas (Mezirow & Taylor, 2011).

The second part of the conceptual framework for this study was based on Weimer's (2013) learner-centered teaching. The major tenets of this theory include the

following five key changes to instructional practice: (a) the role of the teacher, (b) the balance of power between instructor and student in the classroom setting, (c) the function of content, (d) responsibility for learning, and (e) the purposes and processes of evaluation. The tenets of this framework will be described in Chapter 2, including how the theory is articulated and expanded in current research.

Weimer's (2013) learner-centered teaching theory was relevant to this study. Cancer patients at the nonprofit cancer center have been diagnosed with a terminal illness and patients and their families may benefit from instructional practices that empower them to make decisions for short-term and long-term care, improve their self-efficacy, and instill a responsibility for learning long-term as they move toward treatment and healing options. The role of these instructors in this holistic program is also important because they act as facilitators in patient education and healing. Their methods must go beyond lecture-based instruction and dissemination of facts to address multiple dimensions of patient wellness.

### **Nature of the Study**

This qualitative study used a single case study research design to describe how a holistic and spiritual program impacts instructional practices that were designed to improve the well-being of cancer patients. As Creswell (2013) and Yin (2014) noted, case studies are appropriate for providing an in-depth understanding of a phenomenon, such as a program, event, or activity. The case or phenomenon in this study was a specific holistic education program known in the Western United States. Participants

included 4 instructors from a pool of 10 instructors who were selected according to specific inclusion criteria described in Chapter 3.

Data were collected from multiple sources, including interviews of instructors employed in this holistic education program, reflective journals maintained by these instructors, and documents and archival records related to this holistic education program. Analysis was conducted at two levels. For the first level, I coded the data for the interviews and reflective journals using line-by-line coding that Charmaz (2006) recommended for qualitative research in order to stay as close to the data as possible. I used a content analysis that Merriam (2009/2016) recommended to examine the documents and archival records, which involved describing its purpose, structure, content, and use. I constructed categories and summary tables for each of these data sources, using the constant comparative method that Merriam (2009/2016) recommended for qualitative research. For the second level, I examined the categories across all data sources for emergent themes and discrepant data; this formed the key findings or results of this study. The results were analyzed in relation to the central and related research questions and interpreted in relation to the conceptual framework and literature review.

### **Definition of Terms**

*Integrative medicine*: healing-oriented medicine that takes account of the whole person, including all aspects of lifestyle. It emphasizes the therapeutic relationship between practitioner and patient, is informed by evidence, and makes use of all appropriate therapies (The Arizona Center for Integrative Medicine, 2016)

*Complementary medicine:* medicine that addresses the physical, social, emotional, and spiritual needs of patients. This definition is slightly different than integrative medicine as it denotes medicine that compliments traditional methods. It does not necessarily involve healing the whole person (Frenkel & Cohen, 2014).

*Palliative care:* designed to prevent or treat, as early as possible, the symptoms and side effects of the disease and its treatment, in addition to the related psychological, social, and spiritual problems (Palliative Care in Cancer, 2016)

*Holistic programs:* For this study, these programs address the eight dimensions of wellness: emotional, spiritual, intellectual, physical, social, environmental, financial, and occupational. These eight dimensions are based on literature gathered from The Holistic Healing Cancer Center in Salt Lake City, Utah (The Holistic Healing Cancer Center, 2016).

### **Assumptions**

This study was based on three assumptions. The first assumption was that participants would answer the interview and reflective journal questions openly and honestly. This assumption is important to this study because maintaining credibility is of utmost importance for qualitative research. The second assumption was that instructors would be able to describe the specific instructional practices that they use to improve the well-being of cancer patients at the research site and that they would be able to reflect on the effectiveness of these practices. This assumption was important because research has demonstrated that instructors often have difficulty describing their specific instructional practices and evaluating or reflecting on the effectiveness of their instruction

(Moore, 2014). The third assumption was that cancer patients and their families are interested in whole-person healing that addresses the eight dimensions of wellness as proposed by a nonprofit cancer center. This assumption was important because the literature review, and the selected research site for this study, were based on current research related to these dimensions of wellness.

### **Scope and Delimitations**

A case study is a bounded study. The scope or boundaries of this case study were defined by the research site. The nonprofit cancer center was selected as the site for this single case study because instructors in this program adhered to the following eight dimensions of healing: (a) emotional; (b) spiritual; (c) intellectual; (d) physical; (e) social; (f) environmental; (g) financial; and (h) occupational. According to program documents, these dimensions comprise the scope of whole-person healing. In addition, the cancer center is a small nonprofit organization that is not affiliated with a specific hospital, so the types of cancer, the cancer stages, and the experiences of patients varied.

This study was also narrowed by participants and time. The first delimitation was related to the participants of the study because I drew from a limited pool of instructors who were employed at this research site. However, I recruited a minimum of 4 out of 10 instructors currently employed at the research site.

The second delimitation was that I collected all data for this study during a 3-month period in 2017. Rather than conducting a longitudinal study over a long period of time, such as several years, I collected data over several months. This timeline, however, still allowed me to collect data from multiple sources, including interviews of instructors

employed at the cancer center, reflective journals maintained by these instructors, and documents and archival records related to this holistic education program. Data collected from multiple purposes in this study was important for triangulation and trustworthiness.

The transferability of the findings from this qualitative study may be limited to holistic education programs for cancer patients that are similar in mission and size. This limited transferability was due to the research design of this study, which is a single case. However, single case studies are still relevant, Yin (2014) acknowledged, if the case is unique or compelling. This single case was unique and compelling because instructors at this site educate cancer patients about their short-term and long-term care options based on the eight dimensions of wellness.

### **Limitations**

Limitations of this study were related to the case study design. The first limitation was the single case. Yin (2014) noted that single case studies provide literal, but not theoretical, replication. However, to address this limitation, data collection and analysis for this study was guided by a theoretical proposition that Yin (2014) noted is similar to a hypothesis in quantitative research. This theoretical proposition is described in Chapter 3. That proposition would need to be replicated in at least four to six cases if theoretical replication were the goal.

Another limitation was the small sample size, which included a minimum of four instructors from a potential pool of 10 instructors who are employed at the research site. However, because this qualitative study was an in-depth description of a single case, which is a holistic program for cancer patients, the number of participants needed to be

limited in order to describe their responses in detail. In addition, this limitation was addressed by collecting data from other sources, such as program documents, instructor journals, and archival records.

Another limitation was the potential for researcher bias because I am the mother of a cancer patient who was receiving treatment that involves traditional cancer treatment methods, as well as integrative medicinal methods. My son was diagnosed with Ewing's sarcoma in October, 2015. In addition to dealing with the heart-wrenching side effects of chemotherapy, which have included extreme hallucinations, nausea, jaundice, and lethargy, my son began to experience depression, fear, and uncertainty about his condition, which affected him even more than the physical issues. As a result, we sought out integrative medicine and palliative care to compliment his traditional treatment. His cancer was successfully treated as of June, 2016. Through a combination of Western medical methods, such as chemotherapy, and integrative healing methods that involve the whole-person, his cancer is now in remission. In order to limit my potential biases about integrative medicine, however, I used specific strategies to improve the trustworthiness of this qualitative research, including data triangulation, member checks, peer-review, and a researcher's journal. I described these specific strategies in Chapter 3.

### **Significance of the Study**

The significance of this study was determined in relation to advancing original knowledge in the field, to improving practice, and to contributing to positive social change. In relation to advancing original knowledge, this case study reduced a research gap about the impact of a holistic education program on instructional practices designed

to improve the well-being of cancer patients by examining studies about newly emerging trends regarding instructional practices related to integrative, complimentary, and palliative medicine. Multiple scholars have emphasized the importance of holistic education (Goswami, 1996; Sinclair, 2010; Schunk, Meece, & Pintrich, 2014; Turner, Goodin, & Lokey, 2012) involving human development and the cultivation of attributes that prepare students for 21<sup>st</sup> century challenges (Greenstein, 2012).

Holistic education may prepare cancer patients to cope with the challenges of anxiety, fear, depression, pain, and uncertainty (Frenkel & Cohen, 2014) and will complement the rapidly emerging cancer treatments involving integrative medicine (Bussing & Janko, 2013; Cramer et al., 2012; Moritz et al., 2006; White et al., 2008). Therefore, the original contribution of this study consisted of examining the impact of a holistic education program on the instructional practices used to improve the well-being of cancer patients.

This study also supported professional practice because it could provide a deeper understanding about how to prepare instructors who work in these holistic education programs. Enhanced preparation for these program instructors may help cancer patients and their families to become well-informed about the choices that they need to make about patient care. As healthcare professionals and educators embark on a common mission to improve healing and learning for the whole person, such studies will broaden their knowledge base about possibilities for instructional programs that address multiple aspects of the human experience.

This study was expected to contribute to positive social change for individuals, families, organizations, and society. Individual patients and their families may benefit from knowing the options available for patient care so that they may make appropriate decisions for short-term and long-term care based on their education. Additionally, families and loved ones may also benefit from this study because consideration of the whole person may contribute to the healing and psychosocial well-being of cancer patients and those around them who are affected by the disease. In relation to organizations, this study may benefit other holistic education programs in that future instructional designers and medical educators can address the whole person in their methods and practices. Furthermore, this study may contribute to positive social change for society. Transformative learning theory supports providing the most complete and accurate information available to patients. This can help them shift their perspectives by weighing the evidence based on this information and considering various options to support their best judgments (Mezirow & Taylor, 2009). In addition, this study may benefit society because finding a cure for cancer will most likely involve holistic education and scientific research.

### **Summary**

This introductory chapter included information about recent empirical studies that give credibility to the need for holistic programs in the field of medicine. Despite the many recent advances in the field of integrative medicine, there is a gap in the literature on the impact of holistic education on the instructional practices used to improve the well-being of cancer patients. This study addressed this research gap in relation to the

following central research question: How does a holistic education program impact instructional practices that are designed to improve the well-being of cancer patients? The purpose of this single case study was to describe the impact of a holistic education program in the Western United States on the instructional practices used to improve the well-being of cancer patients.

This study was innovative because it attempted to bridge the research gap between holistic education and integrative medicine. Because this study described instructional practices designed to improve the well-being of cancer patients in a holistic education program, it met the requirements for the Learning, Instruction and Innovation Program, a doctoral program in education at Walden University. This chapter also included a description of the research method, which will be a single case study. In addition, assumptions, limitations, and significance were discussed.

Chapter 2 is a review of the literature, including an analysis of research related to integrative, complementary, and palliative medicine for whole-person healing of cancer patients, as well as holistic instructional methods. Add preveiw of Chapters 3–5 as well.

## Chapter 2. Literature Review

### **Introduction**

Recent advances in medicine, integrative medicine, alternative or complimentary medicine, and palliative care have all positively impacted patients with cancer (Bussing & Janko, 2013; Cramer, Lauche, Paul, & Dobos; Moritz et al., 2012; White, Verhoef, Davison, Gunn, & Cooke, 2008). Concurrently, scholarly interest in the holistic aspects of human experiences, as they pertain to learning and education, has increased (Goswami, 1996; Roberts, 2010; Sinclair, 2010; Schunk, Meece, & Pintrich, 2014; Tuner, Goodin, & Lokey, 2012). Despite these recent advances, a research gap remains on the impact of holistic education programs on instructional practices designed to improve the well-being of cancer patients. For this study, it was important to view cancer patients as students of their own condition who make decisions for their short-term and long-term care. In combining integrative medicine with holistic education, cancer patients, their families, and educators can actively work together to take steps toward healing in an innovative way. Therefore, the purpose of this study was to explore the impact of a holistic education program on instructional practices used to improve the well-being of cancer patients.

A brief summary of the research literature indicates that there is a lack of research related to instructional practices that are currently used in holistic education programs to improve the well-being of cancer patients. Prior research has demonstrated how the current emphasis on integrative medicine, complimentary medicine, and

palliative care evolved (Chan et al., 2012; Chow, Liou, & Heffron, 2016; McCreery, 2010; Narahari, Terence, & Aggitaya, 2016; Wollumbin, 2012). In addition, significant research has been conducted in relation to the dimensions of holistic education: (a) emotional, (b) spiritual, (c) intellectual, (d) physical, (e) social, (f) environmental, (g) financial, and (h) occupational (Adamo, 2014; Alves, 2014; Brod, Rattazzi, Piras, & Fulvio, 2014; Maslow, 1954; Montgomery, Strunk, Steele, & Bridges, 2012; Oh & Sarkisian, 2012). However, a research gap still exists about specific holistic educational practices that impact cancer patients.

This chapter is a review of the literature. In this chapter, I describe the literature search strategies that I used to conduct this review as well as the conceptual frameworks and how they are articulated. In addition, I review current research studies related to integrative medicine and the eight dimensions of holistic education. This chapter concludes with a summary and a discussion of the major themes and gaps that emerged from the review.

### **Literature Search Strategies**

Two search strategies were used to conduct this literature review. First, I used *Education* and used *Academic Search Complete* because recent articles were located in multiple fields, including education, social and behavioral sciences, and integrative medicine. The keywords I used for this database were *holistic learning, holistic education, integrative medicine, wellness for cancer patients, holistic education for cancer patients, transformative learning theory, learner-centered instruction, integrative medicine, complimentary medicine, instructional practices, holistic education, learning-*

*centered teaching*, and *complimentary medicine*. I also used Google Scholar in my search for recent empirical research, which included an option to search for peer-reviewed articles. For this database, I used the following keywords: *holistic education*, *cancer patients*, *integrative medicine history*, *recent advances in integrative medicine*, *instructional practices related to holistic education*, and *transformative learning theory*. Second, I used a public library to find recent empirical research through educational books and anthologies concerning the topics, which contained peer-reviewed articles. I asked a librarian where to find up-to-date empirical research about integrative medicine and holistic education.

Several challenges emerged regarding my search for the literature. One challenge was that because a gap exists in the literature regarding holistic education for cancer patients, current research was limited. Therefore, I had to broaden the search for peer-reviewed journal articles, rather than narrow the search through the use of additional keywords. I searched for these articles in the broader fields of integrative medicine and holistic education in hopes that I could find topics that specifically touched on the need for holistic education among cancer patients. For instance, several researchers noted that cancer patients often make decisions about their care based on internet information that is not backed by empirical research. The same problem surfaced with patient information about chemotherapy. Because the topic of holistic education for cancer patients is such a new topic, the search for research was often daunting, and I often had to combine key words in the search engines. I also found the search for recent peer-reviewed journal articles on instructional practices related to holistic education challenging. Using the

word *and* in the library search helped me address this challenge.

### **Conceptual Framework**

The conceptual framework for this study was based on Mezirow and Taylor's (2011) transformative learning theory and Weimer's (2013) learner-centered teaching approach. I selected transformative learning theory because cancer patients go through disorienting dilemmas when they are diagnosed with life-threatening illnesses. They also must form new frameworks and perspectives based on newly discovered information. Holistic instructional practices can potentially aid cancer patients on their journeys of transformation as they navigate new information. In addition, I selected learner-centered teaching as part of this conceptual framework in order to understand the role that instructors in a holistic education program play in helping cancer patients take responsibility for learning about their condition and treatment options.

### **Transformative Learning Theory**

The major tenets of transformative learning theory are based on original contributions that Mezirow and Taylor (2011) made to this theory and more recent contributions that Taylor and Cranton (2012) made regarding the internal and external influences that determine learners' habits of mind. Tisdell and Tolliver (2009) and MacLeod and Egan (2011) have also conducted research that supports this theory. In order to understand how transformative learning theory has evolved, it is important to include both earlier and current research. In this section, therefore, I describe major tenets of the original research, and I describe major tenets based on more recent research. In addition, I discuss why this research was important for this study.

Mezirow and Taylor (2011) defined transformative learning as learning that transforms detrimental frames of reference to promote emotional healing, inclusive thinking, critical reflection about assumptions, and formation of healthy meaning schemas, or patterns of thinking. Transformative learning theory has to do with learning for the self, or learning to make judgments based on critically examining assumptions. The concept of individuation, or the Jungian view of becoming more aware of one's own conscious and unconscious nature in order to improve the self, also influenced the development of this theory. The need for transformation is often triggered by a disorienting dilemma, trauma, or conflict in a person's life. The transformation begins, Mezirow and Taylor contended, when the conflict occurs and the learner must find ways in which to cope with the dilemma and make decisions according to old and new knowledge.

According to Mezirow and Taylor (2011), a transformative cycle can be completed in the following 10 steps: (a) experiencing a disorienting dilemma, (b) conducting a self-examination, (c) feeling alienated or stepping outside of one's comfort zone, (d) expressing a sense of discontent to others, (e) exploring options for changed behavior, (f) building confidence with new knowledge, (g) taking action based on new knowledge, (h) implementing a plan, (i) experimenting with newly found roles, and (j) reintegrating into society. In considering the context of the experience of a cancer patient, the disorienting dilemma would be the terrifying diagnosis of a terminal illness. The patient would conduct a self-examination based on this newly found information, as well as consider what really matters in relation to current assumptions about self and world.

This self-examination would then lead to a feeling of alienation in the sense that the patient might feel frightened or alone because no one understands exactly what it is like to physically and emotionally face such a diagnosis. This realization may lead to expressing discontent to others, as well as feeling a sense of desperation to find solutions. At this point, the patient and his or her family would explore options for changed behavior. Patients and their families often rely on oncology centers at hospitals to explore options, or they revert to reading information on the internet, which can be dangerous if not backed up by empirical research (Cramer et al., 2012). Ideally, once the gap is bridged between integrative medicine and holistic education, the patient and his or her family would have more options to determine future directions for healing. With new information, the patient's level of confidence would improve regarding his/her plans for short-term and long-term care. Taking action and implementing a plan would follow, and the cancer patient would combine new knowledge with old assumptions to create transformation. The journey concludes with the patient's experimentation with newly discovered roles, or with holistic education, concerning short-term and long-term care options. Finally, the patient reintegrates into society, with a shifted perspective about his/her condition and options to treat it based on the most up-to-date and empirically supported information possible.

