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# Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians

Tegan Jean Medico
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To the Graduate Council:

I am submitting herewith a thesis written by Tegan Jean Medico entitled "Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Betsy Haughton, Major Professor

We have read this thesis and recommend its acceptance:

Hollie A. Raynor, Denise R. Bates

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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# Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians

A Thesis Presented for
The Master of Science
Degree
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Tegan Jean Medico
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## ABSTRACT

Increasing demographic diversity, persistent health disparities, and ongoing efforts to reduce health care costs have made cultural and linguistic competence in the United States health care system a premier concern. Integral to improving cultural competence in health care is providing health professionals with adequate education and training in cultural competence. For this reason, there has been increasing attention paid by academia across health-related disciplines and by national organizations and governmental health agencies to delineating what cultural competence in education and training entails. Though a multidisciplinary body of literature on developing curricula related to cultural competence for health professionals exists, still lacking from this literature is sufficient input from the dietetic profession. The purpose of this cross-sectional internet-based research was to create a curricular model of core curricular competencies related to cultural competence for the education and training of registered dietitians. A random sample of registered dietitians rated 73 proposed curricular competencies for essentiality on a 7-point Likert-like scale (1 = Not a priority; 7 = Essential). Exploratory principal components analysis (PCA) with Varimax rotation condensed the proposed competencies with similar variances of responses into factors (model domains) and eliminated competencies which accounted for too little or ambiguous variance. Factors were assigned unique labels based on the prevailing themes of their respective competencies and further interpreted in terms of respondent characteristics via multivariate general analysis of variance (MANOVA). Results based on a 17.9% (n=1,090) rate of response produced a model with 69 competencies and 7 domains: Communication and Relationships; Community Collaboration; Disparities and Diversity in Health Care; Information Access, Analysis, and Use; Bias Management; Food Environments; and Models and Definitions. Significant differences in mean factor ratings were detected between respondents who differed by race and by experience working with diverse individuals and groups. This model is representative of existing research on cultural competence, but it is the first unique to dietetics. It may be used by dietetic education and training programs to systematically plan, implement, and evaluate curricula for cultural competence.

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**ABSTRACT**

Increasing demographic diversity, persistent health disparities, and ongoing efforts to reduce health care costs have made cultural and linguistic competence in the United States health care system a premier concern. Integral to improving cultural competence in health care is providing health professionals with adequate education and training in cultural competence. Though a multidisciplinary body of literature on developing curricula related to cultural competence for health professionals exists, still lacking from this literature is sufficient input from the dietetic profession. This section explains the significance of this research gap and highlights prevailing competencies discussed by other health-related disciplines to create a context for the purpose of this study, which is to identify the core curricular competencies related to cultural competence for the education and training of registered dietitians.

# CHAPTER 1: INTRODUCTION

Increasing demographic diversity, persistent health disparities, and ongoing efforts to reduce health care costs have made cultural and linguistic competence in the United States health care system a premier concern (1-5). Cross et al. (6) have defined cultural competence (including linguistic competence) as a set of attitudes, knowledge, and skills that "come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations (p.13)." In this way, cultural competence of individuals and organizations may help to improve diagnoses, treatment prescriptions, client adherence to treatment protocols, client satisfaction, and overall health outcomes (4, 7-9).

Integral to improving cultural competence in health care is providing health professionals with adequate education and training in cultural competence. For this reason, there has been increasing attention paid by academia across health-related disciplines and by national organizations and governmental health agencies to delineating what cultural competence in education and training entails. As a result, a body of literature on developing curricula that instill cultural competence in students entering the health care field exists.

Still lacking from this body of literature, however, is sufficient input from the dietetic profession. It is important to ask if the competencies discussed by other disciplines and included in public documents are adequate and appropriate for dietetic education and training, especially considering the diverse settings in which dietitians work, how integral food-related beliefs and behaviors can be in a given culture, how strongly these beliefs and behaviors can impact health (10-14). Previous research on multicultural nutrition counseling competencies does suggest there are competencies related to cultural competence which are unique to this field (15). In addition, accrediting bodies are introducing standards specifically related to cultural competence that will impact dietetic education, training, and practice.

The purpose of this study was to provide the dietetic profession with a resource on cultural competence education and training that is detailed and tailored to its needs and obligations. The primary research question was:

*What are the core curricular competencies related to cultural competence for the education and training of registered dietitians?*

To answer this question, a web-based cross-sectional survey was conducted in which randomly-selected dietitians registered with the Commission on Dietetic Registration assessed the priority level of proposed competencies for a culturally competent curriculum. Respondents rated each proposed competency on a Likert-like scale. Principal component analysis of ratings allowed for identification of core domains and organization of items within each domain for the development of a general curricular model. Interpretation of this model was based upon the multivariate analysis of variance of relationships between domains and key respondent characteristics. These characteristics were addressed in four research sub-questions:

1. *How do dietitians who belong to a racial/ethnic minority group rate core curricular competencies compared to those who do not belong to a racial/ethnic minority group?*

2. *How do dietitians who have five or more years of professional experience working with diverse individuals, groups, and/or populations rate core curricular competencies compared to those with less than five years of experience?*
3. *How do dietitians who have participated in non-degree-related continuing education on cultural competence in the past five years rate core curricular competencies compared to those who have not participated in continuing education on cultural competence?*
4. *How do dietitians with a bachelor's degree as their highest education level attained rate core curricular competencies compared to those with a graduate degree-level education?*

Results of this study may be used by education and training programs to plan, implement, and evaluate their curricula for cultural competence in a systematic and detailed way. In addition, results may guide development of individual cultural competence self-assessment tools for dietetic students and/or dietitians, either for assessing learning outcomes or designing continuing professional education plans required by the Commission on Dietetic Registration for ongoing professional certification. Likewise, workplaces may use outcomes of this study to aid staff development and/or assessment.

# CHAPTER 2: LITERATURE REVIEW

## CULTURAL COMPETENCE IN HEALTH CARE

### Indicators of Need

"Health disparities" refers to divergent rates of morbidity and mortality from various health conditions, as well as to differences in access to health care and quality of health care, that exist across diverse populations in the United States. Among the demographic characteristics associated with the greatest degree of health disparities observed are gender, race and ethnicity, socioeconomic status, education level, disability, sexual orientation, and geographic location. These disparities have lead the United States Department of Health and Human Services (US DHHS) to establish as one of its primary goals for *Healthy People 2020*, the national health promotion and disease prevention initiative, elimination of health disparities (2).

Although some disparities in access to care and quality of care have decreased since the 2005 National Healthcare Disparities Report was published by the Agency for Healthcare Research and Quality (AHRQ) (16), the largest gaps remain. For example, new Acquired Immunodeficiency Syndrome diagnoses occur at a rate ten times higher for Blacks than Whites, and American Indians/Alaskan Natives are twice as likely as Whites to receive no prenatal care. Moreover, at least half of the AHRQ's core health care access measures have remained unchanged for African-Americans, Hispanics, Asians, and low-income populations, as have over 60% of core health care quality measures for African-Americans, Hispanics, American Indians/Alaskan Natives, and low-income populations (1). Overall, the goal of eliminating health disparities is not being realized.

