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Instructional Strategies That Promote Cultural Competence in Nutrition and Dietetics Education

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COLLEGE OF EDUCATION

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MA, Immaculata University, 1997

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Abstract

Changing demographics in the United States to a minority-majority culture require health care professionals who are culturally competent to provide appropriate care to patients. In a university in the Mid-Atlantic region of the United States, a gap existed between student education and the culturally competent professional practice of entry-level registered dietitians. Using Freire's notion of social justice and Vygotsky's constructivist theory as the conceptual frameworks, the purpose of this study was to explore educators' instructional strategies that promoted cultural competence in nutrition and dietetics education. The research questions examined how educators described the instructional practices they employed to promote cultural competence in nutrition and dietetics education. Using a qualitative instrumental case study design, 9 educators responded to an open-ended questionnaire, as well as provided documents for analysis in the form of assignments. First-cycle data analysis was conducted using an initial coding protocol followed with a second-cycle phase using axial coding. The key themes for educators included the necessity of cultural competence in nutrition and dietetics instruction, and classroom and experiential learning activities engagement. The key conclusion was cultural competence is necessary to bridge the gap between student education and professional practice. The project study resulted in a position paper that recommended revising the local study site's curriculum to be based in cultural competence instruction through multiple modalities of collaborative and experiential learning activities. Positive social change will be present through enhancing nutrition and dietetics education to better better prepare students to be culturally competent professionals who provide improved health care to their patients.

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Section 1: The Problem

Introduction

The importance of culturally competent health care professionals who meet the needs of the people they serve has been well established in the literature. Cultural competence, combined with hands-on experience in health care education curriculum have been addressed by researchers in disciplines such as medicine, nursing, and dentistry (Betancourt, Corbett, & Bondaryk, 2014; Holyfield & Miller, 2013; Long, 2012). The desired outcome for educators is for students to build knowledge and gain experience with diverse communities to become skilled professional practitioners. Although different models for the inclusion of cultural competence in the curriculum exist, the overarching agreement among nutrition and dietetics educators is that cultural competence is not successfully mastered in a one-course-only approach, but rather it is mastered through the continuous process of education and development (Brown-Jeffy & Cooper, 2011; Campinha-Bacote, 2002, 2011; Kolb, 1984; Kolb & Kolb, 2005; Lawson & Lawson 2013).

Although previous researchers from different health disciplines have examined incorporating cultural competence into their curriculum, minimal research or scholarly discourse has occurred from the discipline of nutrition (Eliot, 2013; Hack, Hekmat, & Ahmadi, 2015; Kessler, Burns-Whitmore, & Wallace, 2010; Knoblock-Hahn, Scharff, & Elliott, 2010; Medico, 2011; Short & Chittooran, 2004). Undergraduate nutrition and dietetic program directors in the United States have previously reported that little time is spent on the acquisition of knowledge and hands-on experience building in the area of

cultural competence (Knoblock-Hahn et al., 2010). The Accrediting Council for Education in Nutrition and Dietetics (ACEND) has identified gaps in cultural competence between student education and professional practice. From these perceived gaps, revisions to the educational guidelines have been made by ACEND to improve the experiences of students and to promote better cultural competence by registered dietitians in professional practice (ACEND, 2015).

To work successfully to prevent and treat ailments and chronic disease, culturally competent health care professionals are needed. Culturally competent health care professionals are also needed owing to globalization and increased diversity anticipated in the United States. More than half of the United States' population is projected to belong to a minority group by 2030. The United States population is expected to reach a "majority-minority" level in approximately 2044, where no group will have the majority and the United States will become "a 'plurality' of racial and ethnic groups" (Colby & Ortman, 2015, p. 9). Based on the current minority growth rate in the United States by 2060, one in five people in the United States will be foreign born (Colby & Ortman, 2015). Groups with poorer physical health or more serious health conditions are expected to increase as the U.S. demographic changes. With a shift to a minority-majority population, considering the cultural upbringing and beliefs of others is important when addressing total health care (CDC, 2013a).

Nutrition is a vital part of total health care, and registered dietitians need to be culturally competent to meet the individual needs of those they serve. Without acquiring knowledge and the exposure of hands-on experience regarding cultural competence,

registered dietitians enter professional practice with little or no skill to provide culturally competent care (ACEND, 2015; CDC, 2013b). The predicted demographic shift in the United States suggest that appropriate nutrition care will be difficulty for minority populations to find if professionals are not aware, do not understand, or have had limited experience working with different ethnic and cultural groups (Council on Dietetic Registration [CDR], 2013).

In Section 1, I define the problem, provide a rationale for the study, review the literature on cultural competence in higher education curriculum, and present guiding questions that shaped the research study. I also address the significance of the problem will also be addressed.

Definition of the Problem

A gap exists regarding cultural competence between nutrition and dietetics student education and professional practice of registered dietitians (ACEND, 2015). Evidence of this phenomenon is seen at the local level, and little proof exists of the inclusion of cultural competence in nutrition and dietetics health care professional (HCP) education nationwide (Knoblock-Hahn et al., 2010; G. Pazzaglia, personal communication, October 12, 2015). As the population of the United States becomes more ethnically diverse, the need for cultural competence among HCPs is acute (CDC, 2013a, 2013b; Shrestha & Heisler, 2011).

Culturally competent HCP provide better care to patients by enhancing patient compliance, improving health outcomes, and reducing the costs associated with chronic disease (Betancort & Green, 2010; Campinha-Bacote, 2003, 2011; Holyfield & Miller,

2013). Conversely, the lack of cultural competence in HCP is a factor in poor health and chronic disease, especially among marginalized and diverse groups of people in the United States. Health care disciplines such as dentistry, medicine, and nursing include cultural competence as part of the educational curriculum, allowing HCP students to establish skills and experiences to best provide care for patients (Betancourt & Green, 2010; Campbell, Sullivan, Sherman, & Magee, 2010; Crandall, George, Marion, & Davis, 2003; Holmboe et al., 2011; Long, 2012; Rowland, Bean, & Casamassimo, 2006; Watts, Cuellar, & O'Sullivan, 2008). By comparison, nutrition and dietetics educators have been slower to establish such curricular requirements for cultural competence.

Nutrition is an essential component of health and well-being. Registered dietitians are ideally poised to assist in the prevention and treatment of chronic diseases and reducing health care costs, while at the same time improving health outcomes (Academy, 2012a; Bilyk, 2015). National educational standards for the required coursework of nutrition and dietetics HCP students are comprehensive. These national requirements include standards to prepare HCP students for a future of professional practice as a registered dietitian. Guidelines and recommendations are included to promote culturally competent HCPs who can work effectively with all people. This will result in the reduction of health disparities for those with chronic diseases such as diabetes, heart disease, and hypertension, particularly those in minority or marginalized groups (Academy, 2012a, 2015). However, ACEND (2015) found evidence of gaps between the nutrition and dietetics student education and professional practice application. One gap noted by ACEND was the ability to provide culturally competent care. This gap indicates

that although evidence suggests that the inclusion of some cultural competence education nationwide in nutrition and dietetics HCP curricula, students overall are not consistently receiving adequate exposure, experience, and application of cultural competence throughout the curriculum to prepare them for professional practice as registered dietitians able to confidently work with diverse groups (ACEND, 2015; Hack et al., 2015; Kessler et al., 2010; Knoblock-Hahn et al., 2010; Stein, 2010). To address this gap in cultural competence, ACEND (2015) has revised curricular guidelines and requirements for nutrition and dietetics HCP students nationwide. The gap in cultural knowledge and sensitivity, or cultural competence, is an important consideration for bridging cultural gaps between health care providers and recipients of health care (Brannigan, 2012).

In a university in the Mid-Atlantic region of the United States, evidence of cultural competence education in the nutrition and dietetics curriculum is consistent with previous observations. Although topics on cultural competence exist in some areas of the curriculum, cultural competence is not integrated throughout the entire curriculum. In addition, not all faculty believe that cultural competence needs to be covered in every course to build student experience. Without a standardized approach to include cultural competence within the curriculum, assessment strategies are challenging (G. Pazzaglia, personal communication, October 12, 2015).

Research for cultural competence in nutrition and dietetics education has focused on ethics, student and faculty perceptions, opinions of specific cultural competencies necessary in education, service learning, and cultural awareness in nutrition education. After reviewing the available literature, no indication of previous research that examined

instructional strategies to promote cultural competence in nutrition and dietetics HCP education exists (Christaldi & Bodzio, 2015; Eliot, 2013; Fornari, 2015; Hack et al., 2015; Harris-Davis & Haughton, 2000; Heiss, Goldberg, Weddig, & Brady, 2012; Kessler et al., 2010; Knoblock-Hahn et al., 2010; Medico, 2011; Short & Chittooran, 2004; Wright & Lundy, 2014).

Because nutrition and dietetics is becoming increasingly globalized, ACEND has recommended that a broader scope of skills be present during HCP education for future practitioners to bridge the gap in culturally competent professional practice by registered dietitians. In part, this gap may result from the demographics within the dietetics profession. The majority of registered dietitians (82%) are Caucasians of European descent (CDR, 2015). These recommendations are a step in the right direction to address the gap in practice; however, specific guidelines for implementing cultural competence throughout the curriculum are not addressed in the literature, leaving each institution to decide how, where, and to what degree to incorporate cultural competence into the curriculum for knowledge and experience (ACEND, 2015). General statements and recommendations from ACEND (2015) to improve cultural competence outcomes include the following:

- Experiential learning integrated into each degree program.
- Improved communication skills by registered dietitians to better "understand the patient's community and cultural ecosystem" (p. 4).
- Cultural care.
- The ability to assess cultural needs within clinical client care.

- The development of menus and standardized recipes for diverse groups.

Outcomes for registered dietitians are also included in the recommendations. Pertaining to cultural competence, it has been noted that registered dietitians should do the following:

- Be a resource for community organizations and design and implement culturally appropriate nutritional initiatives and programs.
- Be able to "identify and solve food, nutrition and/or health related issues" within communities (p. 23).
- Function as leaders and advocates of health to promote policy changes for better access to food and nutrition services for the public.

Rationale

The purpose of this study was to identify instructional strategies that promote cultural competence in nutrition and dietetics HCP education and to identify specific ways for educators to use the instructional strategies in their classrooms. The rationale for this study is linked with the ACEND (2015) recommendations for increasing student exposure to diverse populations to better prepare them for professional practice. The intended outcome was to enhance the teaching skills of department faculty at the study site to provide instructional strategies that promote cultural competence to help students' transition from the learning environment to professional practice at a university in the Mid-Atlantic region of the United States. This study may contribute to the existing body of knowledge and offer ideas for including cultural competence in the curriculum to meet the ACEND recommendations.

Evidence of the Problem at the Local Level

At a Mid-Atlantic university, one course requires that cultural competence is taught as part of the learning objectives. This course is required in the nutrition and dietetics curriculum for graduation. Other courses may offer examples of the application of cultural competence skills, but it is primarily the instructor's responsibility to integrate this topic into the course (G. Pazzaglia, personal communication, October 12, 2015). At this university, no evidence suggests the consistent theme of cultural competence throughout the entire curriculum to (a) convey the importance of being a culturally competent health care professional; (b) pass on skills and experience from educator to student learner; and (c) acknowledge that cultural competence comes through a process of learning through time, not from one-off lessons. If cultural competence is addressed in only one required course, no continuous discussion or experience exist through which students build knowledge and grow by applying what is learned to help bridge the gap for effective professional practice identified by ACEND (2015). In addition, the lack of a standardized approach to include cultural competence in the curriculum means assessing the development of cultural competence in learners is a challenge.

Evidence of the Problem From the Professional Literature

Cultural competence in higher education nutrition and dietetics curriculum appears to be limited to only a small number of studies. One study by Knoblock-Hahn et al. (2010) focused on what was included regarding cultural competence in nutrition and dietetics HCP curriculum. The authors examined didactic programs, coordinated programs, and dietetic internships in the United States. The research was limited to

programs teaching cultural competence in any part of the undergraduate degree or internship experience. The study included faculty perceptions regarding the need for cultural competence in the nutrition and dietetics curriculum. The researchers found that, nationwide, less than 20% of all accredited nutrition and dietetics programs offered at least one course that dealt with cultural competence (Knoblock-Hahn et al., 2010). Additional research has noted that some cultural competence education in nutrition and dietetics curriculum exists but is not widespread in the United States (Hack et al., 2015; McArthur, Greathouse, Smith, & Holbert, 2012; Wright & Lundy, 2015). The lack of conceptual awareness and understanding to apply basic knowledge in professional practice has also been noted in the research (Eliot, 2013; Hack et al., 2015; McArthur et al., 2012; Mier, Ory, & Medina, 2010; Wright & Lundy, 2015). These studies noted the need for hands-on, experiential learning to help bridge the gap between student education and professional practice.

The limited evidence of the inclusion of cultural competence in curriculum to help students become culturally competent professionals suggests that cultural competence is not significant in professional practice. The lack of cultural competence engagement in nutrition and dietetics curriculum can affect professional practice, especially as registered dietitians may find themselves working in different parts of the world, in different regions of the United States, or with diverse cultural groups in their neighboring communities (ACEND, 2015; Bilyk, 2015; Mier et al., 2010). The Code of Ethics governs the practice of dietitians worldwide and sets the standards of ethical practice. This code promotes competence, services provided based on needs, and advocacy to all who are served

(ICDA, 2010).

Definitions

Cultural care: The ability to provide appropriate attention, guidance, and treatment in a culturally sensitive manner (ACEND, 2015).

Cultural communication: Verbal and nonverbal understanding of the "patient in context with the patient's community and cultural ecosystem" (ACEND, 2015, p. 13).

Cultural competence: "A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. 'Culture' refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. 'Competence' implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities" (CDC, 2015).

Dietetics: The field of health that centers on the synergy between nutrition and health (Academy, 2015a).

Essentialist: The point of view that culture is static and unchanging; health problems are related to culture and not to other factors; all peoples within cultural groups are the same with no allowance for variability (Garneau & Pepin, 2015).

Ethnic minorities: Any group that differs from the main population with regard to national and cultural traditions (Gans, 1979).

Health disparities: "Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States" (National Institute of Health [NIH], 2015, p. 1).

Marginalize: Treating others as insignificant or peripheral, lacking importance, vulnerable (World Health Organization [WHO], 2015).

Nutrition: "The science of food and the nutrients and other substances they contain, and their actions within the body" (Whitney & Rolfes, 2011, p. GL-16).

Registered dietitian: A food and nutrition expert responsible in part for translating the science of nutrition into practical solutions for healthy living (Academy, 2015b).

Significance

In this study, I addressed the local problem of the inconsistent inclusion of cultural competence education in nutrition and dietetics curriculum resulting in the perceived gap by ACEND between the education of students and culturally competent professional practice. The local problem at a university in the Mid-Atlantic region is consistent with what is seen nationwide (ACEND, 2015; Hack et al., 2015; Kessler et al., 2010; Knoblock-Hahn et al., 2010; Stein, 2010). This project study is unique because I focused specifically on identifying instructional strategies that currently exist to promote cultural competence in nutrition and dietetics HCP programs in the Mid-Atlantic region of the United States. Identifying instructional strategies that promote cultural competence may help bridge the gap between the education of nutrition and dietetic students and registered dietitians in professional practice nationwide and at the study site. I documented how cultural competence is taught through instructional strategies through

classroom practices to add to the existing research and possibly help develop standards for the inclusion of cultural competence in the nutrition and dietetics HCP curriculum.

Nutrition is a service-oriented profession and registered dietitians are required to meet the needs of all people. Many areas of practice exist in the nutrition profession and being able to work effectively with all people is essential. Every nutrition discipline in every setting deals with unique individuals from different walks of life. Adopting cultural competence proficiency in higher education curricula will help nutrition and dietetic students acquire information and study or experience situations to become more culturally sensitive and subsequently more competent in their future professional nutrition practice as registered dietitians. It is through the process of becoming culturally competent that understanding and sensitivity in working with marginalized and diverse people can lead to positive social change. Experience with and exposure to diverse people promotes cultural competence health care professionals, allowing them to work together to help alleviate health disparities (Campinha-Bacote, 2002, 2011).

Guiding/Research Question

An issue in undergraduate nutrition and dietetic HCP programs in a university in the Mid-Atlantic region of the United States is the lack of cultural competence experience and training for students to become proficient and capable professional health care providers. The primary question guiding this research lends itself to qualitative exploration through open-ended survey questions to answer the following research questions (RQs):

RQ1: What are instructional strategies that promote cultural competence in nutrition and dietetics education?

RQ2: How do educators describe the use of these strategies to promote cultural competence in the classroom?

Review of the Literature

Health care is a complex system that revolves around the care and treatment of all people. The changing demographic is reshaping the U.S. health care system and the dialogue about the need for cultural competence education in health care is ongoing. The need for and the best way to provide cultural competence education are not always agreed on, which complicates implementation (Betancourt et al., 2014; Branigan, 2012; Campinha-Bacote, 2011; Stein, 2010). HCPs are required to provide the best possible care to all. This care includes being culturally competent to help alleviate chronic disease and improve the quality of life (Betancourt et al., 2014; Branigan, 2012). Registered dietitians are a part of the health care team. I identified instructional strategies that promote cultural competence in nutrition and dietetics curriculum to better prepare registered dietitians for professional practice. Presently, the literature gap needs to be addressed to include cultural competence in nutrition and dietetics education and culturally competent registered dietitians (ACEND, 2012, 2015).

I collected references search terms associated with cultural competence education at the collegiate level. I used scholarly sources and identified only a few actual research studies. Most of the recent sources are meta-reviews or articles written to increase the dialogue of culturally appropriate care, or reviews that promoted the need for cultural

competence education. Limited research has come from the field of nutrition and dietetics. Some search terms that I included were *cultural competence*, *education*, *higher education*, *nutrition*, *dietetics*, *instructional strategies*, *student engagement*, *experiential learning*, *culturally relevant pedagogy*, *diversity*, *marginalized*, *health care education*, *cultural literacy*, *nutrition standards of practice*, *undergraduate education*, *curriculum*, and pedagogy in various combinations. I reviewed references for each source to expand the literature review. Databases that I used for the literature review included Google Scholar, EBSCO, Science Direct, ProQuest, Sage, and the Academy of Nutrition and Dietetics database. The following themes emerged from a review of the literature: cultural competence in a conceptual framework, cultural competence in health care professionals, models for cultural competence in health care education, evidence of cultural competence in health care education, evidence of cultural competence in nutrition and dietetics education.

Cultural Competence in a Conceptual Framework

I identified what instructional strategies promote cultural competence in nutrition and dietetics education and how these strategies are employed in the classroom. According to Creswell (2012) and Lodico et al. (2012), when a theory is lacking a conceptual framework is appropriate to promote the identification, explanation, or clarification of concepts. Huberman and Miles (2002) added that a conceptual framework would help impart meaning to research that is created from socially constructed subjective participant input. Balcazar, Suarez-Balcazar, and Taylor-Ritzler (2009), Brown-Jeffy and Cooper (2011), and Lawson and Lawson (2013) all supported and

validated a conceptual framework for training and evaluating cultural competence in health care. According to Brown-Jeffy and Cooper (2011) and Horevitz, Lawson, and Chow (2013), the addition of evidence-based practice to establish pragmatic approaches to instructional strategies that promote cultural competence in marginalized and diverse populations is important. Identifying evidence-based instructional strategies that promote cultural competence is important to offer ideas for future curriculum planning and classroom teaching. Identifying these strategies addresses the ACEND guidelines for nutrition and dietetics HCP education (2015).

Social justice. Within a conceptual framework, social justice is a perspective that is commonly employed when studying culture, diversity, and marginalized or oppressed populations. Cultural competence is a part of the bigger picture of social justice (Dover, 2013; Friere, 1993). In his seminal work, Friere (1993) initially posited that reflection and critical thought should be applied to cultural knowledge; one must not merely act without thought and reflection to what those actions mean. Through reflection and critical thought cultural competence is promoted with social justice when educating the oppressed. Similar to the work of Dover (2013), Clingerman (2011) and Garran and Rozas (2015) posited that within a conceptual framework, social justice is an approach to viewing culturally competent health care. When applied to health care education social justice helps build critical awareness or consciousness to address local and global issues in health, which supported the work of Friere (Kumagai & Lypson, 2009; Solar & Irwin, 2010). Garran and Rozas (2015) furthered this concept of social justice within a conceptual framework by stressing that gender, ethnicity, sexuality, and social class

among other factors influence the whole person and must be taken into consideration for appropriate care to be given. Their focus was the intersection of cultural competence and social identity to strengthen the anti-oppression, social justice approach.

Constructivist definition. Constructivism has been theorized as an integral part of active and experiential learning. Vygotsky (1978) posited that learning (a) is social and collaborative, (b) should be relevant and applicable to real life, (c) will require assistance to integrate skills when learning new tasks, and d) should connect with out-of-classroom experiences. From a pragmatic standpoint, Dewey (1938) supported the experiential process of learning but stated that experience does not necessarily equate to education. Aligning with Dewey and Vygotsky, learning that is within the boundaries of health care application is collaborative and social by nature. Learning in health care education fosters participation through shared experience and application that extends beyond the classroom (Frenk et al., 2010).

Garneau and Pepin (2015) established a constructivist definition applied to cultural competence within the nursing curriculum that modeled continuous learning through experience and progress. A constructivist approach to cultural competence is in direct contrast to the traditional essentialist viewpoint that has dominated the perception of culture and the instruction of cultural competence. An essentialist viewpoint in health care focuses on identifying cultural differences to classify and categorize people for treatment; health problems are viewed to be a result of cultural behaviors that are unchanging and static. Since an essentialist viewpoint makes it easy to compare traits or

attributes to categorize groups of people by identifying differences to quickly build treatment plans, it limits the ability to treat and heal individuals (Garneau & Pepin, 2015).

Continuing this theme, Betancourt et al. (2014), Branigan (2012), Braveman et al. (2014), Campinha-Bacote (2011), and Garran and Rozas (2013) concur that a conceptual and constructive base from which cultural competence can be advanced through progressive, pragmatic, and process learning is essential in the education and training of HCP. The progressive and pragmatic process of learning identifies cultural competence as a dynamic process that is acquired through time according to Brown-Jeffy and Cooper (2011), Campinha-Bacote (2011), Chin et al. (2012), and Frenk et al. (2010). In addition, it is through the process of becoming a culturally competent HCP that one learns to consider people through the evolving social context of their unique circumstances rather than merely the outcome of specific behaviors, practices, or beliefs. These authors additionally argued for an interdisciplinary approach to cultural competence education to better the practice of all HCPs.