**Articulation in current research.** Taylor and Cranton (2012) described transformative learning theory as a way for individuals to discover new aspects of themselves through thinking, reflecting, feeling, and acting based on new perspectives. These new perspectives are often catalyzed through information that instructors or

facilitators provide. In addition, Taylor and Cranton maintained that collaborative learning often occurs in the classroom so that peers learn new perspectives from each other, which eventually shifts student paradigms as they reflect on their relationship to the world. Furthermore, Taylor and Cranton articulated the need for transformative learning in education in order to address all dimensions of learners as whole people in relation to the biosphere and cosmos.

In a quantitative study about the use of specific instructional practices to transform student learning, Heddy and Sinatra (2013) recruited 55 undergraduate students from a southwestern university to determine positive affect and conceptual change in relation to their learning about biological evolution. Instructional methods for the course included lectures and group discussions about biological evolution in which students talked about their beliefs and experiences with this scientific concept. Heddy and Sinatra analyzed surveys and found that students transformed their conceptual understanding of biological evolution as a result of these instructional practices. This study is significant because students changed their thinking about biological evolution because they were provided with opportunities to share their beliefs and experiences about evolution with their peers.

Other transformational teaching techniques articulated in current research include reflective practices and teaching for social responsibility. In a qualitative study, Ossa Parra, Gutierrez, and Aldana (2015) explored critically reflective teaching practices in relation to transformative teaching and learning. Marcela et al. (add year) designed a critically reflective teaching approach and then asked several professors at a private

university in Bogota, Columbia to reflect on how they used this approach in their courses. Three instructional principles emerged for preparing students to be self-directed and socially responsible learners: (a) an emphasis on student experiences and contexts; (b) the ability to confront teacher and student perspectives in course discussions, and (c) an emphasis on broader social and environmental contexts. This research is important because a critically reflective teaching approach helps students to transform their current paradigms through reflective, experiential, and collaborative activities and helps them to think of themselves in relation to society as a whole.

Other perspectives on transformative learning theory are articulated in research that Tisdell and Tolliver (2009) and MacLeod and Egan (2009) conducted. Tisdell and Tolliver explored transformative approaches to culturally responsive teaching and found that transformative learning and teaching involves connecting to others and to the world as a whole. They also found that images, cultural stories, symbols, narratives, music, art, poetry, and dreams are powerful tools that can aid in new patterns of thinking. In a discussion about transformation in palliative care, MacLeod and Egan maintained that an emerging theme is that health personnel need to become more cognizant of self (internal) and the world (external), and the needs of patients as whole persons also needs to be addressed. MacLeod and Egan also maintained that transformative learning theory in a medical context involves opening new doors and opportunities for patients to discover diverse and alternative perspectives on events through reflection. Individual reflection, as well as reflection in groups, helps cancer patients to change their beliefs, attitudes, and emotional expressions related to their condition. As MacLeod and Egan contended, the

medical field is in need of more educational programs that transform cancer patients and their families. To achieve that goal, they recommended group activities, collaborative education with patients and their families, providing patients with community resources, finding ways to express emotions and tell stories, and practicing reflective activities, such as journal writing. These studies are important because they describe specific practices and activities that address the holistic learning needs of patients.

Another tenet of transformative learning theory that is articulated in current research involves a Jungian view of individuation (Dirkx, 2012; Mezirow & Taylor, 2011; Tisdell & Tolliver, 2009). In their discussion of transformative approaches to culturally responsive teaching, Tisdell and Tolliver (2009) noted that Jung believed individuals need to be mindful of internal and external circumstances that may affect their patterns of behavior. In a related discussion about a Jungian approach to transformative learning, Dirkx (2012) noted that transformative learning involves soul work, or using personal, imaginative, and symbolic methods to find deep and powerful ways to transform expressions of self and world. Dirkx suggested specific methods of instruction to impact transformative learning experiences and empower the whole person, including student-centered teaching, group activities, active learning environments, storytelling and sharing of peer experiences, and teaching that allows for paradox, contradiction, and expressions of the soul. For cancer patients who are struggling with a terrifying diagnosis and new journey for healing, Tisdell and Tolliver argued that these activities help patients to make new meaning by combing new and old threads of thinking and feeling.

## **Learner-Centered Teaching**

According to Weimer (2013), learner-centered teaching involves five key changes to instructional practice that helps students become responsible for their own learning and to become active participants, rather than passive listeners, in the learning process. These instructional changes involve (a) the role of the teacher, (b) the balance of power between the instructor and the student, (c) the function of content, (d) the responsibility for learning, and (e) the purposes and processes of evaluation.

In relation to the role of the teacher, Weimer (2013) discussed the importance of the teacher as a facilitator. In this role, the facilitator realizes that students need guidance and support, but that they also need to work on their own learning activities, as well. To illustrate this idea, Weimer used various metaphors to describe the role of the teacher. The first is teacher as a guide or mountaineer. In this view, the teacher forms a rope and provides opportunities for navigation, and the student is the one who does the hiking and climbing. Second, the role of a teacher in student-centered teaching is a gardener. In this metaphor, the teacher propagates and tends to the garden, but the student is the one who actually bears the fruit. The third metaphor is that the role of the teacher is midwife. The teacher is there during the birth of learning; however, the student is the one giving birth to the learning.

In addition to these metaphors, Weimer presented the following seven principles in relation to the role of the teacher: (a) teachers allow students to do more learning tasks; (b) teachers tell less, and they allow students to discover more; (c) teachers do instructional design work more critically to encourage more student participation; (d)

teachers model how experts learn; (e) teachers encourage group and collaborative learning opportunities as well as peer learning; (f) teachers and students work together to create a climate for learning and to promote student responsibility; (g) teachers encourage learning through self-evaluation and peer evaluation. These principles help to guide curricula and instructional practices that promote learner-centered teaching.

Concerning the balance of power, Weimer (2013) discussed how distribution of control in learner-centered teaching should be divided evenly between teachers and students. Teachers exert power in the classroom by assigning due dates for learning tasks and designing the course syllabus. However, students also demonstrate power by choosing from a variety of learning materials, choosing from multiple assignments to accomplish a learning outcome, or deciding how certain assignments should be evaluated. However, Weimer noted that achieving a balance of power between teachers and students requires regular reinforcement from teachers to empower and build confidence in students.

Concerning the function of content, Weimer (2013) contended that the quality of content, not the quantity of content, makes a difference in learner-centered teaching. Weimer believed that content has two purposes: (a) to enhance knowledge, and (b) to build learning skills for long-lasting learning. If students are given a massive amount of information to memorize and regurgitate, they often do not retain that information. If students are given more opportunities for deeper learning that includes opportunities to relate topics to their own experiences, Weimer believed that long-lasting learning occurs more often.

In relation to responsibility for learning, Weimer (2013) noted that student responsibility is closely related to classroom climate, which is defined as the classroom environment that includes the complex relationship between teachers and students. In order to promote a climate that encourages student responsibility, Weimer suggested the following components: (a) logical consequences; (b) consistency; (c) high standards; (d) caring; and (e) commitment to learning. Furthermore, Weimer suggested that students be involved in creating and maintaining a positive classroom learning climate. Weimer believed that a needs assessment activity is a good ice breaker for establishing a positive classroom climate. This assessment might include the following questions: What is the best class you have ever taken? and What is the worst class you have ever taken? After reviewing these assessments, the teacher could facilitate an understanding about instruction that will be conducive to accomplishing meaningful learning. End of course assessments can also help students to participate in establishing a positive classroom climate. These assessments could include opportunities for students to describe significant learning moments that they experienced during instruction.

Concerning the purposes and processes of evaluation, Weimer (2013) maintained that learner-centered teaching involves both self-evaluation and peer-evaluation. In addition, Weimer believed that teachers should reduce the emphasis on grades. Weimer stated, “The emphasis on grades causes students to work for grades and not for learning, or at least not for the deep, lasting learning equated with understanding” (p. 170). Weimer did not mean that educators should omit the grading system, even though some educators have already implemented competency-based evaluation methods. Weimer suggested that

grades should be balanced with students' self-evaluations and with peer evaluations. Students would then have more responsibility for their own grades in conjunction with teacher designed assessments. Additionally, students would be encouraged to develop higher-order thinking skills, such as critical thinking, collaboration, and civic engagement and cheating would be discouraged. Weimer recommended the following strategies to implement a more balanced approach for evaluation of student learning: (a) use the power of grades to empower and motivate students; (b) decrease stress in evaluation experiences; (c) use evaluation only to assess learning and avoid hidden agendas and overwhelming exams; and (d) use more formative feedback throughout the course.

Thus, learner-centered teaching was relevant as the conceptual lens for this study because the goal of this approach is to empower students (i.e., cancer patients in this study) to be proactive about their education and decision-making regarding short-term and long-term cancer care. Weimer (2013) contended that learner-centered teaching is a powerful tool for enhancing student attitudes, skills, and knowledge and for developing a deep understanding of decision-making based on experience and reflection. Weimer believed that teachers act as guides in learner-centered teaching: they are there for students through their journey of learning, carefully directing them toward the appropriate paths based on their individual contexts.

**Articulation in current research.** Recent research also supports the learner-centered teaching approach across multiple fields (Altay, 2014; Colley, 2012; Megwalu, 2014; Schroeder, 2012). In a discussion about practicing learner-centered teaching, Megwalu (2014) supported Weimer's notion that learner-centered teaching is not a

theory, but an approach aligned to multiple learning theories, such as critical, feminist, radical, constructivist, and transformative. This research is significant because a learner-centered teaching approach is particularly beneficial to the fields of education and medicine. In addition, this approach aligns with transformative teaching and learning, which is also a conceptual lens for interpreting the findings of this study.

In a related study about user-centered design through learner-centered instruction, Altay (2014) described how learner-centered teaching appeals to three domains of learning: cognitive, affective, and psychomotor. Altay found that students in a college-level human factors course appreciated the opportunity to use a variety of material and instructional methods because they could relate to and reflect on the material and the instruction. Human factors are defined by Altay as how human beings relate to dynamic systems for their well-being. Altay recommended that teachers use four types of activities to support learning-centered teaching, which included case-based activities, role play, project-based activities, and reflection. This study is relevant because it provides examples of learner-centered instructional practices that address wellness for the whole person.

In other current research about learner-centered teaching, Colley (2012) described the perceptions of nurses in relation to a change that a nursing school made to a learner-centered philosophy. Colley found that student-centered learning involves these components: (a) a safe and comfortable learning environment, (b) less focus on the teacher and more focus on the student learning process, (c) shared control between the teacher and student, which increases student empowerment, and (d) a strong emphasis on

students' experiences and how they relate to the learning process (Colley, 2012). Colley also found a strong theme of balance regarding instructional practices. A balance of power between teachers and students, as well as a balanced curricula, were both relevant findings in this study. This research is important because it addresses the need for learner-centered and holistic instructional practices in the medical field.

In other research, Schroeder (2012) explored how students become engaged in the classroom through learner-centered activities and described specific strategies in order to catalyze engaged learning. Schroeder supported Weimer's (2013) beliefs that the balance of power between the teacher and student can be achieved when teachers design the learning process and when students take responsibility for their own learning. Schroeder believed that the teacher as facilitator is the springboard upon which student learning develops and soars.

Thus, a learner-centered teaching approach is relevant to this study because cancer patients become active participants in their own health conditions. The more balanced guidance they receive regarding various healing options, the more likely they are to make educated decisions regarding their short-term and long-term care (Cramer et al., 2012).

### **Literature Review Related to Key Concepts**

The site chosen for this study, a nonprofit cancer center located in the Western United States, has been selected for its innovative approach to whole-person healing that may provide insight into the learner-centered teaching practices that instructors use to improve the well-being of cancer patients. Therefore, the review of the literature will

focus on two main areas: (a) integrative medicine, complimentary medicine, and palliative care for cancer patients, including a historical perspective, modern practices, and holistic education programs located in cancer centers across the United States, and (b) the eight dimensions of healing that cancer center supports in relation to their instructional practices. These topics are relevant because they reveal recent research trends in the fields of medicine and education. Additionally, an exploration of current research related to these topics reveals gaps in the literature related to the impact of holistic education programs on the instructional practices used to improve the well-being of cancer patients.

### **Integrative Medicine, Complimentary Medicine, and Palliative Care**

Integrative medicine, complimentary medicine, and palliative care are current approaches used for the holistic treatment of cancer patients. For this study, integrative medicine is defined as healing-oriented medicine that takes account of the whole person, including all aspects of lifestyle (Chow, Liou, & Heffron, 2016; The Arizona Center for Integrative Medicine, 2016). Complimentary medicine is defined as medicine that addresses the physical, social, emotional, and spiritual needs of patients (Kalsi & Ryan, 2016; Frenkel & Cohen, 2014). Palliative care is defined as designed to prevent or treat, as early as possible, the symptoms and side effects of the disease and its treatment, in addition to the related psychological, social, and spiritual problems (Masel et al., 2016; Palliative Care in Cancer, 2016; Sawatski et al., 2016).

**Historical perspective.** It is difficult to determine a precise date regarding when integrative medicine, complimentary medicine, and palliative care began emerging in the

field of medicine. Some scholars claim that integrative medicine began with the ancient Chinese and Ayurvedic methods dating back to the 14<sup>th</sup> century BCE (Brosnan, Chung, Zhang, & Adams, 2016; Chan et al., 2012; McCreery, 2010; Wollumbin, 2012). In a discussion about practices in reviewing and publishing studies on herbal medicine, with special emphasis on traditional Chinese medicine, Chan et al. (2012) noted that various healing practices and their applications that included combinations of herbs and materials date back to 1,100 BCE.

An example of the influence of Chinese medicine is the neti pot that was invented thousands of years ago, which is still used today for nasal congestion and sinus infections by many Eastern and Western physicians. In a discussion about integrative medicine, McCreery (2010) noted that Ayurvedic healing systems, which also date back thousands of years, revolved around aspects of mind, body, and spirit for whole-person healing. In a related discussion of Ayurvedic pharmacology and herbal medicine, Sharma and Chaudhary (2015) noted that Ayurveda is a system involving balance, which includes the physical, spiritual, and psychosocial dimensions of healing for preventative and curative patient care. Contemporary examples of Ayurvedic care include yoga, meditation, nutrition, and exercise.

The influence of these approaches on the medical field in the United States came into prominence in the 1980s and 1990s with the emergence of holistic primary health care (House, 2016; Wollumbin, 2012) and the rising popularity of complementary and alternative care (Rekel, 2012). Complementary and alternative care was utilized by 42% of the population in the 1990s (Rekel, 2012). A common example of complementary and

alternative care is chiropractic medicine, which focuses on whole-person healing through the understanding of the human frame or skeleton (Gleberzon & Stuber, 2013). With a rising interest in balanced healing for patients, an increasing number of physicians began to explore the impact of complementary and alternative care on cancer patients. Through these approaches, physicians and patients became partners in the healing process.

Western medicine methods were combined with Eastern medicine methods to positively affect the overall well-being of the patients, which no longer included only the physical aspects of healing, but also the spiritual and psychosocial components of human health (Wollumbin, 2012).

In more current research, Horrigan, Lewis, and Abrams (2012) explored how integrative medicine is currently practiced in clinical centers across the United States, and they found that integrative medicine involves the following components: (a) a partnership of doctors, patients, and their families in the healing process, (b) balanced consideration of the factors that influence wellness, (c) wholeness for the care of individuals, which includes, mind, body, and spirit, and the individuals' relationship to their environment, (d) use of integrative methods to appropriately heal individuals, (e) use of natural remedies when appropriate, and (f) an inquiry-driven approach to patient care, as well as an open mind for various healing methods. Horrigan et al. also found an increasing number of centers across the United States that have begun to integrate holistic healing into their short-term and long-term patient care plans, particularly for patients with terminal illnesses such as cancer.

**Modern practices.** Modern practices of integrative medicine, complementary

medicine, and palliative care have been significantly influenced by historical roots in holistic medicine (Chan et al., 2012; Chow, Liou, & Heffron, 2016; McCreery, 2010; Narahari, Terence, & Aggitaya, 2016; Wollumbin, 2012). In a study about why some men with prostate cancer choose complementary and alternative medicine over conventional cancer treatments, White et al. (2008) selected 29 men to participate in semi-structured interviews and focus groups to determine why they declined conventional treatment methods, such as chemotherapy. White et al. found that participants declined conventional methods because they believed that chemotherapy diminished their overall quality of life. Participants also favored healing methods that addressed the well-being of mind, body, and spirit, because many of them believed that cancer is caused by an imbalance in those areas.

White et al. concluded that certain cancer patients may only elect to choose whole person care because of their concern for quality of life. White et al. recommended that physicians work closely with patients to monitor progress and disease status. This study is significant because it demonstrates the importance of addressing the whole person in the healing process and the need for integrative medicine to improve the well-being, confidence, and control of cancer patients during their healing processes.

In other research about modern practices related to complimentary medicine, Cramer, Lauche, Paul, and Dobos (2012) conducted a meta-analysis of the research literature related to mindfulness-based stress reduction for breast cancer. Cramer et al. found that mindfulness-based stress reduction helps cancer patients to realistically address their condition, speed up the treatment process, strengthen their immune systems,

ameliorate harmful side effects of chemotherapy, relieve pain, and enhance physical and emotional well-being. Cramer et al. also found that 40% of cancer patients used both complementary and alternative methods during cancer treatment. They concluded that balance is the key to the cancer healing process and recommended that patients receive more education at cancer clinics concerning options that address healing for the whole person.

In another supportive study, Büssing, Janko, Baumann, Hvidt, and Kopf (2013) explored the spiritual needs among patients living with chronic pain and cancer in a secular society. Büssing et al. found that the multidimensional needs of cancer patients included their existential well-being, empowerment and hope, stress relief, and meaning-making. Büssing et al. also found that holistic healing benefits cancer patients in the following ways: (a) increases a sense of meaning-making, inner peace, and equanimity, (b) relieves feelings of fear, stress, depression, fatigue, anxiety, and stress, (c) enhances a sense of empowerment, confidence, and an active role in the healing process, and (d) promotes coping strategies, control, and resilience. Büssing et al. concluded that physicians and oncologists need to address the multifaceted needs of cancer patients and recommended programs that honor patient well-being. This study is important because the aspects of holistic education that influence cancer patients are clearly identified.