Independent of race, ethnicity, and income, lack of health insurance is the greatest risk factor for disparities in quality of care. However, disparities in health care quality exist across racial and ethnic groups among the insured, as well (1). As revealed in the Institute of Medicine's (3) 2003 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, racial and ethnic minorities are more likely to receive less-desirable procedures. Just as age and severity of illness do not explain disparities among the insured, these variables do not explain why rates of appropriate and favorable medical treatments are significantly different among races.

These objective measures are complemented by subjective indicators which underscore the need to improve health care delivery to diverse populations, namely the need for improving the cultural competence of health care organizations and personnel. An investigation of African-American, Hispanic, Asian, and Caucasian clients' perceptions of the cultural competence of health care providers and the health care system in general revealed perceptions of low cultural competence more prevalent among racial and ethnic minorities than among white clients. This trend existed independently of other demographics, health literacy level, self-rated health status, communication, and the source of health care received (17).

Of course, the health care system cannot be deemed the exclusive cause of health disparities. Various social, economic, and environmental conditions contribute to many forms of inequities that impact health (18). The aforementioned inequities and patient surveys suggest, however, that

the need for improved cultural competence in health care is real. Despite scant research evaluating the impact of cultural competence training of health providers on equity of services, client adherence, and health outcomes (7, 19-20), it is reasonable to assume that providers who effectively understand and interact with their clients will make more accurate diagnoses, prescribe more appropriate treatments, increase client adherence to treatment protocols, increase client satisfaction, and improve health outcomes (4, 7-9). Additionally, managed care stakeholders value cultural competence as a potential way to reduce health care costs via improved outcomes and as a strategy to appeal to a larger consumer market. Thus, attending to cultural competence in health care is an ethical and practical imperative (4). With increasing cultural diversity in the United States (5), the importance of culturally competent health care is undeniable.

**Definition and Models of Cultural Competence**

The prevailing definition of cultural competence used in health care is that which is adapted from Cross et al. by the US DHHS Office of Minority Health (OMH) for the development of the National Standards for Culturally and Linguistically Appropriate Services (CLAS) (21):

> Cultural and linguistic competence is 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.
>
> (21)

A key part of this definition is reference to both individual and organizational cultural competence. Organizational cultural competence pertains to the structures, policies, and practices of health care organizations regarding provision of services for diverse groups, whereas individual cultural competence pertains to the ability of personnel to provide such services at the interpersonal level. Early conceptual models of cultural competence and patient-centered care focused on the interpersonal interactions between provider and patient, but later models shifted focus from providers at the individual level to the health care system as a whole. Consistencies between models of cultural competence and patient-centered care at both the interpersonal and health systems levels suggest that both models are compelling tools for providing effective care for diverse populations (22).

*Individual Cultural Competence*

Individual cultural competence generally is dimensioned into cultural attitudes or awareness, cultural knowledge, and cultural skills: three components of the model for cultural competence

first introduced in 1994 by Sodowski et al. (23) for multicultural psychology counseling and later expanded in 2001 by colleague Sue (24). Sue's expanded multidimensional model of cultural competence extends the attitudes/awareness, knowledge, and skills dimensions to professional, organizational, and societal foci for specific races and cultures. For proposed models following this form, definitions of each dimension are similar. Cultural attitudes/awareness refers to self-awareness by providers of their own culture, cultural stereotypes and biases, and strengths and weaknesses in interacting with diverse groups. Cultural knowledge refers to knowledge about the beliefs, values, and practices of other cultures and an understanding of factors that may impact the health status of diverse groups. Cultural skills refers to the ability to recognize and effectively navigate differences across cultures in order to provide quality health care services. Campinha-Bacote (25-26) suggests two additional dimensions: cultural encounters and cultural desire. Cultural encounters are cross-cultural experiences, and cultural desire is a spiritual construct referring to an unconscious and continuous commitment to seek cultural encounters and develop the awareness, knowledge, and skills to be culturally competent.

Another dimension of individual cultural competence frequently discussed in literature is cultural humility. Whereas cultural competence often denotes outcomes, cultural humility denotes process. The basis of cultural humility is the notion that the ability to engage in an effective process for becoming culturally competent is a competency itself. This process involves a continuous dedication to self- assessment, being able to recognize and level power imbalances in provider-client relationships through effective patient-centered care, understanding how to establish respectful partnerships with communities that benefit all stakeholders, and becoming an adept and dedicated advocate for disadvantaged groups (27-28)

Some literature expands further upon given dimensions. A notable example is by Teal and Street (29), who elaborate on cultural skills by focusing specifically on communication. They differentiate culturally competent communication into four parts: 1) communication repertoire; 2) situational awareness; 3) adaptability; and 4) knowledge about cultural issues. To have communication repertoire, providers must be equipped with a variety of communications skills, including active listening, acknowledging cultural implications of patients' conditions, eliciting patient perspectives, and empowering patients and families to make decisions about their health care. Situational awareness, different from self-awareness, is being receptive to patient cues, recognizing misunderstandings or disagreements, avoiding hasty assumptions, and conveying attention and personal connectedness. Adaptability refers to changing communication approaches to meet the needs and preferences of individual patients. It echoes reflective practice (i.e. tailoring practice during, not after, the situation at hand). Knowledge about cultural issues includes avoiding stereotyping but also using stereotypes to alert to potential points where cultural differences can affect communication. These four parts of culturally competent communication are the foundation for a skills-based culturally competent communication model developed by Teal and Street (29) that covers verbal behavior, nonverbal behavior, recognizing potential cultural differences, incorporating cultural knowledge, and negotiation and collaboration.

*Organizational Cultural Competence*

Though attitudes/awareness, knowledge, and skills are core components of cultural competence typically applied at the individual level, these components may be applied at the organizational level, as suggested by Sue (24). Historically, however, the predominant models of organizational cultural competence have been the Cross (6) and Lewin (30) models. The Cross model describes organizational cultural competence not in terms of components but rather as a performance continuum. The Lewin model, on the other hand, dissects the organization into operations with particular cultural relevance. Both models provide indicators of cultural competence by which organizations can assess their ability to provide culturally competent services.

According to Cross et al. (6), organizational cultural competence occurs in six stages:

> **Cultural Destructiveness**: "…attitudes, policies, and practices that are destructive to cultures and consequently to individuals within the culture."
> **Cultural Incapacity**: "…the system or agencies do not intentionally seek to be culturally destructive but rather lack the capacity to help minority clients or communities."
> **Cultural Blindness**: "…the system and its agencies provide services with the express philosophy of being unbiased. They function with the belief that color or culture make no difference and that all people are the same."
> **Cultural Pre-Competence**: "The pre-competent agency recognizes its weaknesses and attempts to improve some aspects of its services to a specific population."
> **Cultural Competence**: "Culturally competent agencies are characterized by acceptance and respect for differences, continuing self-assessment regarding culture, careful attention to the dynamics of differences, continuous expansion of cultural knowledge and resources, and a variety of adaptations to service models to meet the needs of minority clients."
> **Cultural Proficiency**: "Culturally proficient agencies seek to add to the knowledge base of culturally competent practice by conducting research, developing new therapeutic approaches based on culture, publishing and disseminating the results of demonstration projects. Culturally proficient agencies hire staff who are specialists in culturally competent practice."
>
> (p. 14-17)

Although devised to address organizational cultural competence, the Cross model may be useful in understanding individual cultural competence, as well.