Culturally Competent Health Care Professionals

Cultural competence is a vital part of a health care professional's role. The requirement of culturally competent HCPs is based on the standards of beneficence and nonmalfeasance in medicine (AMA, 2001; Bravemen et al., 2011; Johnson-Askew, Gordon, & Socklingam, 2011). Contributing to this is the changing U.S. demographic and the need to practice in a culturally competent manner with all people. With the population of the United States expected to shift to a minority-majority (Colby & Ortman, 2015), current literature validated the existing view that cultural competence is a

vital part of basic health care training and education to prepare professionals to serve others in the best way possible. The ability to care for people in a culturally competent manner promotes equity of care and ultimately reduces health disparities that are due to cultural beliefs, ethnicity, and language barriers (Betancourt et al., 2014; Branigan, 2012; Braveman et al., 2014; Johnson-Askew et al., 2011). Brown-Jeffy and Cooper (2011) and Lawson and Lawson (2013) extended the focus of cultural competence education to include increased instructor training. They viewed engaging all HCPs through practical experience and continuing education as significant to the process of developing competence; it is not good enough to merely engage student learners.

Since cultural competence education is necessary to equip HCPs to be well trained, the need for evidence-based practices within that education exists. Evidence-based practices ideally should include interactive techniques that engage learners to practice cultural competence, such as experiential learning (Chin et al, 2012; Frenk et al., 2010). In addition, Chin et al. (2012) noted that research has not focused on the techniques of cultural competence education and training, so little evidence exists to identify what specific techniques or instructional strategies promote cultural competence. Similar to the work of Chin et al., Betancourt et al. (2014) considered a pragmatic approach and discussed the need for HCP. Their approach was to equip HCP with adaptable tools and skills to provide equitable quality care considering that no cultural template or one-size-fits-all cultural competency approach exists. Brown-Jeffy and Cooper (2011), and Lawson and Lawson (2013) agreed that tools and skills are important and added that the HCP needs to also consider the bigger picture of culture: awareness,

knowledge, and attitudes are also vital in the development of a culturally competent HCP. However, they posited that the 'what' is easier to identify than the 'how'; what is needed is more consistent culturally competent health care by professionals, but how those professionals become more culturally competent is not as easy to pinpoint. As part of becoming a more culturally competent HCP, educational requirements support the constructivist process of developing cultural competence. A process is a means to an end rather than an end itself (Betancourt et al., 2014; Branigan, 2012; Braveman et al., 2014; Campinha-Bacote, 2011; Garran & Rozas, 2013). To be a competent HCP takes time and involves continuous engagement, experience, practice, and lifelong learning.

The need for cultural competence can be viewed as a multicultural imperative in health care. The culturally competent HCP must meet the ethical challenges and become more focused on reducing health disparities of those in the minority, marginalized, or diverse groups through culturally competent engagement and care (Betancourt et al., 2014; Cadoret & Garcia, 2014). In addition, Branigan (2012) and Johnson-Askew et al. (2011) noted that to be culturally competent one must be professionally humble and continuously reflect on one's biases and tendencies. This aligns with the belief posited by Braveman et al. (2014), that the practice of caring for others should be guided by ethics and social justice. Similarly, Betancourt et al. (2014), Branigan (2012), and Campinha-Bacote (2011) stated that the HCP must meet the ethical challenges in the changing health care system that reflect a growing minority population and changing U.S. cultural diversity.

As previously stated, cultural competence is an integral part of meeting ethical

challenges and is essential for qualified health care professionals to be able to work successfully with diverse groups. Johnson-Askew et al. (2011) and Cadoret and Garcia (2014) promoted the idea that health care is relational and interpersonal. In addition to the need for cultural competence in HCP, they posited that the role each HCP plays in caring for the health of another puts them in the ideal position to take the lead and initiate contact in a culturally competent manner in situations that are specific to their discipline. HCP know their own areas of care and have an obligation to be a positive influence on the health care experiences of those they serve to reduce health disparities.

In contrast to the view that cultural competence education and training is vital to quality health care, Lie, Lee-Rey, Gomez, Bereknyei, and Braddock (2010) and Horvat, Horey, Romios, and Kis-Rigo (2014) questioned if patient outcomes were evident after receiving care from a HCP. Lie et al. (2010) and Horvat et al. (2014) indicated that a scarcity of evidence that links cultural competence education of HCP to improved patient outcomes. Lack of high-quality research that critically assessed whether educational interventions affect patient health outcomes was noted and aligns with the assessment previously noted by Chin et al. (2012) that evidenced-based practices in cultural competence education are necessary.

Models for Cultural Competence in Health Care Education

The need for culturally competent HCP has previously been noted. The classroom education of students without structure or intent, or without strategies to assess learning outcomes is not enough to promote cultural competence for professional application. In the realm of education, models provide structure by which to design and implement

educational policies and practices. In the area of cultural competence education in health care few models exist that have validated frameworks and outcome measures that indicate the effectiveness of education (Balcazar, Suarez-Balcazar, & Taylor-Ritzler, 2009; Suarez-Balcazar et al., 2011).

Several models of cultural competency are available that have been employed to teach cultural competence. Some models are HCP education-specific, since other models are patient-focused checklists. All of the models have the similar goal of improved interaction between patient and health care professional, but vary in the degree and approach of that interaction. The BATHE model incorporated background, affect, trouble, and handling and was developed by Stuart and Leiberman and focused on the psychosocial context for a patient's visit (2002). The ETHNIC model developed by Levin, Like, and Gottlieb, as cited by Campinha-Bacote (2011), focused on explanation, treatment, healers, negotiation, intervention, and collaboration and was created with the intention of facilitating communication between health professional and patient. The GREET model was designed specifically for nonnative patients and focused on generation, reason, extended family, ethnic behavior, and time living in the United States (Chong, 2002). The LEARN model helped to promote good communication between health professional and patient through listening, explaining, acknowledging, recommending treatment, and negotiating an agreement for that treatment (Berlin & Fowlkes, 1983). The BATHE, ETHNIC, GREET, and LEARN models are all patient-focused and do not necessarily entail HCP education (Berlin & Fowlkes, 1983; Campinha-Bacote, 2011; Lieberman, 2002).

Table 1

Models for Cultural Competence in Health Care

	Patient-focused	HCP education	Focus or purpose
BATHE	X		Background, affect, trouble, handling; psychosocial context for patients visit
ETHNIC	X		Explanation, treatment, healers, negotiation, intervention, collaboration; explanation of treatment and negotiation of care process
GREET	X		Generation, reason, ethnic behavior, extended family, time (living in the U.S.); nonnative patients
LEARN	X		Listen, explain, acknowledge, recommended treatment, negotiated care; promote good communication between HCP and patient
Campinha-Bacote Model	X	X	ASKED; cultural competence for all (not only patients); evolves as a process
Model	X	X	Comprehensive approach based on 16 assumptions; contextual understanding and awareness to serve patient

Note. HCP, health care professional; ASKED, awareness, skill, knowledge, encounter, desire.

Two models focus on HCP education: the Purnell model and the Campinha-Bacote model. The Purnell model considered patients as co-participants in their care, which is similar to the LEARN model posited by Berlin and Fowlkes (1983), but has been used in HCP education. In contrast to the previous models, Purnell (2002) posited a very comprehensive approach based on 16 assumptions that focused on the need for contextual awareness and understanding to best serve a patient. The model included a detailed schematic that focused on the patient but also considered the global society, community, family, and person within many disciplines of health care such as

psychology, nutrition, and sociology. Finally, Campinha-Bacote's (2002) model is a five-step approach to culturally competent care. This model included awareness, skill, knowledge, encounter, and desire using the mnemonic ASKED. The Campinha-Bacote model is the most widely used in health care education as it promotes the concept of cultural competence learning as a process. One specific detail of this model is that it is vital to use with everyone, not just patients from different cultural or ethnic groups (Campinha-Bacote, 2011; Racine, Proctor, & Jewell, 2012).

In 2011 Suarez-Balcazar et al. furthered the Balcazar et al. (2009) research and developed a model that assessed cultural competence among rehabilitation practitioners. The work of Balcazar et al. (2009) is significant as they emphasized the common ground shared by all cultural competence education models: the inclusion of behavioral (acting) and conceptual (knowing) components of health care. Balcazar et al. (2009) also noted the need for a contextual component within educational models. It is in the context that cultural beliefs and practices are found. The Campinha-Bacote model (2002, 2011) and the Purnell model (2002) both validated this need for contextual awareness. Both models incorporated tools and skills that helped learners identify context through the acquisition of specific details surrounding the beliefs and practices of the patient. Both the Campinha-Bacote and Purnell models are found in student education as well as continuing professional development. Again, process learning that is social and continuous is emphasized more than one-off experiences in the classroom. The overarching theme of these models is that one moves from being unconsciously incompetent to unconsciously competent (Campinha-Bacote, 2002, 2011; Purnell, 2002).

Without a model as a guide, cultural competence education tends to be relegated to specific courses and may be considered a one-off experience. Regardless of whether a one-off learning experience or the whole curriculum approach is used to incorporate cultural competence into HCP education, it is difficult to assess as a learning outcome. This is partly because 'cultural competence' is not clearly defined, is not a universally agreed upon practice, and includes conceptual themes as opposed to tangible practices (Stein, 2010). Assessment is crucial to determine appropriate application to improve the health outcomes of patients. The model for assessing cultural competence established by Balcazar et al. (2009) aligns with the cultural competence models developed by Purnell (2002) and Campinha-Bacote (2002, 2011), where individuals must be considered within their circumstances and in their unique cultural context. The idea of learning to be culturally competent as a process has gained popularity and is becoming a standard practice, supported in Section 1 by Betancourt et al. (2014), Branigan (2012), Braveman et al. (2014), and Garran and Rozas (2013).

Cultural Competence in Health Care Education

Cultural competence is evident as an integrated theme in pre-medicine curriculum and is a requirement in internships and residencies for the medical doctor. Cultural competence is included in medical education as part of ethical practice to provide quality care to all patients. In addition to knowledge and skills, the practical application of culturally competent care is crucial in medical education as doctors become trained in treatment modalities with diverse people (Betancourt et al., 2014; Brannigan, 2012; Kumagai & Lypson, 2009). In addition to medicine, cultural competence is an integrated

component of the curriculum of many health care fields such as dentistry, midwifery, nursing, and rehabilitation therapies like occupational therapy and physical therapy (Beach et al, 2005; Holyfield & Miller, 2013; Kumagai & Lypson, 2009; Long, 2012; Matteliano & Stone, 2014; Rowland et al., 2006).

Cultural competence education can be divided into didactic learning and experiential learning. The most common means of instruction used in HCP education were lectures, small group discussion, written reports, clinical experience, simulation, guest lectures, mentoring and consulting, educational partnerships, and studying abroad (Long, 2012; Reyes, Hadley, & Davenport, 2013; Rowland et al., 2006). Holyfield and Miller (2013) added that educational strategies must include practices to address health disparities specific to ethnic, socioeconomic, and cultural identity. In addition, Holyfield and Miller (2013) noted the importance of using a model to organize learning and application and identified the LEARN model by Berlin and Fowlkes (1983) that was previously discussed. Rowland et al. (2006) added that identifying cultural competence within the curriculum was easy because it is considered essential and nonnegotiable. However, they also noted that identifying how cultural competence is integrated into the curriculum is challenging. Matteliano and Stone (2014) suggested that building cultural competence starts with didactic learning and progresses to immersion and hands-on experience with diverse groups to strengthen student confidence, which may help in the development of successful relationships with patients.

Long (2012) and Reyes et al. (2013) additionally looked at instructional strategies and how current education met standards to provide adequate experience to graduating

nurses. It was noted that the perception of graduating nurses was high regarding cultural competence. This supports the position by Matteliano and Stone (2014) that the focus should be on progressing through didactic learning to hands-on, experiential application. As the natural progression of learning is knowledge to application, Bringle, Clayton, and Plater (2013) stated that all learners tend to overestimate their knowledge and skills, so means of assessment should not solely rely on subjective input. As a part of the progression from knowledge to application, Jesse and Kirkpatrick (2013) added that it is important for learners to have self-directed inquiry and discovery techniques to help them succeed in a global economy and multicultural society.

Because cultural competence is a part of health care education, it is not enough to just educate and provide experience to learners. Other factors have started to emerge in the conversation on adjusting the approach to cultural competence in HCP education. Current dialogue in health care education focused on (a) how to best prepare HCP through cultural competence education, (b) how to assess health outcomes when cultural competence is a part of care, (c) understanding how cultural competence translates into equitable and fair care, and (d) identifying strategies to cross professional disciplines in health care and offer an interdisciplinary approach to cultural competence practice and experience (Abu-Rish et al., 2012; Betancourt et al., 2014; Branigan, 2012; Frenk et al., 2010; Koehn & Swick, 2006). Abu-Rish et al. (2012) specifically addressed the need to have more detailed information about conceptual frameworks that fit teaching methods and outcomes.

Caplan and Black (2014) questioned if cultural competence education produced better clinical care. To answer this question, research is needed to identify the best ways to assess patient outcomes. They added that a change in HCP attitude toward a more culturally competent professional practice did not necessarily imply a change in patient outcomes. These findings are consistent with the findings of Lie, Lee-Rey, Gomez, Bereknyei, and Braddock (2010) who reported that limited research exists that indicated improved patient outcome with culturally competent HCP education. Even though cultural competence education is viewed as a significant part of HCP education overall, it is not a universally employed practice in all health care education.

Cultural Competence in Nutrition and Dietetics Education

Evidence of cultural competence exists in some nutrition and dietetics HCP education but it is not widespread in the majority of programs in the United States. In the curriculum, cultural competence education practices range from nonexistent to international service learning projects. Service learning projects focus on experiential learning in short-term educational trips to enhance learning, application, and skill (Hack et al., 2015; Knoblock-Hahn et al., 2010; McArthur et al., 2012; Wright & Lundy, 2015). The lack of widespread cultural competence in the curriculum directly affects the practice of registered dietitians once their formal undergraduate education is complete. Cultural competence is a core element for the professional registered dietitian, and as previously noted, recommendations to reduce the cultural competence gap between student education and professional practice have been made by ACEND (2012, 2015). These recommendations are helpful as guidelines but need to be well defined to extend the

inclusion of awareness, skills, experience, and assessment (Hack et al., 2015; Knoblock-Hahn et al., 2010).

In 2012 McArthur et al. assessed the cultural knowledge, attitudes, and experience of nutrition and dietetics students. They found that students had a better understanding of basic information and knowledge about different cultures as opposed to health beliefs and health care interaction with different cultural groups. Their findings are evidence of a disconnection between knowledge and application, which aligns with the gap between education and professional practice for registered dietitians noted by ACEND (2015). This disconnect was also evident in the studies by Eliot (2013) and Mier, Ory and Medina (2010). Eliot (2013) noted that students believed they received relevant but not adequate education and training. Mier et al. (2010) added that culturally sensitive interventions within the Hispanic population were mostly theory driven and based on formative learning rather than a deeper understanding of cultural practices and beliefs. This indicated a lack of sensitivity to the Hispanic culture and values. McArthur et al. (2012) noted that students need opportunities for experiential learning and situations that allow practice to enhance knowledge and understanding to build communication skills. The McArthur et al. (2012) study aligns with ideas that Abu-Rish et al. (2012) promoted: the need for inter-professional education in health sciences to promote competencies for health care professionals. Inter-professional education is shared experience in learning and practice, and cultural competence is a major factor when preparing to work with diverse people. The idea of shared experience ties directly to the findings of White (2010)

who stated that educators must model the conviction that culture and cultural competence is important in pursuance of student acceptance and adoption of these beliefs and actions.

The theme of cultural competence that focuses on social and experiential learning interwoven throughout the curriculum is an increasingly present topic in nutrition and dietetics research (Eliot, 2013; Keast, MacFarlane, & Riddell, 2012; Knoblock-Hahn et al., 2010; McArthur et al., 2012; Medico, 2011; Mier et al., 2010; Wright & Lundy, 2015). Wright and Lundy specifically looked at the guidance and structure of the curriculum to help students' progress from surface learning to informed, critical thinking (2015).

Implications

Anticipated findings of the data collection and analysis indicated that there exists still a lack of instructional strategies that promote cultural competence experience and training in nutrition and dietetic education in the Mid-Atlantic region of the United States. The hope is that dialogue about the importance of cultural competence in nutrition and dietetics education is becoming more prevalent and that it is leading to an action plan in the curriculum. This more closely mirrors what is currently in health care education in general. It was not expected that the acceptance of cultural competence in the curriculum is widespread since Knoblock-Hahn et al. (2010) initiated the study of cultural competence in the nutrition and dietetic curriculum. An additional possible direction is that nutrition and dietetics educational programs will show evidence of critical analysis of where cultural competence can be incorporated into the curriculum. Critical analysis of the inclusion of cultural competence will help to address the gap identified by ACEND,

and help to bridge the education of nutrition and dietetics students with registered dietitians in professional practice (2015).

The results from this study identified instructional strategies that promote cultural competence education to provide ideas and insight for better faculty practices at a university in the Mid-Atlantic region of the U.S. The findings are a start to the process of generating best practices, tools, and ideas to help guide faculty in establishing curriculum standards and measurable outcomes in practical terms. The ACEND (2015) guidelines are important for providing the general direction of the curriculum, but the guidelines lack details and specific examples to implement change at the local level. Given that only 20% of the nutrition and dietetic programs in the United States offered one course that touches on the subject of cultural competence, it is expected that registered dietitians that are educating the students have had little or no previous cultural competence training themselves (Knoblock-Hahn et al., 2010). Identifying instructional strategies that promote cultural competence can provide the backbone for real change in educating learners and instructors in nutrition and dietetics programs. The strategies identified in this study will help generate discussion and ideas for practical tools to be developed in the future. These tools can become standards within the educational curriculum and help bridge the gap between student learning and professional practice to help improve health disparities and health outcomes of patients. The implications from this study are exciting to consider.

Summary

In this study, I sought to identify instructional strategies that promote cultural competence in nutrition and dietetics education. To date, there has been limited research on the inclusion of cultural competence in the nutrition and dietetics curriculum in the United States, and no research that has looked at instructional strategies. The Knoblock-Hahn et al. (2010) study indicated that cultural competence is mostly lacking in the curriculum. Additional research since then has validated those findings. Some evidence that cultural competence education exists, however, it is not widespread in the nutrition and dietetics curriculum in the United States. The lack of consistent cultural competence education in the curriculum affects the level of application and understanding: knowledge and awareness are not enough to promote a competent professional practice for the registered dietitian. This lack of experiential skill and application in education leads to a gap in practice for the registered dietitian. Current ACEND (2015) educational guidelines offered general recommendations for nutrition and dietetic education to bridge perceived gaps between student education and the professional skills of the registered dietitian. Incorporating cultural competence in the nutrition and dietetics curriculum may be beneficial in enhancing professional practice as students learn how to be culturally competent health care professionals. The following sections will address the methodology used in implementing the project study to ascertain what instructional strategies exist to promote cultural competence in nutrition and dietetics education.

Section 2: The Methodology

Introduction

In Section 2, I describe the overall protocol for this instrumental case study. Creating a protocol for case study research is an integral part of increasing reliability by following guidelines and policies that are appropriate and consistent throughout the research process (Yin, 2014). As previously noted, U.S. demographics are shifting toward a larger percent of minority residents (CDC, 2013a; Colby & Ortman, 2015). Minority groups have different cultural issues, beliefs, and practices. Health care professionals need to have understanding, compassion, and a working knowledge of these beliefs and practices to provide quality health care and elicit behavior change for improved outcomes. Registered dietitians play a vital role in health care and must be culturally competent to meet the needs of those they serve. To emphasize the importance of culturally competent registered dietitians, ACEND published guidelines to bridge the gap between what students learn and experience and effective professional practice. Recommendations for including cultural competence throughout the nutrition and dietetics curriculum have been included in these guidelines (2015).

Research Design and Approach

The problem driving this project study is the gap in cultural competence between student education and the professional practice of the registered dietitian as evidenced by research from ACEND (2015). This gap exists at the national level, but understanding and insight into how this phenomenon applies specifically to address the problem at the local level is needed. Because no existing research helps describe the phenomenon in the

Mid-Atlantic region, I employed a qualitative research approach within a bounded system. Qualitative research allows the researcher to explore and be directly involved with the phenomenon through the eyes of the participants. Through this direct involvement, the researcher obtains a deeper understanding that will provide insight and help advance ideas or hypotheses for future research. A limitation of the detailed and deep information is that it is not easy to generalize, and it is often specific to only the phenomenon. In addition, this type of information and data gathering is less formal and is not based on an objective, systematic approach (Creswell, 2012; Lodico et al., 2012; Trochim, 2006).

Within the qualitative research structure, an instrumental case study is used to explore the phenomenon of a gap in cultural competence and identify concepts related to that gap. An instrumental case study aids in the understanding of an occurrence and is "the study of a case to provide insight into a particular issue, redraw generalizations, or build theory" (Grandy, 2016, p. 1). With the focus on exploring instructional strategies to better understand the phenomenon at the local level, I chose to survey educators and preceptors who are currently employed in the Mid-Atlantic region and who are also members of the NDEP dietetic practice group. The small-scale approach of this instrumental case study provided natural boundaries or qualifying factors for the data and information collected from the dietetics educators and preceptors in the Mid-Atlantic region. For this project study, the instrumental case study answered the following RQs:

1. What are instructional strategies that promote cultural competence in nutrition and dietetics education?

2. How do educators describe the use of these strategies to promote cultural competence in the classroom?

Within the scope of the qualitative research tradition, different approaches are used in health care studies. These include action research, ethnography, grounded theory, and phenomenological studies (Cohen & Crabtree, 2006). Case studies are frequently used in health care research because the focus is on patients or a specific practice, or a health care system is easily bounded (Holloway & Wheeler, 2013). The primary focus of qualitative research in this case study was an exploratory approach to identify concepts to describe the phenomenon in the Mid-Atlantic region of the United States. I sought insight and understanding to develop further explanation, ideas, and theories on cultural competence for application to programs at the local university.