In other related research about modern practices in medicine, Moritz, Quan, Rickhi, and Liu (2006) conducted a randomized, controlled, 8-week trial about a home study-based spirituality education program and found that this program decreased emotional distress and increased the quality of life for mood-disturbed patients. Moritz et

al. also found that this spiritual healing program improved stress, cognitive functioning, fatigue, and depression for mood-disturbed patients. Moritz et al. concluded that mindfulness-based stress reduction improved psychological health in the participants and recommended weekly 2-hours sessions for mood-disturbed patients that included activities such as meditation, yoga, and mindfulness techniques. This study is significant because cancer patients often experience fear and anxiety regarding their condition that worsens the side effects of treatment (Bussing et al., 2013).

**Cancer centers.** While conducting a search to find current research about holistic education programs located in cancer centers across the United States that use specific instructional practices to improve the well-being of cancer patients, it became even more apparent why this study is needed. To date, such holistic education programs are sparse. According to the National Cancer Institute (United States Department of Health and Human Services, 2016), there are 69 cancer centers located in the United States, most of which are funded by research grants and federal grants. Of the 69 centers, 36 centers involve some aspects of integrative medicine, and only three cancer centers have educational programs for patients (United States Department of Health and Human Services, 2016). One of these centers is located in Arizona. One of these centers is The Institute of Medicine offers a Shared Medical Appointment and Readiness Teaching (SMART) program for gynecologic oncology patients, which Precott et al. (2016) described as providing chemotherapy education via a presentation, information pamphlets, and regular doctor's appointments. Even though this program is innovative in the sense that it offers educational and social support for cancer patients, this program

does not include diversified activities that consider the whole person. Serpico et al. (2016) described a similar program at the University of Utah in which instructors used a breast cancer education video to prepare patients for shared decision-making prior to their initial consultation after diagnosis. Even though this program is innovative and provides evidence-based education, it does not consider holistic treatment and healing for the whole person.

The Mayo Foundation for Medical Education and Research (2016), which is in Minnesota, also provides a holistic education program to cancer patients to help them become active participants in their short-term and long-term care. This program offers classes on chemotherapy treatment, instructional lectures on complementary care, and counseling sessions for coping strategies and caregiving. Thus, a review of the research literature for this study revealed only three locations where holistic education programs are offered at cancer centers in the United States, which includes Arizona, Utah, and Minnesota. What separates the nonprofit cancer center in this study from these programs is that it addresses eight dimensions of holistic education for cancer patients.

### **Eight Dimensions of Holistic Education**

Multiple scholars have emphasized the importance of holistic education for cancer patients (Goswami, 1996; Roberts, 2010; Sinclair, 2010; Schunk, Meece, & Pintrich, 2014; Tuner, Goodin, & Lokey, 2012). Holistic education is defined as education that involves the cognitive, emotional, physical, and spiritual dimensions of learning (Montgomery, Strunk, Steele, & Bridges, 2012). In a discussion of the nature of holistic education, Forbes (2012) stated, “Over the last several decades the number of educational

initiatives that describe themselves as holistic has dramatically increased as parents, students, and educators feel that an alternative to mainstream education is needed” (p. xi). The nonprofit cancer center in the Western United States, which was the research site for this study, has defined holistic education in terms of the following eight dimensions: (a) emotional, (b) spiritual, (c) intellectual, (d) physical, (e) social, (f) environmental, (g) financial, and (h) occupational. In this section, each of these eight dimensions will be discussed in relation to current research about holistic healing for cancer patients.

**Emotional dimension.** The first dimension of holistic education is the emotional dimension. This dimension is also related to the affective learning processes of students that Weimer (2013) cited in research about learner-centered teaching. In a related study, Astin, Astin, and Lindholm (2011) conducted a seven-year, mixed-methods study at college campuses across the United States to determine the spiritual and affective needs of students. Astin et al. used surveys and interviews to collect data and found that diversified curriculum and student-centered instructional activities enhanced equanimity, or mental calmness, in college students. Recommended activities included group work, community service learning, meditation, reflective activities such as journal-writing, autobiographical assignments, and field trips. This research is important because achieving equanimity can be a coping tool for cancer patients as they navigate through complex emotions during the healing process (Cassileth, 2014). Holistic education programs for cancer patients can alleviate their feelings of fear, anxiety, and depression (Cassileth, 2014). Furthermore, feelings impact human physiological states, which may deter or benefit bodily health (Montgomery, Strunk, Steele, & Bridges, 2012).

In other related research about the emotional dimension of holistic education, Montgomery, Strunk, Steele, and Bridges (2012) discussed Jungian typology as a holistic teaching strategy in higher education. Montgomery et al. noted how important the emotions are regarding student learning experiences. Through this lens of Jungian psychology pertaining to aspects of the personality, they described how emotions control human individual development, as well as a sense of connectedness to others. Montgomery et al. also noted that students' emotions play a major role in long-lasting meaning-making. If students relate what they learn to their own experiences and emotions, they are more likely to retain information. Montgomery et al. recommended the following learning opportunities to improve the affective dimension of learning: (a) community experience, (b) journaling, (c) research papers, (d) semester-long projects, (e) group projects, and (f) film analysis. This research is relevant because cancer patients retain information concerning their present and future care if they have an emotional connection to what they are learning (Cassileth, 2014).

**Spiritual dimension.** The second dimension of holistic education is spirituality. The word *spirituality* usually beckons to thoughts of religion and even new age themes. A decade or two ago, such topics would have been scoffed at or dismissed in formal academic settings. Recently, however, spirituality has become a rapidly emerging concept in academia. There are many definitions of spirituality, ranging from a connection to a higher purpose and/or deity (English, Fenwick, & Parsons, 2003) to a movement toward wholeness (Palmer, 2009; Tisdell, 2004). In more recent studies,

spirituality has also been defined as a cyclical quest or journey toward purpose and meaning (Astin, Astin, & Lindholm, 2011; Greenstein, 2012; Webster, 2013).

Contemporary empirical research from various fields (e.g., education, sociology, neuroscience, and psychology) links spirituality to increased brain functioning (Holzel et al., 2006); enhanced academic experiences and cognition (Astin, Astin, & Lindholm, 2011; Getz, 2009; Helber, Zook, & Immergut, 2012); increased psychological well-being (Ellison & Fan, 2008; Ho, Chan, Lo, Wong, Chan, Leung, & Chen, 2016; Jain et al., 2006; O'Sullivan, 2016; Stanley et al., 2012; Vaingankar et al., 2012); increased physical well-being (Gaudet & Griggs, 2016) and greater proclivity for social engagement (Neff & Germer, 2013; Oh & Sarkisian, 2012).

In a mixed-methods study, Oh and Sarkisian (2012) investigated the individual and collective aspects of spirituality and how it impacts social engagement. Mind-body-spirit practitioners were recruited from local business and asked to complete interviews and surveys regarding the impact of spirituality on their well-being. This study revealed that spirituality was associated with charitable giving, community volunteer involvement, and positive social change. Oh and Sarkisian recommended spirituality, which is not necessarily religious in nature, as a way to positively impact social engagement through individual and community activities.

In other related research about spirituality, Vaingankar et al. (2012) conducted a study about the development and validation of the mental health instrument that they developed to assess levels of mental health and its six dimensions in a multi-ethnic population in Singapore. Vaingankar et al. discovered that spirituality, as one dimension

of mental health, contributed to positive psychological health through the following activities: (a) meditation; (b) community involvement; (c) reflection; (d) and mind/body practices such as Yoga and mindfulness. This research is important because it includes an important, but often neglected, dimension of well-being for cancer patients.

**Intellectual dimension.** The third dimension of holistic education involves the intellect. Specifically, the intellectual dimension for cancer patients is important because it impacts their desire to learn about their condition. This dimension is also important because it pertains to their ability to make meaning from what they learn, as well as how to fit new knowledge into present frameworks. In significant earlier research, Piaget (1972) defined intelligence as the transformative and static aspects of reality in the human experience. Piaget contended that human intelligence involves both nature and nurture and that intelligence occurs in stages. Piaget believed that humans are born with a certain mental capacity related to genetics, physiological makeup, and other factors. However, Piaget also believed that humans have the ability to adapt and enhance their intelligence based on their environment. Piaget referred to this process as assimilation or fitting new experiences into existing schemas and accommodation or altering existing schemas to fit new information. Both aspects function to increase cognition and intelligence.

In addition to Piaget's definition of intelligence, Vygotsky (as cited in Alves, 2014) believed that instruction plays a major role in the construction of knowledge. To Vygotsky, learning is a social process that requires the active participation of students in their own learning. If intelligence involves nature, or the learner, as well as nurture, or the

instructor, and if cognition is one of the three dimensions of learning (Weimer, 2013), then both are important factors to consider in the holistic education of cancer patients.

In related research about the intellectual dimension, Noble, Crotty, Karande, Lavidés, and Montano (2016) conducted a four-year quantitative study in which they explored the personal and intellectual effects of holistic consciousness on students in college-level courses. Noble et al. defined consciousness as one's sense of reality and how it manifests in physical environments. Pre- and post-tests were used to determine how students viewed their overall intelligence and attitudes before and after a ten-week course on consciousness. During this course, students explored holistic concepts of mindfulness, which included being present in the moment, and they participated in contemplative activities. Students often worked in groups and learned from one another.

Noble et al.(2016) found that these undergraduate college students who examined what it means to be human improved their cognitive and meaning-making skills, enhanced their feelings of optimism and hope, developed a sense of purpose, and increased their desire to learn. Furthermore, feelings of anxiety and depression decreased. Noble et al. recommended implementing consciousness activities in college-level courses to increase cognition, enhance positive attitudes, and impact the desire to learn among students. This study was relevant because holistic instructional methods may enhance students' desire to learn. Research has shown that for cancer patients, addressing the intellectual dimension positively impacts their ability to make educated decisions about their treatment (Frenkel & Cohen, 2014; Cramer, Lauche, Paul, & Dobos, 2012).

**Physical dimension.** The fourth dimension of holistic education is the physical dimension. This dimension is important to cancer patients because their terminal illness manifests in the physical body. Additionally, patient nutrition plays an important role in the body's ability to recuperate from chemotherapy (Cramer et al., 2012). Numerous recent studies have demonstrated the importance of this physical dimension in the role of immune systems and physiological states (Adamo, 2014; Brod, Rattazzi, Piras, & D'Acquisto, 2014; Farooqui & Hassali, 2013; Kalra, 2016; White et al., 2008).

In a meta-analysis of research regarding the fight or flight mechanism in humans, animals, and insects, Adamo (2014) found that short-term and long-term stress causes a decline in resistance to sickness and disease. In other words, when stress occurs, the immune systems become more susceptible to harmful influences. When individuals experience stress, their immune systems may become weaker. For cancer patients, this fact is a vicious circle as they often feel fear, anxiety, and stress concerning their condition, which further worsens their immune system (Frenkel & Cohen, 2014).

In a meta-analysis of research about the fight or flight concept, Brod, Rattazzi, Piras, and Fulvio (2014) discovered that certain emotional responses directly impact cellular responses to stimuli. For example, anger and anxiety reduce cognition and psychological well-being, while relaxation and mirth increase cognition and psychological well-being. Brod et al. also found that well-being is related to physical health. They concluded that stress and depression may be part of a widespread and detrimental worldwide health crisis by the year 2030. Brod et al. recommended more research pertaining to how physical well-being contributes to healthiness. This study is a

testament to why the physical dimension of holistic education is important, particularly in relation to decision-making about care.

Multiple researchers have also noted the importance of nutrition education for cancer patients in relation to the physical dimension (Gavazzi et al., 2016; Muls et al., 2016; Marx, Kiss, McCarthy, McKavanagh, & Isenring, 2016; Murphy & Girot, 2013; Capozzi et al., 2012; Schiavon et al., 2015). In a critical analysis of recent empirical oncology literature conducted in England, Murphy and Girot (2013) explored the dietary and lifestyle behaviors of cancer survivors and found that several themes emerged regarding the importance of educating cancer patients about nutrition and lifestyle behaviors. Themes that emerged included the need for more focused nutritional and lifestyle education for patients during and after treatment, nurse education and professional development regarding quality cancer patient care, and the need for collaboration and inter-professional practice between various fields concerning the wellness of cancer patients. Murphy and Girot found that cancer patients need nutrition and lifestyle behavior interventions and suggested more research to show the benefits of these interventions among recovering cancer patients.

In other research about the physical dimension, Capozzi, Lau, Reimer, McNeely, Giese-Davis, and Culos-Reed (2012) conducted a 12-week randomized and controlled trial study that involved a nutrition and exercise intervention and an educational program for head and neck cancer patients. Capozzi et al. wanted to discover gaps in patient care to reduce harmful physical side effects, psychosocial symptoms, and outcomes of cancer treatments. They found that nutrition therapy alone is not enough to reduce harmful

effects in cancer patients and recommended educational components in addition to therapy to positively impact patient well-being. Capozzi et al. called for a new program to educate patients about their nutritional health for the sake of their overall well-being.

In a similar study, Schiavon et al. (2015) conducted a randomized one-year clinical trial about nutrition education intervention for women with breast cancer. This study included an intervention group of 18 participants and a comparison or control group of 75 participants. The study revealed significant nutritional and dietary transformations in the intervention group, following a treatment that included an educational program about diet, nutrition, and whole well-being. Schiavon et al. recommended more nutritional education intervention programs to better serve women with breast cancer. This research is significant because the body is the vehicle for learning. For cancer patients who experience care in a traditional setting, the body is often overemphasized (Frenkel & Cohen, 2014). However, the eight dimensions of holistic education call for a balance of the body and the mind.

**Social dimension.** Cancer is a complex diagnosis that impacts both patients and their families, particularly in relation to social interactions (Frenkel & Cohen, 2014). The social dimension often promotes a sense of community and interconnection for whole-person healing. Vygotsky's (1978) earlier research on the importance of learning in a social environment reveals that meaningful learning often occurs within the zone of proximal development, which he defined as providing assistance during the learning process. Therefore, according to Vygotsky, learning is considered a social phenomenon because individuals often learn when they receive assistance from others. Even though

learning may occur individually, Vygotsky believed that social settings offer unique opportunities for deeper learning.

In related current research, Kochenderfer and Ladd (2016) discussed how to integrate academic and social and emotional learning into classroom interactions. They described the Piagetian and Vygotskian perspectives of social learning and noted that by working together in groups or on collaborative projects, students learn and retain information at deeper, more meaningful levels. By exposure to varying opinions and paradigms, students may experience conflict, which assists them in developing meaningful schemas. The social dimension of holistic education for cancer patients often includes peer-to-peer learning opportunities that space for developing relationships and building community.

Numerous researchers have also expressed the idea that people need people, especially during times of conflict or crisis (Maslow, 1954; Oh & Sarkisian, 2012; Karnatovskaia, Gajic, & Bienvenu, 2015; Suwankhong & Liamputtong, 2016). In early research about motivation, Maslow (1954) developed a hierarchy of needs, in which love and belonging needs immediately follow physiological and safety needs. Love and belonging needs, Maslow contended, include friendships, family, social groups, communities, and intimacy. As Maslow asserted, if individuals experience the absence of love and belonging in their lives, anxiety, depression, and other mood disturbances may result. In addition, a lack of love and belonging may also adversely impact the physical body.

This idea is also emphasized in Karnatovskaia, Gajic, and Bienvenu's (2016) discussion of Maslow's hierarchy of needs in relation to the holistic care of critically ill patients. By honoring connections between the patient's body and mind in relation to Maslow's hierarchy, Karnatovskaia et al. concluded that the patient, ICU personnel, and the patient's family all play active roles in the healing process. They recommended activities for cancer patients that make them feel loved and help them to feel a sense of belonging to improve their physical condition. Such activities include group activities, meaningful discussions with other cancer patients, and collaborative decision-making among patients, personnel, and their families regarding care.

In other current research, Suwankhong and Liamputtong (2015) conducted a qualitative study about social support for women 20 women living with breast cancer in Thailand. The participants wrote narratives describing the disruptive nature of cancer in their lives to provide personnel with more of a context for their oncology needs. Suwankhong and Liamputtong found that varying forms of social support, including emotional support, educational support, and tangible support, are essential for women facing breast cancer. These types of support were discovered once personnel read the narratives and became sensitive to patients' emotional and spiritual needs. Suwankhong and Liamputtong recommended additional education for nurses and doctors so they can be more culturally sensitive and provide resources to support female patients with breast cancer. This research is important because learning communities provide spaces for deep meaningful learning, and they also provide a network where students or patients can support each other. Additionally, this study is important in addressing the need for

doctors and nurses to be culturally sensitive to the resources that female cancer patients may need.

**Environmental dimension.** Two types of environments are included in this dimension. The first type is the physical environment, which plays a tangible sensory role in the health of cancer patients (Timmermann, Uhrenfeldt, & Birkelund, 2013). The second type is a less tangible environment, but important nonetheless, because it involves how certain environments make patients feel (Preisser et al., 2016). This concept of a sacred space is as important as the physical environment.

In relation to the physical environment, Timmerman, Uhrenfeldt, and Birkelund (2013) conducted a phenomenological study in which they explored how cancer patients experience hospital settings through their senses. Six cancer patients from two cancer wards were interviewed, the transcribed interviews were coded, and themes emerged. Timmerman, Uhrenfeldt, and Birkelund found that physiological sensory impressions, such as auditory and visual stimulation, contribute to the well-being and healing processes of cancer patients. They recommended the following components for optimal physical environments for these patients: (a) access to nature or the outdoors, (b) natural light and a pleasant view, (c) aesthetic aspects such as art and architecture, (d) cultural artifacts and family photos, and (e) items that help patients recognize their identity and purpose. All of these environmental factors contribute to positive well-being among cancer patients.

In similar research about the physical environment, Kordivan, Preisser, Ulrich, Bokemeyer, and Oechsle (2016) conducted a qualitative study about the effects of sound

on healing for cancer patients. They found that music therapy had a positive impact on the well-being of participants and suggested that education will contribute to how physicians address the psychosocial and sensory needs of cancer patients. This research is important because education regarding sound therapy positively impacts the well-being of cancer patients.