The Lewin (30) model of organizational cultural competence was developed by the US DHHS Health Resources and Services Administration (HRSA) in consultation with the Lewin Group, a health care and human services consulting firm. This model divides the organization into several domains relevant to cultural competence: organizational values; governance; planning and monitoring/evaluation; communication; staff development; organizational infrastructure; and services/interventions. Each domain contains focus areas for targeted interventions to improve organizational cultural competence (31). Examples of interventions may include leadership and workforce initiatives, such as: culturally diverse staff recruitment programs and cultural competence training; providing interpreters and culturally and linguistically appropriate health education materials; and developing culturally-specific health care programs for the client population (7, 32).

There is a model of organizational cultural competence specific to health-related post-secondary academic units. Originally developed in 2004 by the Department of Nutrition at the University of Tennessee (33), this model was based on a literature review of cultural competence themes. An expert panel provided input for qualitative content validation of the model, which was subsequently revised in 2009 by Krause (34). The revised model contained 12 domains, including one specifically labeled "Culturally Competent Curriculum." In 2010, Krause's model was revised further by Dotson (35) via quantitative methods to include four domains. The majority of competencies which originally fell within the "Culturally Competent Curriculum" domain of Krause's model were reorganized within a new domain labeled "Organizational Accountability."

## CULTURAL COMPETENCE IN THE EDUCATION AND TRAINING OF HEALTH PROFESSIONALS

With culturally competent curricula as a target of several competencies, the models proposed by Krause (34) and Dotson (35) underscore the need for health-related training and education programs to include cultural competence in their curricula. Indeed, cultural competence training of health professionals is a growing priority fueled by the changing population and by federal initiatives, such as *Healthy People 2020* , the National Standards on Culturally and Linguistically Appropriate Services (21), quality improvement models for caring for diverse populations developed by the Health Resources and Services Administration (HRSA) and the Institute for Healthcare Improvement, and research and education projects funded by the National Institutes of Health (NIH) and the AHRQ. National non-governmental organizations, including professional groups and accrediting bodies, have contributed to this trend, as well. For example, the Liaison Committee on Medical Education, the Institutes of Medicine, and the Accreditation Council of Graduate Medical Education have issued recommendations, which have encouraged medical academe to make strides in incorporating cultural competence in medical curricula (4). Other disciplines have made similar efforts. Key discipline-specific recommendations and national initiatives for cultural competence education and training of health professionals are summarized below.

**Recommendations from Health Disciplines on Curricular Components**

*Medicine*

Since the Liaison Committee on Medical Education established two basic standards for cultural competence content in medical school curricula in 2000, delineating a detailed framework for doing so has become a priority for medical educators. Tervalon's (36) 2003 article, "Components of Culture in Health for Medical Students' Education," presents key components of medical training regarding culture competence in health care. Tervalon suggests a medical curriculum should convey the rationale for learning about culture in health care; teach "culture basics" (i.e. definitions, concepts, the basis of "culture" in the social sciences, relationship of culture to health and health care, and health systems as cultural systems); teach health status information and related concepts (i.e. demographics, epidemiology, and health disparities and their historical context); and develop the tools and skills for conducting cross-cultural clinical encounters and self-assessing attitudes and behaviors. This and subsequent publications address cultural competence training of medical students in terms of key competencies of varying quantity and specificity that are either implicitly related to attitudes/awareness, knowledge/information, and skills dimensions or explicitly categorized as such (37-42).

Elements of Tervalon's suggestions are echoed in the *Tool for Assessing Cultural Competence Training* (TACCT) (Appendix A), a tool for evaluating cultural competence training in medical schools that was developed in 2005 by the Association of American Medical Colleges (AAMC) as part of its project, "Medical Education and Cultural Competence: A Strategy to Eliminate Racial and Ethnic Disparities in Health Care" (43-44). TACCT includes 67 items covering attitudes, knowledge, and skills. These items are further organized into five domains: 1) cultural competence rationale, context and definition; 2) key aspects of cultural competence; 3) impact of stereotyping on medical decision-making; 4) health disparities and factors influencing health; and 5) cross-cultural clinical skills (43).

Another valuable example of a curricular competency framework is the report published by Smith et al. (42) on the recommendations and guidelines created by the Society of General Internal Medicine (SGIM) Health Disparities Task Force (DTF) for teaching about racial and ethnic disparities in health and health care. The Task Force outlined a suggested curriculum involving three themes: 1) "examining and understanding attitudes" of patients and providers themselves; 2) "gaining knowledge about the existence and magnitude of health disparities," including causes and solutions; and 3) "acquiring skills to effectively communicate and negotiate" in cross-cultural situations (p.656). Each theme is accompanied by major learning objectives and related topics with sample questions addressing each topic. Learning objectives include:

- Attitudes
    - Understand your own racial and ethnic background.
    - Understand cultural diversity and the relationship between racial and cultural attitudes and quality of care.

- Knowledge
    - Understand U.S. racial and ethnic population trends and the prevalence and severity of racial and ethnic health disparities.
    - Identify several types and causes of racial and ethnic health disparities.
- Skills
    - Understand the community in which you practice.
    - Know how to conduct cross-cultural and cross-language clinical encounters.
    - Use a patient-centered approach to clinical encounters.
    - Negotiate conflict resulting from differences between patient explanatory models of illness and treatment and physician models.
    - Learn and apply skills to combat racial, ethnic, and clinical barriers to effective care.

(p. 657-659)

These objectives were refined and transformed by the SGIM to the SGIM Health Disparities Curriculum, a series of five evidence-based learning modules targeted at medical educators to prepare them to teach about cultural competence (a "train-the-trainer" curriculum). The modules include: Disparities Foundations, Teaching Disparities in the Clinical Setting, Disparities Beyond the Clinical Setting, Teaching about Disparities Through Community Involvement, and Curriculum Evaluation (45).

The RESPECT model, developed by a group of physicians from the Boston Medical Center (46), revealed cross-cultural relational skills, which expanded many skills addressed by the SGIM. The RESPECT model was developed for the instructional, observational, and evaluative purposes of medical education. Dimensions include: 1) *R*espect; 2) *E*xplanatory model; 3) *S*ocial Context, including *S*tressors, *S*upports, *S*trengths, and *S*pirituality; 4) *P*ower; 5) *E*mpathy; 6) *C*oncerns; and 7) *T*rust/*T*herapeutic alliance/*T*eam. Creators describe each dimension in terms of both verbal and non-verbal behaviors.

The objectives proposed by authors of the RESPECT model are fairly representative of competencies proposed by other authors in the medical field, though there are variations in quantity, specificity, and organization of competencies within the attitudes/awareness, knowledge, and skills domains. Overall, current literature in medicine follows the statement made by Betancourt (47) that cultural competence education should not assume a merely informative approach regarding the attitudes, beliefs, values, and practices of various groups; rather, it should offer a framework for understanding how culture can impact health beliefs and behaviors, common problems that may arise in health care due to cultural differences and how providers should address these problems. Furthermore, current literature frequently emphasizes the idea of individuation versus categorization; it encourages providers to avoid reinforcing simplified stereotypes and recognize the complexity of patients' individual socio-cultural

situations, as opposed to their membership in a larger cultural group with "distinct" homogeneous characteristics (38-39, 48).