Furthermore, exploratory research drives further investigation and promotes explanation. Methods of conducting qualitative research can involve information and detail collection via interviews, focus groups, observations, surveys, fieldwork, or document analysis (Lodico et al., 2012). The choice to employ an instrumental case study was based on the need to gather rich and detailed information to gain insight. Case studies permit in-depth study of a particular situation or phenomenon to enhance understanding and help build an idea or theory. A case study is appropriate for this project study because exploration was needed to study this particular phenomenon before an explanation for the situation can be made.

Different approaches to qualitative research were reviewed before deciding to implement a case study. Ethnography, phenomenology, and narration are all approaches

in qualitative research, but these did not address the intent of this study. The intent was to discover what instructional strategies are used to promote cultural competence, and how instructors describe the use of these strategies in the classroom. Cultural competence involves working effectively in cross-cultural situations, transcending any one specific culture. Deeper investigation to understand why specific instructional strategies were used was beyond the scope of this study.

The purpose of ethnography is to discover the elements of a culture and its uniqueness (Lodico et al., 2012). My interest was not to examine instructional strategies within one specific culture, but to explore the gap between student education and professional practice in nutrition and dietetics overall. The purpose of phenomenological inquiry is to look "closely at an individual's interpretation of his or her experiences" (Lodico et al., 2012, p. 270). My intent was not to explore how participants make meaning, or to understand their thinking or choices behind instructional strategies. Similarly, I was not interested in the participant's description of the instructional strategies used, which is the purpose of narration.

After reviewing different types of qualitative research design, a case study was the most appropriate way to address my specific focus to explore the gap between student learning and professional practice (Creswell, 2012; Lodico et al., 2012). A case study does not require testing or experimentation but relies on communication and the transfer of knowledge through rich narrative accounts. A case study allows the researcher to dig deeper and understand a situation. This exploration process yields personal information and insight to instructional strategies that promote cultural competence in nutrition and

dietetics education at the local level. Identifying instructional strategies provides insight to guide faculty practice in the nutrition and dietetics program at the local university in the Mid-Atlantic region where this author is an instructor. The Mid-Atlantic region includes several states, but for this study it will be limited to Pennsylvania, Delaware, and New Jersey.

Participants

Selection Criteria

This study surveyed educators of undergraduate nutrition and dietetics HCP programs. Participant criterion is important to ensure that the information gathered will be pertinent to the study. Homogenous sampling is one type of purposeful sampling where identified individuals meet certain characteristics or criteria for inclusion (Creswell, 2012). For this study, homogenous sampling was used to ensure that participants hold either a master's degree or doctorate to teach in higher education and are also credentialed as registered dietitians. Registered dietitians are accountable for standards of professional practice and continuing education to maintain credentialing through the national organization, the Academy of Nutrition and Dietetics (Academy). Since instructors and preceptors in nutrition and dietetics education can be found nationwide, this study limited the homogenous sampling pool to those instructors in the Mid-Atlantic region. This is the same region where the local problem was identified. Using these criteria for participant selection means that the faculty perspectives are relevant to the purpose of the study (Merriam & Tisdell, 2016). Participant selection must

be free from bias and be a representative sample of the relevant population (Academy, 2012b).

Participant selection was not directly accessible through the Academy website for members in general, and being a member of the Academy does not mean one is an instructor in higher education, as numerous professional paths exist for the registered dietitian. Practice groups exist in addition to Academy membership for registered dietitians. Practice groups are voluntary and allow registered dietitians to gather and share common interests and experiences, for example, sports nutrition, food service directors, or being of a specific heritage, such as Jewish. Each practice group has volunteer coordinators and officers who manage their group membership. Although numerous practice groups exist, the group that has members who are educators in nutrition and dietetics curriculum is Nutrition and Dietetic Educators and Preceptors (NDEP). This practice group is the only one whose membership is primarily comprised of educators and preceptors in higher education nutrition and dietetics programs.

Justification for Number

It is anticipated that a 30% to 50% response rate for mailed surveys is standard, with the response rate for Internet surveys being lower (Lodico et al., 2012). For this study, six to 10 participants were viewed as an ideal response rate to obtain a deeper inquiry to explore the research questions. Saturation is typically sought in qualitative research to determine sampling adequacy (Creswell, 2012; Fusch & Ness, 2015; Lodico et al., 2012). Every qualitative researcher is faced with practical constraints and unforeseen issues that should be considered (Draper & Swift, 2010; O'Reilly & Parker,

2012). For this research study, the constraints included minimal participant response, lack of detail in participant responses, and not providing responses to specific survey questions. Given that Internet surveys yield a lower response rate, half of the NDEP members were emailed initially to participate. The remaining 50% of the practice group were emailed to participate when not enough initial responses were received. Random generation from the homogenous sample occurred through the use of a spreadsheet that lists the participant contact information. An online survey was an ideal way to reach instructors and preceptors in the large Mid-Atlantic region and investigate responses to the research questions. To be able to reach participants, faculty interviews or face-to-face contact was not feasible for this study given the widespread region. Increasing the likelihood of survey responses through email follow-up was appropriate.

Gaining Access

Permission to have access to the NDEP practice group database was required and granted by the Academy employee who acts as the practice group administrator for NDEP and by the volunteer member chairperson. Contact information came directly as an Excel spreadsheet that provided names and email addresses only. 128 members in the Mid-Atlantic region from NDEP were present (personal communication, October 2015b). Members of the NDEP practice group that are currently employed in higher education in the Mid-Atlantic region were emailed by the researcher and invited to participate in the online survey.

Measures for Protection

Walden University IRB permission (06-21-16-0405957) was granted before beginning any research and helped ensure that the research plan was acceptable and that the benefits outweighed the risks to participants (Creswell, 2012). This helped ensure that appropriate professional behavior was employed for treatment of participants that shows respect, beneficence, and justice (Creswell, 2012; Trochim, 2006). Responses were anonymous through SurveyGizmo, and each response was recorded as the number in which it was received. In addition, names of participants on the spreadsheet were changed to numbers to create anonymity so that the researcher did not know who has been contacted via the online survey.

Researcher and Participant Relationship

The researcher-participant working relationship is minimal through an online survey, but clear communication is important to ensure appropriate responses to the research questions as well as to build trust throughout the data collection and analysis process (Merriam & Tisdell, 2016; Yin, 2014). Clear communication via direct contact started with the emailed letter inviting NDEP members to participate in the survey. Part of this initial contact was to convey researcher confidentiality and establish trust in handling all responses and documents (Merriam & Tisdell, 2016). The letter inviting participation described the scope and purpose of the study, as well as procedures taken to protect confidentiality and anonymity of participants. The researcher practiced common sense and good judgment in maintaining just practices and confidentiality of participants. Consent forms were not included in a separate document, but as a part of the initial

invitation to participate letter. Participation in the online study implied consent, and no personal contact was made unless participants directly emailed the researcher to provide additional documentation or comment. All documents were saved electronically on my password-protected computer in a hidden file with names excluded for five years before being destroyed (Merriam & Tisdell, 2016).

Data Collection

Data collection and analysis occur simultaneously in case study research (Academy, 2012b; Creswell, 2012; Merriam & Tisdell, 2016; Yin, 2014). The collection of data began after IRB approval had been granted. For this case study, structured online surveys and document examination were employed to gather and analyze the data. These methods of collecting data aligned with the standards of research for registered dietitians when conducting case study research (Academy, 2012b). An online survey was utilized as the instrument through which to gain access to educators of undergraduate nutrition and dietetic programs in the Mid-Atlantic region. Structured, open-ended questions were used and are appropriate for case study research because they allow participants to provide more in-depth responses that contain meaningful insight and rich descriptions (Creswell, 2012; Lodico et al., 2012; Wahyuni, 2012). Purposeful sampling was employed for the discovery and exploration of deep inquiry and understanding (Merriam & Tisdell, 2016). Participants 1, 3, 5, 6, 7, and 8 provided insight and offered deep and subjective perspectives of instructional strategies that promote cultural competence, including how they used these instructional strategies to promote cultural competence. These participants also attached examples of assignments, though not all of them

included rubrics. Participants 2, 4, and 9 provided one-line or short answers without depth or discussion of instructional strategies or assessment used. Survey questions for this instrumental case study were researcher produced, but the ideas came from previous surveys that were designed and implemented to identify or understand if cultural competence was included in nutrition and dietetics HCP education (Knoblock-Hahn et al., 2010).

Participants were asked to submit one example of an assignment along with the online survey response. Participants 1, 3, 6, 7, and 8 provided examples of assignments for either classroom or experiential learning. All of the documents were assignments previously included in the curriculum of the course, and all were specific to promoting cultural competence in the students. Examination of the assignment documents added insight and understanding to the instructional strategies used. The documents included instructions and/or rubrics, and detailed the required components, grading criteria, and the level of information required to successfully complete the assignment. Document examination also helped to provide credence and integrity and helped me better understand the instructional strategies (Creswell, 2012).

Organization throughout the data collection process and a plan for remaining focused on the research were important to ensure accurate interpretation of data (Merriam & Tisdell, 2016). Researchers need to be flexible and make adjustments in organization and coding depending on the process of data collection and analysis. During data collection I used a research log to record comments and notes. Through critical thinking and reflection of the research data, a reflective journal was also kept. Computer

spreadsheets that included the survey questions and responses were the primary organization tools for keeping track of the collected data, coding the data, and then organization of coded data into emerging themes, adjusting themes and coding as needed (Merriam & Tisdell, 2015; Yin, 2014).

Data Analysis

The online survey began after IRB approval had been granted and the homogenous sample was chosen. The survey was open from June 25 until August 25 with two separate mailings. Follow-up email contact was made one week and two weeks after the initial email request for participation to help increase response rate. During the survey timeframe I continuously analyzed and organized, reflected, commented, coded, and categorized the data into themes. I remained curious and open-minded during the review of the survey responses. Yin (2014) stated that an inquiring mind is important before, during, and after the process of conducting a case study. To continuously promote critical thinking, researcher notes, comments, and memos were kept to record insights when reading through the survey responses and attached documents. Spreadsheets were used to organize data collection for analysis.

Process and Procedures

The data collection process began on June 25, 2016 and concluded on August 25, 2016. Two survey groups were randomly generated from the Excel spreadsheet containing all potential participants for an even distribution of participants in each survey group. The two survey groups represented the first survey mailing on June 25 and the second survey mailing on August 5 respectively, using SurveyGizmo online. The first

survey group was emailed on June 25 and was followed up by two reminders at one week (July 2) and two weeks (July 9) to generate more participation. A second emailing to the remaining half of the participant pool was planned in the event of insufficient responses from after the first mailing.

Table 2

Dates of Survey Mailings to Recruit Research Participants

Mailing 1: June 25, 2016
Mailing 1 follow-up: July 2, July 9
Mailing 2: August 5, 2016
Mailing 2 follow-up: August 12, August 19

By July 9 only four surveys were returned, an insufficient number of responses to analyze. Saturation had not been reached. Saturation occurs when no new data, information, or insights were produced from the survey responses (Merriam & Tisdell, 2015). The second survey group was emailed using SurveyGizmo on August 5 and was followed up by two reminders at one week (August 12) and two weeks (August 19) to generate adequate participation to reach saturation and have enough data to analyze. An additional five surveys were returned after the second emails. These final responses provided more insight, details, and an adequate amount of data to analyze. After these final five surveys were returned it was apparent that similarities and repeating themes between the participant responses addressing the research questions existed. However, the practical constraints beyond my control limited the level of saturation. For this research study the constraints included lack of detail in participant responses and

participants not providing responses to specific survey questions or not attaching requested documents.

In total, 128 surveys were emailed and nine usable surveys were returned and coded from the two mailings. This represents a 7% return rate that is lower than the average expected for online surveys (Lodico et al., 2012). The low response rate was disappointing, but it was decided to not email more reminders to elicit more survey responses because of the busyness of the start of the university semester that was then upon us. In addition, it was felt that more than enough time was given and reminders sent, and I was concerned that further reminders would continue to be ignored or considered unprofessional. See Table 2 for a summary of survey mailings to recruit participants

Organization of Data

Case study data analysis is an iterative and recursive activity where the data is continually scrutinized during the research process (Creswell, 2012; Merriam & Tisdell, 2015; Yin, 2014). For this case study data collection and analysis occurred simultaneously. Participants answered questions in an online survey and were asked to upload documents as part of their response to the online survey. The documents included in-class activities, assignments, and rubrics. Five of the nine survey participants uploaded documents. With so few responses, the use of external software to code the data was not necessary.

Four separate Excel spreadsheets were used to organize the data. These spreadsheets can be found in Appendixes F through L. Spreadsheet 1 listed all survey

questions and the corresponding responses as they are submitted by column. This spreadsheet also included any specific details from the documents that participants attached to their completed surveys. Survey questions can be found in Appendix C. These documents provided practical examples of instructional strategies employed in the classroom. Spreadsheet 1 enabled me to see all complete responses to each question on one sheet. This process continued until no more new responses appeared.

Spreadsheet 2 further organized and consolidated the data to reduce verbiage and glean the meaningful data and deep insights that are pertinent to the research question (Hancock & Algozzine, 2011). This enabled me to see the responses to each question on one sheet. This helped with the beginning ideas for themes. This process continued until the desired number of surveys had been received to provide enough instructional strategy options.

Spreadsheet 3 identified codes and themes from the surveys and submitted documents, as well as researcher notes from literature review and insights gained. Through constant iteration and reflection, four themes emerged from the data analysis that mirrored what was found in the literature. These are listed on Spreadsheet 4. Using these final themes, taxonomical tables were created to aid in displaying the data. Taxonomical tables are important to reduce the findings into a visual display. Visual displays present a clearer depiction of the research from which to draw conclusions as well as to publish the findings (Creswell, 2012; Hancock & Algozzine, 2011; Lodico et al., 2012; Merriam & Tisdell, 2015; Pell Institute, 2016; Yin, 2014). A summary of the four spreadsheets is listed in Table 3.

Table 3

Summary of Spreadsheets to Organize Data

Spreadsheet 1: Full responses
Spreadsheet 2: Abbreviated responses and key terms
Spreadsheet 3: Connection of survey response with literature review, researcher notes
Spreadsheet 4: Final themes

Assurance of Accuracy and Credibility

The purpose of collecting data for qualitative research is to identify, examine, and interpret patterns and themes. The standard practice in case study research is for data analysis to occur simultaneously during data collection. This provides a researcher with the opportunity to dissect and reassemble the responses to provide insight and understanding to answer the research question (Academy, 2012b; Creswell, 2012; Merriam & Tisdell, 2015; Wahyuni, 2012; Yin, 2014). During the data collection phase I continually analyzed participant responses and sought insight and understanding. By doing this I was able to reflect on the similarities of the responses, the word choices and tone used, and examples of instructional strategies provided. Continual reflection also helped me to analyze discrepant cases and try to understand the meaning behind any outlying comments.

The survey questions were carefully crafted to ensure alignment with the research questions (Appendix C). These open-ended questions provided participants with the opportunity to provide their honest responses without leading or implying a correct response. Leading questions can show researcher bias and limit the responses and

reliability of a study, and thus were omitted (Creswell, 2012; Merriam & Tisdell, 2015; Yin, 2014).

Structured questions were used for the online survey questions. Probing questions cannot be asked via an online survey, so participants were asked to submit an example for one assignment that included cultural competence along with their survey submission. These assignments provided the written documentation of practical examples that were used for identifying instructional strategies that promote cultural competence. Objectivity during the analysis and reassembly of the responses helped establish credibility in the study.

It was important to ensure that participant accounts were accurate for credible research. An impartial peer debriefer was used to review the researcher's interpretations of the surveys and documents. Peer debriefing allows a colleague who is not linked to the case study research to review the results and judge the accuracy and credibility of the responses (Hancock & Algozzine, 2011; Lodico et al., 2012; Peer Debriefing for Qualitative Research, 2016). The peer debriefer examined the methodology, themes and codes, and final report and provided feedback to me to enhance credibility and ensure validity.

Data Analysis Results

The driving research questions of this project study were to (a) identify instructional strategies that promote cultural competence in nutrition and dietetics education, and (b) identify how educators describe the use of these strategies to promote cultural competence in the classroom. Although the response time was slow and overall a

low number of participants responded to this online survey research, the data obtained provided informative answers for the research questions. Throughout the data analysis process I attempted to let the participants' responses guide the natural flow of exploration and establish themes that were also supported by the literature. Participants identified instructional strategies employed to promote cultural competence. Some participants provided additional documentation identifying how they use the instructional strategies in the classroom. See Appendix F through I.

Discussion of the Themes

To establish themes that accurately represented the participant responses, an inductive approach was employed to continuously review, break down, and then reassemble the raw data to summarize the content, establishing a clear link to the research questions and purpose of the research (Creswell, 2012; Lodico et al., 2012). Details from the survey participants' documents and assignment examples were carefully recorded on the spreadsheets and critically analyzed as part of the iterative process in qualitative research to yield accurate themes. These documents did not necessarily clarify the instructional strategies, but provided an objective perspective about how the strategies were incorporated into particular courses and what students were asked to do. Throughout the survey and document analysis, and literature review, four final themes emerged. These themes are summarized in Table 4.

Analysis of the survey responses and documents occurred first. After this, analysis of the literature review occurred to compare and contrast what was found in the survey and document analysis. The literature review clarified and supported methods

employed by educators and preceptors to promote cultural competence, and also provided additional examples of educational opportunities and instructional strategies. For example, the literature review supported the survey participants' use of case studies, research projects, and experiential learning (Branscum et al., 2013; Cuningham, 2014; Hack et al., 2015; Heiss et al., 2011). Additional examples from the literature that were not reported by survey participants included virtual reality, hands-on cross-cultural experience, and Two Days with Diabetes (Christaldi & Bodzio, 2015; Davis, 2015; Gaba et al., 2016).

Table 4

Emerging Themes From Data Analysis and Literature Review

1. Cultural competence is vital in nutrition and dietetics education
2. Classroom and experiential learning are both appropriate venues to develop cultural competence
3. Interprofessional and collaborative learning are crucial for professional development
4. Multiple modalities for instructional strategies exist

Theme 1. Cultural competence is vital in nutrition and dietetics education. This theme was identified from careful review of the survey responses and synthesis of the literature. Comments from eight of the nine survey participants included the significance of cultural competence in nutrition and dietetics education. Participant 2 responded only that cultural competence in the nutrition and dietetics curriculum would "help bridge the gap", referring to the gap between student education and the professional practice of a registered dietitian noted by ACEND (2015).

A deeper understanding of culture. Participants spoke of a need for students to

have a deeper understanding of cultures. Participant 1 stated,

> With an increasing diversity in the population, our customers, clients, and patients have food ways, health beliefs, and communication behaviors that may be different from our own. As a DI Director, I believe it critical that students have the ability to respectfully work in this diverse society.

Similar to Participant 1, Participant 5 stated,

> Food is at the core of nutrition and dietetics. Food has immense cultural diversity that encompasses more than preference, but environmental, social and educational factors. The appreciation and understanding of cultural practices and perceptions of food choice should be fundamental in dietetic education and practice.

Tying in with the previous comments, Participant 8 stated "RDs specifically need to be culturally competent when advising patients on their diet and health behaviors. I believe that nutrition education must include student learning outcomes relevant to cultural competence."

A component within the curriculum. Participants also responded that cultural competence should be a component within the curriculum. Participant 3 stated,

> Dietetic professionals need to be competent or have the capacity to function and practice effectively with other clients/patients that are from various backgrounds/cultures. I feel that cultural competence (including other ethnic cultures, and all other areas of culture to include sexual preference culture, racial identity, disabilities, and both genders) need to be addressed and included in every DPD course taught in dietetics.

Participant 6 added that,

> RDs need cultural competence to work with patients and clients, as well as with colleagues. In addition, the different organizations RDs work for need to be accessible to a variety of cultures and be sensitive to behaviors and beliefs. I feel passionate that cultural competence in our profession. It must be addressed and discussed, practiced and demonstrated among educators and preceptors.

Similarly, Participant 7 stated,

> It [cultural competence] should be a cornerstone of what we do when we align ourselves with a national accrediting body to serve all people. I feel very passionate and very strongly that cultural competence should be included throughout the curriculum, and not just in one or two classes where it is unpracticed and unrelated to the profession. When we don't emphasize cultural competence to our students we minimize its significance within the profession.

Likewise, Participant 9 stated,

> The demographics in the United States have changed dramatically. Culture influences food choice, and health beliefs. Cultural competence and sensitivity is critical to high quality care and counseling. It is absolutely vital that cultural competence be integrated into any curriculum that trains future educators.

Participant 4 concurred, stating that cultural competence "fits well [with the nutrition and dietetics curriculum]. In this world melting pot it is important to be able to work with people of all backgrounds."

From these comments, the educators' opinions about including cultural

competence in the curriculum are clear: Cultural competence is vital in nutrition and dietetics education. Participants 6 and 7 also indicated they felt "passionate" and "very passionate and very strongly" about cultural competence in the curriculum. To confirm the participant responses, the literature supported the ability of one to be culturally competent as an important facet of quality patient care. In addition, the literature noted that students benefit from both didactic and experiential opportunities that include cultural competence in the curriculum to better equip them to handle challenging situations when starting in professional practice (Betancourt et al., 2014; Connor, 2015; Eliot, 2013; Handu, Medrow, & Brown, 2016; Klement, 2010; Knoblock-Hahn et al., 2010; Palermo & White, 2010).

Theme 2. Classroom and experiential learning are both appropriate venues to develop cultural competence. Participants identified two main ways to reach students and promote cultural competence in education as in-class engagement and out-of-class experiences. Classroom engagement and experiential learning are both required for a student to be eligible to pass a national registration exam to become a registered dietitian, and are the main ways of educating nutrition and dietetic students (ACEND, 2015; Chapman, Bates, O'Neil, & Chan, 2008).

In-class engagement. Participant 3 provided the example of "in-class experiences with counseling" and role-play. To engage students in class, Participant 5 identified the use of documentaries and photographs of foods consumed from different cultures, and a reflection paper to engage students. Participants 6 and 9 used reading assignments, and

had student's research (self-study) outside of class, but gave team presentations in class. Participant 8 used a discussion board, cultural case study, and exams.