In relation to the environment of sacred spaces, Getz (2009) discussed teaching leadership as exploring sacred space. In a five-year-long action research study, Getz explored how reflection and sacred space in an undergraduate leadership course positively impacted teachers and students. By analyzing data that included essays, journals, observations, and interviews, Getz found that reflection and sacred space were important components in self-exploration and transformation in organizations. Getz recommended activities in classrooms that allow teachers and students to critically reflect on themselves in relation to the world. Getz recommended honoring sacred space, or a place where students and teachers feel safe discussing experiential topics, as a way to open up dialogue in the classroom. Additionally, Getz recommended reflective activities such as journal-writing and reflective papers and assignments. This study is important because it addresses how a holistic instructional environment impacts teacher and student learning.

In related case-study research, Heng (2016) discussed the creation of these sacred spaces in spirit mediums and house temples in Singapore. Heng found that unofficial sacred spaces involve stepping outside of political and physical arenas into non-physical

realms of reflection. This research is significant because sacred space, which is not necessarily physical, is important for a positive learning environment.

In other research about sacred spaces, Tisdell (2008) conducted a qualitative study about spirituality and adult learning that included 31 teacher educators. Tisdell found that a sacred space where adults can share stories, cultural values, and create meaning allows for culturally sensitive and dialogically open learning experiences. Tisdell recommended creating art, interpreting symbols, sharing narratives, listening to music, and using instructional strategies that trigger emotional, meaningful responses from students. This research is particularly important because these types of activities catalyze holistic learning environments.

**Financial and occupational dimensions.** The last two dimensions, financial and occupational, are combined because they are often interrelated concerns for cancer patients and their families (McCreery, 2010). The financial dimension includes concerns regarding cancer patients' financial stability. The occupational dimension includes cancer patients' jobs and careers and their sense of purpose related to them.

In related research, Van Egmond, Duijts, Vermeulen, Van Der Beek, and Anema (2015) conducted a 12-month randomized control trial that included 164 participants in order to analyze how a return-to-work intervention program affected cancer survivors who had experienced job loss. Van Egmond et al. found that cancer survivors returning to work felt financially and emotionally vulnerable, experienced a lack of social support from acquaintances and colleagues, and were out of the work force for an extended amount of time. Van Egmond et al. found that a tailored intervention and education

program for cancer survivors was beneficial for cancer survivors, their families, and the economy as a whole. This program was beneficial because it included education, coaching, physical therapy, job assistance such as resume-building and placement into the workforce, and recovery support groups. Van Egmond et al. recommended more intervention groups aimed at educating cancer survivors regarding their occupational and financial well-being.

In a similar study, Raque-Bogdan et al. (2015) interviewed 13 women under the age of 40 with breast cancer. Analysis of the interview data revealed the following themes: occupational and financial challenges and hardships because of cancer; coping with these challenges, returning to work after cancer, and occupational and life satisfaction after cancer. Raque-Bogdan et al. found that breast cancer patients often experienced anxiety because of losing control over their financial and career situations, suffering from depression, and experiencing a lost sense of purpose. However, Raque-Bogdan found that reframing their perspectives, choosing to be optimistic, and seeking control helped cancer survivors to alleviate these negative effects.

These financial and occupational dimensions of holistic education are important because many people, including cancer patients, base their sense of meaning and purpose on their careers and their sense of self-efficacy about their careers. When a terminal illness occurs, Van Egmond et al. noted that it is important, not only for healthcare personnel, but also for educators in cancer programs, to be sensitive to these life-altering feelings of self-worth. Additionally, the financial burden and stress caused by the illness is worthy of consideration because emotional stress may be detrimental to the physical

body (Brod, Rattazzi, Piras, & Fulvio, 2014).

### **Summary and Conclusions**

In summary, this chapter was a review of the research literature. In this chapter, I described the literature search strategy that I used to conduct this study and the major tenets and implications of the conceptual framework for this study. In addition, I reviewed research literature about integrative medicine, complimentary medicine, and palliative care in relation to historical perspectives, modern practices, and holistic education programs located in cancer centers across the United States. I also reviewed current research literature concerning holistic education for cancer patients in relation to these eight dimensions of holistic education: (a) emotional, (b) spiritual, (c) intellectual, (d) physical, (e) social, (f) environmental, (g) financial, and (h) occupational.

Several themes emerged from this literature review. The first theme was that the well-being of cancer patients involves both internal and external components. This theme recurred in much of the historical and contemporary literature about integrative medicine (Chan et al., Cramer et al., 2012; 2012; Frenkel & Cohen; Gleberzon & Stuber, 2013; McCreery, 2010; Rekel, 2012; White et al., 2008; Wollumbin, 2012), as well as in the eight dimensions of holistic education (Adamo, 2014; Alves, 2014; Brod, Rattazzi, Piras, & Fulvio, 2014; Maslow, 1954; Montgomery, Strunk, Steele, & Bridges, 2012; Oh & Sarkisian, 2012). Internal aspects include the emotions (Astin, Astin, & Lindholm, 2011; Cassileth, 2014), psychological health (Ellison & Fan, 2008; Ho, Chan, Lo, Wong, Chan, Leung, & Chen, 2016; Jain et al., 2006; Stanley et al., 2012; Vaingankar et al., 2012), meaning-making (Tisdell, 2008), spirituality (Vaingankar et al., 2012), and a sense of

purpose (Raque-Bogdan et al., 2015). External aspects include physiological health (Adamo, 2014; Brod, Rattazzi, Piras, & D'Acquisto, 2014; Farooqui & Hassali, 2013; White et al., 2008), family involvement, social engagement and relationships, and community building (Vygotsky, 1978; Kochenderfer & Ladd, 2016; Maslow, 1954; Oh & Sarkisian, 2012; Karnatovskaia, Gajic, & Bienvenu, 2015; Suwankhong & Liamputtong, 2016). This theme is important because instructional methods that are used in holistic education programs need to include both internal and external dimensions of learners who are cancer patients.

The second theme was that holistic education instructors need to use instructional practices that are diversified and balanced. Many studies in the literature review recommended holistic education that involves diversified learning activities. Those activities include collaborative tasks such as group work and community service learning, reflective activities such as journal writing and meditation, autobiographical and cultural activities such as storytelling and art, activities that involve exercise and nature, such as field trips and community involvement, and class discussions that allow differing perspectives and opinions (Altay, 2014; Alves, 2014; Astin, Astin, & Lindholm, 2011; Colley, 2012; Getz, 2009; Schroeder, 2012; Tisdell, 2008; Tisdell & Tolliver, 2009; Weimer, 2013; Taylor & Cranton, 2012). This theme is important because it provides insights into the practices that instructors use in holistic education programs for patients with cancer.

The third theme was that cancer patients go through a journey of transformation in the treatment and healing process. This concept was prevalent in the research literature

related to the conceptual framework and in the research literature related to integrative medicine, complimentary medicine, and palliative care (Cassileth, 2014; Mezirow & Taylor, 2011; McCreery, 2010), which fits the cancer patient's journey, beginning with a disorienting dilemma and ending with reintegration. In a Jungian sense (Dirkx, 2012), the patient also goes through a process of transmutation and individuation in relation to self and world. Additionally, learning is often a journey of transformation (Astin, Astin, & Lindholm; 2011; Weimer, 2013; Dirkx, 2012; Montgomery, Strunk, Steele, & Bridges, 2012; Tisdell & Tolliver, 2009). The concept of the cancer diagnosis and treatment process as a transformative journey is important because the instructor is a guide who will help the patient navigate various paths to achieve this transformation. The patient's peers and family are companions or travelers on the journey, as well. If they all have relevant information that attends to the healing of the whole person, they can make informed decisions about which paths to take on their journey.

The fourth theme was the need for more holistic education regarding short-term and long-term care for cancer patients. Some of the studies specifically called for more research about patient education (Capozzi et al., 2012; Cramer et al, 2012; Frenkel & Cohen, 2014; Murphy & Girot, 2013); , but only one study explored a holistic education program for cancer patients (Schiavon et al., 2015). Furthermore, most of the studies were concerned with education for healthcare providers, not patients themselves (Adamo, 2014; Alves, 2014; Brod, Rattazzi, Piras, & Fulvio, 2014; Montgomery, Strunk, Steele, & Bridges, 2012; Oh & Sarkisian, 2012).

Several gaps also emerged from this review. The first major gap was that even though holistic education for cancer patients is clearly needed, there is a lack of research about this type of education. Additionally, none of the studies explored specific holistic educational practices that instructors use to support the well-being of cancer patients. Therefore, this study was innovative because it specifically addressed the impact of a holistic education program on instructional practices designed to improve the well-being of cancer patients.

Chapter 3 will cover research method used for this study, including the research design and rationale, and the role of the researcher. In relation to the methodology, this study will also include a description of participant selection, instrumentation, procedures for recruitment and participation and data collection, and data analysis procedures. In addition, issues of trustworthiness and ethical procedures for qualitative research will also be discussed.

## Chapter 3: Research Method

### **Introduction**

The purpose of this qualitative study was to describe how a nonprofit holistic education program in the Western United States, impacts instructional practices designed to improve the well-being of cancer patients. To accomplish this, I gathered data from interviews, archival documents, and online reflective journals. At the first level, data analysis involved transcribing recorded interviews manually. At the second level, data analysis involved line-by-line coding. I describe how instructors in the holistic education program describe the instructional practices they use and their effectiveness to improve the well-being of cancer patients. I describe their beliefs about these practices in improving the well-being of cancer patients. Furthermore, I explore what documents and archival records related to this holistic education program revealed about the impact of this program on instructional practices designed to improve the well-being of cancer patients.

This chapter is about the research method that was selected for this study and will include the following sections: (a) research design and rationale; (b) role of the researcher; (c) participant selection; (d) instrumentation; (e) procedures for recruitment, participation, and data collection; (f) data analysis plan; (g) issues of trustworthiness; and (h) ethical procedures.

### **Research Design and Rationale**

The research questions were based on the conceptual frameworks for this study

and the literature review. They were as follows:

### **Central Research Question**

How does a holistic educational program impact instructional practices designed to improve the well-being of cancer patients?

### **Related Research Questions**

1. How do instructors in a holistic education program describe the instructional practices that they use to improve the well-being of cancer patients?
2. How do instructors in a holistic education program reflect on the effectiveness of their instructional practices to improve the well-being of cancer patients?
3. What do documents and archival records reveal about the impact of a holistic education program on instructional practices designed to improve the well-being of cancer patients?

A single case study design was used for this qualitative study. Yin (2014) defined a case study research design in two parts. In the first part, “A case study is an empirical inquiry that investigates a contemporary phenomenon (the “case”) in-depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (p. 16). In other words, there are too many indistinguishable variables and permutations to measure, and the lines between context and phenomenon are blurred. Instead of variables, case studies have features that help the researcher to understand a real-world phenomenon. In the second part of this definition, Yin noted that

A case study inquiry copes with the technically distinctive situation in which there will be many more variable of interest than data points, and as one result relies on

multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis. (Yin, 2013, p. 17)

Since there are many variables in a case study, triangulation of multiple sources of data is key to understanding the case or phenomenon. Yin also advocated the development of a theoretical proposition or hypothesis to help the researcher analyze the data.

A single case study design was chosen for this study because the goal of this study is to understand a single case or phenomenon, which is a specific nonprofit cancer center located in the Western United States. Yin (2014) noted that a single case study design can be used when the phenomenon under investigation is compelling or unique. This case was unique because it is a cancer center that is distinctively separate from hospitals as an innovative nonprofit organization and because it emphasizes multiple dimensions of holistic education. Specifically, the goal of this study was to describe this case in relation to instructional practices designed to improve the well-being of cancer patients. Data will also be collected from multiple sources to present a rich picture of this phenomenon. Therefore, a case study design is appropriate to answer the research questions designed for this study.

Other qualitative research designs, such as phenomenology, grounded theory, and ethnography, were considered but rejected. According to Creswell (2013), phenomenology involves exploring the in-depth experiences of a phenomenon in relation to subjective participant world views. This research design was not appropriate because the intent of this study is not to describe the lived experiences of instructional staff or to

understand cancer patients' world views. Creswell described grounded theory as the development of a theory about a specific phenomenon. However, the purpose of this study was not to create a theory about holistic education for cancer patients. Ethnography was also considered as a qualitative research design. Creswell noted that this research design involves becoming immersed in a culture or organization over an extended period of time. While this design would have been ideal for observations of instructional practice over an extended period of time, the purpose of this study was not to study the culture of these instructors over a long period of time.

### **Role of the Researcher**

As the single researcher for this study, I was responsible for selecting the design for this study, determining participants, designing the instruments, and collecting and analyzing all data. Therefore, the potential for researcher bias exists. Later in this chapter in a section on issues of trustworthiness, I will describe specific strategies that I used to reduce this potential bias.

In my current position, I am an admissions counselor and student advisor for a university in the Western United States. However, I have no relationship with the instructors at the research site, and I am not employed at this site. My graduate studies have also focused on holistic instructional practices in the field of adult and higher education. Additionally, I have been employed as an adjunct professor of humanities at a local university, and I have implemented holistic instructional practices in this position. My son's cancer experience with Ewing's sarcoma, combined with my graduate studies, catalyzed my desire to conduct this study.

## **Methodology**

This study consisted of a qualitative single case study design. Methodology pertaining to this study will be discussed in this section, including participant selection logic, instrumentation, procedures for recruitment and data collection, the data analysis plan, issues of trustworthiness, and ethical procedures.

### **Participant Selection Logic**

Participants for this study included instructors currently employed at the nonprofit cancer center in the Western United States. I selected a minimum of four to six participants for this study from a potential pool of ten instructors who were recruited from this center. Participants were selected according to the following inclusion criteria: (a) they must be employed at least part-time at the cancer center; (b) they must currently be implementing some of the eight dimensions of holistic education; and (c) they must be able to describe their previous educational and/or training background in holistic education.

### **Instrumentation**

For this single case study, I designed three instruments. The first instrument was the interview guide (see Appendix B) that I used to conduct individual interviews with instructors at the nonprofit cancer center. The second instrument was the online reflective journal that these same instructors maintained for a short period of time. The third instrument was a document and archival record data collection (see Appendix D) form that I used to collect documents and archival records related to The Holistic Healing Cancer Center in Salt Lake City, Utah.

## **Interview Guide**

The interview guide that I designed for this study is based on Merriam and Tisdell's (2016) recommendations for conducting effective interviews for qualitative research. I chose the semi-structured interview format because it supports the use of pre-determined questions that follow a specific order and the use of probing and follow-up questions when needed. This semi-structured format was used in the face-to-face interviews. Merriam and Tisdell also recommended the following techniques for conducting good interviews: (1) avoiding yes-or-no questions, multiple questions, and leading questions; (2) using careful wording, such as avoiding jargon; (3) asking good probing or follow-up questions to enhance descriptive data; (4) beginning the interview with more neutral questions and leading into more personal and sensitive questions as the interview progresses; and (5) being cognizant of body language, stance, and interviewee comfort during the interview. Merriam and Tisdell also recommended considering the following types of questions to maximize responses from participants: opinions and values; knowledge and feelings; behavior and experiences; sensory; and demographic and background. For this study, I have designed 8 open-ended semi-structured interview questions that are presented in Appendix B.

## **Online Reflective Journal**

The online reflective journal (see Appendix C) that I designed for this study included five open-ended questions that are based on Weimer's (2013) research about learner-centered teaching in relation to key changes to instructional practice. For this instrument, I asked participants to write a paragraph response to each open-ended

question. Participants returned these responses to me as an email attachment within two weeks. These semi-structured journal questions are in Appendix C.

### **Document and Archival Record Data Collection Form**

For the documents, I have designed a document and archival data collection form that I have adapted from the content analysis that Merriam and Tisdell (2016) recommended for qualitative research. This content analysis involves describing the purpose, structure, content, and use of each document. This document and archival record data collection form is located in Appendix D.

To ensure that these instruments align with the research questions, I have asked an expert panel to review the instruments for their alignment with the research questions before I begin collecting data. This expert panel consisted of three colleagues with advanced degrees in education (masters degrees or beyond). I have also aligned these instruments to the data sources for this study in Table 1 below.

Table 1

#### *Alignment of Data Sources to Research Questions*

	CRQ	RR1	RR2	RR3
Interviews	X	X		
Reflective Journals	X		X	
Documents/Archival Records	X			X

### **Procedures for Recruitment, Participation, and Data Collection**

In relation to recruitment and participation, I contacted the executive director of The Holistic Healing Cancer Center to explain the purpose of my study and to obtain a

letter of cooperation, which indicated the willingness of this center to serve as my research partner. I also sought the assistance of this person in determining the instructors that meet the inclusion criteria that I have developed for this study. I sent all potential participants an invitational letter (see Appendix A) and an informed consent letter, inviting them to participate in this study. I sent these items through the United States Postal Service and included a self-addressed stamped envelope so that the participants returned the consent form to me. Concerning participation, I selected all potential participants returned a signed consent form to me within 2 weeks.

In relation to data collection, I collected data from interviews, reflective journals, and documents and archival records. During the data collection process, I kept detailed notes in a researcher's journal as Merriam and Tisdell (2016) recommended. In order to ensure privacy, I conducted the individual interviews in the living room and dining room (common areas) in the nonprofit cancer center during non-instructional hours. The goal was to make the instructors feel comfortable because they were in a natural and familiar environment (Merriam & Tisdell, 2016). All interviews took place during the day. I included permission to record the interviews in the consent forms. I also recorded the face-to-face interviews with a voice recorder, and I used a voice recorder to record phone interviews if needed.

At the end of each interview, I reviewed the reflective journal procedures with participants. I instructed them to respond with one paragraph for each question. I also asked participants to return their journals to me within 2 weeks from the date of the interview. Regarding documents, I collected publications found on the center website that

present the mission and vision of this center, the history of the center, patient testimonials, services, schedule of classes, and community resources. In addition, I collected pamphlets and worksheets that instructors gave to cancer patients during classes at the center. I also asked the director of the center for potential archival records about holistic instructional practices and stories of patients to determine how they were impacted by these practices.