*Nursing*

The individuation concept as it applies to nursing was captured in 1996 by Leininger's (49) theory of culture care. This theory recognizes differences ("culture care diversity") and similarities ("culture care universality") among cultures and lends itself to "ethnonursing," which is a patient-centered holistic approach to care in which nurses learn from patients via active listening and observation. "Culture care" includes "culturally derived, assistive, supportive, or facilitative acts for or toward another individual or group with evident or anticipated needs which guide nursing decisions and actions and are held to be beneficial to the health or the well-being of people, or to face disabilities, death, or other human conditions" (p.73). According to this theory, culture care involves three potential modes of action: 1) cultural preservation; 2) cultural accommodation; and 3) cultural re-patterning or restructuring. Cultural preservation occurs when the values, beliefs, and practices of an individual or group are maintained. Cultural accommodation occurs when existing values, beliefs, and practices of individuals or groups are negotiated to exist in harmony with those of others. Cultural re-patterning occurs when the values, beliefs, and/or practices of an individual or group are changed (for a beneficial purpose) (50).

The differences and similarities among cultures are captured by the theory's Sunrise Model, which depicts several dimensions of cultural worldviews: 1) technological factors; 2) religious and philosophical factors; 3) kinship and social factors; 4) cultural values and lifeways; 5) political and legal factors; 6) economic factors; and 7) educational factors. This model applies to individuals, families, groups, communities, and institutions and is intended to direct nursing professionals in understanding different cultures' concepts, meanings, expressions, patterns, processes, and structural forms of care (49).

Abrums and Leppa (51) and Campesino (52) echo the individuation concept in their promotion of Freidman's (53) theory of relational positionality and rejection of essentialist conceptualizations of culture in nursing education, respectively. The theory of relational positionality is a non-essentialist perspective that emphasizes the complex interplay of multiple statuses that each individual within a given culture maintains. These statuses encompass not only race and ethnicity, which tend to be the prevailing focus in dialogue about cultural competence, but also gender, socioeconomic class, and sexuality, for example. Abrums and Leppa state that teaching students to believe that every individual has knowledge but that this knowledge is "partial and situated" (p. 272) is an important component of instilling cultural self-awareness. Both groups of authors contend that understanding how these multiple statuses might create complex relational perceptions among people is important for diminishing an "us versus them" mentality when thinking about culture and for identifying power hierarchies in cross-cultural situations. To this latter end, Campesino promotes examining prevailing social constructs to increase awareness of power hierarchies. In other words, it is not merely differences in characteristics that must be acknowledged and addressed for effective provider-patient interactions to take place. Awareness of power inequities must be part of the dynamic, as well.

Beyond recognizing power inequalities in caring for vulnerable groups, Campinha-Bacote (54) emphasizes the importance of recognizing overt and covert social injustices, willingness to advocate for the remedy of such injustices, protection of human rights, and compassion. These concepts fit Campinha-Bacote's description of cultural desire and may be facilitated by and demonstrated through partnerships, collaborations, advocacy, and effective implementation of Leininger's (49) three action modes of cultural preservation, cultural accommodation, and cultural re-patterning. No consensus exists, however, in nursing literature on how to teach cultural desire; hence the need for a formal delineation of its dimensions attained through further research using both qualitative and quantitative measures.

One plan for including cultural competence in an undergraduate nursing curriculum is the *Blueprint of Integration of Cultural Competence in the Curriculum* (BICCC), developed by the School of Nursing at the University of Pennsylvania in 2008 (55). This curriculum includes 31 items, some adapted from the AAMC's *Tool for Assessing Cultural Competence Education* (44) and some specific to nursing education, research, and practice. It was designed to progress students through knowledge, application, analysis, and synthesis of cultural competence content though leveled objectives modeled after Bloom's (56-58) taxonomy. Objectives of the BICCC span its three core domains of Awarenes/Attitudes, Knowledge, and Skills. The *Blueprint of Integration of Cultural Competence in the Curriculum Questionnaire* (BICCCQ) is a curriculum evaluation instrument that resulted from construct validation of the BICCC. It includes the following domains: Attitudes and Skills; Knowledge of Basics; Cultural Communication; Knowledge of Theory; and Knowledge of Key Constructs. The BICCCQ has strong internal consistency, reliability, and construct validity and can be used to assess nursing curricula for cultural competence content at both the undergraduate and graduate levels (59).

*Mental Health*

In addition to the definition of cultural competence and stages model developed by Cross et al. (6) in 1989 and the model for individual cultural competence developed by Sodowsky et al. (23) in 1994 and Sue (24) in 2001, the major contribution to cultural competence research and literature from the mental health field has been promoting individuation versus categorization. In the *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* developed in 2003 by the American Psychological Association (60), "multiculturalism" is the term used to connote this idea: every individual has multiple cultures. The *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* provides psychologists with the rationale for including multiculturalism and diversity in the aforementioned elements of the discipline, as well as the necessary background information for doing so, references to support continual improvement, and paradigms that expand understanding about the profession's functions in health care. There are six guidelines which together address cultural awareness and knowledge of self and others, education, research, practice, and organizational change and policy development. The guideline specific to education is:

> Guideline 3: As educators, psychologists are encouraged to employ the constructs of multiculturalism and diversity in psychological education.
>
> (p. 386)

A discussion of this guideline includes several key themes. The first theme is rejecting ethnocentric monoculturalism, the belief that one's own culture is superior to others' and the consequential imposition of cultural values upon a less powerful group. The second theme is recognizing the importance of multiculturalism as a legitimate area of study, as every interaction is cross-cultural (via individuation).

Another way of referring to individuation was presented by Yali and Revenson (61) with the term "contextual competence." These authors explain that cultural competence should be broadened with the notion of contextual competence, which acknowledges intra-racial and intra-ethnic differences brought on by variations in "history, family, religion, politics, economics, community, prejudice, and discrimination" (p. 148).

In general, the American Psychological Association (APA) urges psychology educators to become familiar with different learning models for multicultural education as well as models of integrated concepts, such as those on race, oppression, cultural competence, multicultural counseling and therapy, and psychotherapy and healing (60). Mahoney and Carlson (62) suggest that teaching modules for delivering culturally competent care should be organized within a framework with the following domains: 1) philosophical; 2) contextual; 3) experiential; and 4) pragmatic. The philosophical domain refers to understanding values and definitions of "good" and "bad;" the contextual domain refers to understanding cultural norms; the experiential domain refers to assessing patients' needs; and the pragmatic domain refers to the logistics of health care as dictated by available resources.

*Summary of Recommendations from Health Disciplines*

The medical, nursing, and mental health disciplines contribute the bulk of discipline-specific literature on cultural competence training of health professionals. In proposing curricular components and teaching approaches, authors from these disciplines generally follow the attitudes/awareness-knowledge-skills paradigm for individual cultural competence. "Awareness" is sometimes interchanged with "attitudes," but concepts are similar. They include motivation to become culturally competent (cultural desire); understanding one's own cultural background; and recognizing the impact of bias, racism, power inequities, and stereotypes. Recurrent knowledge elements include culture basics, the health implications of culture, the epidemiology of health conditions, and health trends and causes of disparities. Prevailing skills concepts include attaining familiarity with the community in which providers work; achieving self-efficacy; eliciting patient information and perceptions; communication and negotiation; empowering patients and families; identifying and using cultural brokers in communities; tailoring treatments to different cultures; and incorporating individuation versus categorization. Although some authors may emphasize certain concepts over others or categorize concepts differently within the attitudes/awareness, knowledge, and skills dimensions, these concepts

together provide a brief but inclusive summary of the body of literature on curricular content related to cultural competence in the education and training of health professionals across disciplines.