Out-of-class engagement. Participant 1 incorporated clinical experiences to reinforce previous classroom leaning. Participant 2 included supervised practice rotations in food service administration. Participants 6 and 9 had students do research, or a self-study module. Participant 7 used service and experiential learning with the elderly, and cross-cultural interviews. Participant 9 shared that research was a component out of class, but typically had a discussion or presentation component in-class. Critical analysis of the survey responses and documents revealed overlap between the two venues. Participants included experiential opportunities in the classroom, such as Participant 3 including role-play and practice counseling. Participants also incorporated assignments, activities, and lecture as part of experiential learning, such as Participant 8 including case studies and exams, and Participant 6 including readings. These strategies are further discussed in Theme 4 and presented in Tables 5 and 6.

Theme 3. Interdepartmental collaboration is necessary for professional development. This is an emergent area of health care professional practice better represented in the literature than the survey responses. Health care literature contains many examples of interdepartmental training and collaboration to improve professional communication that results in improved patient care (Cowperthwait et al., 2015; Expert Panel, 2012; Pierce et al., 2012). The literature specifically from nutrition and dietetics is sparse in this area, however this trend in health care affects the work of the registered dietitian (Eliot & Kolasa, 2015).

The theme of interdepartmental collaboration builds on the classroom and experiential learning that students receive during their education as they train to become registered dietitians (RD) in Theme 2. Once a student has completed the supervised practice and passed the national accreditation exam, they are qualified as an entry-level RD. Most entry-level RDs work as clinical dietitians, where they are expected to work as part of a team to collaborate, educate, and perform research to provide the best outcomes for patients (Academy, 2015b, 2016e). Educators understand the skills that students need to have once they become an RD. As educators, survey participants commented on the relationship between the health care professional and patient, as well as the professional within the health care professional community by providing the following statements. Participant 1 noted it is "critical that students have the ability to respectfully work in this diverse society". Participant 4 stated it is "important to be able to work with people of all backgrounds." Participant 6 stated "developing cultural competence requires interacting with others that are culturally different than yourself." Participant 7 stated "when we don't emphasize cultural competence to our students we minimize its significance within the profession." Participant 8 stated our students "will need to learn more about the cultures represented in his/her patient population."

Through critical analysis of participant responses, it was evident that some educators and preceptors see value in interdepartmental collaboration to further the expertise of the RD. Registered dietitians interact with other health care professionals to provide the best care to patients, and the study participants identified areas where students can learn to

collaborate and share resources for better professional engagement and better patient care.

Theme 4. Multiple modalities for instructional strategies exist. Survey participants provided responses and document examples of different types of instructional strategies they used to promote cultural competence. When comparing and analyzing these responses, participants used similar instructional strategies and overlapping terminology to promote cultural competence in and out of the classroom.

In-class engagement. Participant instructional strategies in-class included numerous examples of student engagement to promote cultural competence. The overlapping terminology from participants indicates strategies that are commonly used. For example, Participants 3, 6, 7, and 8 employed class lecture either one-sided from the instructor or as a dynamic interaction with students. Participants 2, 3, 6, 7 and 9 used display boards and presentations to share findings and showcase student work. Participants 5, 6, 7, and 8 stated that watching documentaries or showing descriptive photographs of cultural foods were strategies that promoted cultural competence by illustrating similarities, differences, and unique aspects of different cultures to help students gain knowledge and experience. Exams were used by Participants, 3, 6, and 8 to reinforce knowledge and assess learning. Participant 3 stated the use of in-class counseling and role-play exercises to build experience.

Out-of-class engagement. Experiential or service learning opportunities were also important aspects of promoting cultural competence. Service or experiential learning were strategies specifically employed by Participant 7 through a cross-cultural interview

where students each interviewed someone from a different culture, and a dining out experience in an authentic restaurant from a culture different to their own. Case studies and research assignments were utilized by Participants 1, 3, 5, and 7 as opportunities for students to gather knowledge and information to present in class to their peers. Similarly, Participant 6 had students research a culture of choice for a self-study module. Participants 2 and 9 included food preparation out of class for students to share specific aspects of different culture groups. Assigned readings were mentioned by Participant 9, although it is reasonable to assume that other participants utilize assigned readings, but did not mention them. Self-reflection was used by Participants 3, 5, and 7 as a method of engaging students to consider and analyze what they had learned. The literature supported these different in- and out-of-class instructional strategies (Branscum et al, 2013; Christaldi & Bodzio, 2015; Cunningham, 2014; Hack et al., 2015; Heiss et al., 2011; Karpinski & Heinerichs, 2015; Kessler et al., 2010; Mier et al., 2010; Pierce et al., 2012; Stephenson et al., 2015). In contrast, Participants 2 and 4 provided no examples of courses that included cultural competence and no strategies that were promoted cultural competence. Participant 2 indicated that cultural competence was "incorporated in some themes and projects", but did not state any specifically. Participant 4 stated that they do not "teach a course where cultural competence is very relevant."

Levels of engagement. When critically analyzing the responses and the literature it was noted that in general instructional strategies in-class had an individual student focus, and those out-of-class strategies were more interactive or collaborative. Survey participants indicated perceived levels of student engagement. High levels of student

engagement were noted. Participant 3 stated “in-class exercises like counseling”; Participant 6 stated “presentation” and “self-study module”; and Participant 8 indicated using a cross-cultural case study. Low levels of student engagement by Participants 3 and 7 were noted to be exams or “regurgitation oriented (i.e. exams)”. In addition, low levels of student engagement was noted to be lecture by Participant 8 and assigned readings by Participant 9. When compared to the research, participant responses were not based on best practice or scholarly evidence. From the responses it appeared that even though certain methods do not engage students, they are used as instructional strategies. For example, lecture and exams are still employed by some educators as methods to engage and assess students when developing cultural competence, even though participants noted that they typically had a low level of student engagement. No rationale was provided for any of the instructional strategies used by educators. However, it should be noted that no rationale was asked for in the survey questions.

The literature supported the participant responses of in-class and experiential learning strategies, and indicated more depth and discussion for using these strategies. Additional instructional strategies found in the literature provided insight, instructional strategies, and practices beyond what the participants mentioned. These additional instructional strategies included

- Authentic practice-based experience.
- Communication enhancement through role-play.
- Engaging discussions.
- Guest speakers.

- Online problem-based learning modules.
- Portfolios.
- Virtual reality (Davis, 2015; Gaba et al., 2016; Gould, 2015; Karpinski & Heinerichs, 2015; Perkins, 2013; Sabatini et al., 2016; Stephenson et al., 2015).

Building skills beyond cultural competence. Through the guidance of the constructivist framework, this study added to the literature currently available on cultural competence in nutrition and dietetics education. The intent of this study was to identify instructional strategies that promote cultural competence, and identify how educators employ these instructional strategies. However, an important consideration to this study was the additional skills that students potentially acquired through the different instructional strategies. Additional skills were not openly noted from the survey participants, but it is important to note that additional skills were not asked for in the survey questions. The literature review provided numerous examples of additional skills necessary for professional practice and collaborative engagement. The additional skills acquired through the different instructional strategies included

- Experience with different cultures.
- Application of learning and practice-based learning.
- Increased knowledge and understanding.
- Improved practice through self-reflection.
- Empathy.
- Building cross-generation skills.
- Critical thinking and discernment.

- The ability to summarize.
- Improved communication skills.
- Practice with collaboration and teamwork.
- Flexibility and openmindedness.
- Greater awareness of personal assumptions and biases.
- Decision making.
- Awareness and appreciation for the beliefs and perceptions of another.
- The opportunity to read nontraditional literature.
- Gain evidence-based perspective and research skills (Branscum et al., 2013; Davis, 2015; Gaba et al., 2016; Gould, 2015; Heiss et al., 2011; Karpinski & Heinerichs, 2015; Kessler et al., 2010; Meir et al., 2010; Perkins, 2013; Pierce et al., 2012; Sabatini et al., 2016; Stephenson et al., 2015).

These skills are important to the development of cultural competence at the individual level, and skills that educators encourage and help students develop in general. In addition to developing a culturally competent individual, these skills also bridge to the previous themes presented (a) cultural competence is vital in nutrition and dietetics education, (b) classroom and experiential learning are both appropriate venues to develop cultural competence, and (c) interdepartmental collaboration leads to professional development. The in-class or out of class experiences are vital to provide students with the opportunities to learn and practice skills to work with individual patients. Through the learning process, these skills additionally serve students as they learn to collaborate as part of a team with other HCPs. Full examples of instructional strategies, perceptions of

engagement, assessment strategies, and skills acquired by students can be found in Tables 5 and 6. Specific participant responses to survey questions can be found in Appendix F.

Themes in Relation to the Research Questions

Research Question 1. What are instructional strategies that promote cultural competence in nutrition and dietetics education?

Theme 1: Cultural competence is vital in nutrition and dietetics education. The majority of participants indicated the importance or including cultural competence in the curriculum. Only Participant 2 did not include comments about the significance of cultural competence education. The sentences from this participant were short and incomplete, without any details or rich narrative. The terms used to describe the significance of including cultural competence in the curriculum from the majority of the participants were “critical”, “important’, “needs to be taught”, “cornerstone”, “must include”, and “absolutely vital”.

The documents that Participants 1, 3, 6, 7, and 8 attached to their survey responses did not speak to the importance of this theme, but were examples of the student requirements and practical application of instructional strategies. It is important to note that the attached documents did not include information about what year the students were in (freshman, sophomore, junior, senior). It is expected that junior and senior students could be given more challenging assignments, but specific details were not known. Participant documents only emphasized the need for ground level education and initial training necessary to help students start to learn to be culturally competent. See Tables 5 and 6 for examples of assignments and instructional strategies.

Theme 2: Classroom and experiential learning are both appropriate venues to develop cultural competence. From the survey responses and attached documents, the majority of participants indicated a course or assignment where cultural competence was included. Participants noted that education was appropriate in the classroom or as an experiential learning activity or trip. Participant 4 was the only discrepant case, indicating that they "don't teach a course where cultural competence is very relevant". Participants did not indicate any best venue or preference for how to teach cultural competence. From careful review of the responses the indication was that classroom and experiential learning opportunities can overlap, indicating that some instructional strategies such as case studies, research, role-play, engaging discussion, presentations, and food preparation and presentations may work well for both in-class and experiential learning.

Theme 3: Interdepartmental collaboration is necessary for professional development. This theme was emphasized more from the literature, and is a current theme in health care (Cowperthwait et al., 2015; Expert Panel, 2012; Pierce et al., 2012). The survey participants and the reviewed literature noted the importance of cultural competence skill-building in professional practice. The survey participants' perspective of the importance of student education continued throughout one's professional career was clear. Interdepartmental collaboration and professional development were noted to be important components in the ongoing development of the culturally competent professional, as evidenced by comments such as it is "critical to work respectfully in a diverse society" (Participant 1), it is "important to be able to work with people of all

backgrounds" (Participant 4), and "developing cultural competence requires interacting with others that are culturally different" (Participant 6).

Theme 4: Multiple modalities for instructional strategies exist. This theme directly ties into theme 2, providing the specific details for in-class and out-of-class experiential learning opportunities. Participants provided numerous examples of ways to promote cultural competence in nutrition and dietetics education. Some overlap was evident in strategies such as case studies, lectures, engaging discussion, presentations, experiential learning, and research. Tables 5 and 6 provide details of assignments and instructional strategies.

Research Question 2. How do educators describe the use of these strategies to promote cultural competence in the classroom?

Theme 2: Classroom and experiential learning are both appropriate venues to develop cultural competence. As in response to Research Question 1, survey participants directly answered Research Question 2 by providing narrative in the survey responses and attaching assignments that supported the inclusion of cultural competence in the curriculum. The majority of participants responded with either an instructional strategy that was employed in-class education or an out-of-class or experiential situation. Only Participant 4 provided a contrasting response, indicating that they "don't teach a course where cultural competence is very relevant". In Theme 2, participants identified both classroom and experiential learning as appropriate venues to develop cultural competence, and indicated that these venues can overlap, meaning that instructional strategies will work in either a classroom or out of class experiential situation.

Theme 4: Multiple modalities for instructional strategies exist. Participants provided responses and discussion of different instructional strategies to promote cultural competence. Similar to answering Research Question 1, participants indicated similar instructional strategies and overlapping terminology used promote cultural competence in and out of the classroom. Examples of overlapping instructional strategies were case studies, lectures, engaging discussion, presentations, experiential learning, and research. Tables 5 and 6 provide details of assignments and instructional strategies.

Table 5

Instructional Strategy: Out of Class or Interactive

Assignment / Activity	Perceived Level of Student Engagement	Assessment Strategy	Skills Acquired
Communication Enhancement: Role play counseling with paid actors	High	Instructions Self-reflection	Engagement with real-life scenarios to improve skills, competency, confidence, cultural competence experience (Stephenson et al., 2015)
Two Days with Diabetes	High	Instructions Self-Reflection	"Authentic practice-based experience", skills, application, understanding, reflection, empathy (Gaba et al., 2016)
Dining Out	High	Instructions Rubric	Comparison between Americanized and traditional ethnic restaurant.
Experiential Learning	High	Self-reflection	Hands-on cross-cultural experience (Christaldi & Bodzio, 2015; Cunningham, 2014; Hack et al., 2015) Valuable learned skills if working cross-generationally (Branscum & Sciaraffa, 2013)
Interview (cross-cultural)	High	Self-reflection	Research, knowledge building, communication, discernment, accurate application, able to summarize. Valuable learned skills if working cross-generationally (Branscum & Sciaraffa, 2013)
Portfolio	High	Instructions Rubric	Research, reflective note taking. (Sabatini et al., 2016)
PBL module online: diet, DM and CVD	High	Instructions Final survey	Collaboration, interactive learning increase in student knowledge and application (Gould & Sadera, 2015)
Service Learning	High	Self-reflection	Hands-on cross-cultural experience resulting in self-growth, flexibility, teamwork, openmindedness, greater awareness of assumptions and bias. (Pierce et al., 2012)
Virtual Reality	High	N/A	Practice-based learning, repetition, working with rare cases, reflection, critical thinking, decision making, (Davis, 2015)

Note. In class instructional strategies are based on the literature review and survey results only. N/A indicates only that it was not specifically mentioned in the literature or by survey participants.

Table 6

Instructional Strategy: In Class or Individual

Assignment / Activity	Perceived Level of Student Engagement	Assessment Strategy	Skills Acquired
Case Study	High	Instructions Rubric	Mini Nutrition Assessment skills, MNT application, basic cultural knowledge of dietary practices, research, communication, accurate application, able to summarize. Valuable learned skills if working cross-generationally (Branscum & Sciaraffa, 2013)
Class Lecture	Low	N/A	"Inefficient and ineffective in changing learned behaviors" (Davis, 2015, p. 3)
Display Board	High	Rubric	Research, knowledge building, communication, discernment, accurate application, able to summarize
Documentary Viewing	Depends	Guided questions Self-reflection	Awareness, appreciation. Depends on topic and length
Engaging Discussion	High	N/A	Awareness, appreciation. Opportunity to read nontraditional literature and apply it to field. (Perkins & Rodriguez, 2013)
Exams & Quizzes	Low	N/A	Ability to answer questions on knowledge, some concepts and definitions.
Food Preparation & Presentation	High	Self-reflection Instructions	Research, knowledge building, communication, discernment, accurate application, able to summarize.
Guest Speaker	Depends	Multi-cultural Sensitivity Scale; Health Beliefs Attitudes Survey	Awareness, gained evidence-based perspective from practitioner and cultural competence speaker (Karpinski & Heinerichs, 2015)
Portfolio	High	Instructions Rubric	Research, reflective note taking. (Sabatini et al., 2016)
Presentation	High in groups	Instructions	Research, knowledge building, communication, discernment, accurate application, able to summarize.
Research Paper	Depends	Rubric	Research, knowledge building, communication, discernment, accurate application, able to summarize (Heiss et al., 2011; Kessler et al., 2010; Mier et al., 2010)
Virtual Reality	High	N/A	Practice-based learning, repetition, working with rare cases, reflection, critical thinking, decision making (Davis, 2015)

Note. In class instructional strategies are based on the literature review and survey results only. N/A indicates only that it was not specifically mentioned in the literature or by survey participants.

Discrepant Cases

Qualitative case study research explores and identifies a phenomenon within a bounded system. The process of analysis yields data that is shaped into similar categories, but may not elicit absolute agreement of results (Merriam & Tisdell, 2015). To yield an "exemplary" case study, one valuable approach to account for data that is not in agreement or is discrepant is to consider alternative perspectives (Yin, 2014, p. 200). One discrepant case emerged for specific questions in the survey. All data was rechecked thoroughly and carefully for accuracy, to confirm any inconsistent findings. The peer debriefer confirmed the process for and results of the data recheck. Discrepant cases are included in the analysis to present an honest and accurate portrayal of alternate perspectives.

One discrepant case emerged. Participant 4 noted that they do not teach any courses in the nutrition and dietetics curriculum that include cultural competence. This response was further clarified by the additional comment in question 6, "I don't teach a course where cultural competence is very relevant" (Spreadsheet 1). No other comments or documents were shared, leaving me to wonder what courses offered in nutrition and dietetics curriculum would not be relevant to cultural competence. The only other identification of this participant is that they have been an educator for 33 years. What was seen from the other participants was that the longer they were in practice, the more details they shared and the stronger they felt the need for cultural competence was relevant. Spreadsheet 1 contains details of participants' number of years as an educator, ranging from 1½ - 33 years.

Discussion of Instructional Strategies

In response to the first research question (what instructional strategies promote cultural competence?), participants provided examples of instructional strategies used both in and out of the classroom from either a clinical or community perspective. Typically, two venues for nutrition and dietetics education were evident: (a) the didactic classroom curriculum (the Didactic Program in Dietetics or DPD), and (b) supervised practice (the Dietetic Internship or DI). Not every DPD program has a DI component. The Dietetic Internship provides students with hands-on experiential learning opportunities with additional assignments for pre-professional practice and assessment in community, clinical, and foodservice settings. Two participants indicated instructional strategies that included a DI focus. The remaining seven participants provided instructional strategies for DPD programs, which are primarily classroom based. Responses for either the DPD or DI program with a clinical or community focus can be seen in Table 7.

Table 7

Document Information by Participant Number

Dietetic Internship	Didactic Program in Dietetics	Clinical or Community Focus	Documentation Provided
1	N/A	Clinical	Cultural Awareness Case Study (Standardized clinical case study on Vietnamese woman)
2	2	N/A	No documentation provided
N/A	3	Community	Food and Culture Presentation (Cultural area or country of choice is researched. Demographics, health perspectives, religion, family, food history, and immigration of the culture to the US/Philadelphia region to research and present.)
N/A	4	N/A	No documentation provided
N/A	5	N/A	No documentation provided
N/A	6	Community	Cultural Competence in Nutrition (Choose culture, ethnicity, race, or religion and focus on foods, health issues, cultural beliefs, use of traditional medicine, family values, communication style to research and present.)
N/A	7	Community	Cultural Food Ways Assignment (Cross cultural interview of person of a different cultural group. Dining out observational experience in an authentic venue of a different cultural group. Research only, no presentation.)
N/A	8	Community	Cultural Diversity Assignment (Choose culture or county, educational access, foods, health issues, cultural beliefs, and use of traditional medicine to research and present.)
N/A	9	N/A	No documentation provided

Participant 1 provided instructional strategies and examples of assignments or activities specific to their DI program through a patient case study. Participant 2 noted general information about both their DPD and DI programs, but provided no specific details. Both of these participants mentioned the development and evaluation of recipes, formulas, and menus for different cultural groups. Participant 1 also indicated that activities with simulated patients from different ethnic groups were used for students to

practice the nutrition care process. To support this information Participant 1 provided a document for evaluation that was a clinical case study using a standardized patient.

In contrast however, no evidence of cultural competence integrated within the whole curriculum from any of the participants existed. Participants provided several examples of instructional strategies to promote cultural competence. Participants 1, 3, 6, 7, and 8 attached documents that provided more detailed examples, rubrics, and standards of assessment. Critical analysis showed that participant responses aligned for the curriculum-based questions. The only areas where responses diverged were:

- Years spent in professional practice.
- Additional comments.

Participants' experience as an educator or preceptor ranged from 1½ to 33 years. The additional comment section gave the participants the opportunity to share additional insights or perspectives. These can be seen in Table 8. These additional comments supported cultural competence in the curriculum and further detailed instructional strategies. One survey participant indicated that they did not teach a nutrition course where cultural competence was relevant. This discrepant case was outside all other comments made about the inclusion and significance of cultural competence in the curriculum. Unfortunately, this participant did not provide additional information to better understand the types of nutrition courses taught that would not be relevant to cultural competence.

Table 8

Additional Comments from Survey Participants

Participant 3 - Each course identified in this survey has some component of cultural competence, but specifics are tailored to the course content.
Participant 4 - I don't teach a course where cultural competence is very relevant.
Participant 6 - Concepts of cultural competence can be taught in the classroom but developing cultural competence requires interacting with others that are culturally different from you.
Participant 7 - Faculty, educators, and preceptors also need to be culturally competent to be effective in practice, but also to accurately guide the next generation of learners.
Participant 9 - Provide a case study where students have to design a meal plan for someone not American-born and who is unfamiliar with the Western diet.

In addition to the online surveys and the examination of documents, peer debriefing was used for triangulation and to assess the accuracy of the data analysis. Peer debriefing in qualitative research helps to ground the researcher in the data and to remain balanced. A peer debriefer helps to keep biases or assumptions in check, and focus on the research question and purpose of the study is better maintained (Creswell, 2012; Lodico et al., 2012; Merriam & Tisdell, 2015). As part of the data analysis process the peer debriefer was provided with Excel Spreadsheets 1, 2, 3 and 4, as well as the researcher notes illustrating codes and the progression of the four themes that emerged. The quality and accuracy of this study was supported by the debriefer comments that my methodology and coding as a researcher were well explained. The peer debriefer responded with insightful comments and supportive suggestions throughout the research process and offered suggestions and ideas for further research. Debriefer comments and review are found in Table 9.

Table 9

Peer Debriefer Review

Confirmation and Feedback	Questions for Conclusion or Future Research
This study will help the field understand the interrelated nature of cultural practice as traditions as they relate to food, nutrition, and lifestyle.	Should cultural competence be infused throughout the curriculum and/or be taught in a specific course?
Methodology and coding were thorough and well explained.	How are cultural practices or traditions understood?
Focus and scope of study is very good.	Is the goal of cultural competence to promote change or to value authenticity?