### **Data Analysis Plan**

According to Merriam and Tisdell (2016), data analysis is an emergent and inductive process. For this process, organization and analysis are equally important in making sense of the data, discovering meaning in the findings, and answering the research questions based on the conceptual framework. At the first level of data analysis, I first transcribed the interview data manually. I then coded the interview data using line-by-line coding that Charmaz (2006) recommended for qualitative research. I also coded the reflective journal data using this same technique. I used a content analysis to describe the documents and archival data, which included an explanation of the purpose, structure, content, and use for each of them.

At the second level of data analysis, I reviewed the coded interview and reflective journal data and the analysis of the document and archival record data in order to construct categories for each data source. According to Merriam and Tisdell (2016), categories should be: (a) exhaustive (or recurring patterns in the data); (b) mutually exclusive; (c) sensitive; (d) conceptually congruent, or able to align to the conceptual frameworks; and (e) responsive to purpose. I created summary tables of the categories

that I constructed for each data source, and from these summary tables, I determined the themes that emerged across all data sources. These themes formed the key findings for this study, which were analyzed in relation to the research questions and interpreted in relation to the conceptual framework and the literature review.

### **Issues of Trustworthiness**

Trustworthiness in qualitative research is important because readers must be able to trust the research results. Additionally, the results should be based on a view that is congruent with the conceptual tenets and contributes to the body of literature in the field (Merriam & Tisdell, 2016). Merriam and Tisdell (2016) suggested multiple strategies to address the following issues of trustworthiness: credibility, transferability, dependability, and confirmability.

#### **Credibility**

The first issue of trustworthiness for qualitative research is credibility, which Merriam and Tisdell (2016) described as how the findings match reality. Reality is seen as holistic, diverse, based on context, and always changing. It is also highly subjective, which is why Merriam and Tisdell suggested the following strategies for ensuring credibility in qualitative research: (1) member checks, or feedback from participants on the results of the study; (2) saturation, or finding recurring patterns in the data, as well as spending significant time collecting the data; (3) reflexivity, or describing researcher biases, values, opinions, and potential expectations; and (4) peer-review, or feedback from either a dissertation committee and/or peers. For this study, I used all four strategies.

**Transferability**

The second issue of trustworthiness involves transferability. According to Merriam and Tisdell (2016), transferability focuses on how the study can be applied to other situations. Strategies to enhance transferability include (1) thick, rich descriptions; (2) thinking about other applications for the findings; and (3) maximum variation or typicality of the sample, which means making sure the sample is either diverse or typical. For this study, I used the strategy of thick, rich descriptions by describing the setting, participants, data collection and analysis procedures, and findings in detail. I also considered other applications for the findings beyond this single case in the section on recommendations for further research. The sample for this study may not be diverse or typical.

**Dependability**

The third issue of trustworthiness that Merriam and Tisdell (2016) discussed was focused on dependability, or if the results can be replicated by making sure that results are consistent with data collected. To address this issue, Merriam and Tisdell recommended the following three strategies: (1) peer review; (2) triangulation of methods and data sources; and (3) an audit trail, or detailed researcher records, such as researcher journals and memos. For this study, I used all of these strategies. I used peer review by asking my dissertation committee to review this study, I used triangulation by comparing and contrasting data sources, and I kept a detailed researcher's journal in which I documented the decisions that I made during the research process.

**Confirmability**

The fourth issue of trustworthiness is confirmability or objectivity. The objectivity of qualitative research can be enhanced through use of the strategy of reflexivity, which Merriam and Tisdell (2016) defined as describing the researcher's values, opinions, potential biases, and expectations. I used this strategy by maintaining a researcher journal in which I described my assumptions and beliefs about this phenomenon and the decisions that I made during data collection and analysis.

**Ethical Procedures**

The trustworthiness of qualitative research, Merriam and Tisdell (2016) noted, depends on the ethics and values of the researcher. Ethics pertain to all aspects of the study, including the collection of data and presentation of findings. Ethics are of utmost importance in qualitative research because ethical research determines the credibility, transferability, dependability, and confirmability of a study. To maximize ethical data collection and analysis, Merriam and Tisdell noted that qualitative researchers should address the following constructs: (a) understanding and articulation of the purpose of the study; (b) reciprocity; (c) confidentiality; (d) informed consent; (e) the mental state of the interviewer; (f) data collection; and (g) data analysis choices.

In relation to this study, I took specific steps to ensure ethical conduct. I first sought approval to collect data from the Institutional Review Board (IRB) at Walden University (Approval No. 03-22-17-0399217). In addition, I used pseudonyms to protect the privacy of participants and the research site. I also stored data in locked cabinet files and protected external hard drives, and I installed virus protection programs on

computers where data is stored and analyzed. I also obtained letters of cooperation and informed consent forms from all participants in this study. These documents also addressed how the study results were used and published. The documents will be destroyed after 5 years via shredding to ensure confidentiality and participant protection.

### **Summary**

This chapter was about the research methods for this study. In this chapter, I discussed the research design and rationale; the role of the researcher; participant selection; instrumentation; procedures for recruitment, participation, and data collection; the data analysis plan; issues of trustworthiness; and ethical procedures. Chapter 4 will include the results of this single case study.

## Chapter 4: Results

### **Introduction**

The purpose of this qualitative study was to describe how a holistic education program impacts instructional practices designed to improve the well-being of cancer patients. To accomplish that purpose, I used a single case study design and gathered data from multiple sources, including interviews, archival records, and online reflective journals. I transcribed data and used line-by-line coding to determine results. I explain how instructors in a holistic education program describe the instructional practices that they use to improve the well-being of cancer patients. I also describe their beliefs about the effectiveness of these practices in improving the well-being of cancer patients. In addition, I describe what documents and archival records related to this holistic education program reveal about the impact of this program on instructional practices designed to improve the well-being of cancer patients. The research questions were as follows.

#### **Central Research Question**

How does a holistic educational program impact instructional practices designed to improve the well-being of cancer patients?

#### **Related Research Questions**

1. How do instructors in a holistic education program describe the instructional practices that they use to improve the well-being of cancer patients?
2. How do instructors in a holistic education program reflect on the effectiveness of their instructional practices to improve the well-being of cancer patients?

3. What do documents and archival records reveal about the impact of a holistic education program on instructional practices designed to improve the well-being of cancer patients? In this chapter, I will describe the single case study setting, demographics, data collection process, data analysis, evidence of trustworthiness, and results.

### **Setting**

The setting for this qualitative single case study was a nonprofit cancer center located in the Western United States. The center functions as a safe haven, treatment center, and educational site for patients with cancer, as well as their families. During the study, the site was in the process of restructuring the eight dimensions of wellness into three overarching aspects of holistic education. Those aspects were: emotional and spiritual support, mind and body wellness, and social and community connections. However, the main tenets of the eight dimensions have been condensed into the three touchstones. The concepts are the same, just in condensed form. Interviews took place on site between May and September of 2017 in the living room and dining room areas of the center. The main site resembles a Victorian home, and there is a second building where treatment and education rooms are located. The site all around has a very home-like and inviting feel, as if you are stepping into a relative's house, rather than a cancer center.

### **Demographics**

Participants for this study at the Holistic Healing Cancer Center included four individuals who were chosen from a pool of ten instructors. Participants were selected according to the following inclusion criteria: (a) they must be employed at least part-time

at the nonprofit cancer center; (b) they must currently be implementing some of the eight dimensions of holistic education; and (c) they must be able to describe their previous educational and/or training background in holistic education. Additionally, all names used in the study are pseudonyms to protect the privacy of participants.

Participant 1 (Rachel) was currently working on her master's degree in social work when I interviewed her. She had been employed at least part-time (first as an intern, and then as an official employee) at the nonprofit cancer center since August of 2016, so she had seen two executive directors during her employment there. Her professional background included working with people who have chronic illnesses of all kinds, including mental illness, physical illness, chronic illness, and disabilities in general. Her background with holistic education included training during social work practicums as it was her job to make sure that patients took care of all aspects of their lives.

Participant 2 (Bob) had a total of four degrees: a degree in medical anthropology, a degree in psychology, a master's degree in public health, and a doctorate degree in health promotion. All four degrees encompass the fields of preventative medicine and behavioral health in the context of culture and community. He was the executive director of the center and had been employed there full-time since January of 2017. His professional background included employment at the Center of Disease Control (CDC), as well as over twenty years in government and private sectors, which involved nonprofit and for-profit organizations. Training in holistic education was an integral part of his education and profession within the fields of preventative medicine and behavioral health in the context of cultures and communities.

Participant 3 (Ryan) had a bachelor's in psychology and a master's in social work. He had worked for the nonprofit cancer center, first as an intern for his master's degree, and then full-time afterwards. His professional background included working for a hospice agency, the nonprofit cancer center, and a government agency dedicated to helping families and their children in a social work context. His holistic education involved taking well-rounded and holistic courses such as "Mind/Body Bridging" and "Mindfulness."

Participant 4 (Lisa) had a nursing program from Germany, a general associate's degree from the United States, as well as a bachelor's and master's degree in Chinese medicine from the United States. She was also licensed in massage therapy, acupuncture, and herbology. Professionally speaking, Lisa had worked for a nonprofit breast cancer center in California, as well as several nonprofit organizations as a volunteer massage therapist and acupuncturist. She began working for the Holistic Healing Cancer Center seven years ago. Her holistic education involved hands-on, well-rounded, and student-centered education within her Chinese medicine programs. Regarding their instructional practices, all four participants had been implementing multiple aspects from the eight dimensions of holistic education at the time of the study, which took place between May and early September of 2017.

### **Data Collection**

Data collection took place between May and early September of 2017 at a nonprofit cancer center in the Western United States. This section includes a description

of participants, location, frequency and duration of the study. Additionally, recording instruments, variations, and unusual circumstances are addressed.

### **Interview**

Out of a pool of 10 instructors at the holistic healing cancer center, four participated. The location of the interviews was a nonprofit cancer center in the Western United States, and the interviews took place between May and early September of 2017. The average length of the interviews was 40 minutes. The longest interview was an hour and a half. After the interview had been completed, participants were instructed to complete online reflective journals and to return to me after 2 weeks. Archival data was collected throughout the duration of the study, which included a published article written by the director, site pamphlets, website information, and patient testimonials. Additionally, I kept a researcher journal the entire duration of the study, in which I wrote memos and reflections pertaining to the study and experience of being an instrument. I have included an interview as Appendix E to support the depth of probing and detail occurring in these face-to-face interviews to support my analysis.

### **Recording instruments**

The interviews were recorded with an Olympus digital voice recorder model VN-7200. Interviews were transcribed by first-year graduate student at an accredited local university. The reflective journals were collected online via email. Archival data was collected from the site (pamphlets and executive director's article), and the journal entries were written in a bound hard-copy journal owned by the researcher.

The only variations and unusual circumstances encountered during data collection involved the condensing of the eight dimensions of holistic education into three dimensions, or touchstones, of holistic education.

### **Archival Data**

Archival data collected included pamphlets from the center, website information, patient testimonials, and an article written by the program director. The pamphlets and article were collected during my initial meeting with the director when he signed the letter of cooperation and provided me with a list of instructors at the center. The website information and patient testimonials were gathered from the program website.

I decided to code the archival data in the same manner that I coded the interviews. I printed them all out and conducted line-by-line coding. I tallied all of the codes and condensed them into larger categories, and then finally larger overarching themes. Initial coding structures from content analysis

### **Reflective Journals From Participants**

These were completed postinterview online via e-mail. Instructions for the reflective online journals were provided to participants at the end of the interviews. They had two weeks to return the responses to me via email. I coded the returned e-mails in the same way that I coded the interviews and archival data. I used line-by-line coding and discovered codes, which were then transformed into larger categories and themes.

### **Data Analysis**

Since the data collection process for this study was emergent and inductive (Merriam & Tisdell, 2016), organization and analysis were used simultaneously for this

single case study to determine the findings according to the research questions and conceptual framework. At the first level of analysis, interviews were transcribed by a graduate student manually, and the finished files were sent to me via email. I coded the interviews using line-by-line coding as recommended by Charmaz (2006) for qualitative research. For example, for each line of the interviews, I circled key words or phrases and wrote detailed notes off to the side of the lines. Then, each detailed note was abbreviated into an acronym. I then created a key for each acronym and the meaning behind each one. Codes were then condensed into categories and themes. The same process was used for the participant journals. Archival data was analyzed using content analysis and the Document and Archival Record Data Collection Form (Appendix D). Four overarching themes were found throughout the entirety of the data.

### **Description of the Analysis of Each Data Set**

To analyze the data, I printed out the transcribed interviews, archival data, and online reflective journals. Then, I conducted line-by-line coding as recommended by Charmaz (2006). I color-coded each larger category, and those categories turned into larger overarching themes.

Throughout the holistic thematic analysis process, saturation seemed to occur among the interviews, archival data, and online reflective journals. After time, no new ideas seemed to emerge. The codes kept repeating themselves in all data sources. However, I do recognize that because of my small sample size and limited number of participants (four participants), results may have been different among different sets of people and larger sample sizes. While I did interview four of the instructors at the center,

I did not interview all of them. So there was saturation among these individuals, but there may not have been saturation with different or increased amounts of individuals.

Specific codes discovered during the data analysis process were as follows. I have created a table of the codes, their abbreviations, and their frequency in the data.

**Table 2**

*Coding Table*

	Code Abbreviations	Meanings	Frequency
Code 1	HHCC	Nonprofit cancer center	23
Code 2	EST	Establishing statements	42
Code 3	SOCIAL WORK	Social work background or context	5
Code 4	ED.W	Holistic education	84
Code 5	CHR.IL	Experience related to chronic illness or cancer	57
Code 6	8 DIM	The eight dimensions of holistic education	35
Code 7	EFFICACY	Empowering patients to become education about their own condition	44
Code 8	HOSPITAL	Hospital setting or experience; wanting a better environment for learning; experiences with Western medicine	65
Code 9	STU. CEN	Student-centered instruction and	19

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		facilitation	
Code 10	MBW	Mind/body wellness	74
Code 11	OPEN	An openness to learning and trying new things	19
Code 12	DIVER	Diversity of individual patients and learners	7
Code 13	TRANSFORM	Transformative learning or experience	14
Code 14	COLLAB	Collaborative learning or learning community	44
Code 15	INNOV	Innovative programs and design	2
Code 16	PSYC	Degree or topic related to psychology	3
Code 17	RESEARCH	Call for more research and evidence-based instruction	21
Code 18	MASLOW	Maslow's hierarchy of needs	18
Code 19	SPIR	Spirituality or religion	6
Code 19	COPING	Coping strategies and techniques	11
Code 20	NATURE	Nature or being outside	6

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## Themes

The four overarching themes discovered from condensing the codes were: (a) impact of the eight dimensions of holistic education; (b) self-efficacy and student-centered methods; (c) transformative learning and the hierarchy of needs; and (d) patient experiences with chronic illness and their learning environments. The combined codes created the following themes.

**Table 3**

*Themes and Totals*

	Themes	Totals
Theme 1	The eight dimensions of holistic education	140
Theme 2	Self-efficacy and empowering student-centered methods	194
Theme 3	Transformative learning and hierarchy of needs	39
Theme 4	Patient experiences with chronic illness and what is lacking in Western medicine	122

## Evidence of Trustworthiness

### Credibility

Merriam and Tisdell (2016) recommended the following techniques for confirming credibility: (a) member checks; (b) saturation of recurring patterns in the data; (c) reflexivity, or examining researcher values, opinions, biases, and expectations; and (d)

peer-review, or feedback from the committee and/or graduate level peers. To ensure the holistic process of my study, I adhered to all four of these recommendations. I worked closely with the director and participants to reiterate the data and results through member checking. I coded each set of data three times to ensure that patterns were arising from the findings through saturation. I used a researcher journal and detailed memos to constantly check my own biases, values, values, and expectations. Additionally, I gained feedback from my committee through feedback during revisions, as well as from my peers in the dissertation forum.

### **Transferability**

Merriam and Tisdell (2016) suggested the following methods for ensuring transferability: diversity or maximum variation of the sample; considering additional applications for the findings; and rich, thick descriptions. While there were not necessarily diverse or typical findings, transferability was confirmed in thick/rich descriptions during the interviews, as well as in the researcher journal and vignettes for each participant. Transferability was also evident in the ability to discover additional applications of the findings, such as in educational and medical settings as we all search for a cancer cure.

### **Dependability**

Trustworthiness is also determined according to dependability (Merriam & Tisdell, 2016). Techniques for this concept include: triangulation; peer review; and detailed memos and journals. All three of these techniques were used to confirm dependability. Triangulation occurred between interviews, archival records, the

researcher journal, and online participant reflective journals. Peer review took place between the committee members and peers in the dissertation forum, and I kept detailed journal writings and memos throughout the data collection process.

### **Confirmability**

Confirmability, or objectivity, involves reflexivity and minimizing researcher bias, values, opinions, and potential expectations. There were no variations in this issue of trustworthiness since I adhered to keeping a researcher journal to describe my assumptions and beliefs regarding the cases study phenomenon.

## **Results**

There were a total of four overarching themes discovered in the interviews, online reflective journals, and archival data. They were: (a) impact of the eight dimensions of holistic education, (b) self-efficacy and student-centered methods, (c) transformative learning and the hierarchy of needs, and (d) patient experiences with chronic illness and their learning environments. Oftentimes, the themes would overlap and relate to one another. I will explore these themes in relation to each participant and how they relate to the study research questions, as well as themes discovered in the literature review.

### **Organization of Results**

For this study, I chose to present results based on each participant in a holistic thematic analysis, rather than themes alone, in order to show triangulation among data sources. Since data saturation seemed to occur over time, and no new themes emerged, I combined the three data sources to discuss here. I have presented the data according to each person and also incorporated themes from all data sources.

**Participant 1: Rachel**

**Introduction to analysis for themes in Rachel's interview.** Once all three data sources were analyzed, I found that all four overarching themes seemed to recur in Rachel's data sources (her interview and online reflective journal). Then, I discovered that one of her themes seemed to corroborate with a patient testimonial on the center website.