**National Association for Multicultural Education**

While health disciplines have developed recommendations and guidelines for culturally competent curricula specific to their respective fields, coordination of their conclusions often occurs at the national level. One of the first national-level efforts to centralize resources for effective cultural competence education and training was by the Association of Teacher Educators professional group. Organized in 1991 by members of the Multicultural Education Special Interest Group of the Association of Teacher Educators, the National Association of Multicultural Education (NAME) (63) is a nucleus for resources, consultation services, and forums for the advancement of cultural competence in education. Among the consultation services it provides is curriculum development, and this service, like the organization's other benefits, targets educational institutions and allied specialists at the pre-kindergarten through the university levels. In addition, NAME helps develop policy statements related to multicultural education for educational institutions, organizations, and policymakers.

**National Center for Cultural Competence**

The National Center for Cultural Competence (NCCC) (64) operates in the Department of Pediatrics at Georgetown University Medical Center and is part of the university's Center for Child and Human Development. For 15 years, the NCCC has been a major cultural and linguistic competence resource for local, state, federal, and international governments; health care organizations, providers, and professional associations; quality improvement organizations; family advocacy and support groups; and health educators. In addition to contributing a body of published literature, the NCCC helps to advance cultural competence via academia by offering consultation services and a variety of assessment and planning tools for academic programs to use. Currently, the NCCC website includes a Curricula Enhancement Module Series that it operates with the Division on Research, Training, and Education (DRTE) of the Maternal and Child Health Bureau (MCHB), a bureau of the US DHHS's Health Resources and Services Administration. Each of the module's four content areas (cultural awareness, cultural self-assessment, multicultural communication, and public health in a multicultural environment) provides information, additional materials and resources, and instructional strategies that cover awareness, knowledge, and skills (64).

**Office of Minority Health: CLAS Standard on Training**

In 2001, the US DHHS Office of Minority Health (OMH) (21) published a final report on a set of 14 national standards for culturally and linguistically appropriate services (CLAS) in health care. The third standard outlined in this publication focuses specifically on the training of health care professionals:

> Standard 3: Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

The OMH stresses that training should be relevant to trainees' activities and should address the unique needs of specific populations served. It lists 10 training topics to include in any training program (Appendix B). Although not explicitly categorized as such, these training topics cover concepts related to attitudes/awareness, knowledge and skills. The CLAS standards are intended primarily for health care organizations and individual providers and thus are not a curriculum guide, but they do comprise one of the first consensuses at the federal level on key components for cultural competence training of health professionals.

**Curricular Content Standards from the California Endowment**

The first major consensus on key components for culturally competent curricula for health professionals was established by the California Endowment (65) in 2003. This organization was founded in 1996 as a statewide private health foundation whose mission is to provide underprivileged groups with affordable, high-quality health services and to promote health status improvements for all state residents. It provides publications, resources, and advocacy and evaluation tools for several program areas, including health disparities and cultural competence (66). Its publication, *Principles and Recommended Standards for Cultural Competence Education of Health Care Professionals* (65), contains curricular components (Appendix C) along with tips for implementing them. It is intended to complement CLAS.

**Curriculum Guide from the Health Resources and Services Administration**

In 2005 the US DHHS's Health Resources and Services Administration (HRSA) (31) produced a curriculum guide for cultural competence entitled *Transforming the Face of Health Professions Through Cultural and Linguistic Competence Education: The Role of the HRSA Centers of Excellence*. This guide was created by an Expert Team comprised of members from various health-related disciplines and is intended for widespread use across the health care field. It is the largest and most comprehensive multidisciplinary consensus on cultural competence curriculum development, implementation, and evaluation.

There are three goals specified in the HRSA guide: 1) " increased self-awareness and understanding of the centrality of culture in providing good health care to all patient populations;" 2) "clinical excellence and strong therapeutic alliances with patients;" and 3) "reduction of health care disparities through improved quality and cost-effective care for all populations" (p.20). To these ends, the Expert Team demarcated several key points for academic institutions to apply in various facets of their operations. The following are summaries of the points which pertain to curricular development:

- The definition of culture and population diversity should be broad and inclusive.

- Training efforts should be incremental, integrated throughout a curriculum, and follow an interdisciplinary approach.
- Attitudes, knowledge, and skills should be the cornerstone outcomes at which cultural competence training is targeted.
- Process-oriented training should hold a greater focus than transmission of factual information.
- Training should be institutionalized within an educational program.
- Students should participate in their own evaluation and that of the curriculum.
- Training should follow guidelines of professional accreditation and practice organizations.
- Planning, design, implementation, and evaluation of cultural and linguistic competence curriculum should involve diverse patients, community members, consumers, and advocates.

For developing a culturally competent curriculum, the Expert Team (31) recommended a framework for incorporating various existing models. The models they specify pertain to either cultural competence education or general curriculum development. First, a culturally competent curriculum should follow a general framework highlighting freedom, justice, equality, equity, and human dignity, concepts identified by the National Association for Multicultural Education (NAME) (63) as cornerstones of multicultural education. The Expert Team recommended that frameworks reflect the Dimensions of Multicultural Education model developed by James A. Banks (67), the Director of the Center for Multicultural Education at the University of Washington. Banks's model includes the following components: 1) content integration; 2) the knowledge construction process; 3) the prejudice reduction dimension; 4) equity pedagogy; and 5) empowering school culture and social structure. Moreover, curricular frameworks should follow Campinha-Bacote's (68) complete model, the Process of Cultural Competence in the Delivery of Healthcare Services Model, which dimensions cultural competence into cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desire. Finally, it should adhere to the Standard Principles of Instructional Systems Development (ISD), which are the standards for analyzing, designing, developing, implementing, and evaluating curricula (31).

As a complement to the Process of Cultural Competence in the Delivery of Healthcare Services Model (68) the Expert Team (31) provided a set of detailed curricular objectives regarding awareness, knowledge, and skills (Appendix D). The recommended core competencies to which these detailed objectives relate are summarized below:

- The effect that race, ethnicity, gender, age, language, country of origin, sexual orientation, religion/spirituality, socioeconomic class, political orientation, educational/intellectual levels, and physical/mental ability have on creating and contributing to health disparities;
- The demographic influences on health care quality and effectiveness in the diagnosis and treatment of disease at an individual and community level;
- The total health needs of patients and the effects that social and cultural circumstances have on patients' health and their community; and

- The effect of provider bias on the practitioner-patient relationship and health outcomes.

With these models, objectives, and core competencies, *Transforming the Face of Health Professions Through Cultural and Linguistic Competence Education: The Role of the HRSA Centers of Excellence* represents the multidisciplinary body of literature on cultural competence education and training up to the point of its publication. It embodies one of the most extensively-coordinated national efforts to provide health-related education or training programs with useful curricular guidelines. Medical and allied health fields may use it as a key resource.

**DIETETICS IN HEALTH CARE**

Although the HRSA (31) curriculum guide is intended for allied fields, the document is the product of input from the fields of medicine, nursing, pharmacy, psychology, anthropology, organizational development, and hospital administration; it was not informed by representatives from dietetics. The absence of dietetic informants begs the question: Are the competencies included in the document are adequate and appropriate for dietetic training, especially considering how integral food-related beliefs and behaviors can be in a given culture and how strongly these beliefs and behaviors can impact health (10-14). As dietitians focus on food and eating, do they require additional and/or different competencies than those established by HRSA?