Participants 3, 4, 5, 6, 7, 8, and 9 responded from a DPD program standpoint, but only Participants 3, 6, 7 and 8 provided additional documentation to give an example of how instructional strategies are assessed. These documents had the common theme of a paper or a paper and presentation of a different cultural group. Most educators requested that students investigate aspects that make the cultural group unique, such as health beliefs, communication, health issues, family values, foods consumed, and traditional medicine practices. Specific cultural or ethnic groups were not identified, allowing the student to choose. Only the assignment from Participant 7 included an interview and a dining experience different from the student's ethnicity or culture. Presentations by students were used to share information and assess learning in all examples but Participant 7. Although effectiveness of the instructional strategies was a question asked, only Participants 3, 6, 7, 8 and 9 offered insight. See Table 10 for details of effectiveness of instructional strategies.

Table 10

Participant Identification of Most and Least Effective Instructional Strategies

Participant	Most Effective	Least Effective	Comments
3	X	X	Most – Exercises in counseling Least – Examinations
6	X		Presentations
7	X	X	Most – Reflection, insight, providing personal examples Least – Exams
8	X	X	Most – Culture project-based assignment Least – Lecture
9		X	Assigned readings

In addition to the survey responses, a review of the literature indicated similar instructional strategies, and also provided additional insight and details as well as a greater breadth of instructional strategies and assessment approaches to promote cultural competence. A list of survey and literature review results can be found in Tables 9 and 10. Instructional strategies and assessment in the literature included additional input from researchers of the perceived effectiveness of the instructional strategy. For example, class lecture and quizzes or exams were seen to have a low level of effectiveness on promoting cultural competence. Conversely, engaged discussion, food preparation and sharing, and service learning were seen to have high levels of effectiveness. This information is helpful when considering different approaches that are effective in promoting cultural competence.

It is important to note that both individual in-class and experiential out-of-class strategies can promote cultural competence. Much of classroom learning experience is

theoretical and not practical, providing little opportunity for students to engage with different cultures and experience the 'real world' (Campinha-Bacote, 2002; Christaldi & Bodzio, 2015; Pierce et al., 2012). However, opportunities exist for students to engage and have more 'real world' experiences in class. Tables 5 and 6 provide complete details from the participants and research on instructional strategies that promote cultural competence in nutrition and dietetics education. Examples include incorporating guest speakers (Karpinski & Heinerichs, 2015), viewing documentaries, role-play counseling (Stephenson et al., 2015) or having an engaging discussion (Perkins & Rodriguez, 2013).

Discussion of Assessment Strategies

In comparison to numerous instructional strategies, the educators who participated in the study employed few assessment strategies. Assessment strategies can be found in Spreadsheet 1 for the survey participants only. Participant 1 discussed instructional strategies that focused on a standardized clinical patient, so the assessment strategies were unique to a clinical case. These assessment strategies focused on calculations for BMI, nutrient requirements, dietary recall, the Mini Nutrition Assessment, and overall assessment, diagnosis and recommendations as part of the Nutrition Care Process. Clinical assessments are generally easier to evaluate, as more absolute answers and less subjectivity involved in reaching those answers exist.

The remaining participants who provided information (Participants 3, 6, 7, 8) provided assessment strategies that were not clinically focused, but had more of a community or general focus. Community focused work is more conceptual and interpretive, requiring a greater amount of subjectivity to assess and answer. This internal

process of subjective knowledge and skill integration can take a long time to develop, beyond the time spent in the classroom (Campinha-Bacote, 2002, 2011). Community focused instructional strategies mean fewer skills to assess and fewer clear-cut or absolute standards for comparison. More student subjectivity integrating knowledge and skills translates into more educator subjectivity when assessing if the instructional strategies used actually promoted cultural competence. For example, from Tables 5 and 6, self-reflection, communication, and the multi-cultural sensitivity scale and Health Beliefs Attitudes Survey are subjective forms of assessment. Assignment instructions provide guidance to as the scope of the problem, and what things should be included. Rubrics are written with the intention of providing clear communication to students to identify standards for grading. Assessing complex skills, such as building cultural competence, is subjective, and not necessarily accurate from the instructors' perspective when using rubrics (Humphry & Heldsinger, 2014).

Five assignments were attached to survey responses, three of which had rubrics. All of the assignment examples listed specific information that students were expected to include to successfully complete the assignment. The rubric from Participant 8 did not include subjective wording to determine understanding of cultural competence, only that the right details had been included in the assignment. Rubrics from Participants 1 and 7 included subjective wording to ascertain learning and understanding in addition to requiring knowledge and information. For example, Participant 1 required students to "provide[s] all relevant information necessary for full understanding" on the rubric. Participant 7 required "evidence of clear understanding". These statements are subjective

and difficult to measure. As Campinha-Bacote illustrated, cultural competence takes time to develop, and is often not evident in the classroom, but continues beyond graduation (2002, 2011). Assessment strategies may require that specific elements are included in assignments and activities, but it is nearly impossible to assess one's level of cultural competence (Matsumoto & Hwang, 2013).

This research study explored instructional strategies that promote cultural competence, addressing the two RQs:

1. What are instructional strategies that promote cultural competence in nutrition and dietetics education?
2. How do educators describe the use of these strategies to promote cultural competence in the classroom?

This research study did not intend to explore assessment strategies for cultural competence development. The intent was to address the gap identified by ACEND between student education and professional practice of the registered dietitian. Although educators employ assessment strategies, as evidenced by their survey response comments and attached documents, it is unclear if any guidelines or regulations to create the assessment strategies were used. To build and maintain best practices and promote cultural competence in students, assessment strategies that are supported through evidenced-based research are needed. This evidence-based research can come from all health care professions, but research specific to nutrition and dietetics will be more valuable to those practicing and teaching in the profession. Research from nutrition and dietetics will specifically address our unique role in health care, as well as offer ideas that

potentially can be implemented very quickly, as all accredited programs have to conform to the same curriculum standards (ACEND, 2015). It is suggested that further research be conducted to assess the types of instructional strategies used, if they are evaluated for effectiveness, and how they are improved, changed, or revised based on that evaluation.

Research as a Deliverable Project

A position paper was selected as the logical outcome of the research results to address the gap in cultural competence between student education and the professional practice of the registered dietitian. The survey results, document analysis, and literature review answered the research questions by identifying instructional strategies and viewing application examples that promote cultural competence in the classroom. Because my research was specifically designed to address the gap at the local university, a position paper is the most appropriate genre to disseminate findings and solutions (Powell, 2012; Stelzner, 2010). Before any change can occur in the curriculum at the local university, a position paper is an important tool to allow the researcher to present the data, explain the situation, interpret the ACEND guidelines, and to encourage faculty engagement and support. The precedent for using position papers to elicit change in nutrition and dietetics has been set by the Academy (2016a,b,c,d).

Summary

This section specifically presented the overall protocol for the case study research methodology aligning the problem and research questions. The study design, participant selection, and methods of data collection, analysis, and triangulation were presented.

Details were provided for ethical treatment of participants and the handling of discrepant cases.

The purpose of this study was to identify instructional strategies that promote cultural competence in nutrition and dietetics education and identify how educators use the instructional strategies in the classroom. Currently cultural competence is not an integrated component of the curriculum at the local university; it is one topic in one required course for nutrition and dietetics majors (G. Pazzaglia, personal communication, October 12, 2015). Offering cultural competence in one course is not in alignment with the recommendations to bridge the gap between student education and experience and the professional practice of the registered dietitian (ACEND, 2015).

Examples of cultural competence both in health care education and professional practice exist in many health disciplines. Cultural competence education in the curricula is viewed as an essential requirement overall in health care, but varying degrees exist to which it is implemented. The current dialogue for cultural competence revolves around the changing U.S. demographics and the need for HCP to be able to meet the challenge of successfully working with diverse and marginalized groups to improve health outcomes. The field of nutrition and dietetics has lagged behind other HCP disciplines, and recently revised recommendations have been made with the intention of bridging the gap between education and the professional practice of the registered dietitian (ACEND, 2015). By identifying instructional strategies, this study seeks to provide additional research specifically to nutrition and dietetics instructors and preceptors to further the dialogue of improving the curriculum to include cultural competence. The hope is that educators will

recognize the importance of cultural competence education and experience within a learning environment so that students will be better prepared to provide a higher level of care when in professional practice. A position paper was determined to be the best way to present the research findings to the most appropriate stakeholders at the local Mid-Atlantic university.

Section 3: The Project

Introduction

I chose to study instructional strategies that promote cultural competence in the nutrition and dietetics curriculum using a policy recommendation with detail, or a position paper. To elicit change at the local level, a position paper precedes a curriculum plan by allowing the researcher to present the data, explain the situation, interpret the ACEND guidelines, and encourage faculty engagement and support. A position paper gives the university faculty current research and qualitative study details to contribute to the discussion of what exists and what can be changed. A position paper also allows the university faculty to contribute to the dialog and add to the instructional strategies that promote cultural competence in the nutrition and dietetics curriculum. A curriculum plan can only be implemented with the agreement and collaboration of university faculty, academic deans, and the vice president of academic affairs. At this university, all nutrition courses will eventually be re-evaluated for ways to include cultural competence based on the ACEND (2015) recommendations.

Goals of the Proposed Project

My focus in the project study was to identify instructional strategies that promote cultural competence in the nutrition and dietetics curriculum. I used online surveys and document evaluation to gather instructional strategies from educators and preceptors. The objective of this project is to revise the current nutrition and dietetics curriculum at the local university to include cultural competence using the examples of these instructional strategies as a starting point. Procedures and recommendations for curricular revision

include a timeline for implementation and ideal stakeholders to be involved in the process.

Rationale of the Project Genre

As a direct result of the gap identified by ACEND in cultural competence between student learning and the professional practice of registered dietitians, universities are required to address this gap and make curriculum revisions. My research was specifically designed to address the local problem of lack of cultural competence in nutrition and dietetics education (2015). According to Powell (2012) and Stelzner (2010), a position paper is the most appropriate genre to disseminate findings and solutions for addressing a gap such as this.

An additional intent of mine was to add to the existing body of knowledge for instructors, preceptors, and registered dietitians throughout the United States. The position paper was written to inform stakeholders of the current recommendations and standards in nutrition and dietetics education, and to present the facts and recommendations for curriculum improvement via instructional strategies. Successfully designing and implementing a nutrition and dietetics curriculum that incorporates cultural competence can elicit change at a local Mid-Atlantic university and contribute to the existing body of knowledge nationally. A position paper is ideal for the following:

- Provide a factual, though biased, summary to gain stakeholders attention.
- Provide general background information, details, and facts on a pertinent issue.
- Contribute to the existing body of knowledge of the need to include cultural competence within the nutrition and dietetics curriculum.

- Establish my credibility as a registered dietitian and researcher, passionate about the topic at hand.
- Provide a solution to the problem to help bridge the gap between student education and the professional practice of the registered dietitian (Purdue Owl, 2010; United Nations Association of the U.S., 2017; Young Adult Library Services Association, 2015).

This position paper intertwines with the project study by identifying the pertinent research and encapsulating participant perspective. Research indicated the importance of integrating cultural competence in nutrition and dietetics curriculum to match what is currently seen in medicine, nursing, and public health. Comments made by study participants concurred with the research findings, that cultural competence in the curriculum is a cornerstone to educational design and essential to a proficient health care professional. However, a disconnection exists between participant comments and evidence of a curriculum that integrates cultural competence throughout. Position papers have been routinely used in the nutrition and dietetics profession. Position papers that align science with practice in nutrition and dietetics are a regular practice of the Academy of Nutrition and Dietetics. In 2016 four position papers have been published on various topics (Academy, 2016a,b,c,d).

Review of Literature Related to Genre

Addressing the Problem with a Position Paper

This position paper is based on a literature search using the following keywords: *cultural competence*, *education*, *higher education*, *nutrition*, *dietetics*, *dietetic internship*,

service learning, *experiential learning*, *instructional strategies*, *student engagement*, *nutrition standards of practice*, *undergraduate education*, and *graduate education*, in various combinations. In the literature review, one major theme was cultural competence in the nutrition and dietetics curriculum. At this point, little evidence of further research to expand this topic area exists; however, research by registered dietitians appears to be increasing in this area.

A review of the current literature provided a foundation from which themes emerged. These themes established the basis for strategies and recommendations to the nutrition and dietetics department at one local Mid-Atlantic university to help ameliorate the gap between student education and professional practice as noted by ACEND (2015). In the end what emerged from the literature review mirrored what was found from the survey responses. To help bridge the gap between student education and professional practice in nutrition and dietetics the themes that emerged were (a) cultural competence is vital in nutrition and dietetics education, (b) different venues for teaching cultural competence, (c) inter-professional and collaborative learning for professional development, and (d) multiple modalities for instructional strategies.

Cultural Competence is Vital in Nutrition and Dietetics Education

Cultural competence is an important facet of quality patient care by all HCPs (Betancourt et al., 2014). As future health care professionals, nutrition and dietetics students need to have cultural competence included in the curriculum and in experiential learning opportunities to be ready to handle challenging situations when newly qualified as registered dietitians (ACEND, 2015; Connor, 2015; Eliot, 2013; Handu, Medrow, &

Brown, 2016; Klement, 2010; Knoblock-Hahn et al., 2010; Palermo, Davidson, & Hay, 2016). Survey responses supported the evidence found in the literature: cultural competence is a cornerstone to our service-focused profession and critical as we witness increasing diversity in the population of the United States. Survey participants included both internship directors and didactic programs instructors and both commented that cultural competence should be incorporated throughout the curriculum to train and prepare future nutrition professionals. ACEND has noted the gap between student learning and the professional practice of registered dietitians, thus indicating the value of education and experience before professional registration (2015).

Many areas where intentional student engagement can help bridge the gap to professional practice. Nortjé (2014) found that conflicting values with clients was one major area where students struggled. Being aware of cultural practices, beliefs, and values is crucial for developing cultural competency. Students also need to have critical thinking skills to be able to weigh possible outcomes to allow patients and clients to maintain their beliefs. Similar to Nortjé, Connor (2015) discussed the importance of understanding differences and being culturally aware, but it is impossible for one person to know everything about all cultures. Having the basic skills, experiential learning, and critical thinking will help on the journey to becoming a culturally competent professional. Tying in with the need for skill building and critical thinking posited by Nortjé and Connor, specific areas on which to focus student education include improved counseling skills, working in communities where food insecurity is rife, and educating migrant and indigenous populations (Handu et al., 2016; Ranzaho, Halliday, Mellor, & Green, 2015;

Riggs-Brown, 2013). As a part of building skills and developing critical thinking, Besnilian, Goldenberg, and Plunkett (2016) promoted the role of both peer and professional mentors to guide students. They asserted that both types of mentoring relationships help students to focus on the vital skills to succeed in the short-term internship process as well as through the longer-term professional practice as a registered dietitian.

Although the importance of including cultural competence in student education has been established in the literature and the survey results, how to assess cultural competence is not as clear (Eliot & Kolasa, 2015; Palermo et al., 2016). Cultural competence has previously been likened to a continuous journey throughout education and professional practice where the end-point is unclear (Campinha-Bacote, 2003, 2011; Saunders, Haskins, & Vasquez, 2015). Assessing one's journey is often blurred by subjective evaluation with no continuous skill development to measure. Survey participants indicated numerous ways in which to engage students in cultural competence development, but basic knowledge of different cultures or cultural practices via quizzes and exams were the only tangible means of assessment. Palermo et al. (2016) suggested that establishing nutrition competencies are important, and both individual and group assessment practices be implemented to establish these competencies. However without standardized and validated instruments, the means to assess cultural competence does not exist. Matsumoto and Hwang (2013) supported this when they noted that several tools are available, yet no standardized assessment of cross-cultural competence is available at present.

Venues for Teaching Cultural Competence

Nutrition and dietetic students are required to complete a four-year didactic program plus successfully complete an internship program before taking a registration examination. Following a passing score on this exam the student learner now becomes a registered dietitian (Academy, 2016e). Didactic education and the supervised skill building process are the main venues for teaching cultural competence in all health care professionals (Chapman et al., 2008). According to Hack, Hekmat, and Ahmadi (2015) although the didactic education is critical in helping students develop a baseline familiarity with different cultures, lack of standardization in the curriculum and inconsistent strategies used by instructor's compromise depth of knowledge and application. The Expert Panel (2012) aligns with Hack et al. (2015) and outlined standards of cultural competence within the educational curriculum for medical and public health students. These standards are two-fold: prepare professionals for successful practice, and offer the most appropriate care to patients.

Survey responses echoed the literature in providing numerous examples in which students can be engaged to develop cultural competency skills. This will be discussed in the final theme. Survey participant ideas for engagement heavily promote classroom engagement without experiential opportunities. Within a four-year didactic program students can be exposed to service and experiential learning opportunities, both local and international. However, this requires the vision and commitment of faculty to organize these opportunities within the curriculum (Pierce, Havens, Poehlitz, & Ferris, 2012). When faculty incorporate steps to help students become culturally competent, areas of

development that are appropriate to engage in the classroom exist, such as cultural awareness, cultural knowledge, and cultural skill building (Campinha-Bacote, 2002). Experiential, hands-on learning is the foundation for internship practice, giving students who have graduated from a four-year didactic program the opportunities to engage directly with other HCP and patients and clients. It is within the internship that Handu et al. (2016) proposes working with specific populations such as the food insecure.

Interdepartmental Collaboration for Professional Development

As follow-on to the venues to develop cultural competence education and experience, research has started to focus on the value of interdepartmental training and collaboration across the health care disciplines. A common theme from the literature is that health care professionals can maximize interdepartmental partnerships to share resources, build skills, share services, and in the end provide better patient care (Cowperthwait et al., 2015; Expert Panel, 2012; Pierce et al., 2012). Eliot and Kolasa (2015) made the point that although well studied in many health care fields, evidence of the need for and implementation of collaborative and interdepartmental professional education and experience in nutrition and dietetics is sparse.

Chapman et al. (2008) addressed HCP education in California. They shared that cultural competence may mean different things to different health care disciplines. Through collaboration and interdepartmental education, skills are enhanced and better service is provided to minorities and lower income populations, which echoed research from Cowperthwait et al. (2015). Extending this concept, Ghaddar, Ronnau, Saladin, and Martinez (2013) described educational strategies to encourage minority students'

collaborative involvement in health care fields such as medicine, nursing, and dietetics, as well as enrich student educational experiences across the health care disciplines. Smit and Tremethick (2012) discussed the development of an international inter-disciplinary course to benefit nursing students. This aligns with the example presented by Christaldi and Bodzio (2015) of the outcome from an international medical missions trip in which nutrition and dietetics students participated with other HCP. This experiential service-learning project enhanced communication and promoted a better understanding of the roles that different HCP play in treating patients, tying back to the research of Cowperthwait et al. (2015).

Survey questions did not specifically address interdepartmental or collaborative education for nutrition and dietetics students. Two participants stated that educators and preceptors should be culturally competent to set the example for students. This implies a collaborative working environment where HCP work alongside one another for the betterment of the patient. These participants also indicated that ‘interaction’ and ‘involvement’ among a health care team are critical to provide quality patient care. Research presented by Kris-Etherton et al. (2014) aligns with these survey responses. Their research expressed the need to advance the nutrition education of HCP across the disciplines. With a strong multi-cultural health care model, such as that designed by Campinha-Bacote (2002, 2003, 2011), intra- and inter-departmental outcomes for effective patient care are improved (Tempest, 2012).

Multiple Modalities for Instructional Strategies

This study sought to identify instructional strategies to promote cultural competence in nutrition and dietetics education. Both the literature search and survey participants offered numerous examples and various ideas to engage students in and out of the classroom. Survey responses focused more on in-class means of engagement to promote cultural competence, however the literature search resulted in more examples of the importance of service and experiential learning, or out-of-class ways to engage in a cooperative and inter-professional approach to developing cultural competence.

Historical research has established that learning by doing is more effective than learning by hearing or seeing alone (Bloom, 1971; Krathwohl, 2002). Bloom's Taxonomy and the National Training Institute (NTL) both present a division of instructional modalities that estimate learning retention to promote behavior change (NTL, 2015). As indicated in Figure 1, better retention is seen when students participate in the learning process. Behavior change is a key factor in developing cultural competence, and students who develop cultural competence are better equipped to function as professional HCPs and engage in social change. This ties back to the gap identified by ACEND (2015) between student education and professional practice.

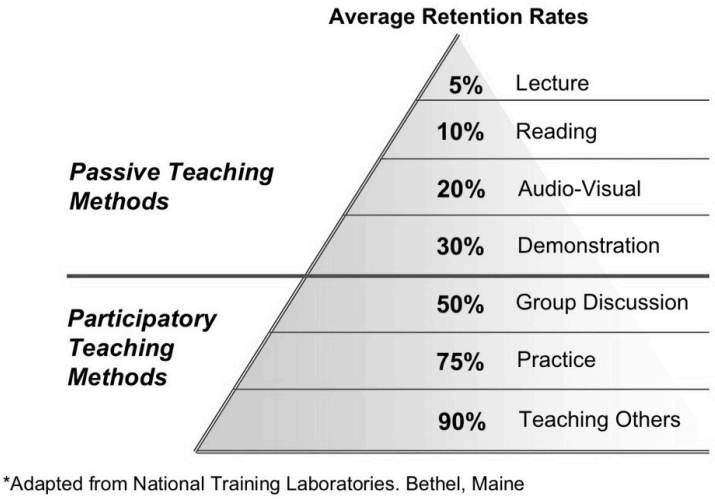

Figure 1. The learning pyramid. Average retention rates based on passive and participatory teaching methods. Adapted from the National Training Laboratories.

Least effective student engagement strategies. According to Davis (2015), examples of the least effective means to promote cultural competence were noted to be quizzes, exams, and class lecture. Survey results mirrored these findings, with only three of the nine participants indicating that they assess the development of cultural competence with quizzes or exams. Of those three, other means of assessment were also used. This directly supports historic research by Bloom (1971), Krathwhol (2002), and NTL (2015). These authors established that more passive forms of engagement result in lower retention and therefore lower levels of application. The work of Davis specifically noted that classroom lectures are "inefficient and ineffective" when changing learned behaviors (2015, p. 3).