**Impact of the eight dimensions of holistic education.** The first recurring theme in Rachel's interview involved the impact of the eight dimensions of holistic education on instructional programs and the wellbeing of cancer patients at the nonprofit cancer center. As a review, these dimensions are: (a) emotional, (b) spiritual, (c) intellectual, (d) physical, (e) social, (f) environmental, (g) financial, and (h) occupational.

During the interview, Rachel described the unique and innovative nature of the eight dimensions as they relate to instruction at the center. These eight dimensions in conjunction with the instructional practices positively impacted the patients' well-being and addressed all aspects of healing for the whole person.

You have the scientific side and the wellness side working as one. I would say that is a huge piece of our instructional programs here: being able to focus on knowing your client is going through with those eight dimensions and teaching them about each one for their own wellness. Knowing what cancer can do to someone, not just physically or emotionally, but also spiritual distress, is a huge piece of the empathy and treating a person as a whole. It really sets us apart from

some of the other centers. When they come here, they are very involved in their education and care plan. (Rachel, personal interview, May 4, 2017)

According to Rachel, healing for the whole person at the cancer center involves all eight dimensions of holistic instructional practices, and patients are empowered through the creation of their own health plans.

**Self-efficacy and student-centered methods.** Rachel described how the instructional methods at the nonprofit cancer center are very student-centered and promote patient empowerment and responsibility for education. Through a combination of unique care plans, collaborative learning, and hands-on activities, patients learn about all aspects of wholeness so they can make short and long-term decisions appropriate for their individual care.

One of the things that they do when they come in here is we create an empowering plan. It's not just coming to them and saying here is this and you need to do this, it is actually engaging with them in what they actually want their wellness to look like, as well as where they are in the eight dimensions. So they have a huge part in their own healing and education. Many people are faced with the fear of death. For the stage of cancer that these people are dealing with, you have to see each person as an individual with specific learning needs. (Rachel, personal interview, May 4, 2017)

Rachel elaborated on how empowering patient plans are in her online reflective journal. She reiterated creating this plan for patients so that they can be more responsible for their own learning, and she discussed powerful collaborative activities such as group

collages and discussion so patients can learn from each other (personal communication, May 17, 2017).

**Transformative learning and the hierarchy of needs.** One of the interview questions in the protocol specifically asked about transformative experiences at the center due to the innovative instructional practices. Rachel described multiple examples of cancer patients whose lives were positively impacted at the center. She described a patient who went from being a champion arm wrestler to having multiple types of cancer. In her explanation, he went from being angry at his situation and isolated from his children to being actively involved in his education, healing, and rekindling relationships with his family members.

Being able to come here for years has helped him to be open and think about things. He has been really resilient in making it through things in general. And teaching others in class how to be really resilient, too. And a lot of people come here really angry. Just angry at life and angry at people who are persevering through cancer when they are not. But it is really cool. Again. Sitting and watching them give other people advice about how to get through things like....what? How did you get from being super angry in life to helping people and living your life? A lot of members turn to that attitude and a sense of community because they are not alone. (Rachel, personal interview, May 4, 2017)

In this description, the Rachel described the patient as being transformed and empowered because of information and a sense of community provided by the center. A

patient testimonial also provides insight on the transformational nature of programs for some patients.

I am 46 years old and was recently diagnosed with breast cancer. I share this personal story for awareness and how a routine mammogram saved my life. I also share how the nonprofit cancer center has pretty much saved my sanity and has become a huge source of strength and hope for me daily in trying to deal and cope with the challenges I continue to face. (Holistic Healing Cancer Center, 2017)

**Patient experiences with chronic illness and their learning environments.** The final recurring theme had to do with experiences with Western medicine, patient experiences with a chronic illness, and the impact of learning environments. One example of this theme that recurred as a pattern was the industrialization of medicine and how most hospital environments are not very conducive to holistic learning.

R: People are tired of walking into hospital settings that are not home-like.

A: Do you mean settings that are cold and corporate?

R: Yes, and people feel like it's more like grandma's house here, and that is why they can come here. I can just come and chill on the couch and say, well my life sucked today, and talk about it and learn from it. And then have everyone help them through it. (Rachel, personal interview, May 4, 2017)

Rachel expressed how patients desire a more inviting and comfortable setting, rather than a cold one. Patient testimonials also touch upon the inviting nature of the center.

A wonderful place to retreat to. I first heard of the Holistic Healing Cancer Center from the local cancer hospital. The newly renovated addition for massages and acupuncture, meditation classes and journaling is comfy and warm despite being in a house that was probably built at the turn of the century. (Holistic Healing Cancer Center, 2017)

Concluding remarks about Rachel's interview.

## **Participant 2: Bob**

**Introduction to analysis for themes in Rachel's interview.** During my interview with Bob (see Appendix E), his found themes seemed to reinforce what he wrote in his online reflective journal. Those findings also seemed to be linked to the artifact from archival data.

**Impact of the eight dimensions of holistic education.** Regarding this theme, Bob had a lot to say about the structure of the programs at Holistic Healing Cancer Center and how they are all designed to impact whole-person healing. He was in the process of restructuring the program as it seemed to be disorganized under the prior director. One unexpected topic that came up in relation to whole-person healing was Maslow's hierarchy of needs.

One of the things that I am looking at is Maslow's hierarchy of needs. Okay? So if you think about that, there are five levels of needs, right? So what we do is our programs nest into those needs. So basic needs, such as nutrition, sleep, exercise, that is number one. So we provide you with education in Yoga, nutrition, exercise programming, quality of sleep, that is the first level. The second level is the idea

of community connectedness. So you have a need to be connected with others.

The third level is that we have love and compassion, like a deeper sense of love and caring. And then there is this idea of developing a level of self-efficacy. A level of confidence. A level of skill. A level of self-identity and worthiness. And self-esteem. And the final level is purpose. So you now have all of this. And on top of this pyramid is purpose, and that is the drive. So our programs really fit into every one of these levels. (Bob, personal communication, May 11, 2017)

Bob described the importance of the eight dimensions of holistic education pertaining to their uses at the center, but they are also based on the theoretical tenets of Maslow's hierarchy of needs.

**Self-efficacy and student-centered methods.** Pertaining to self-efficacy and student-centered methods, Bob described his use of autobiographical assignments such as writing purpose statements and creating wellness plans with learners.

In terms of Maslow's hierarchy of needs, and making sure I ask a person when I first meet them about their nutritional behavior, about their exercise, about their sleep, like if you are not taking care of these basic things, you will not reach the latter things. (Bob, personal communication, May 11, 2017)

According to Bob, at the cancer center, self-efficacy is key according to the interviewees in that the basic needs of the patients are addressed first in their educational responses, until the patient's needs reach the higher levels.

Bob also articulated the importance of evaluation for student-centered methods based on Maslow's hierarchy of needs. Students are actively involved in their program success and evaluation.

We are measuring the individuals and getting feedback on individuals' sense of participation and the outcomes that they see for each level. Do you feel you can survive this situation? Do you feel like you have the confidence, the skills, the efficacy, the energy, and the support to get through this? And finally, do you have purpose? Because when it gets hard, and life gets hard, we have to have purpose. (Bob, personal communication, May 11, 2017)

Here, Bob described the formative and summative evaluation that takes place during and after the program.

Bob's online journal reflection specifically addressed the quality of the instructor and being able to measure confidence in the patients at the center.

We have a ton of educational material, but what is missing is the in-between piece. Because you still need to get the person to that sense of efficacy that goes beyond just the education material. You still have to build that support. You still have to measure confidence in the individual, and be sure that the individual is being driven by purpose in their endeavor to change their behavior, especially when it becomes difficult. The programming is at the level of the quality of the instructor as well, and the aspects of the characteristics of the instructor. (personal communication, May 25, 2017)

This journal entry touches on all four major themes: the eight dimensions of holistic education (sense of purpose), student-centered methods, transformation of behavior and Maslow's hierarchy of needs, and climate created by the instructor to impact a sense of purpose.

The executive director's published article within the archival data directly called for more student-centered methods to empower individuals about their health and directly correlates with Rachel's the decision to use student-centered methods at the center.

There is a better way to approach our medicine and that is to empower our personal education...We have a tremendous responsibility to be well-educated and informed medical consumers. This knowledge will lead to a significant increase in our ability to effectively spend money, prevent disease and medical error, and improve health and happiness, both as individuals and as a society. (Librett, 2017)

Here we have another example of possible data saturation because this theme was present in multiple sources of data.

**Transformative learning and the hierarchy of needs.** Bob described an instance in which transformation occurred with a student because she was able to rediscover her sense of purpose after her father passed from cancer. Regarding the function of content in Weimer's (2013) learner-centered teaching, this transformational moment occurred as a direct result of the teaching method: a group collage project the students had been working on, rather than just dissemination through lecture.

We do an exercise where they create collages. And this one teenage girl said her dad died of cancer, and she was really struggling with that. And she saw a picture, and she said she did not laugh anymore. And she was the type of person who was always laughing. And she described herself as being very giggly and silly and playful. She said she does not feel that she is that person anymore. But she was going through this exercise with the cutouts, and they were getting playful with it, and she came to the realization that she adopted that playfulness and silliness from her dad. And when she realized where that came from, she started laughing, and she realized that even though her dad is gone, that he is still inside of her.

(Bob, personal communication, May 11, 2017)

For the patient in this quote, according to Bob, transformation occurred when she had an epiphany and transformation during the collaborative student-centered activity.

### **Patient experiences with chronic illness and their learning environments.**

Learning environments, in the case of cancer patients, were described by Bob as crucial to patient learning success.

When you are in a hospital, you are dehumanized. Your identity is taken away.

Literally, you become a barcode. And they take all your clothes and your belongings, and they put them in bags, and they give you a gown and slippers, so you are stripped of everything. Your identity. Literally, you are stripped down naked and have a barcode. So this is the industrialization of medicine. So absolutely, environment is critical to health and wellness. And even though they are all coming here with different cancers, different ideas, different

socioeconomic status, it's just this theme of reconnecting to the community and self-identity (Bob, personal communication, May 11, 2017)

Bob's description of the need for learning environments and climates that promote whole-person healing aligns with a patient testimonial found in the archival data: "I don't feel alone anymore, and I feel that I matter even with all my imperfections. That in itself is helping me cope every day!" (Holistic Healing Cancer Center, 2017).

### **Summary of Themes**

Bob's interview, reflective journal, and article revealed four themes: the impact of the eight dimensions of holistic education, self-efficacy and student-centered methods, transformative learning and the hierarchy of needs, and patient experiences with chronic illness and their learning environments.

### **Participant 3: Ryan**

The four themes were prevalent in Ryan's interview, the online reflective journal, and archival data from the director. I analyzed the data using line-by-line coding, and the codes became larger categories and overarching themes.

**Impact of the eight dimensions of holistic education.** Regarding the balance of power in Weimer's (2013) learner-centered teaching, students are provided with a limited amount of power in the learning climate, and activity design guides their decision-making. While discussing the eight dimensions of holistic education, Ryan described an activity that provided a limited amount of power to students as he facilitated the learning group.

Regarding transformative learning as promoted by Mezirow and Taylor (2011), Ryan touched on how transformative the eight dimensions can be in helping the cancer patients at this center recognize healing potential for the whole person. After the disorienting dilemma of the initial diagnosis, this new information helps paradigm shift to occur among the patients as they navigate their journey toward health.

I just feel like cancer patients become extremely focused. It's just a lot of physical well-being. They're going to do chemo, and they are going to do whatever treatment they can to get rid of cancer. And they forget about all the other things. All of those other areas such as financial and mental health and recreational health, all of those things are very important as far as them feeling good about themselves and even at times, doing better at fighting cancer physically if they're able to address some of those other things. (Ryan, personal interview, July 31, 2017)

This quote expressed the need to focus on more than just chemo and radiation for cancer patients. For Ryan, knowledge about healing for the whole person is transformative in that patients are empowered to take control of their own condition.

**Self-efficacy and student-centered methods.** Throughout our interview, Ryan promoted the concept of student-centered methods and being able to teach patients self-efficacy. Activities such as group work and practicing mindfulness were some examples of student-centered teaching.

One of the ones that first comes to mind is mindfulness, and that is such a broad general term, but breathing and focusing on breathing was a huge thing we talked

about. Talking to them about getting their brain out of auto-pilot, because when you are in auto-pilot, you spin out of control. So you get into this mode of, 'I have cancer, I have to have chemo, I don't have any money,' and when your brain gets moving like that, you can get into some really dark places. And thinking of ways to break that. (Ryan, personal interview, July 31, 2017)

For Ryan, student-centered methods at the cancer center allow patients to evaluate their own condition and to learn techniques to help them cope.

Ryan's online journal reflection expanded on being able to encourage patients to do their own research about methods or techniques that might work for them in their particular situations, as well as being able to analyze data collected annually to see if patients were positively impacted by the program for evaluation (personal communication, August 14, 2017).

**Transformative learning and the hierarchy of needs.** The director spoke repeatedly about how Maslow's hierarchy of needs tied into instructional methods at the center. Similarly, this topic came up during Ryan's interview. He described a case in which a patient came to the center while only focusing on the cancer, not the other areas of wellness for whole-person healing. A transformation occurred while she was at the center, and she focused more on community and purpose by the end of her course sessions.

So when I ended with her she was done with all treatment and she had gotten a diagnosis that they would not need to do any more scans for six months, so she was on the road to full recovery. But it was amazing to see her relationship

change with her boyfriend as things improve. I still think there are more things to work on, but just that cancer was not in the driver's seat in her life. It took power away from cancer and being able to cope with it so she could make her own decisions. (Ryan, personal interview, July 31, 2017)

According to Ryan, the cancer center's focus on the whole person and transformation enabled this patient to be proactive, not reactive, about her condition and decision-making for short and long-term care.

**Patient experiences with chronic illness and their learning environments.** Just as with the other interviews, learning climate and patient learning environments were significant factors in catalyzing meaningful learning experiences (Weimer, 2013). Part of the empowerment for learning environments at the center was the ability to learn in groups and allowing students to assess themselves and each other during open dialogue.

A lot of the group sessions was letting them talk and express themselves in a group setting where they could learn from each other when maybe they thought that there was no one else who understood what they were going through.

(Ryan, personal interview, July 31, 2017)

Through open dialogue and feedback from peers, Ryan created a safe space in his classroom for patients to feel comfortable learning from each other. Just as with previous interviews, the four overarching themes were discovered in Ryan's journal, interview, and the archival data.

#### **Interview 4: Lisa**

**Introduction to analysis for themes in Lisa's interview.** The four themes were discovered in Lisa's interview, as well as archival data written by the program director and patient testimonials. Just as with the other interviews, the line-by-line coding revealed categories and larger overarching themes.

**Impact of the eight dimensions of holistic education.** Lisa described how the eight dimensions of holistic education at the Holistic Healing Cancer Center are impactful because they address both the physiological and psychological well-being of the patients.

So just having all these stresses of dealing with the diagnosis and treatment of cancer, you are worried about the outcome. And that's what I really loved about the Holistic Healing Cancer Center, that the other places did not have, is the support for people who can get treatments for stress, like even someone whose partner is diagnosed with cancer. And it is nice that they can come there and also get help and support. And oftentimes I will see a mother and daughter coming in, or a husband and wife coming in, and so I feel like for both of them to be able to get help with all the stressors, is perfect to impact the mental and psychological side of things. And then the physical stuff, as well. (Lisa, personal communication, September 14, 2017)

Lisa's description of well-roundedness at the center corroborates the center's eight dimensions of holistic education and healing found on the center website.

**Self-efficacy and student-centered methods.** Integrative medicine as an emerging practice in Western medicine was a predominant theme in my interview with Lisa. For her, student-centered teaching must include hands-on learning experiences at the center, as well as a better way to teach the benefits of acupuncture to the masses to empower them about well-being for the whole person.

The most powerful thing is just to experience the acupuncture and teach about its benefits so patients are empowered. To just experience it. Usually people walk out of their treatment like it's a big relief and they are happy. The patients are already open and interested because they're trying it out. And it's experiential learning because it's hands-on. (Lisa, personal communication, September 14, 2017)

According to Lisa, through teaching the patients about the benefits of the treatment, rather than just giving the treatment alone, self-efficacy and empowerment occurs. Lisa's online journal reflection also touched on being able to get immediate feedback from patients after acupuncture sessions and having them return as a method of summative evaluation (personal communication, Sept 27, 2017).

Lisa's statements about experiential learning and educating the masses to empower them about their own health are also echoed in the article written by the center director.

Improved consumer knowledge is a shift (or breakthrough) in how we understand, navigate, and consume medicine, health, and wellness. There are basically three important aspects of being a smart consumer: 1. Have a strategic health plan 2. Assemble your health team 3. Know your numbers. (Librett, 2017, p. 15)

**Transformative learning and the hierarchy of needs.** Lisa expressed how not only are her instructional sessions transformative to her patients, but they are also transformative to the instructors, as well.

You look forward to it, and you spend a few hours there. And so that was this pitch that I gave to my colleagues. You learn a lot, and you get so much back. And the gratitude and thankfulness of the patients, and just being able to come to a place where it does not feel medical, that is just here to support you. So I feel like every session and every treatment has a small transformation in of itself.

(Lisa, personal communication, September 14, 2017)

In student-centered teaching, students' gardens are cultivated through the help of a facilitator. However, the facilitator may learn and grow, as well (Weimer, 2013).

Maslow's hierarchy of needs was also mentioned by Lisa in the sense that the center helps to provide low-cost learning programs that touch on not only basic needs, but also a sense of stress relief and connectedness through discovery of self.

Through what I can offer too, we immediately have an effect on stress. Because in doing the treatment, you just lay there and release endorphins and opiates, and our brain chemistry changes during acupuncture, and we can show that with lab tests and results. You get a sense of well-being and increasing circulation throughout the body, and just helping you to get a better relationship with our body. Because I think you go through that: did my body fail me? Am I the one creating this?