Answering this question is hindered by limited research on cultural competence in general and especially for curriculum development within the dietetic discipline. Whereas other disciplines, such as medicine, nursing, psychology, and pharmacy, have their own bodies of literature that explore cultural competence in curriculum development, dietetics must extrapolate from these disciplines if it desires greater detail than that provided by the HRSA guide and other multidisciplinary resources. Again, this is a condition which raises questions about appropriateness and adequacy of available competencies.

These research gaps are important to note, as the American Dietetic Association (ADA) is currently considering cultural competence requirements for accreditation of dietetic education programs in response to Joint Commission's imminent introduction of a new hospital accreditation standard addressing culturally competent care (69). The Commission for Accreditation for Dietetics Education (CADE) has not yet established specific competencies for cultural competence that must be met by accredited Didactic Programs in Dietetics (DPDs) and Dietetic Internships. Instead, it provides broad objectives. The following curriculum and student learning outcomes in the CADE *2008 Accreditation Eligibility Requirements and Standards* (70) cite cultural competence for DPDs:

> 2.1.2 Didactic learning activities prepare students to implement the nutrition care process in pre-professional supervised practice with various populations and diverse cultures, including infants, children, adolescents, adults, pregnant/lactating females and the elderly.

> 2.2.5 Opportunities for students to develop collaboration, teamwork, problem solving, critical thinking and self-assessment skills; and personal and professional attitudes and values, cultural competence, leadership and decision-making skills.
>
> (p. 9-10)

For DIs, there is one outcome:

> 2.3.6 Opportunities for interns to develop collaboration, teamwork, problem solving, critical thinking and self-assessment skills; and personal and professional attitudes and values, ethical practice, cultural competence, leadership and decision-making skills.
>
> (71, p.6)

In addition to the limited number and broad language of these outcomes, the language of outcome 2.1.2 may suggest that cultural competence is only necessary for dietitians who directly interact with people in a provider-client setting. The "nutrition care process" mentioned in outcome 2.1.2 is specific to health services delivery (i.e. inpatient and outpatient medical nutrition therapy). Yet, the field of dietetics presents various career opportunities, all of which do not directly involve health services delivery. For example, dietitians work as food service managers in health care facilities and schools; as private consultants to the food industry and to organizations with corporate wellness programs; and as researchers and academics. DPD and DI programs prepare students for all of these possibilities, and it is conceivable that cultural competence is important in these settings, as well.

In addition, the field cannot readily rely on the diversity of its members to facilitate cross-cultural proficiency. Only 16% of its members are non-White (14). Though minority status is not a guarantee of a high level of cultural competence (72-74), it is reasonable to suspect that diversity within the field can impart some advantages in understanding cultural differences and cultural competence needs.

Although there is no dietetics-specific research pertaining to curricula, there have been efforts to understand cultural competence needs for nutrition counseling. Harris-Davis and Haughton (15) evaluated proposed nutrition counseling competencies and identified three factors for a multicultural nutrition counseling model: 1) multicultural nutrition counseling skills; 2) multicultural awareness; and 3) multicultural food and nutrition counseling knowledge. Content and construct validation of the model lead to subsequent revision (75). Though the final model parallels the familiar awareness, knowledge, and skills dimensions, the dimensions of multicultural nutrition counseling skills and multicultural food and nutrition counseling knowledge include competencies unique to the dietetic profession.

## RESEARCH QUESTION

In an effort to provide the dietetic profession with a resource on cultural competence education and training that is detailed and tailored to its needs and obligations, the study described in this thesis answered the following research question:

*What are the essential core curricular competencies related to cultural competence for the education and training of registered dietitians?*

To answer this question, a cross-sectional survey of registered dietitians was conducted in which respondents rated proposed curricular competencies. Certain respondent characteristics deserved special consideration in the interpretation and application of study results. First, because the field lacks considerable diversity, it may be useful to know if and how professionals' own cultures affect their perceptions of the field's cultural competence needs. Likewise, amount of experience working with diverse groups, participation in continuing education on cultural competence, and education level are other characteristics of registered dietitians that may have shaped responses, providing further insight about the education and training needs related to cultural competence that could be considered in the design of a curriculum. Hence, research sub-questions included:

1. *How do dietitians who belong to a racial/ethnic minority group rate core curricular competencies compared to those who do not belong to a racial/ethnic minority group?*
2. *How do dietitians who have five or more years of professional experience working with diverse individuals, groups, and/or populations rate core curricular competencies compared to those with less than five years of experience?*
3. *How do dietitians who have participated in non-degree-related continuing education on cultural competence in the past five years rate core curricular competencies compared to those who have not participated in continuing education on cultural competence?*
4. *How do dietitians with a bachelor's degree as their highest education level attained rate core curricular competencies compared to those with a graduate degree-level education?*

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**APPENDICES**

## Appendix A: Domains and Specific Components from the *Tool for Assessing Cultural Competence Training* (TACCT) of the American Association of Medical Colleges (AAMC)[1]

### Domain 1: Cultural Competence—Rationale, Context, and Definition

- K1. Define—in contemporary terms—race, ethnicity, and culture, and their implications in health care.
- K2. Identify how these factors—race, ethnicity, and culture—affect health and health-care quality, cost, and consequences.
- K3. Identify patterns of national data on health, health-care disparities, and quality of health care.
- K4. Describe national health data in a worldwide immigration context.
- S1. Discuss race, ethnicity, and culture in the context of the medical interview and health care.
- S2. Use self-assessment tools, asking: What is my culture? What are my assumptions/stereotypes/biases?
- S3. Use *Healthy People 2010* and other resources to make concrete the epidemiology of health-care disparities.
- A1. Describe their own cultural background and biases.
- A2. Value the importance of the link between effective communication and quality care.
- A3. Value the importance of diversity in health care and address the challenges and opportunities it poses.

### Domain II: Key Aspects of Cultural Competence

- K1. Describe historical models of common health beliefs and health belief models (for example, illness in the context of "hot and cold," Galen and other cultures).
- K2. Recognize patients'/families' healing traditions and beliefs, including ethno-medical beliefs.
- K3. Describe common challenges in cross-cultural communication (for example, trust, style).
- K4. Demonstrate basic knowledge of epidemiology and biostatistics.
- K5. Describe factors that contribute to variability in population health.
- S1. Outline a framework to assess communities according to population health criteria, social mores, cultural beliefs, and needs.
- S2. Ask questions to elicit patient preferences and respond appropriately to patient feedback about key cross-cultural issues. Elicit additional information about ethno-medical conditions and ethno-medical healers.
- S3. Elicit information from patient in context of family-centered care.
- S4. Collaborate with communities to address community needs.
- S5. Recognize and describe institutional cultural issues.
- A1. Exhibit comfort when conversing with patients/colleagues about cultural issues.

- A2. Ask questions and listen to patients discuss their health beliefs in a nonjudgmental manner.
- A3. Value the importance of social determinants and community factors on health and strive to address them.
- A4. Value the importance of curiosity, empathy, and respect in patient care.