Most effective student engagement strategies. Following on the work of Davis (2015), to be effective in promoting cultural competence one must employ an element of active engagement from the students. Since researchers focused on one method of

engagement in their work, survey participants often used multiple modalities to promote cultural competence. The more effective in-class instructional strategies varied and included the use of

- Case studies.
- Dining out in an authentic ethnic restaurant.
- Engaging classroom discussions.
- Enhancing communication through role-play with paid actors.
- Student role-play with diabetes for two days.
- Guest speakers.
- Cross-cultural interviews.
- Food preparation.
- Creating a portfolio.
- Research on a culture or country.
- Class presentations (Branscum & Sciaraffa, 2013; Christaldi & Bodzio, 2015; Cunningham, 2014; Davis, 2015; Gaba, Wong, & Ghatak, 2016; Goody et al., 2009; Gould & Sadera, 2015; Hack et al., 2015; Heiss et al., 2011; Karpinski & Heinerichs, 2015; Kessler et al., 2010; Mier et al., 2010; Perkins & Rodriguez, 2013; Pierce et al, 2012; Sabatini et al., 2016; Stephenson, 2015).

Aligning with the research findings, survey results indicated that instructors primarily assigned case studies, documentaries, research, and presentations. Throughout both the

literature and the survey responses, student research is a ubiquitous component in many different assignments and activities to gather information and build knowledge.

Service learning and experiential learning are both among the best ways to engage students as evidenced in the research and from the survey responses. Both service learning and experiential learning can be local or international, and can be incorporated into the didactic curriculum and the dietetic internship. Christaldi and Bodzio (2015) and Cunningham (2014) reviewed international service learning opportunities for nutrition and dietetics students. These authors concluded that effective skills and application are expected outcomes from international service learning, but not everyone has access to these types of programs. Cunningham (2014) specifically indicated that the barriers of cost and time often prevent students from participating. Hack et al., (2015) noted that hands-on cross-cultural experience is invaluable in building professional skills as well as communication skills. Branscum & Sciaraffa, (2013) identified the same skills but in a cross-generational environment, pairing younger and older generations with the specific intent of changing Millennial learner's views of older people.

Assessing cultural competence development. Assessing one's learning to be culturally competent is highly subjective (Betancourt & Green, 2010; Betancourt et al., 2014; Campinha-Bacote, 2002, 2011). The difficulty in assessing learning is due to the fact that no standardized assessment of cross-cultural competence exists, as previously noted by Matsumoto and Hwang (2013). Examples from the literature and survey responses are primarily subjective, supporting the findings of Betancourt and Green (2010), Campinha-Bacote (2002, 2011), and Matsumoto and Hwang (2013). Assessment

can also come through the level of student engagement. It is important to realize that perceived engagement levels from the literature and survey responses were noted either by the instructor, researcher, student, or not at all. Some highly engaging instructional practices will not be well received, and some low engagement practices may result in good student self-reflection but no evidence to show that they affected behavior change in professional practice exists.

A good example of this was found in the study from Karpinski and Heinerichs (2015). They assessed multicultural sensitivity and cultural competence awareness of students who attended a series of guest lectures. In spite of the fact that they found a significant difference in attitudes about how cultural competence affects health care quality, these results do not necessarily translate into better professional practice. Positive self-reflection, increased knowledge, and increased awareness was evident across the literature and the survey results for all of the most effective instructional strategies, but this is not evidence of better professional practice to positively affect patient care.

Implementation

Description of Project

The result of the project study is a position paper. A position paper is an important tool that provides scholarly, concise information on a solution for the problem (UNA, 2017). The position paper will clearly present information to help stakeholders tie together current research and the gap previously identified by ACEND between student education and professional practice (2015). The results of the project study will provide the rationale for including cultural competence in nutrition and dietetics education and

also offer instructional strategies and ideas for change at the individual course and curricular level.

Timeline for Implementation

Presentation of the position paper is anticipated to start early summer 2017 at the first department meeting for full-time faculty. Two weeks before this meeting a blank hard copy of the survey that was emailed to study participants in the Mid-Atlantic region will be distributed to all faculty (full-time and adjuncts). One week before the department faculty meeting the results will be collected, and the position paper report will be distributed. The rationale for having faculty complete the same survey beforehand is to start the thinking process about cultural competence within the curriculum and to share what instructional strategies they use. For this unofficial survey no uploaded documents will be required, as all assignments will have previously been collected by the program director or department chair as part of data tracking to meet the accreditation guidelines.

It is expected that this will be the first of a few meetings with stakeholders to decide how to best proceed with incorporating instructional strategies throughout the curriculum. The anticipated outcome from this first department meeting is two-fold: 1) The full-time nutrition faculty will discuss and decide which instructional strategies can be easily incorporated into the existing curriculum right away while at the same time aligning with the objectives and outcomes. Additional instructional strategies may be more difficult to incorporate, and a specific timeline for implementation will need to be identified. 2) The full-time faculty will decide when to present the information to the deans (College of Undergraduate Studies, College of Lifelong Learning, and the College

of Graduate Studies) and the vice president of academic affairs at a meeting later in the summer. As the researcher, I will present to the stakeholders at the academic affairs meeting. I will disseminate the report to all members 3 days prior to the meeting. I will answer questions and oversee any recommendations and suggestions.

A second nutrition department meeting is necessary to get input from the adjunct faculty as well as get feedback on the position paper and unofficial survey results. Adjunct faculty who teach in the nutrition department at this university are often experts practicing as RDs in a clinical setting in addition to teaching. Thus they will have insight that full-time educators may not have. This second meeting will occur later in the summer and is also intended to help prepare the adjunct faculty for any changes in the objectives and assignments.

It is not anticipated that any major changes to the curriculum will be entertained before the autumn 2018 term. Some instructional strategies will be easier to implement than others. By autumn 2018 it is expected that one or two courses will be revised at a time to provide a gradual transition to the overall curriculum. This makes the change more likely to be sustainable and is a much easier transition for faculty. A gradual approach to changing the curriculum also allows for feedback, discussion, and revision of instructional strategies and assessment practices along the way. Revising a curriculum is not a simple process that can be handled in one or two meetings. With educational requirements from ACEND due in 2024, time exists to gradually change the curriculum. It is expected that the college deans and the vice president of academic affairs will voice

their opinions and ideas along the way. The deans and vice president will also need to be kept informed of curricular changes.

One potential outcome for a revised nutrition and dietetics curriculum at the local Mid-Atlantic university is as a model for other programs around the country to follow. With no evidence from the literature or the survey results of existing comprehensive curricula that integrate cultural competence throughout a nutrition and dietetics program of study, this local university can be a trendsetter. Integration of cultural competence throughout the nutrition and dietetics curriculum exceeds the ACEND (2015) recommendations, yet seems an important step when compared to the curriculum of health care fields such as nursing and medicine (Betancourt & Green, 2010; Campbell et al., 2010; Caplan & Black, 2014; Horvat et al., 2014; Jeffreys, 2010; Jesse et al, 2013; Monterey et al., 2014; Reyes, 2013; Seeleman et al., 2014; Wear et al., 2012). It is also an important addition when considering the demographic changes and higher education standards in the United States (CDC, 2013a, b; Shrestha & Heisler, 2011). Including cultural competence throughout the nutrition and dietetics curriculum has multiple advantages, such as elevating student education to be on par with curricular practices of medicine and nursing, minimizing the gap identified by ACEND, and preparing the registered dietitian professional for interdepartmental and cross-discipline engagement, as noted in the literature review.

Social Change

Cultural competence is an integral part of providing equitable and nondiscriminatory health care (Campinha-Bacote, 2002; Purnell, 2002). Adopting

cultural competence proficiency in higher education nutrition curricula will help nutrition and dietetics students build the necessary skills. Everyone eats, but people have different food practices and beliefs. Nutrition and dietetics students who become familiar with customs, traditions, common and celebratory foods used, patient worldview, religious beliefs, and health practices have a better understanding of those they serve when they become entry-level registered dietitians. This ideally translates into better quality of care, and behavior change for improved health and the reduction of chronic disease. It is through the process of becoming culturally competent that understanding and sensitivity to work with marginalized and diverse people can lead to positive social change. The experience of and exposure to diverse people allow health care professionals to work together to help alleviate health disparities, and cultural competence plays a significant role (Campinha-Bacote, 2002, 2011; Chapman et al., 2008; Ghaddar, 2013; Lee et al., 2013; Tempest, 2012; Wittwer & Herbold, 2009).

Project Evaluation

Type of Evaluation

Participant feedback forms will be included in the project at the initial presentation. See Appendix A for project details. It is important to note that faculty approval is not being sought to implement the project. Curriculum content that includes cultural competence is required by ACEND to address the gap between student education and professional practice (2015). The objective of the project is to successfully revise the nutrition and dietetics curriculum to include cultural competence. After the initial feedback from faculty and stakeholders I will seek ongoing formative feedback from

faculty during project implementation to assess the outcomes and our progress. Initially and during project implementation input from faculty is important for the timeline of implementation, and ideas for which instructional strategies for specific courses best suit our curriculum. Ongoing formative evaluations during the change process are necessary to gather feedback and have continued involvement and buy in from faculty. The success of this project depends on good communication among the faculty.

Measurable Outcomes

Faculty outcomes. When attempting to revise program curriculum, faculty awareness, stakeholder buy-in, and readiness to change are factors to address. Creating a task force gives faculty members the opportunity to take ownership and buy-in to be involved in the change process. A task force presents a problem but does not dictate answers. Because faculty are involved in the solution, they 'own' the problem and are more likely to support instead of resist any changes (Tagg, 2012). The task force approach also provides the faculty the means to address their specific issues first. One of the issues with cultural competence in nutrition and dietetics education is that the educators and preceptors themselves often lack the awareness and experience to effectively teach the concepts (Knoblock-Hahn et al., 2010).

Since 2011 the Academy requires one continuing education credit for ethics training for all registered dietitians per five-year recertification cycle (CDR, 2016). Ethics training is an excellent place to start with faculty buy-in. Additional faculty development in cultural awareness, sensitivity, and competency is required beyond maintaining an ethical practice. The local Mid-Atlantic university has a rich and diverse faculty pool

across the colleges. The university encourages cross-discipline training and engagement so it is possible that other departments have cultural competency training for faculty in which we can participate. An associate professor in the nutrition and dietetics department has a background in cultural anthropology and can offer resources, workshops, and brown-bag sessions to faculty. In addition, the local university promotes a collaborative and sharing environment where scholars are encouraged and supported to work together. The outcomes for faculty can be assessed using written feedback evaluation forms. Surveying faculty for responses and engagement will help with interest and buy-in and provide the opportunity for suggestions and revisions as specific courses and the overall curriculum are being modified to include cultural competence.

Student objectives. Part two of the project evaluation comes after the course curriculum has been changed to include cultural competence. Designing student learning objectives is essential to track and measure the project study outcomes. Having a plan and good ideas supported from the research survey and literature are good, but do they elicit more culturally competent nutrition and dietetic students? Implementing assessment strategies is important to determine if curriculum changes achieved the desired objectives. Nutrition and dietetics is unique in requiring an additional internship for skilled practice before becoming a registered dietitian. However, the internship is not necessarily linked to a didactic education program. Feedback and assessment from internship directors as well as faculty working with the interns will provide very important information to measure how well the students have been prepared to engage

with diverse patients and clients. In addition, student performance and their ability to meet the department objectives is a vital part of evaluation.

Curriculum assessment. The final part of evaluating the project is to ensure compliance of the instructors to meet the recommendations for education and the focus on key concepts and core areas of knowledge for registered dietitian as established by ACEND (2015). Compliance has not been an issue in the past, but curriculum and course objective changes mean that evaluation methods need to be in place to make sure that the changes are valid and that everyone is adhering to the new guidelines and standards. The faculty are required to provide course syllabi and assignment details to the program director for each class taught. Performing a document review of the syllabi and assignments will help to measure compliance.

Key Stakeholders

The primary stakeholders in this project are the didactic program director and the nutrition and dietetics department faculty. Incorporating faculty input via feedback and communication is an important factor in the success of curricular change. Faculty will be teaching the courses and the program director is charged with maintaining the curriculum. Secondary stakeholders include the vice president of academic affairs, and the deans of the colleges of Undergraduate Studies, Lifelong Learning, and Graduate Studies.

Project Implications

The position paper was the logical outcome of the project study to provide stakeholders with scholarly justification for revising the nutrition and dietetics curriculum to include cultural competence, and to assist them in implementing these changes. As a profession, the inclusion of cultural competence in the curriculum to prepare students for professional practice has lagged behind the standards of other health care fields such as medicine and nursing (Expert Panel, 2012; Klement, 2015; Stein, 2009; Tempest, 2012). Implications for my project can be seen at the local university level where the policy of including cultural competence as a dynamic part of the nutrition and dietetics curriculum will be a standard. This benefits students through an enhanced curriculum that provides education and experience for students. It also gives instructors the opportunities to build cultural competence knowledge and skills. Numerous opportunities are available for students and faculty to practice cultural competence embedded in specific nutrition and dietetic courses. Clinical settings such as hospitals and long term care facilities. Community settings such as preschool programs, senior centers, after school programs, feeding centers, and shelters all are within our local community and are reasonable locations for applied learning, fostering an appreciation for diversity, and promoting social justice.

Keeping within the university community, opportunities exist for students to personally experience different cultural perspectives and practices by gaining knowledge and skills through the enhanced curriculum and engaging with the numerous faculty, staff, and students that are foreign born. University community functions and on-campus

activities such as the student-focused health fairs, the various committees, clubs and teams active on campus that include students, faculty and staff are opportunities to engage with different people on campus and practice what is learned in the classroom. In addition, the university has a network of international contacts and opportunities for experiential learning. Nutrition and dietetic students have not been a part of these international opportunities previously, but along with the curriculum change, feedback, and assessment this is something that can be considered. International learning is an opportunity for students to apply knowledge, but more importantly practice beyond the boundaries of the United States to promote social justice and equitable health care to reach the global community.

Conclusion

In Section 3 of this project study I described how the use of a position paper is the appropriate genre to disseminate research findings and offer suggestions for curriculum improvement to bridge the gap between student learning and professional practice. Specific research details are provided along with implementation and evaluation suggestions for the project at the local Mid-Atlantic university.

In the final section I reflect on the process and scholarly journey of becoming a researcher from development of the project to implications for future research. I discuss the project strengths and limitations, as well as alternate approaches. In addition, I reflect on my growth and development as a contributor to the scholarly world.

Section 4: Reflections and Conclusions

Introduction

In this study, I explored instructional strategies employed by educators and preceptors to promote cultural competence in nutrition and dietetics education. After analyzing the data and conducting a comprehensive review of the literature, I concluded that a position paper would be the most appropriate course of action to communicate the findings. In this section, I discuss the project strengths and limitations as well as alternative approaches. I also reflect on my journey as a scholarly researcher. Finally, I discuss the potential for social change through the recommendations in my position paper. These recommendations will affect nutrition professionals today and the nutrition professionals of tomorrow. My work has the potential to do immeasurable good for the thousands of people that every registered dietitian touches throughout their career.

Project Strengths

Identifying instructional strategies that promote cultural competence is intended to help reduce the gap between student education and professional practice in nutrition and dietetics as noted by ACEND (2015). For this gap to be reduced or eliminated, educators and preceptors need access to ideas and best practices. Evidence from the literature review and research survey strongly suggested that cultural competence is critical in education and should be incorporated throughout the curriculum (Connor, 2015; Handu, Meadrow, & Brown, 2016; Nortjé, 2014; Palermo et al., 2016; Riggs-Brown, 2013). In this position paper, I present strategies to reduce the gap between student learning and professional practice and enhance the professional skills of the

registered dietitian. According to Powell (2012) and Stelzner (2010), a position paper can be used to effectively communicate strategies grounded in the literature to elicit support and solve a problem. This position paper is the best and most concise way to present best practices, instructional strategies, and ideas for curricular improvement to stakeholders and interested parties.

This position paper has three strengths. First, it offers conceptual as well as practical solutions for the inclusion of cultural competence via instructional strategies. In the field of nutrition and dietetics, the educators and preceptors who teach tend also to be those who have a stake in the planning and design of the curriculum based on the requirements designated by ACEND (2015). Second, this position paper presents the practical nature of instructional strategies to allow for implementation and change at both the local and national level. Instructional strategies are flexible and can be modified to fit specific courses as well as specific cultural groups. At the national level, this position paper contributes to the existing literature and encourages dialogue to elevate the significance of cultural competence in nutrition and dietetic education.

The third and final strength is that this position paper offers ideas to exceed the ACEND recommendations. By incorporating cultural competence throughout the curriculum nutrition and dietetics education will mirror the standards of other health care programs. In conjunction with a curricular-wide focus of cultural competence, this position paper provides evidence of the importance of cultural competence in the education of other HCP such as medicine and nursing. This evidence is included with the intention that those in nutrition and dietetics higher education consider the preparation of

students to function expertly and engage equally on an interdepartmental health care team. As seen in the research, the ability to engage effectively with patients and other professionals' results in better care from a more qualified professional (Chapman et al., & Donini-Lenhoff, 2008; Eliot & Kolasa, 2015; Ghaddar et al., 2013; Klement, 2015; Lee et al., 2013; Smit & Tremethick, 2012).

At the start of the study, educational requirements for becoming a registered dietitian (RD) were being restructured. These new educational guidelines have been published and now require that by the year 2024, all those desiring to be an RD must have a master's degree before being eligible to take the national registration examination. Currently, candidates can have only a bachelor's degree to take the exam. The restructuring of educational standards requires universities throughout the country that offer the education and training to become an RD to make revisions and sometimes major changes to their curriculum to stay compliant. In this project study, I supply important information about cultural competence promotion that can be incorporated throughout the curriculum, thus helping not only to bridge the gap between student education and professional practice but also offer ideas and suggestions about curriculum improvements to meet the changing educational standards (ACEND, 2015, 2016).

Project Limitations

The limitations of this project are indicative of the methodology chosen, a case study. Case studies are limited by time and location, providing a limited perspective (Creswell, 2012; Lodico et al., 2012; Yazan, 2015). One of the study limitations was initiating the survey to collect data in the summer when many instructors are out of the

office. The original intent was to survey in the April-May timeframe to reach all faculty, but the need to delay the survey was beyond the researcher's control. What was intended to be a short survey timeframe to collect adequate responses wound up taking considerably longer to acquire a minimum number of participants. Waiting until mid-August to send out the second half of the survey invitations proved to be a good tactic to reach a minimum number of participants.

Another limitation was restricting the participants to within a specific geographic area. Results may be different if the survey had run nationwide, but time constraints and the primary intent of the research limited the scope of this project. The primary intent of this study was to offer suggestions for including cultural competence in the curriculum to a local Mid-Atlantic university based on the literature and the survey responses. A nationwide survey may provide additional ideas for broader application of instructional strategies.

Alternate Approaches

The purpose of this project study was to identify instructional strategies that promote cultural competence within the nutrition and dietetic curriculum. Incorporating cultural competence in the curriculum is required by the accrediting agency and is not an option for nutrition and dietetics programs in the United States that wish to maintain accreditation (ACEND, 2015). Owing to this, a limited number of options were suited to present the information to interested parties at my local university to elicit change. I considered two main options for dissemination of the research: internal publication and external publication. An internal publication in the form of a position paper was chosen

following the qualitative case study. This research study looked at only one region of the United States. A different approach could have included participants nationwide in a mixed method study to identify strategies specific to the areas of nutrition and dietetics education (i.e. didactic, internship). Another approach could have compared the specific curriculum of nursing to nutrition and dietetics. And finally, broadening the scope to include an international perspective of the inclusion of cultural competence in nutrition and dietetics education is another way to approach this study.

A position paper was one way to present the information gained from the research study to affect the local university community. A position paper was my preferred method to disseminate the information to improve the curriculum. In addition, it provided the perfect option to help improve department communication and build a stronger team by involving all faculty in the change process. Alternate options were available to me to present the research findings. These external publication options included submission of my research in a professional journal as a written thesis, creation of a summative poster, or a lecture at a professional conference. These external publications require more data and a larger participant base to improve response numbers and generalize the results.

Scholarship

Much of the life of a student is about gathering information and building knowledge to apply it. Although I have enjoyed the educational journey for many years, it was mostly from a position of receiving and not contributing. It wasn't until the start of my higher education teaching career that I realized an important part of scholarly commitment is peer engagement and giving back to the scholarly community by my

research. Starting the doctoral program at Walden University in 2013, I began my commitment to both the take and the give that shapes the community of learners today and in the future. During my early courses, I engaged in something new to me called the ‘scholarship of teaching and learning.' This concept was pivotal in my commitment to scholarship.

From the start of this journey becoming a researcher through the doctoral program was exciting, although I was apprehensive. Deciding what to research in general was easy; deciding on specific questions to drive the research took more time than I realized. Early in the process, I discovered that alignment is a much bigger process than I anticipated, essential to making sure that the research flows and stays on target. As a person with excellent organizational skills, I found the planning and sequencing part of the research process relatively easy. There have been two challenges for me as an emerging researcher (a) waiting on other peoples’ timeline when it did not synchronize with mine, and (b) opening myself up to criticism and critique through the subjective process of the research review. Through the process, I have learned not to take the criticism personally and to accept the experience and support of my committee as they guide me to become a better researcher and writer.

On this journey, I have grown considerably as an educator, moving from an adjunct position to assistant professor promoted to program director. These personal milestones have come through hard work, experience, and dedication to lifelong learning. Through lifelong learning, I have uncovered many interests and passions. One area of interest is in the development of culturally competent nutrition professionals. From my

twenty-plus years of practice as an RD, I believe this is an area that has not received much consideration in the United States until recently. The field of nutrition and dietetics has lagged behind other health care professions for too long in cultural competence education and practice. It is my hope that research and scholarly work such as this project study can help registered dietitians acquire the skills to provide equitable care for a changing world.

Project Development

Research can be a hard and patience-building process. Scholarly research meant a different level of engagement in my role as the sole researcher. This project study meant that all research, data collection, accurate analysis, and presentation were my responsibility. Although daunting at first, I have learned how to conduct scholarly research and have grown as a project developer. Throughout this process I have tried to practice continuous reflection and iteration in all stages of the research process to make sure I was staying true to my intent. Presenting scholarly research meant a commitment to credible, trustworthy, and transferable information to help the local university as well as the greater profession. It also meant a continuous self-evaluation process to make sure I was maintaining integrity through every stage of the process.