(Lisa, personal communication, September 14, 2017)

According to Lisa, through the opportunity for patients to become more in-tune with their bodies, transformation occurs and changes negative self-talk into concern for the whole person.

This information was reiterated in many of the patient testimonials, which praise the center's programs built on support, friendship, and unity, as well as low cost programs that promote self-discovery and a sense of community (Holistic Healing Cancer Center, 2017).

**Patient experiences with chronic illness and their learning environments.** In our interview, Lisa expressed the importance of positive learning environment for patients at the center.

People just love coming to the nonprofit cancer center. And I think it is a home-like feeling, like you feel like you are coming to your living room instead of a medical setting. And I feel like that is really important, and I am hoping that Bob continues the legacy, and I feel like people really need that cozy feeling. (Lisa, personal communication, September 14, 2017)

This quote also echoes what the previous three interviews stated regarding a sacred space, a safe space, and a physically welcoming space.

Lisa also expressed similar sentiments when she discussed her personal experiences as a nurse before she immersed herself in Chinese medicine degrees.

We were overworked, understaffed, and I felt like our patients were overmedicated. And I could not keep up with the workload. So I walked out of there. And into something more holistic. So after the whole effort did not work for

other places, I went to the nonprofit cancer center. (Lisa, personal communication, September 14, 2017)

This quote echoes Lisa's concern for better patient environments, and she was able to find them at the nonprofit cancer center. The four overarching themes in Lisa's interview echoed her journal, as well as archival data from the director and patient testimonials.

### **Summary and Conclusions**

This chapter discussed the setting, demographics, data collection process, data analysis process, evidence of trustworthiness, and results of this study. Study results included four major overarching themes discovered in the interviews, reflective journals, and archival data, as well as how they relate to the review of the literature. They were: (a) Impact of the eight dimensions of holistic education, (b) Self-efficacy and student-centered methods, (c) Transformative learning and the hierarchy of needs, and (d) Patient experiences with chronic illness and their learning environments. The themes oftentimes overlapped and related to each other throughout analysis of the results, and data saturation occurred. Chapter 5 will discuss interpretation of the findings, limitations of the study, recommendations, and implications.

The research questions for the study were as follows.

#### **Central Research Question**

How does a holistic educational program impact instructional practices designed to improve the well-being of cancer patients?

**Related Research Questions**

1. How do instructors in a holistic education program describe the instructional practices that they use to improve the well-being of cancer patients?
2. How do instructors in a holistic education program reflect on the effectiveness of their instructional practices to improve the well-being of cancer patients?
3. What do documents and archival records reveal about the impact of a holistic education program on instructional practices designed to improve the well-being of cancer patients? In this chapter, I will describe the single case study setting, demographics, data collection process, data analysis, evidence of trustworthiness, and results.

## Chapter 5: Conclusion

### **Introduction**

The purpose of this qualitative study was to describe how a holistic education program impacts instructional practices designed to improve the well-being of cancer patients. With such a widespread epidemic affecting so many lives, this study is expected to be significant because it addresses a gap between integrative medicine and holistic education to improve the overall well-being of cancer patients and their families. The study is interdisciplinary since it adds to the body of literature education and medicine. Furthermore, since the center was in the process of restructuring during the study, the executive director noted the impact of the study itself on the center, and he requested future studies on other populations affected by cancer. Four major themes emerged from the data analysis: (a) Impact of the eight dimensions of holistic education, (b) Self-efficacy and student-centered methods, (c) Transformative learning and the hierarchy of needs, and (d) Patient experiences with chronic illness and their learning environments. This chapter will cover the interpretation of the findings, the limitations of the study, recommendations, and social change implications.

### **Interpretation of the Findings**

#### **Review of the Literature**

As a whole, the themes discovered in this study echo the themes discovered in the review of the literature, but they also expand on them. This section will address how the study's major findings relate to the literature review and themes discovered therein. As a reminder, gaps in the literature review were as follows: (a) Even though holistic

education for cancer patients is clearly needed, there is a lack of research about this type of education, (b) None of the studies explored specific holistic educational practices that instructors use to support the well-being of cancer patients. Findings were in alignment with themes and addressed the gaps in the body of literature, but they also expanded on them. More information was discovered, such as the impact of learning environments on cancer patients, the specific use of Maslow's hierarchy of needs, and major implications for future research. Thus, the findings both confirm and extend knowledge in the discipline. Additionally, in this section I make connections from my findings to the conceptual frameworks (transformative learning theory [Mezirow & Taylor, 2011] and learning-centered teaching [Weimer, 2013]).in each theme.

### **Impact of the Eight Dimensions of Holistic Education**

The first recurring theme involved the impact of the eight dimensions of holistic education on instructional programs and the wellbeing of cancer patients at the nonprofit cancer center. As a review, these dimensions are: (a) emotional, (b) spiritual, (c) intellectual, (d) physical, (e) social, (f) environmental, (g) financial, and (h) occupational. In the review of the literature, the emotional dimension of holistic education is important as it catalyzes equanimity, reduces fear and anxiety, and impacts long-term retention of information (Astin, Astin & Lindholm, 2011; Cassileth, 2014; Montgomery, Strunk, Steele, & Bridges, 2012). As a whole, this study expanded the literature because the varying dimensions of holistic education at a nonprofit cancer center had not previously been explored. In the review of the literature, holistic dimensions were predominant in adult education settings, such as higher education and postsecondary education

environments (Montgomery et al., 2012; Tisdell, 2004; Palmer, 2009), as well as hospital or clinical settings (Capozzi et al., 2012; Cassileth, 2014). The interviews may also triangulate with the review of the literature regarding learning environments and the conceptual framework. According to Weimer (2013), a positive learning climate is essential for student-centered teaching. If patients are feeling well psychologically and physically, they are more apt to retain what they are learning and maintain equanimity (Astin, Astin, and Lindholm, 2011). The focus on the eight dimensions of holistic education promotes well-being for patient health, as well as their potential for lasting learning experiences regarding their condition.

### **Self-Efficacy and Student-Centered Methods**

The second recurring theme involved self-efficacy and using student-centered methods at the center. Themes from the interviews, reflective journal, and archival data align with the conceptual framework Weimer's (2013) learner centered teaching because the instructors at the center act as facilitators that empower students to learn and to evaluate their learning. There is a balance of power between the teacher and student, and the learning stretches beyond the classroom and into patient short and long-term decision-making. Additionally, evaluation from the center involves students' evaluation of themselves, as well as evaluation of peers' progress, thus creating a sense of community, connectedness, and decreased stress (Weimer, 2013). As Weimer (2013) elaborated, group activities add authenticity to what is being learned because students learn from someone else besides the professor. The results from this study expand on the themes found in the review of the literature since this student-centered teaching exchange is

occurring in a nonprofit cancer center, rather than in a K-12 or higher education learning environment.

In the conceptual framework, Weimer (2013) explained how learner-centered teaching challenges students to make decisions about learning based on their own experiences. According to the results, mindfulness is one example of how responsibility has been transferred to the student, and there is a balance of power, because the student is an active participant in the learning process and planning mindfulness for short and long-term well-being. Mindfulness directly relates to the existing literature. Cramer et al. (2012) described how mindfulness strengthens immune systems, helps speed up patient treatments, reduce the harmful side effects of chemotherapy, and increase an overall sense of well-being.

In the historical perspective in the review of the literature, Chinese and Ayurvedic medicine, which dates back to the 14<sup>th</sup> century BCE, directly influenced the emergence of integrative medicine for cancer patients over time (McCreery, 2010; Sharma & Chaudhary, 2015; Rekel, 2012). For instructors at the cancer center, knowledge of all aspects of healing for the whole person is empowering to her patients and promotes self-efficacy. Regarding conceptual framework, a large part of transformative and student learning involves empowering learners to take responsibility of their learning and to educate them about making short and long-term decisions (Mezirow & Taylor, 2011; Weimer, 2013). However, these views may not reflect other cases or sites, and more research is needed to determine the importance of student-centered teaching for cancer patients.

As a whole, according to the results and views of the instructors, patients should be wise consumers in their own health and the various options available to promote whole-person healing. Instructors at the center act as facilitators in the process of engaged student learning, so that patients are better informed about their options (Weimer, 2013).

### **Transformative Learning and the Hierarchy of Needs**

The third predominant theme involved transformative learning and the hierarchy of needs for patients at the center. This theme aligns with themes found in the literature review. In the literature and conceptual framework, Mezirow's initial disorienting dilemma discussed how through collaborative and empowering learning, patients are able to cope and make judgments by critically examining their assumptions (Mezirow & Taylor, 2011). The results revealed that instructors believe holistic education is transformative in the sense that it allows peer collaborative learning, empowerment through choices for decision-making, and critical examination of assumptions about cancer. According to the instructors, detrimental frames of reference concerning patient conditions were transformed based on critical reflection on assumptions, formation of healthy meaning schemas, and being aware of coping mechanisms to improve the self (Mezirow & Taylor, 2011; Taylor & Cranton, 2012). This transformative experience also ties back to self-efficacy and Weimer's (2013) ideas regarding empowering students to make short and long-term decisions about their education and how it affects their lives.

### **Patient Experiences With Chronic Illness and Their Learning Environments**

In the literature review, environmental dimensions are of utmost importance for cancer patients (Timmermann, Uhrenfeldt, & Birkelund, 2013; Preisser et al., 2016).

Environmental factors contribute to positive well-being among cancer patients. However, the environment can also impact learning processes (Tisdell, 2008). Weimer (2013) contended the importance of learning environments in student-centered teaching, and according to the instructors at the cancer center, the positive learning environments are not only important to cancer patients at the center, but also to the instructors, as well. In this sense, the results align with the conceptual framework and Weimer's (2013) views of teacher as facilitator, but also teacher as active learner, in student-centered learning.

Regarding responsibility of learning in student-centered teaching (Weimer, 2013), the notion of student responsibility is directly related to learning environment and climate. Results revealed that according to instructor views, industrialization of medicine does not always typically provide a positive learning environment for cancer patients, whereas the center for cancer patients does provide a safe and comforting learning space. Data revealed that according to instructors, the cancer patient demographic is constantly exposed to a hospital setting, so learning in a place like the cancer center in this study may provide a safe space where students can assess themselves and each other.

It is important to note, however, that only four instructors were interviewed from the center. Results may have been different had all ten instructors been interviewed. The four discovered themes were based on the perspectives and experiences of just the four individuals, so it cannot be definitively stated that these are the views for all instructors at the center, or all centers in the Western United States.

## **Conceptual Framework**

The conceptual framework for this study was based on Mezirow and Taylor's (2011) transformative learning theory and Weimer's (2013) learner-centered teaching approach. Both aspects of the conceptual framework ended up being overarching themes in the findings. Furthermore, the conceptual framework expanded regarding the cancer center with the revelation of the executive director's plan to restructure the entire site based on Maslow's hierarchy of needs. While this new lens was unexpected, it may have added value to the themes found in the literature review since Maslow's hierarchy addresses both internal and external aspects of the whole person, and it focuses on specific holistic instructional methods for cancer patients at this innovative center (Karnatovskaia et al., 2015; Maslow, 1954).

## **Limitations of the Study**

As previously mentioned in Chapter 1, limitations relating to this study involved the single case study design. Yin (2014) described single case studies as involving literal replication, not theoretical replication. Therefore, the theoretical proposition discussed in Chapter 3 would need to be replicated for at least four to six cases in the case that theoretical replication was the ultimate goal. Another limitation was the sample size, which was a total of four participants from a pool of ten instructors at the center. This sample size was chosen, however, to obtain more detailed accounts and depth during the interviews. Results and themes may have differed had there been more participants. This limitation may have been ameliorated with other data sources, such as the archival data and online reflective journals. Additionally, the data seemed to become saturated in the

amount of data gathered, so a larger sample size with all instructors at the center may have produced different codes and themes. One more limitation involved my own bias as a researcher, especially since my son is a cancer patient. However, I used strategies to minimize that potential bias, such as member checks, peer-review, a researcher journal, and data triangulation.

### **Recommendations**

Multiple recommendations emerged as a result of the findings in this study. The study's scope included gathering data from instructors at the nonprofit cancer center to determine answers to the research questions. My recommendations are based on an urgency to expand on the study (still within the same scope) or conduct future studies that focus on others affected by the cancer epidemic. One suggestion is exploring holistic education for physicians, clinicians, and oncologists that partner with the cancer centers so that they can focus on healing for the whole person, not only for the cancer patients at the center, but for their own health and well-being, as well. Another recommendation involves being able to holistically educate family members of patients with cancer at the center.

Another recommendation is for future research involved with holistic education for not only cancer patients, but their physicians and clinicians, as well. Based on my research and results of this study, clinicians and physicians of cancer patients may experience burnout, depression, and anxiety concerning their stressful jobs. Holistic education about whole person healing may benefit this population with further research.

### **Implications**

Implications for this study included exploring instructional practices in holistic education for patients with cancer. Instructors described and reflected on these holistic instructional practices based on their own experiences, which will perhaps provide insight and catalyze other centers to become innovative in their approaches and methods, as well. This study may add to the body of literature in both medical and integrative settings, as well as the field of holistic education. As integrative medicine increasingly becomes an additional option for patients struggling with cancer, and as holistic education becomes an increasingly valid method of instructional delivery, the need may exist for more studies that explore the impact of holistic instructional practices on patients with cancer. The nonprofit cancer center in this study is unique in that it marries holistic education with innovative instructional practices meant to promote whole-person healing.

On an individual level, cancer patients may be positively impacted by similar educational programs as they explore options for short-term and long-term care, learn self-efficacy and self-discovery regarding their condition and purpose, and learn healing methods that honor the whole person. On a family level, family members and loved ones of patients may benefit from efficacy and education regarding short and long-term care options, as well. As demonstrated in the findings, families may also be affected by the epidemic as they see their loved ones suffer. On an organizational level, perhaps more centers will consider similar programs that combine integrative medicine and holistic education.

Furthermore, physicians of patients at this center may benefit from similar holistic educational programs that honor the whole person as they are under frequent pressure and stress in the field. If there is also a positive impact on physicians and clinicians, perhaps that impact will also emanate onto patients. On a societal level, as multiple fields and disciplines search for a cure for the complex chronic illness we call cancer, sites such as the innovative cancer center in this study may positively impact communities and eventually societies at large since whole person healing is one more step in the journey for a cure.

### **Positive Social Change**

The scope of this study included one site in the Western United States – a site that is extremely innovative in their holistic instructional programs for patients with cancer. However, although the scope for this study is small, the impact of it may be widespread in that it is adding to multiple bodies of literature from multiple fields. Furthermore, when I arrived at the center for the very first time, the director was so excited about the study that he wrote the title of the dissertation on a giant white board in his office. Since he comes from a background of working for the CDC (Center for Disease Control), as well as researching literature for public and private sectors, he promoted the study as an important step in spreading awareness regarding the need for more holistic instructional programs nationwide, and even worldwide, for patients with cancer.

Additionally, the call for future research was evident throughout the study, and the implications for social change fit both within the scope of the center, as well as the possible scope for multiple cancer centers. If more cancer centers (both hospital and

nonprofit) respect the need for whole-person healing, and they work to holistically educate patients about their condition and healing options, then doctors and educators may all be potentially on the same page as they embark on the quest to find a cure.

### **Conclusion**

Throughout this study, it became apparent based on the experiences and perspectives of the four instructors, as well as the archival data, that cancer is a tragic and complex issue that affects everyone in some way, and it is a widespread epidemic that warrants attention in the search for a cure (American Cancer Society, 2015). A large part of finding a cure is the potential alignment of the fields of medicine and education so that cancer patients and their families are well-informed regarding healing for the whole person, as well as a broad range of options for short and long-term care (Bussing et al., 2013; Cramer et al., 2012; Moritz et al., 2006; White et al., 2008). This study was conducted based on a gap about the impact of holistic education programs on instructional practices designed to improve the well-being of cancer patients. The problem was that the impact of holistic education programs on instructional practices is unknown. The four instructors at the center expressed a positive impact of these programs on the instructional practices designed to improve the well-being of cancer patients. However, it cannot be definitely said that these are the same views of other instructors at the center, or generally for holistic education or integrative medicine as a whole. More research may be needed to find further saturation across larger participant populations. This study may have contributed to social change by providing instructors and health professionals with a deeper understanding of holistic instruction and how it influences

whole-person healing. Bridging the gap between integrative medicine and holistic education would mean that medical professionals and educators can partner with each other and collaborate in patient short and long-term care for the whole person. Doing so may be transformative, student-centered, and based on holistic human needs. Doing so may be impactful in hospitals, oncology centers, nonprofit centers, patient environments, and beyond.

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## Appendix A: Letter of Invitation

October, 2016

Dear Potential Participant,

My name is Alicia Oberle, and I am currently a doctoral student at Walden University, an accredited institution of higher education. You have been invited to participate in a study entitled *Exploring Instructional Practices in Holistic Education for Patients With Cancer*. You have been invited to participate in this study because you are currently an instructor at the Holistic Healing Cancer Center, which is the proposed site for this study. The purpose of this study is to describe how a holistic education program impacts instructional practices designed to improve the wellbeing of cancer patients. The relevance of this study to positive social change is that it may raise awareness concerning the importance of instructional practices in holistic education that support the healing of patients diagnosed with a terminal illness. In the search for a cancer cure, perhaps consideration of the whole person may contribute to the wellbeing of cancer patients and those individuals affected by their disease.

Please review the consent form below, which includes an explanation of your responsibility in participating in this study. If you are interested in participating in this study, please return this signed consent form to me within the next 2 weeks in the prepaid envelope I have included.

Sincerely,

Alicia Oberle

## Appendix B: Interview Guide

### *Introductory Script:*

My name is Alicia Oberle. Thank you so much for taking the time to be here today. Your participation is very valuable, and your responses will contribute to the findings of this study. I am going to ask you 7 open-ended questions. When the interview is complete, I will explain how to complete the five written questions for the online reflective journal.