**Domain III: Understanding the Impact of Stereotyping on Medical Decision-Making**

- K1. Describe social cognitive factors and impact of race/ethnicity, culture, and class on clinical decision-making.
- K2. Identify how physician bias and stereotyping can affect interaction with patients, families, communities, and other members of the health-care team.
- K3. Recognize physicians' own potential for biases and unavoidable stereotyping in a clinical encounter.
- K4. Describe the inherent power imbalance between physician and patient and how it affects the clinical encounter.
- K5. Describe patterns of health-care disparities that can result, at least in part, from physician bias.
- K6. Describe strategies for partnering with community activists to eliminate racism and other bias from health care.
- S1. Demonstrate strategies to assess, manage, and reduce bias and its effects in the clinical encounter.
- S2. Describe strategies for reducing physician's own bias.
- S3. Demonstrate strategies for addressing bias and stereotyping in others.
- S4. Engage in reflection about their own cultural beliefs and practices.
- S5. Use reflective practices in patient care.
- S6. Gather and use local data as examples of *Healthy People 2010*.
- A1. Identify their own stereotypes and biases that may affect clinical encounters.
- A2. Recognize how physician biases impact the quality of health care.
- A3. Describe/model potential ways to address bias in the clinical setting.
- A4. Recognize importance of bias and stereotyping on clinical decision-making.
- A5. Recognize need to address personal susceptibility to bias and stereotyping.

**Domain IV: Health Disparities and Factors Influencing Health**

- K1. Describe factors other than bio-medical—such as access, historical, political, environmental, and institutional—that impact health and underlie health and health-care disparities.
- K2. Discuss social determinants on health including, but not limited to, the impact of education, culture, socioeconomic status, housing, and employment.
- K3. Describe systemic and medical-encounter issues, including communication, clinical decision-making, and patient preferences.

- K4. Identify and discuss key areas of disparities described in *Healthy People 2010* and the Institute of Medicine's Report, Unequal Treatment.
- K5. Describe important elements involved in community-based experiences.
- K6. Discuss barriers to eliminating health disparities.
- S1. Critically appraise the literature as it relates to health disparities, including systems issues and quality in health care.
- S2. Describe methods to identify key community leaders.
- S3. Develop a proposal for a community-based health intervention.
- S4. Actively strategize ways to counteract bias in clinical practice.
- A1. Recognize the existence of disparities that are amenable to intervention.
- A2. Realize the historical impact of racism and discrimination on health and health care.
- A3. Value eliminating disparities.

**Domain V: Cross-Cultural Clinical Skills**

- K1. Identify questions about health practices and beliefs that might be important in a specific local community.
- K2. Describe models of effective cross-cultural communication, assessment, and negotiation.
- K3. Understand models for physician-patient negotiation.
- K4. Describe the functions of an interpreter.
- K5. List effective ways of working with an interpreter.
- K6. List ways to enhance patient adherence by collaborating with traditional and other community leaders.
- S1. Elicit a culture, social, and medical history, including a patient's health beliefs and model of their illness.
- S2. Use negotiating and problems-solving skills in share decision-making with a patient.
- S3. Identify when an interpreter is needed and collaborate with interpreter effectively.
- S4. Assess and enhance patient adherence based on the patient's explanatory model.
- S5. Recognize and manage the impact of bias, class, and power on the clinical encounter.
- A1. Demonstrate respect for a patient's cultural and health beliefs.
- A2. Acknowledge their own biases and the potential impact they have on the quality of health care.

K=Knowledge
S=Skill
A=Attitude

[1] American Association of Medical Colleges. Tool for Assessing Cultural Competence Training (TACCT). 1995-2009. Available at: https://www.aamc.org/initiatives/54262/tacct. Accessed June 11, 2009.

## Appendix B: Culturally and Linguistically Appropriate Services (CLAS) Standard on Training with Recommended Topics[1]

Standard 3: Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

1. Effects of differences in the cultures of staff and patients/consumers on clinical and other workforce encounters, including effects of the culture of American medicine and clinical training
2. Elements of effective communication among staff and patients/consumers of different cultures and different languages, including how to work with interpreters and telephone language services
3. Strategies and techniques for the resolution of racial, ethnic, or cultural conflicts between staff and patients/consumers
4. Health care organizations' written language access policies and procedures, including how to access interpreters and translated written materials;
5. The applicable provisions of Title VI of the Civil Rights Act of 1964, 42 U.S.C. §2000d, 45 C.F.R. §80.1 et seq. (including Office for Civil Rights Guidance on Title VI of the Civil Rights Act of 1964, with respect to services for (LEP) individuals (65 Fed. Reg. 52762-52774, August 30, 2000)
6. Health care organizations' complaint/grievance procedures
7. Effects of cultural differences on health promotion and disease prevention, diagnosis and treatment, and supportive, rehabilitative, and end-of-life care
8. Impact of poverty and socioeconomic status, race and racism, ethnicity, and sociocultural factors on access to care, service utilization, quality of care, and health outcomes
9. Differences in the clinical management of preventable and chronic diseases and conditions indicated by differences in the race or ethnicity of patients/consumers
10. Effects of cultural differences among patients/consumers and staff upon health outcomes and patient satisfaction

[1] US Department of Health and Human Services Office of Minority Health. *National Standards for Culturally and Linguistically Appropriate Services in Health Care: Final Report*. 2001. Available at: http://raceandhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=15. Accessed April 29, 2009.

## Appendix C: Curricular Content Standards from the California Endowment[1]

Attitudes

- Similar to all aspects of health care professionals' continuing education, cultural competence education should be a continuous learning process as well. Cultural competence education for health care professionals should foster a lifelong commitment to learning and self-evaluation through an ability to recognize and question their own assumptions, biases, stereotypes and responses.

- Health care professionals should be encouraged to adopt attitudes of open-mindedness and respect for all patients including those who differ from them socially or culturally.

- Health care practitioners should be taught techniques that promote patient and family-centered care, along with the understanding that effective therapeutic alliances may be construed differently across patients and cultures.

- As they learn about health care disparities and inequities and the factors that lead to unequal treatment, health care professionals should be encouraged to undertake a commitment to equal quality care for all and fairness in the health care setting.

- To actively serve this commitment, educators can teach students ways to identify systemic or organizational barriers to access and use of services by their patients and encourage them to be proactive within their practice environments to eliminate these barriers.

(p.3)

Knowledge

- Self-awareness and self-knowledge are the first types of knowledge cross-cultural training would seek to establish. This involves bringing to the learner's awareness internalized beliefs, values, norms, stereotypes and biases. They should be made aware of how ethnocentrism, that is, the belief that one's own culture is superior to others, operates in all cultures and encouraged to be attentive to the possibility of ethnocentrism in their own thinking. They should be made aware of how ethnocentrism may influence their own interaction with patients.

- Essential to their understanding of both themselves and their patients is an understanding of the concept of culture. The theory of culture makes clear the connections between worldview, beliefs, norms and behaviors related to health, illness and care-seeking in different populations. In this regard, practitioners can be taught to explore how their own cultures, including the cultures of biomedicine, inform their perceptions and behaviors. All people operate within multiple cultures.

- Information about local and national demographics would be part of a health professional's cultural competence education. This should include attention to specific populations, immigration and changing demographics, such as alterations in age or occupational

distributions. Students/trainees should be encouraged to draw implications from this information for their current and future professional practices. Organizations should have a process in place to reassess relevant demographics on a consistent basis.

- Practitioners need to know the legal, regulatory and accreditation issues which address cultural and linguistic issues in health care**.** These would include such things as the position of the federal Department of Health and Human Services (DHHS) on civil rights and language access, federal and state cultural competence contract requirements for publicly funded health care and state legislation around the provision of language services and culturally sensitive health care. The DHHS Recommended Standards for Culturally and Linguistically Appropriate Health Care Services should be reviewed.