As part of triangulation, I did not conduct participant interviews but chose to rely on the assessment and guidance of a peer debriefer. In retrospect, this person provided me with much more scholarly input that I imagined. Through the confirmation of my methodology and coding, my debriefer provided insightful comments as well as ideas for future research. In addition, throughout this process a colleague in higher education and

leadership has continually supported me to remain focused on scholarly practices through the self-evaluation process.

Leadership and Change

The implementation of the strategies outlined in the position paper has the potential to change the way cultural competence is taught in nutrition and dietetics education and how registered dietitians are trained. Because of my research I am now better informed of the issue and can provide leadership for change at the local Mid-Atlantic university. With the newly restructured educational standards for nutrition and dietetics, strong leadership at the local level is key to successful implementation. To successfully restructure our local curriculum to include cultural competence and comply with the 2024 deadline, leaders cannot be afraid to change and must be open to new ideas and instructional strategies. On the national level, those willing to explore new ways to engage students and promote cultural competence will find the scholarly evidence and suggestions in the position paper an ideal place to start.

Reflection of the Importance of the Work

Throughout the entire project study process there has been a recurring theme that validated my efforts: my research is timely and needed in my profession and the greater health care system. Previously little research appeared on the focus of cultural competence in higher education for nutrition and dietetics before the Knoblock-Hahn et al. study in 2010. Since then the amount of research has slowly grown, but as a profession our standards for cultural competence in education to prepare the RD for practice have lagged behind the standards of other health care fields such as medicine and

nursing (Expert Panel, 2012; Klement, 2015; Stein, 2010; Tempest, 2012). The significance of my project study and resulting position paper affects both local and nationwide practice. It adds to the body of scholarly knowledge and contributes to the discussion of the inclusion of cultural competence in nutrition and dietetics education. Beyond the education of students, it affects (a) RDs in professional practice, (b) RDs in higher education as instructors and preceptors, and (c) RDs whose primary role is the education of other health care professionals.

Implications, Applications, and Future Research

Implications and Applications

The significance of being a culturally competent health care professional cannot be underestimated. Health care students will one day become the educators and health care professionals that must be able to work collaboratively and on an interdepartmental team (Eliot, 2015; Klement, 2015; Wood & Gillis, 2015; Yan et al., 2016). A study by DiMaria-Ghalili, Mirtalo, Tobin, Hark, Van Horn, and Palmer noted that gaps are evident in the nutrition education and training of individual health care professionals and the need to build skills for basic and applied nutrition education (2014). This is an excellent example of an opportunity for the RD to apply cultural competence in the education of and working with a multifaceted health care team. As has previously been stated, registered dietitians influence thousands of people in their career. The affect of my research and position paper for social change is significant within the profession of nutrition and dietetics.

From the research and the participant survey responses a common theme that emerged was that cultural competence is a crucial and integral part of student education (Besnilian et al., 2016; Brown-Riggs, 2013; Connor, 2015; Eliot, 2013; Handu et al., 2016; McConnell 2013; Nortjé, 2014; Palermo et al., 2016). Survey participants stated that cultural competence should be included as a requirement to address the gap between student education and professional practice noted by ACEND. From the survey responses other terms used to convey the importance of cultural competence in the curriculum included 'must be addressed and discussed', 'must be practiced and demonstrated', 'definitely', and 'absolutely vital'.

The four-year didactic program and the dietetic internship are the obvious areas where cultural competence education and practice can occur (ACEND, 2015; Expert Panel, 2012; Hack et al., 2015; Handu et al., 2016; Pierce et al., 2012). Opportunities within these areas can be explored for new types of engagement. Distance learning and technological advances such as virtual reality simulation training will offer new and exciting ways to engage learners (Davis, 2015). Program directors and faculty in nutrition and dietetics can learn to better incorporate interdepartmental education with other health care fields. This will contribute to inter-professional collaboration and professional development to share resources, build skills, share services, and provide better patient care (Cowperthwait et al., 2015; Eliot & Kolasa, 2015; Expert Panel, 2012; Pierce et al., 2012).

The research and survey responses provided numerous examples of instructional strategies to engage learners and promote cultural competence. Some instructional

strategies are more effective such as experiential and service learning, cross-cultural interviewing, role-play and authentic practice-based experience, (Branscum & Sciaraffa, 2013; Christaldi & Bodzio, 2015; Cunningham, 2014; Davis, 2015; Gaba et al., 2016; Hack et al., 2015; Stephenson et al., 2015). Some instructional strategies are less effective and should not be considered as the primary means of engagement, such as classroom lectures, quizzes and exams (Davis, 2015). Overall, the numerous examples give educators and preceptors in nutrition and dietetics education opportunities to engage about employing different strategies and practical examples for inclusion in the curriculum.

Future Research

Suggested future research includes a follow-up study to assess the effectiveness of curriculum change and faculty support at the local Mid-Atlantic university. Another study to re-identify instructional strategies that promote cultural competence would include technological advances and ideas to engage learners in simulation and online. A future study comparing cultural competence education in the curricula of different health care disciplines such as nutrition, nursing and medicine would be beneficial to assess how nutrition education has changed.

Conclusion

The motivation for this project study came after reading a research article on cultural competence in nutrition and dietetics education. From this article I was shocked by specific participant comments trivializing the need for cultural competence in the nutrition and dietetics curriculum. I developed this project study and subsequent position

paper to identify what instructional strategies educators and preceptors were using, and to offer suggestions for curriculum change to better equip our students for a higher standard of professional practice.

During the initial stages of this project study, research from ACEND was presented that specifically noted the gap between student education and the professional practice of the registered dietitian (2015). This gives my study more credence. Since then additional revisions to the recommendations for nutrition and dietetics education have been published by ACEND in 2016.

Participants in the study were asked to provide examples of instructional strategies that promote cultural competence in nutrition and dietetics education. Participants were given the opportunity to share their ideas and experiences about including cultural competence in the curriculum by providing specific instructional strategies and assessment practices. The participants also had the opportunity to attach an assignment or activity that provided an example of instructional strategies and assessment practices. Data from the literature review and the survey participants aligned, indicating a strong belief that cultural competence is vital to student education, however no evidence of nutrition and dietetics curriculum infused with cultural competence exists. Individual examples of instructional strategies mirrored the literature and provided ideas for high and low engagement.

The position paper was the logical conclusion of the literature review and project study. The position paper can provide concise information to stakeholders to enhance knowledge and promote buy in to elicit change. Nutrition and dietetic education that

incorporates cultural competence will enhance student learning and promote skills for professional practice. Students who become registered dietitians will have the experience to work collaboratively alongside diverse health care professionals in different fields. These professionals will have better skills to meet the needs of diverse patients and provide excellent care to all people.

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Appendix A: The Project Position Paper

Incorporating Cultural Competence in the Nutrition and Dietetics Curriculum

Introduction

The project study addressed the lack of cultural competence education and experience in the nutrition and dietetics curriculum. The study looked specifically at educators and preceptors in the Mid-Atlantic region of the United States, and sought to identify instructional strategies that promote cultural competence. In 2015 the Accreditation Council for Education in Nutrition and Dietetics (ACEND) identified a gap between student education and professional practice. Recommendations for bridging this gap were made, but a lack of research focusing specifically on implementing cultural competence in nutrition and dietetics has made it unclear whether educators are addressing the issue. More than half of the population in the United States is expected to belong to a minority group by 2030. The United States population is expected to reach a "majority-minority" level around the year 2044, where no group will have the majority and America will become "a 'plurality' of racial and ethnic groups" (Colby & Ortman, 2015, p. 9). Based on the current minority growth rate in the United States, by 2060 one in five people in the United States will be foreign born (Colby & Ortman, 2015). Groups currently experiencing poorer health status are expected to grow proportionately to the change in U.S. demographics. With a shift to a minority-majority population, attention to the details of one's cultural upbringing and belief system will continue to be an important part of total health care. The changing demographic further strengthens the need for cultural competence in the education of the registered dietitian (CDC, 2013a, b; Shrestha

& Heisler, 2011). Cultural competence is an essential educational component to equip graduates with the skills necessary to perform expertly, especially in entry-level positions. Student engagement and learning directly affects the role of the registered dietitian in the care of diverse, marginalized, and minority groups.

This position paper supports the revision of the curriculum in the undergraduate nutrition and dietetics program. Revising the curriculum will address the gap between education and practice identified by ACEND to improve the standards for student education. Practical ideas for adopting a more culturally competent curriculum are provided based on the research findings. The goals of curricular revision are two-fold: 1) to raise nutrition and dietetics education to the same standard as medicine and nursing, and 2) to encourage the use of didactic and experiential learning opportunities for students to be proficient when entering the profession. Additional benefits will be discussed.

The Project Study

Rationale

The educational requirements for the registered dietitian are extensive, covering a wide range of necessary skills and competencies. A gap has been identified by ACEND between the education of nutrition and dietetics students and the professional practice of the registered dietitian (2015). The guidelines and requirements published by ACEND include revised standards to better prepare students for a future of professional practice. Guidelines and recommendations are included to promote a culturally competent registered dietitian to work with all people to promote health and help reduce for chronic

diseases such as diabetes, heart disease, and hypertension (Academy, 2012; ACEND, 2015, 2016).

The gap between student learning and professional skills indicates that evidence of the inclusion of some cultural competence in education nationwide in nutrition and dietetics curricula exists. However, overall students are not consistently receiving adequate exposure, experience, and application throughout the curriculum to prepare them for professional practice as registered dietitians able to confidently work with minority, marginalized, and diverse groups (ACEND, 2015; Hack et al., 2015; Kessler et al., 2010; Knoblock-Hahn, Scharff, & Eliot, et al., 2010; Stein, 2010). Research for this project study indicated that little evidence exists of the inclusion of cultural competence in nutrition and dietetics education in general nationwide (Knoblock-Hahn, et al., 2010; personal communication, 2015).

Registered dietitians are an essential part of the health care team. A culturally competent health care professional enhances patient compliance, improves health outcomes, and reduces the costs associated with chronic disease (Betancort & Green, 2010; Campinha-Bacote, 2003, 2011; Holyfield & Miller, 2013). Conversely, the lack of cultural competence in HCP is a factor in poor health and chronic disease, especially among minority, marginalized, and diverse groups of people in the United States. The curricula of medicine and nursing students integrates multiple opportunities to practice patient engagement and establish skills and experiences to provide the best care for all (Betancourt & Green, 2010; Campbell, Sullivan, Sherman, & McGee, 2010; Crandall et al., 2003; Holmboe et al., 2011; Long, 2012; Rowland et al., 2006; Watts et al., 2008).

Conversely, educators in the field of nutrition and dietetics have been slower to establish such curricular requirements for cultural competence for their students. This places registered dietitians at a disadvantage and compromises interaction on the health care team, especially when entering the profession.

At the Mid-Atlantic University evidence of cultural competence education in the nutrition and dietetics curriculum is consistent with what was previously observed nationwide. Even though topics on cultural competence exist in some areas of the curriculum, cultural competence is not integrated throughout the entire curriculum. Cultural competence is not a topic that all instructors are comfortable teaching. In addition, not all instructors believe cultural competence needs to be covered in every course to build student experience. Without a standardized approach to include cultural competence within the curriculum, assessment strategies are challenging (personal communication, October 2015).

Research Design

A qualitative case study design was employed and an online survey of nutrition educators and preceptors in the Mid-Atlantic region of the United States was conducted. The Mid-Atlantic region was targeted to assess how other programs are integrating cultural competence within the same geographic and demographic region as the local university. The driving research question answered was: what instructional strategies are employed to promote cultural competence in nutrition and dietetics education? A case study was used to gather insight and develop understanding from the perspective of the participants.

Importance

This study addressed the local problem of the inconsistent inclusion of cultural competence education in the nutrition and dietetics curriculum resulting in the gap between the education of students and culturally competent professional practice. The local problem at the Mid-Atlantic University is consistent with what has been seen nationwide (Hack et al., 2015; Kessler et al., 2010; Knoblock-Hahn et al., 2010; Stein, 2010). In didactic programs across the United States, ACEND noted the lack of evidence for cultural communications and cultural care (2015). This project study is unique because it focuses specifically on identifying instructional strategies that currently exist to promote cultural competence in nutrition and dietetics programs in the Mid-Atlantic region of the United States, where the university is located. Identifying instructional strategies that promote cultural competence will potentially help bridge the gap between the education of nutrition and dietetic students and registered dietitians in professional practice, both nationwide and at the Mid-Atlantic university. This study sought to document how cultural competence is taught through instructional strategies and classroom practices to add to the existing research and hopefully aid in the development of standards for the inclusion of cultural competence in the nutrition and dietetics curriculum.

Nutrition is a service-oriented profession and registered dietitians are required to meet the needs of all people. Many areas of practice in the nutrition profession exist, and being able to work effectively with all people is essential in all of them. Every nutrition discipline in each different setting deals with unique individuals from different walks of

life. Adopting cultural competence proficiency in higher education curricula will help nutrition and dietetic students acquire information and study and experience situations to become more culturally sensitive and subsequently more competent in their future professional nutrition practice as registered dietitians. It is through the process of becoming culturally competent that understanding and sensitivity to work with marginalized and diverse people can lead to positive social change. It is by experience and exposure to diverse people that health care professionals work together to help alleviate health disparities, and cultural competence plays a significant role (Campinha-Bacote, 2002, 2011).

Results

The data collection process began on June 25, 2016. It concluded on August 25, 2016. 125 participants were polled. Online surveys were mailed out in two parts; each mailing represented one half of the total participation pool. The first mailing was sent the end of June, the second mailing the first part of August. Two follow up reminders were emailed for each. It was initially expected that only half of the total participation pool would need to be surveyed to avoid too many responses. In the end too few surveys were returned so the second half of the participation pool had to be surveyed to obtain an adequate number of responses. Ten responses in total were received, but one was an empty survey returned, so could not be used. Nine surveys were coded. Years in practice for participants varied as indicated in Table 1.

Table 1

Number of Participants and Years of Teaching Experience

Number of Participants	Years of Teaching Experience
1	< 5 years
2	6 – 10 years
4	11 – 20 years
2	21 – 33 years

Analysis of the data was assessed for accuracy using a peer debriefer and document examination to confirm instructional strategies and assessment approaches. Participants uploaded assignments and rubric documents as part of their survey responses. Five of the nine survey participants uploaded documents. Data collection and analysis was typed into an Excel spreadsheet. With so few responses the use of external software to auto-code was not deemed necessary. All responses for each question were typed into one spreadsheet, thus viewing all data together by columns in a question and response format. Details of the content contained in the different spreadsheets are listed in Table 2.

Table 2

Spreadsheet Layout for Question and Response Organization

Spreadsheet 1	All questions, full responses for all participants, document examination details for instructional strategies and means of assessment
Spreadsheet 2	Abbreviated responses reflecting emerging themes, common terms, identification of outliers and discrepant cases
Spreadsheet 3	Researcher notes, insights, peer debriefer comments
Spreadsheet 4	Final themes

From this first full-response spreadsheet a second abbreviated-response spreadsheet was created using emerging themes, common terms, and to identify any outliers or discrepant cases. The number of responses was scaled back to reflect any overlap or similarity in terms used by survey respondents and to simplify the final coding. Discrepant or outlying cases were noted in this second spreadsheet. Of the nine responses only one study participant indicated that no nutrition-related courses currently taught were relevant to cultural competence. No further details were given to assess the perspective or experience of this participant. Given the anonymous nature of the online survey, a means to decipher the meaning or accuracy of this statement does not exist.

The abbreviated-responses shaped the final codes from the associations and existing connections of the responses. This third and final spreadsheet reflects researcher notes, insights, and the time spent re-reading and pondering the data to reduce the lengthy responses to more manageable words and phrases. In the end four themes emerged from the data analysis that mirrored what was found in the literature. All participants indicated that cultural competence is vital in nutrition and dietetics education. Most participants provided instructional strategies for teaching cultural competence. Only two participants commented that instructors and preceptors should also be culturally competent. A summary of the results are identified in Table 3.

Table 3

Four Themes from the Data Collection, Document Examination, and Literature Review

Theme 1 Cultural Competence is Vital in Nutrition and Dietetics Education
Theme 2 Two Venues for Teaching Cultural Competence Exist
Theme 3 Interdepartmental Collaboration for Professional Development
Theme 4 Multiple Modalities Exist for Instructional Strategies to Teach Cultural Competence

Note. Interdepartmental collaboration for professional development was not included as part of the survey. Responses made by survey participants were additional comments, yet align with the research.

Theme 1: Cultural Competence is Vital in Nutrition and Dietetics Education

Survey participants all responded to the question pertaining to the integration of cultural competence in nutrition and dietetics education. Eight of the nine participant responses were unanimous in their view that cultural competence is a vital and significant part of nutrition and dietetics education and should be a continuous and integrative part of the curriculum to prepare students for entry-level professional practice. This aligns with what is found in the literature (ACEND, 2015; Connor, 2015; Eliot, 2013; Handu, Medrow & Brown, 2016; Klement, 2010; Knoblock-Hahn et al, 2010; Palermo & White, 2010). Participants number two and four chose to answer this question without additional details or insight. Specific comments are identified in Table 4.

Table 4

Survey Participant Responses and Years in Education

Participant Number	Years in Nutrition and Dietetics Education	Participant Response
Q1: How do you feel about including cultural competence in nutrition and dietetics education to address this gap [perceived by ACEND]?		
1	18	"It is included as a requirement. I think for students, it may be hard to get culturally diverse experiences in programs that are not in culturally diverse communities. We can provide simulations and also remember that cultural beliefs are not just generated by race or country of origin, but also by other socio-economic conditions, physical/mental disabilities, and generational differences. This broad consideration of cultural competence means all students are likely to experience culturally different patients, clients, and customers"
2	1.5	"It would help bridge the gap"
3	15	"I feel that cultural competence (including other ethnic cultures, and all other areas of culture to include sexual preference, racial identity, disabilities and genders) needs to be addressed and included in every didactic course taught in dietetics"
4	33	"I feel great about it"
5	20	"Should definitely be a part of academic and experiential training"
6	19	"I feel passionate about this issue. Cultural competence must be addressed and discussed, and better yet practiced and demonstrated among preceptors"
7	7	"I feel very passionate about it. Cultural competence should be included throughout the curriculum. When we don't emphasize cultural competence to our students we minimize its significance within the profession"
8	28	"I believe nutrition education must include student learning outcomes relevant to cultural competence but understand that future professionals will likely need to learn more about cultures represented in his or her patient population"
9	8	"It is absolutely vital that cultural competence be integrated into any curriculum that trains future nutrition educators"

Theme 2: Two Venues for Teaching Cultural Competence Exist

Participants responded that the two primary ways in which educators and preceptors can engage students and provide instructional strategies that promote cultural competence: in class or individual, and out of class or interactive. This again aligns with what was found in the literature (Campinha-Bacote, 2002; Chapman, Bates, O'Neil & Chan, 2008; Handu, Medrow, & Brown, 2016; Pierce, Havens, Poehlitz, & Ferris, 2012). Numerous ways to engage students in these two venues was offered by participants, and many of the responses overlapped. These will be identified in theme four.

Theme 3: Interdepartmental Collaboration for Professional Development

A common theme from the literature is that health care professionals can maximize interdepartmental partnerships to share resources, build skills, share services, and in the end provide better patient care (Cowperthwait, Saylor, Carlsen, Schmitt, Salam, Melby, & Baker, 2015; Expert Panel, 2012; Pierce et al., 2012). Eliot and Kolasa (2015) made the point that although well studied in many health care fields, evidence of the need for and implementation of collaborative and interdepartmental professional education and experience in nutrition and dietetics is sparse.

Through service and experiential learning many opportunities exist for nutrition and dietetic students to engage with other HCP students. Christaldi and Bodzio (2015) presented the outcome of an international medical missions trip in which nutrition and dietetics students participated with other HCP. This experiential service-learning project enhanced communication and promoted a better understanding of the roles that different HCP play in treating patients.

Survey questions did not specifically address interdepartmental or collaborative education for nutrition and dietetics students within the curriculum. One participant specifically stated that educators and preceptors should be culturally competent to set the example for students. See Table 4, Participant 6 above. This encourages collaboration between educator and student and builds the necessary skills for entry-level registered dietitians to function on a diverse team of health professionals. As part of the health care team registered dietitians must be able to collaborate and interact to provide quality patient care.

Theme 4: Multiple Modalities Exist for Teaching Cultural Competence

For in class or individual assignments and activities different levels of perceived effectiveness in promoting cultural competence exist. Some of the in class strategies were not easy to assess; these instructional strategies were dependent upon whether the students were interested in the topic, who was speaking, what documentary was being watched, or the topic of the research paper being discussed. Generally these strategies were also viewed as passive strategies of engagement, and were perceived to be less effective in promoting cultural competence. All of the out of class or interactive and collaborative strategies were perceived as highly effective in promoting cultural competence. A summary of the instructional strategies for in class and out of class engagement is provided in Table 5.

Table 5

Summary of Instructional Strategies and Perceived Effectiveness

In Class / Individual		Out of Class / Interactive
Most Effective (Active)	Least Effective (Passive)	Communication enhancement through role-play counseling with paid actors
Case study	Virtual reality	Two days with diabetes
Display board	Class lecture	Dining out
Engaging Discussion	Exams and quizzes	Experiential learning
Food preparation and presentation	Viewing documentaries	Cross-cultural interview
Portfolio	Guest speaker	Portfolio
Student presentation	Research paper	Problem based learning with online modules
		Service learning
		Virtual reality

The Importance of a Culturally Competent Registered Dietitian

The need for cultural competence has been called ‘acute’, and is viewed as an imperative in health care. Health care professionals (HCPs) must meet ethical challenges and become more focused on reducing the health disparities through appropriate engagement and care. Much has been written from medicine and nursing regarding culturally competent HCPs and the role they play in patient care. The education of doctors and nurses provides cultural competence integrated throughout their curricula at all levels. In medicine and nursing, practice engaging patients from diverse, marginalized and minority groups begins early and occurs often to build skill, confidence, and competence (Betancourt et al., 2014; Cadoret & Garcia, 2014).