### *Interview Questions:*

1. Please describe your education and training in holistic education.
2. Why do you believe the eight dimensions of holistic education are important for cancer patients at The Holistic Healing Cancer Center?
3. What instructional practices do you use to improve the well-being of cancer patients at this center?
4. How effective do you feel your instructional practices are in improving the well-being of cancer patients at this center?
5. How do you evaluate the effectiveness of your instructional practices?
6. Do you believe your instructional practices are student-centered? Why or why not?
7. What kinds of transformational stories have you heard from cancer patients at this center?

### *Closing Script:*

Thank you again for participating in this study! I really appreciate all your help and insights.

## Appendix C: Online Reflective Journal

*Directions:*

Please answer each question with a paragraph. After you have completed your responses, please return them by email to me within the next 2 weeks.

*Reflective Journal Questions:*

1. How would you describe your role as an instructor at the Holistic Healing Cancer Center?
2. Do you believe there is a balance between your role as a teacher and the role of students in holistic education classes at this center? Why or why not?
3. What is the function of content in your instructional practice?
4. How do you help students take responsibility for their own learning at this center?
5. What are the processes and purposes for evaluation at the center?

Appendix D: Document and Archival Record Data Collection Form

Purpose

Structure

Content

Use

## Appendix E: Example Interview

A: I am Alicia Oberle, and it is May 11<sup>th</sup>. Describe your credentials, education, and how you ended up here.

B: Okay. I have a degree in medical anthropology, I have a degree in psychology, I have a master's in public health, and I have a doctorate in health promotion. Those 4 degrees are an ecosystem or architecture in that they all encompass the field of preventative medicine and behavioral health in the context of culture and community. So I apply that knowledge to a translation of science and evidence. I like to say I sit between the bench and the bedside. So my skill is understanding the literature of what the scientists are doing. I can do research, but I do not enjoy it. I prefer to just read it and understand it, and then apply the knowledge that the researchers are getting toward the implementation of programs and policies that benefit the community, patients, clients, and customers. My career has been in government private sector and nonprofit private sector. So I have applied those skills in federal government, state government, and non for profit and for profit companies. You can consider me a generalist in terms of health policies. I have worked on tobacco policies, fiscal policies, nutrition policy, emergency preparedness, general preventative medicine, artificial intelligence, predictive analytics, health informatics, and also urban design. So how to improve the health of communities through the design of communities, better urban design, trails and mixed use redevelopment. So you have a lot of businesses and also residents and restaurants. Okay. So how did I get to the Holistic Healing Cancer Center? I co-founded a company in 2012, and I left that company in the spring of 2016. I took some time off to consider my next project. I usually spend about 5 years on a project, and then I leave. That is my MO. Fix it and go. There are advantages and disadvantages to that, but that is what I do. So after 5 years of this last project, I left, and I was looking for opportunities, and I was meeting with a number of people at the University, and I stumbled on this issue of the cancer survivor population. And I started to learn about the reality that over 90% of people diagnosed with cancer survive it, but the experience from the point of diagnosis through survivorship, I see cancer in effectively 5 stages. So you're diagnosed. Then there is the period between diagnosis and treatment. I am a cancer survivor. And I can think of in terms of my experience. So a doctor says, "I have some news for you. You have cancer." So you have to process that, and treatment has not started yet. So you tell your kids or whatever. There is a diagnosis phase. Then there is a treatment phase, and you are going through treatment. Then there is the period of recovery right after treatment. And there is the survivorship treatment. So you have this huge population going through these phases of cancer. And the survivorship is growing to where we are approaching, by 2020, 20 million cancer survivors in the United States. So there is this huge population, and there is a gap in services for the holistic and integrative medicine. The treatment of the whole person throughout the phases of cancer. So when you go through treatment the oncologists job is to shrink the tumor. Right? Don't die from cancer. That is what they do. But then there is this whole person that needs to be treated, treated through what is called a care plan or cancer survivor plan. And I just got interested in this gap. And again,

thinking about my credentials and background, that whole context wrapped around the issue of cancer and led me to this organization. The opportunity was that this organization needed a new executive director and board chair, and I accepted both of those positions in January.

A: So this is probably jumping ahead a little bit, but do you see the design or someone's space as effecting the way that cancer patients learn and heal? Do you think that the urban design of things have anything to do with healing?

B: Absolutely. So there is design of personal space. Like designing it to support my own creative process. I need to have an office that is very comfortable that I enjoy being in. And I am a creative person, so I need to have a base that supports my creativity and my energy. And if you are in a community where you're not able to go out and walk around, or if you determine your neighborhood is not safe, you might be more reluctant to leave the house, you might be more sedentary, and if you look at places where the communities are not walkable, like they don't have sidewalks or trails, pocket parks, nature, so these kinds of things support healthy lifestyles. Also, if you think about the opportunities for healthy food: when I was at the center for disease control, the CDC, there were these very toxic alleyways and roadways, where you have up and down the street on both sides, fast food restaurants, and that is it, there is not a lot of healthy options. So you get these urban settings where it's high traffic, high fast food restaurants, the destruction of open space and nature. And then home design is the same. Having home being a place of comfort, wellness and healing, decluttered, clean, for me, I am not a clean freak, and we have kids, and the house just gets destroyed, and we are very active. We have two kids that play Lacrosse, so we have that that equipment everywhere, and I ski, so there is that equipment everywhere. The house can turn into a war zone. But, there is also a level of cleanliness and making it a relaxing environment. The other thing about environment is the importance of this organization, so if you think about that in relation to cancer patients. When I had cancer and had my surgery, I was up in the room at the hospital, and the doctor came in and asked if there was anything I needed. And my answer was that I needed to go home. I need to get out of here, and be in a healthy environment. In medical anthropology, I remember this discussion about how when you are in a hospital, you are dehumanized. Your identity is taken away. Literally, you become a barcode. And they take all your close and belongings, and they put them in bags, and they give you a gown and slippers, so you are stripped of everything. Your identity. Literally, you are stripped down naked and have a barcode. So this is the industrialization of medicine. Okay? So you go to the hospital, and they make sure you do not die of cancer. But for me, I needed to get home. Where I can relax. I needed that quickly. And that is what this organization offers to the cancer community is that same situation. And where we want to provide integrative medicine, like yoga, acupressure, acupuncture, counseling, bereavement groups, nutrition classes, exercise programs, all evidence based programs, but it is not the hospital. It's in a home-like setting. It has beautiful green space, and you can see outside, and under the trees. So absolutely, environment is critical to health and wellness.

A: Excellent! So piggybacking off of wellness and the 8 dimensions, why do you feel like the 8 dimensions of healing are important to cancer patients?

B: So...one of the things that I am looking at is Maslow's hierarchy of needs. Okay? So if you think about that, there are 5 levels of needs, right? So what we do is our programs nest into those needs. And with a purpose, self-actualization and purpose being the highest outcome.

A: Yes...right under basic sustenance and shelter you need meaning and purpose.

B: So basic needs, such as nutrition, sleep, exercise, that is number one. So we provide yoga and nutrition education, exercise programming, quality of sleep, that is the first level. The second level is this idea of community connectedness. So you have a need to be connected to others. So one of the first things we do when we meet somebody is we try to establish commonality. So we try to find something that we have in common. Like you have a cat, and I have a cat. And you know a Bill, and I know a Bill. Or oh you have this, well I have this. So it is this level of community connection. The third level is we have love and compassion, like a deeper connection of love and caring. And then there is this idea of developing a level of self-efficacy. A level of confidence. A level of skill. A level of self-identity and worthiness. And self-esteem. And the final level is purpose. So you now have all this. And on top of this pyramid is purpose, and that is the drive. So our programs fit into every one of these levels. We are not necessarily changing the programming, but we are rearticulating the structure, if you will, the architecture and scaffolding. So those 8 pillars will articulated as programs driven by Maslow's hierarchy of needs. And then, what is really cool is that that provides a space for program evaluation. So then what we are doing is we are saying, okay. What are we measuring at level one? The basic needs. Are we getting those outcomes? And then we measure the quality of the programs. So looking at the evidence of the programs. We are measuring individuals and getting feedback on individuals' sense of participation and the outcomes that they see. And then we will literally measure whether we are seeing the outcomes on that level. And at that level we are measuring the program and the effectiveness of that program all the way to the last 2 levels, which is self-efficacy and purpose. And then we are no longer measuring the program but the ultimate outcome. Do you feel you can survive this situation? Do you feel like you have the confidence, the skills, the efficacy, the energy, the support to get through this? And finally, do you have purpose? Because when it gets hard, and life gets hard, we have to have purpose. And the opposite of purpose is depression. Right? So purpose is the ultimate. And that is part of why I want to shift from just the 8 dimensions and integrate them into Maslow's hierarchy of needs. I want to communicate in terms of this pyramid. Because it ties into our programs, our evaluation, our fundraising, our training.

A: And in either case, you are basing it off of the dimensions, but this way you have it backed by very well-known research.

B: Exactly. So it gives us the evidence-based, which is a driver for me in what we do.

A: That is interesting to hear, because I have been looking at it from learner-centered teaching, which actually has a lot to do with self-efficacy, right? But also a transformative level, too. Because if you look at Mezirow, you have the disorienting dilemma, where it could be the stage of diagnosis, and then helping them to gain the right

knowledge to make decisions to impact their healing, so I find it really interesting that you have specifically chosen Maslow.

B: And it also ties into Bandura, with social cognitive theory, social learning theory, and DiClemente and the stages of change, so I think that, William James, the thing that I like about Maslow is because it has become a universal thing, and you can put in each one of these levels. So for example, you can place DiClemente's stages of change into this pyramid. You could use social cognitive theory, you could use William James's psychology, you could use Freudian psychology, you could use Jung. You could put it into the buckets of these stages. Like Piaget's developmental stages. In each developmental stage, you could pile them in.

A: What instructional practices do you use to improve the self-efficacy and well-being of cancer patients here?

B: I just mentioned a number of them, but thinking in terms of Maslow's hierarchy of needs, and making sure that I ask a person when I first meet them about nutritional behavior, about their exercise, about their sleep, like if you are not taking care of these basic things, you will not reach the latter things. So in terms of instructional practices, following that. But sometimes I jump right to purpose. So I take someone through stages of community connectedness and the individuals that support you. I don't ask specifically about someone's confidence in achieving someone, but I do like to get a feel for if a person has a level of learned helplessness or lack of confidence or empowerment. So I want to see if they can feel like they can handle this, and then I specifically address purpose, and I assign clients an assignment to spend a significant amount of time identifying their purpose. And this something I do every day. I read purpose statements. So what is my purpose? And that really drives instructional strategy. To get insight it's autobiographical and experiential to gain insight, and then driving out to the exports in the particular domains, so I spend a little bit of time understanding what their behavior is, and then I align them with a professional that can help instruct in that area. The second component of that is actually creating a written plan, and having that plan referred to constantly. So we are great planners. We do not plan well, however, as it relates to our health. And so the second component is to create that infrastructure, so that people can start to plan learning specifically as it relates to their health.

A: Wonderful! Do you feel like these methods have been effective so far? Or can they be improved?

B: Yep! The feedback from the clients is wow. One client said that this is the first time that someone was actually listening to them in a year and a half about their cancer experience. And then another person said that they are having a really hard time with their purpose statements. And it's been working with them on these purpose statements. And it was good insight into the reality of the situation. And if someone tells me they are having a hard time with their purpose, they're...now we have discovered an issue. It's a great place to start. And then yoga and all these different classes. The evidence is that they just work. And you don't have to justify yoga working because from the literature, these are all evidence based processes. To some extent, we can have trust in the outcomes, and we will achieve them as long as the person is participating in the

programs. So if someone is coming to yoga regularly, I feel that we can measure the effective outcome, and at the end of the day, I have a strong level of certainty that it is working.

A: We kind of touched on this, but how do you measure the effectiveness of your instructional practices and what other instructors are doing?

B: What we can do is use Maslow, and use it as a way to measure the quality of the program and the outcome of the client. So that is the best framework to measure it. And that way we can say, okay, what are the aspects of the curriculum that improve nutrition, for example, and then that is the antecedent to, if they are participating in that program, then the outcome will happen. What we are working on in the American Cancer Society, we need self-efficacy. We need community support and purpose, because it would be hard to find someone today who does not know that smoking is bad for them. So we have a ton of programs that are evidence based to address smoking cessation. Right? It comes down to the level of the individual teaching yoga, for instance, and it needs to be evaluated. Does that make sense?

A: Yea! So making sure that the instructors can cater to each individual and their need for the dimensions, the highest being self-efficacy and purpose?

B: And making sure that you are standardizing the curriculum. Like when we developed a teen tobacco cessation program. And it became very clear that we spent years developing this curriculum, but the implementation of the curriculum completely changed based on the instructor, the individual, who would get creative and not teach certain aspects of the curriculum because say they were not comfortable with it, or emphasize other aspects of the curriculum. During our observations, it became very clear that really really mattered was the quality of the instructor and the important of the instructor sticking with the curriculum that was meant to be delivered on evidence-based. Now the instructor providing feedback, now let's say this isn't working and this isn't working, and let's try this. That is program evaluation. But what we noticed is the problem of the instructors wanting to do their own thing. We spent years developing this formula, and they would not follow it. So then it becomes really important to focus on the instructor training, and doing things like role playing, making sure that we role played the process with different scenarios to make them comfortable with that component of the curriculum. And if not after the training, then we just knew that they would not be right as an instructor for this curriculum. I think that's a really critical aspect of programming is the training, oversight, and quality of the instructor.

A: Can you share any transformational stories that you have seen here?

B: Yea! We have a program for children whose family members have cancer, which is very unique. So these are the kids that do not have cancer themselves, but maybe it is a parent with cancer. And it's a really unrecognized population. And if you know the symptom and behaviors that no one noticed in this population, there is a tremendous amount of anxiety, depression, and PTSD type behavior. So we have a program for that population. And we had two sisters, teenagers, and we do an exercise where they create collages. And this one teenage girl said that her dad died of cancer, and she was really struggling with that. And she saw a picture, and she said, "I do not laugh anymore." And

she was the type of person who was always laughing. And she described herself as being very giggly and silly and playful. She said that she does not feel that she is that person anymore. But she was going through this exercise with these cutouts, and they were getting playful with it, and she came to this realization that she adopted that playfulness and silliness from her dad. And when she realized where that came from, she started laughing, and she realized that even though her dad is gone, that is inside of her. And so that's pretty amazing. And there are we have a lot of testimonials. And all has to do with this sense of rediscovery. We had talked about this sense of being stripped of your identity. And you become a cancer patient, and that is your identity, and you become fake. What is your barcode? You become this person with cancer. And I think that what happens here is re-identification. And I was meeting with a client a couple of weeks ago, and she is in her 60s, and she was fluctuating in weight, and I asked her if she was close to her high school weight, and she said yes. And I said, "Okay, so what were you like in high school?" And she started describing her experience, and they were positive experiences, and one of the things that got her really excited was getting back to that space, where she was excited and energetic and playful. And engaging in the community in activities and hanging out with friends, and being involved with clubs, and learning, and chasing boys, and staying fascinated with stuff, and I think that is one of the things that I see happening here. And you get cancer, and it is really hard because you lose this connection. And coming back here and being re-connected with the community and a sense of self is probably a major outcome we see within the testimonials in the archives. Such as, "I felt lost and confused, and I came to the Holistic Healing Cancer Center, and I found friends. And I got a better understanding." Or "I felt alone." We see that a lot. And I felt isolated." And a lot of quotes related to, "I did not know other people felt this way or thought this way." And I think in life in general, we tend to kind of gravitate to this idea that we are the only ones with this problem. We do that all day. Right? Normally. We just sit and "why me" and we do not realize that it's happening with our friends and neighbors, but we don't make that connection because we don't talk to each other about these things. We are so isolated. There is a book called *Bowling Alone* by Robert Putnam, and it's the metaphor for the destruction of community. We are in our cul-de-sacs, and our house, and social media, and we drive up our road, and we go up our drive way, and we pull into our garage, and we put the garage door down, and we go into the house, and we shut the door, and we sit in there by ourselves. And this is a really cool community space where they can unlock that situation. And that is what a lot of the quotes are. Even though they are all coming here with different cancers, different ideas, different socioeconomic status, it's just this theme of reconnection to community and self-identity. And we have a lot of programs such as massage and acupuncture and reiki and energy work that help with that.

A: Wonderful! Well that is all I have. Do you have anything you want to add?

B: Since this is a research project, over 60% of our population here is women, and I think I would be nice to have a men's program. I mean there is a program called REEL recovery which is actually a fishing program for men recovering from prostate cancer. But I think that it would be interesting to explore the evidence of the important for men's

programs. I would like to increase the involvement of men, whether it's support or men whose spouse or kid or loved one has cancer. Or if it's men themselves with cancer or cancer survivors. That is an area that needs some attention.

A: Call for future research!

B: Yes. And the second thing is really intriguing to me as a place for exploration for us, is programs for actual clinicians and physicians. The literature suggests that doctors are really burning out and a really high rate. And there is a really high suicide rate. This is what I am seeing in the literature. You know...it's a tense day, there is a lot of pressure, a lot of intensity, within the physician's space in general. And then you think about the life of an oncologist or clinician or nurse. There is an intensity all day. And I was thinking about is there an opportunity for us to create educational and wellness programs for clinicians? So we offer massages, we offer exercise and nutrition programs, we offer therapy. Maybe a physician has a difficult case where there is some connection to one of their patients, and their patient dies, or there is a difficult family situation, and it is very exhausting for them. I mean can we provide programs for physicians as we do our patients? It would be cool to invite in the clinicians in and say, "Look, you need some TLC too, you need some wellness, you need some instruction, and are you taking care of yourself? How does Maslow help you?" Because again, generally speaking, they are going to have a lot of anxiety and stress and lack of sleep and poor nutrition and exercise. And they are lacking connectivity. So those are two areas I would like to explore as an organization and that I would like to see in the literature. Also, to integrate the idea of holistic education and medicine for the clinicians. I do not think anyone is doing that. So to be here for the clinicians also.

A: And just think of the impact that it could, in turn, have on their patients, because the patients will know the difference between a doctor who is desensitized or depressed or burned out versus someone who is well themselves and who can kind of emanate that onto the patients.

B: Thanks! That was so great.

A: Thank you! I am getting so many good things, Bob. I am super excited.