Ethical application and social justice should guide the practice of caring for others. This is especially relevant in our health care system with a growing minority population and changing United States demographic (Betancourt et al., 2014; Branigan, 2012; Braveman et al., 2014; Campinha-Bacote, 2011). Like doctors and nurses, registered dietitians play an active and vital role on the clinical health care team. As part of this team registered dietitians work at all levels of patient care, and are often the HCPs that spend the most time with patients in the promotion of health and the prevention of chronic disease.

Registered dietitians work in a vast array of health care settings and are versatile and flexible; they provide expert skills based on what is needed and where they are employed. Since the clinical dietitian performs different skills than the community nutritionist, the underlying role is the same: provide quality nutrition care based on scientific evidence for the promotion of health and the prevention of disease for all people (Breuning et al., 2015). It is not uncommon for registered dietitians to spend hours with patients in follow-up care or in counseling and education. It is the registered dietitian that is primarily responsible for providing nutrition education, evaluation of adequate nutrient intake, assessment of proper dietary practices, instruction in food safety and sanitation, assistance with basic cooking and culinary skills, and helping to plan a healthy diet when ones budget gets tight. To perform these skills adeptly the registered dietitian must have the skills, awareness, knowledge, desire, and experiences to practice culturally competent health care (Campinha-Bacote, 2003, 2011). Figure 1 below illustrates the process of cultural competence. Cultural competence must be a part of the

nutrition and dietetics curriculum both from a didactic and an experiential learning standpoint for students to develop into expert health care professionals.

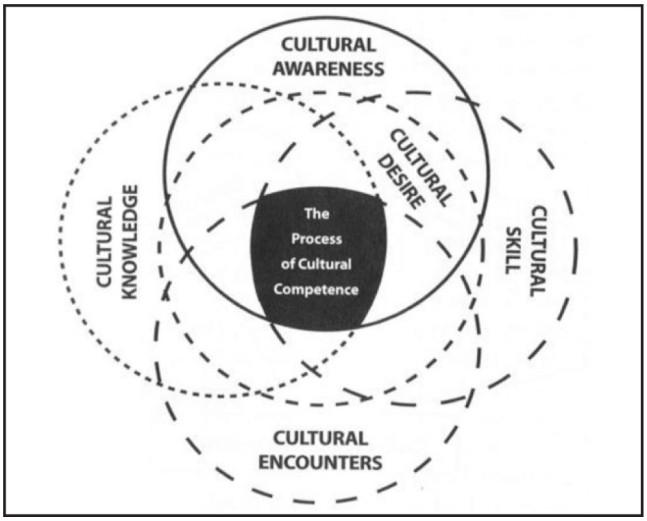

Figure 1. The Process of Cultural Competence in the Delivery of Health Care Services Campinha-Bacote, 2002).

Summary

The population of the United States is changing. With more than half of the population expected to belong to a minority group by 2030, evidence exists for a need for health care professionals to have knowledge, skills and experience to work successfully with diverse groups of people. The education that health care professionals receive prepares them to focus on health promotion and disease prevention. Registered dietitians are an integral part of the professional health care team providing nutrition-specific care.

In 2015 ACEND published research findings after evaluating the curriculum of nutrition and dietetics students. They identified a gap between student education and professional practice, specifically in cultural communication and cultural care. Although evidence exists for the inclusion of some cultural competence in nutrition and dietetics

education, it is inconsistently seen nationwide. At the Mid Atlantic university cultural competence education in the curriculum mirrors what is seen nationwide. Cultural competence is an essential educational component to equip graduates with the skills necessary to perform effectively in entry-level positions. Without cultural competence skills registered dietitians are unable to work effectively on an interdepartmental team or provide the care required by minority, marginalized, or diverse patients.

This project study resulted in numerous instructional strategies that promote cultural competence. Some of these strategies are more suited to in-class or individual learning, others work better in groups or in out of class or experiential environments. Cultural competence may not be incorporated nationwide in the nutrition and dietetics curriculum. Survey participants agreed that cultural competence is vital and should be included in the education of nutrition and dietetic students. The knowledge, skills, and experience that students take with them after graduation into professional practice will influence their patients' health immediately and promote equality and social justice in the long term.

Conclusion

Suggested Course of Action

Including cultural competence in the nutrition and dietetics curriculum to address the gap identified by ACEND is a significant endeavor that requires planning and collaboration. Although addressing this gap is the impetus for the current curriculum change, it is not the complete goal in educating students. The goal should be excellence in education that includes providing an engaging and stimulating learning environment

where students gain the experiences needed for professional practice. Cultural competence is a part of that stimulating learning environment and experiential learning. Ensuring ACEND recommendations are met satisfies the basic proficiencies for entry-level dietitians. Striving for excellence in education involves continually exploring ways to exceed the basic competencies. This includes integrating cultural competence throughout the curriculum and ensuring that experiential learning opportunities provide the exposure to different diverse ethnic and cultural groups.

Reaching the goal of excellence in education involves collaboration between academic affairs and the nutrition and dietetics department faculty. Faculty in this department are the most qualified to interpret recommendations and implement the changes within the curriculum. Continuously striving for academic excellence translates into qualified entry-level registered dietitians competent in working with diverse groups of people. To reach this level vision is needed to make the appropriate changes to continuously structure knowledge, skills, and experience within the curriculum.

After considering the ACEND recommendations, a two-part assessment of the curriculum is appropriate: (a) identify the level of cultural competence currently offered, and (b) review of the curriculum to determine where cultural competence is already included in the curriculum and where it could be (2015, 2016). Suitable questions to ask include

1. What courses include instructional strategies that promote cultural competence in the curriculum?

2. Is cultural competence consistently taught in these courses by all instructors?
3. What additional courses could easily include instructional strategies to promote cultural competence?
4. What timeline for improving the curriculum is most appropriate for the faculty?
5. What are measurable outcomes to assess cultural competence development in students?

Consequences of Not Incorporating Cultural Competence

Cultural competence was shown in the project study to be highly valued yet inconsistently included in the nutrition and dietetics curriculum. Lack of inclusion of cultural competence in the curriculum limits the skills and fails to prepare entry-level registered dietitians to engage on multicultural teams. This defies the trend currently in health care where interdepartmental collaboration and professional development across the disciplines was noted in the research. Other health care disciplines are promoting collaboration and interdepartmental processes. Registered dietitians are a valuable asset on the health care team and should be engaging in the dialogue of collaboration, not keeping themselves out of it.

Another consideration for not incorporating cultural competence within the nutrition and dietetics curriculum is the lack of promotion of social justice. To continuously engage people appropriately registered dietitians need to have exposure to diverse ethnic and cultural groups. Students without the exposure to different

communities, beliefs, and practices are less likely to provide culturally sensitive care. When sensitive care is not provided health promotion and disease prevention are not as likely to occur.

Recommendations

Following the evidence provided in this position paper I recommend that the department of academic affairs begin collaboration with the nutrition and dietetics department to assess how the gap between student education and professional practice can be eliminated. These early conversations should engage all invested parties and discuss the necessary changes as well as the timeline for implementation. As previously stated, identifying what level of cultural competence is currently offered and reviewing the curriculum to determine where cultural competence is already included allows input and dialogue from all parties. Following open dialogue and idea exchange, the logical progression is to

1. Make changes to existing courses first by integrating cultural competence topics, assignments, activities, and service and experiential learning opportunities to courses that naturally lend themselves to this topic (i.e. community nutrition, nutrition in the lifecycle),
2. Follow up to identify the instructional strategies that work best within the curriculum,
3. Rely on the expertise of the nutrition and dietetic faculty to set the pace for change and determine the best instructional strategies for appropriate

courses. Many instructional strategies will take longer to smoothly integrate, others will require only one or two semesters,

4. Continue follow up to analyze and refine the integration process until cultural competence is an integrated thread that runs smoothly through the curriculum.

The integration of cultural competence in the nutrition and dietetics curriculum is not monumental, as nutrition is a topic that naturally merges with culture and cultural issues. The transition to a curriculum with a deeper emphasis on cultural competence education and experience will help to bridge the gap between student education and the professional practice of the registered dietitian.

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Appendix B: Survey Invitation Email Follow-Up

Dear Nutrition and Dietetics Educator and Preceptor member,

Recently you were invited to participate in my doctoral research study about instructional strategies that promote cultural competence in nutrition and dietetics education. If you have not participated in this study and wish to do so please use the link below to directly access the research study. As a reminder, in this study you will be asked to complete a web-based survey of 7 question and attach one example of an assignment with instructions that identify how cultural competence is taught or incorporated in one of your courses or course lessons. The study should take you about 10 minutes to complete.

The purpose of this study is to explore and identify instructional strategies that promote cultural competence in the nutrition and dietetics classroom. Identifying instructional strategies will add to the existing body of literature for practical approaches and best practices to be implemented by educators in the field. These instructional strategies will benefit educators at the local level, as well as help to identify gaps between student education and the professional practice of the registered dietitian at the national level. If you have any questions about this study you can contact me directly at (484.889.6976) or email (cecile.adkins@waldenu.edu). If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210.

Please see the attached original survey invitation document with link to participate.

Thank you.

Cecile Adkins, MA, RD, LDN

Appendix C: The Survey Questionnaire

Cultural competence is defined as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. 'Competence' implies having the capacity to function effectively as an individual and an organization within the context of cultural beliefs, behaviors, and need presented by consumers and their communities" (CDC, 2015).

1. How does the definition of cultural competence relate to the field of nutrition and dietetics?

ACEND (2015) noted a gap in cultural competence between student education and experience and the professional practice of the registered dietitian.

2. How do you feel about including cultural competence in nutrition and dietetics education curriculum to address this gap?

3. What course(s) do you teach or have recently taught that include the topic of cultural competence as part of the measurable objectives? For each course you teach please indicate

4. Courses by name and indicate the style of delivery: in-class, blended, or online.
    a. What instructional strategies do you use to promote cultural competence?
    b. What strategies have been most effective or yielded the best student response?
    c. What strategies have been least effective or yielded minimal student response?

5. What are some ways that you assess student learning of cultural competence?

6. As you complete this survey, please attach one student assignment for one course that provides an example of your instructional strategies that promote cultural competence.

7. Please provide any additional comments regarding incorporating cultural competence in the courses you teach.

8. How many years have you been a nutrition and dietetics educator?

Appendix D: Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

Tim Brown, PhD:

During the course of my activity in collecting data for this research: "Instructional Strategies that Promote Cultural Competence in Nutrition and Dietetics Education" I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature: *Timothy Brown* **Date:** June 1, 2016

Appendix E: The Certificate of Completion

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Cecile Adkins successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 01/24/2015

Certification Number: 1640916

Appendix F: Spreadsheet 1

SPREADSHEET 1: FULL RESPONSES
Instructional Strategies that Promote Cultural Competence in Nutrition and Dietetics Education

KEY: CC = cultural competence DI = dietetic internship DPD = didactic program in dietetics N/A = not answered or no document provided

Survey Participant Time as Educator	Q1: How does this definition of CC relate to the field of nutrition and dietetics?	Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?	Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?	Q4: What are some ways that you assess student learning of CC?	Q5: Please provide examples of your instructional strategies that promote CC.	Q6: Provide any additional comments regarding incorporating CC in the courses you teach.
1 18 years	With an increasing diversity in the population, our customers, clients and patients have food ways, health beliefs and communication behaviors that may be different from our own. As a DI director, I believe it is **critical that students have ability to respectfully work in this diverse society.**	It is **included as a requirement.** I think for student, it may be hard to get culturally diverse experiences in internship programs that are not located in culturally diverse communities. However, we **can provide simulations** and also remember that cultural beliefs are not just generated by race or country of origin, but also by other socio-economic conditions, physical/mental disabilities, and generational differences. This broader consideration of cultural competence means all students are likely to experience culturally different patients, clients and customers.	Included in DI: CRD 3.6 recipe development and CRD 3.1 nutrition care process.	See attachment of assignment.	CC case study	N/A
2 1.5 years	I think it relates.	It would help bridge the gap.	I haven't included it in the learning objectives of the course, but it has been included in learning objectives of specific projects. Courses are all online.	During DI rotations in food service admin, the students incorporated this into their theme meal project.	N/A	N/A

Survey Participant Time as Educator	Q1: How does this definition of CC relate to the field of nutrition and dietetics?	Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?	Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?	Q4: What are some ways that you assess student learning of CC?	Q5: Please provide examples of your instructional strategies that promote CC.	Q6: Provide any additional comments regarding incorporating CC in the courses you teach.
3 15 years	Dietetic professionals **need to be competent or have the capacity to function and practice effectively** with other clients/patients that are from various backgrounds/cultures.	I feel that cultural competence (including other ethnic cultures, and all other areas of culture to include sexual preference culture, racial identity, disabilities, and both genders) **need to be addressed and included in every DPD course taught** in dietetics.	Nutrition Education and Counseling Food & Culture Food Science Foodservice Management Practicum Management in Nutrition & Dietetics	1. Reflections on guest speakers, class trips, discussions 2. Questions on exams 3. Presentations in class 4. Rubrics that include areas of cultural understanding	CC case study	Each identified course has some component of cultural competence, but the specifics are tailored to the course.
4 33 years	It fits well. In this world melting pot it is important to be able to work with all people of all backgrounds.	I feel great about it.	None.	**I don't in my classes.**	N/A	N/A
5 20 years	Food is at the core of nutrition and dietetics. Food has immense cultural diversity that encompasses more than preference, but environmental, social and educational factors. The **appreciation and understanding of cultural practices and perceptions of food choice should be fundamental** in dietetic education and practice.	**Definitely should be part of academic and experiential training** on the path to becoming a registered dietitian.	I haven't specifically taught cultural competence, but I do include content and activities to help students appreciate the differences and significance of food and nutrition related practices and perceptions.	Reflection paper or assignment pertaining to diversity and impact on food choice and nutrition. Searching out common themes from food guides around the world, showing that basics remain very similar.	N/A	N/A

Survey Participant Time as Educator	Q1: How does this definition of CC relate to the field of nutrition and dietetics?	Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?	Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?	Q4: What are some ways that you assess student learning of CC?	Q5: Please provide examples of your instructional strategies that promote CC.	Q6: Provide any additional comments regarding incorporating CC in the courses you teach.
6 19 years	RDs need cultural competence to work with patients and clients as well as with colleagues. In addition the organizations RDs work for need to be accessible to a variety of cultures and be sensitive to behaviors and beliefs. For example, being open to alternative health practices, offering access outside of typical business hours, or access to materials and resources in native languages.	I feel passionate about cultural competence in our profession. It must be **addressed and discussed, practiced and demonstrated** among educators and preceptors.	Self-study module in hybrid course with team presentation.	Quiz questions, class discussion, and interaction with patients/clients in clinical rotations.	CC case study	Concepts of cultural competence can be taught in a **classroom** but developing cultural competence requires **interacting with others** that are culturally different than yourself.
7 7 years	This definition **relates very much to nutrition and dietetics**. It should be a **cornerstone** of what we do when we align ourselves with a national accrediting body to serve all people.	I feel **very passionate and very strongly** that cultural competence should be included in the curriculum, and not just in one or two classes where it is unpracticed and unrelated to the profession. **When we don't emphasize cultural competence to our students we minimize its significance within the profession.**	Nutrition and Culture Health and Weight Community Nutrition	Self-reflection, documentaries, teaching through CC models showing that CC is not a learned skill but a journey. I will add that I think while students need to have cultural competence integrated into the full nutrition and dietetics curriculum; faculty also need it desperately! So many of my generation have not had much or any experience, nor do they possess the desire [to become culturally competent]. To effectively teach and guide students in the concept - we [faculty] must also be culturally competent.	CC case study	Just want to reiterate that **faculty, educators, and preceptors also need to be culturally competent to be effective in practice**, but to also effectively and accurately guide the next generation of learners.

Survey Participant Time as Educator	Q1: How does this definition of CC relate to the field of nutrition and dietetics?	Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?	Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?	Q4: What are some ways that you assess student learning of CC?	Q5: Please provide examples of your instructional strategies that promote CC.	Q6: Provide any additional comments regarding incorporating CC in the courses you teach.
8 28 years	RDs and other healthcare professionals interact with different patient populations. Because food is so personal, RDs **need to be culturally competent** when advising patients on their diet and health behaviors.	Nutrition education **must include student-learning outcomes relevant to cultural competence**. It's important to teach our students about cultural competence, but our students will need to learn more about cultures represented in their own patient population.	Basic Nutrition Lifecycle Nutrition	Projects, discussion board, test questions.	CC case study	N/A
9 8 years	The demographics of the US have changed dramatically over the past 25 years and will continue to do so. Food choice is heavily influenced by culture and beliefs. **Cultural competence is critical to high quality nutrition counseling and education**.	It is **absolutely vital** that cultural competence be **integrated into any curriculum that trains future nutrition educators**.	Introductory nutrition courses. Designing a service-learning project where students design a nutrition lesson that incorporates cultural themes and ethnic foods. Application-focus is better; students don't get much from the textbook readings.	Have them write a reflective piece on their teaching experience during the service-learning project that outlines what they've learned with respect to cultural awareness.	N/A	Provide a case study where they have to design a meal plan for someone who is not American-born and unfamiliar with the Western diet.

Appendix G: Spreadsheet 2

SPREADSHEET 2: ABBREVIATED RESPONSES AND KEY TERMS Instructional Strategies that Promote Cultural Competence in Nutrition and Dietetics Education						
KEY: CC = cultural competence DI = dietetic internship DPD = didactic program in dietetics N/A = not answered or no document provided						
Survey Participant	**Q1: How does this definition of CC relate to the field of nutrition and dietetics?**	**Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?**	**Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?**	**Q4: What are some ways that you assess student learning of CC?**	**Q5: Please provide examples of your instructional strategies that promote CC.**	**Q6: Provide any additional comments regarding incorporating CC in the courses you teach.**
1	**Critical** that students have the ability to respectfully work in this diverse society	Included as **requirement in courses.**	DI courses identified	Rubric for accurate assessment, calculations, plan and recommendations	CC case study	N/A
2	I think it relates	It **would help** bridge the gap	Not included in learning objectives of course, but included as learning objectives of specific projects in DI	Incorporated in meal theme project	N/A	N/A
3	**Professionals need to be competent** with clients/patients from different backgrounds/cultures	CC **needs to be addressed** and **included in every DPD course** taught in dietetics	DPD courses identified	Reflections, exams, presentations, rubrics	CC case study	Some CC in each DPD course
4	Fits well, melting pot, important to be able to work with people of all backgrounds	I feel great about it	**None**	**I don't in my classes**	N/A	**I don't teach a course where CC is very relevant**

Survey Participant	Q1: How does this definition of CC relate to the field of nutrition and dietetics?	Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?	Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?	Q4: What are some ways that you assess student learning of CC?	Q5: Please provide examples of your instructional strategies that promote CC.	Q6: Provide any additional comments regarding incorporating CC in the courses you teach.
5	Understanding of cultural practices **fundamental** in dietetic education and practice	Should **definitely** be a part of academic and experiential learning	N/A	Reflection paper	N/A	N/A
6	RDs need CC	**Passionate** about issue of CC. Must be **addressed and discussed, practiced and demonstrated**	Cultural Competence in Nutrition, DPD course	Self-study module Team presentation Food Samples Quizzes Class discussion	CC case study	Concepts of CC can be taught in DPD, but developing CC requires interacting with others
7	Definition relates very much. Should be a **cornerstone**	**Passionate** and **strongly** that CC be included in DPD	DPD courses identified	Self-reflection, CC models. CC is lifelong journey	CC case study	N/A
8	**RDs need to be CC** when advising patients	Nutrition education **must include** student learning outcomes relevant to CC	DPD courses identified	Presentation, rubric	CC case study	N/A
9	**Critical** to high quality nutrition counseling and education	**Absolutely vital** that CC be **integrated**	DPD courses identified	Reflection paper	N/A	Case studies for students to practice.

Appendix H: Spreadsheet 3

SPREADSHEET 3: CONNECTION OF SURVEY RESPONSES WITH LITERATURE REIVEW, RESEARCHER NOTES

Instructional Strategies that Promote Cultural Competence in Nutrition and Dietetics Education

KEY: CC = cultural competence DI = dietetic internship DPD = didactic program in dietetics N/A = not answered

Q1: How does this definition of CC relate to the field of nutrition and dietetics?	**Q2: How do you feel about including CC in nutrition and dietetics education to address this gap?**	**Q3: What course(s) do you teach or have recently taught that include the topic of CC as part of measurable objectives?**	**Q4: What are some ways that you assess student learning of CC?**	**Q5: Please provide examples of your instructional strategies that promote CC.**	**Q6: Provide any additional comments regarding incorporating CC in the courses you teach.**
Concurring responses: All participants - critical for students - professionals need to be competent - work with all people - fundamental understanding in education and practice - RDs need CC - Should be cornerstone - Critical to high quality education and counseling		*Concurring responses Q3: Participants 1, 2, 3, 5, 6, 7, 8, 9* - included in DI course sections and experiential learning - included in learning objectives in class, experiential learning out of class - DPD course, DI assignments (same as literature) - courses with cultural competence components *Concurring responses Q4: Participants 1, 2, 3, 5, 6, 7, 8, 9* -DPD courses, DI assignments (same as literature) - assessment strategies (reflection, case study, readings, exams, presentations, assignment rubrics, clinical calculations and assessment, food samples, class discussion) *Concurring responses Q5: All participants* - CC case study - N/A *Discrepant responses Q3: Participant 4* - None *Discrepant responses Q 4: Participant 4* - I don't in my classes		*Participants 1, 2, 5, 8* - N/A *Participants 3, 6, 7, 9* - Some CC in each course - Classroom and interaction both important - Faculty, educators, and preceptors need to be CC *Participant 4* - Not relevant to nutrition and dietetics courses taught.
1. CC is vital in nutrition and dietetics education. 2. Inter-professional and collaborative are crucial for professional development		3. Classroom and experiential learning are both venues to teach and learn cultural competence (DPD and DI). 4. Multiple modalities for instructional strategies exist in DPD and DI.			

Appendix I: Spreadsheet 4

SPREADSHEET 4: FINAL THEMES **Instructional Strategies that Promote Cultural Competence in Nutrition and Dietetics Education**
Theme 1: Cultural Competence is Vital in Nutrition and Dietetics Education
Theme 2: Classroom and Experiential Learning are Both Venues to Learn Cultural Competence Skills
Theme 3: Inter-Professional and Collaborative Learning are Crucial for Professional Development
Theme 4: Multiple Modalities for Instructional Strategies Exist