- Health care professionals need to be made aware of any cultural and linguistic policy statements or standards espoused by their own or other professional associations, such as the Society for Teachers of Family Medicine, the American Academies of Family Physicians, Pediatrics or the American Academy of Nursing. They should be given an understanding of how cultural competence fits into the goals of their professional education.

- Health care professionals should know the kinds and degrees of disparities in health status, health care access and use of preventive strategies across racial, ethnic, gender and other discrete population groups in the United States. This information should be placed in a context that allows the learner to understand how class, racial and ethnic discrimination, social variables and structural variables, including the structure of health car, contribute to these disparities**.**

- Health care professionals should be given a framework for exploring the family structure and dynamics, health beliefs, behaviors and health practices demonstrated in different cultures and population groups, especially those in the local areas of service.

- Practitioners should understand the concept of medical pluralism— the concurrent use of both traditional and biomedical systems of care. Familiarity with the kinds of healers and healing traditions within their communities of practice or those frequently associated with their specialty field should be discussed. Interaction with traditional healers, if possible, is recommended. Improved understanding of traditional practices does not mean endorsing them, but it can lead to improved provider-patient or provider-family interaction.

- In developing understandings about epidemiology and group health practices, the tendency to make inferences from probabilistic, group-level generalizations to individual cases, which, carelessly done, can lead to stereotyping, should be addressed. Its clinical risks and benefits should be carefully explored. Sources of within-group variation, including class and acculturation need to be clarified. A “recipe” approach to cultural and clinical descriptions of groups should be rigorously avoided.

- Emergent data, such as those being developed in genome research and ethnopharmacology, which apply to specific racial and ethnic groups, should be carefully evaluated as to their potential use in enhancing the quality of care for these groups. The positive and negative implications of these types of data for the care of diverse populations should be discussed and well understood.

- Practitioners should learn about the epidemiology of disease among specific populations, both nationally and within their local areas, and be able to use this knowledge in patient assessment, health promotion and other aspects of care. This includes an awareness of the limitations of epidemiological information for diverse populations. For example, there is not much data on epidemiological differences for ethnic sub-populations. Existing broad ethnic group data may not be able to be applied generally across sub-populations.

- Knowledge of the dangers of attempting to care for a patient whose language they do not understand well and of the problems associated with the use of family members, friends or unskilled interpreters should be part of a health professional's cultural competence training.

- Without using a recipe approach, health care practitioners should become knowledgeable about cross-cultural variations in verbal and non-verbal communication and etiquette and be taught techniques for recovering, if they discover that they have inadvertently breached a cultural norm.

- Trainers and teachers should inform trainees of available resources, such as bibliographies, web sites, case studies and community contacts and resources, so that practitioners can continue to expand their knowledge and education around cultural issues while engaging in professional practice.

(p.4-5)

<u>Skills</u>

- Skills that enable health care professionals to assess their own responses, biases and cultural preconceptions on an ongoing basis are critical baseline skills to be learned.

- Providers need to be given communication tools and strategies for eliciting patients' social, family and medical histories, as well as patients' health beliefs, practices and explanatory models. Communication skills for fostering positive therapeutic alliances with diverse patients should be taught. These would include ways for assessing patients' expectations around levels of interactive formality with providers, valuing and incorporating the patients' beliefs and understanding into diagnosis, treatment options and preventive health care where possible and negotiating conflicting patient/provider perspectives when necessary.

- Health care practitioners should be taught ways of accessing and interacting with diverse local communities for the purpose of understanding their traditional or group specific health care practices and needs. Collaboration with local communities, for example, is useful in tailoring effective outreach, prevention and educational programs and materials.

- Health care professionals should be able to assess patients' language skills as they relate to their ability to communicate fully with the practitioner and staff and to their understanding of written instructions, prescriptions and educational materials. While language and literacy issues may be particularly important in working with limited English speakers, they should be considered in relating to all patients.

- Practitioners should be taught methods of realistically assessing their own proficiency in languages other than English and should acquire the skills for effective use of interpreters, including working with an untrained interpreter, a trained interpreter and telephone interpreting.

- Skills in accessing translated written materials through their organizations and commercial resources; as well as computer programs and web-based resources should be taught.

- Cultural competence education should foster skills for retrieving data concerning cultural issues in health care, population data and epidemiological information on the web.

(p.6)

[1] The California Endowment. *Principles and Recommended Standards for Cultural Competence Education of Health Care Professionals.* Los Angeles: The California Endowment. 2003. Available at: http://www.calendow.org/uploadedFiles/principles_standards_cultural_competence.pdf Accessed May 2, 2009.

**Appendix D: Curricular Content Objectives from Transforming the Face of Health Professions Through Cultural and Linguistic Competence Education: The Role of the HRSA Centers of Excellence**[1]

Awareness Objectives

- Awareness or attitudinal objectives include self-awareness and awareness of the dangers of bias, stereotyping and overgeneralization. These objectives also include awareness about the following variations in patient populations, among others:

    - Immigrants, refugees, and other stigmatized groups
    - Those who live in poverty and other class-based differences
    - Those who have limited English proficiency; believe in complementary, alternative, and integrative medicine and other healing traditions; and who believe in traditional, alternative, and folk healers

(p.41)

Skills Objectives

- The skills objectives naturally involve communication, such as interacting with and interviewing patients, and include other communication skills related to:

    - Forming a therapeutic alliance and achieving common ground
    - Greeting and closing behaviors in clinical settings
    - Negotiating and problem solving
    - Communicating appropriately with culturally diverse patients and families
    - Working effectively with interpreters using different modalities, such as those who are onsite and over-the-phone; having a pre-session with an interpreter, and working to ensure the patient's understanding through an interpreter
    - Eliciting a patient's history or use of traditional/alternative/folk remedies; recognizing symptoms or signs related to the use of traditional/alternative/folk remedies; and collaborating with traditional/alternative/folk healers
    - Negotiating cross-cultural conflicts relating to diagnosis, treatment, and compliance with treatment and prescription plans
    - Apologizing for cross-cultural errors and seeking clarification from patients on these issues.

(p.41)

Knowledge Objectives

- The knowledge objectives involve having an understanding of a wide variety of historic, demographic, health, and other factors within the general and local populations and within the health and mental health professional workforce. For example, health care practitioners will need a thorough understanding of the historic and contemporary effect of racism, bias, discrimination, prejudice, and other forms of oppression various population groups have experienced in accessing and using the health care system. These practitioners also may need to understand the cultural issues relating to spirituality, health, and illness and the different

healing traditions, such as Ayurvedic and Traditional Chinese Medicine, among others. They will certainly need to understand the concept of culture-driven behavior as it may affect the onset, distribution, course, treatment, and outcome of disease processes. They will need to know the difference between interpretation and translation and how to use each of these professional resources when working with patients with limited English proficiency. They will also need to know the:

- Health risks and illnesses experienced by individuals who are homosexual, bisexual, and/or transgender
- Health risks and illnesses and wellness, health promotion, and utilization of preventive services experienced by African American, Hispanic American, Asian American/Pacific
- Islander American, American Indian/Native American, European American populations, and multi-racial/ethnic populations
- Potential benefits and side effects of various complementary and alternative medicine (C/AM) treatment modalities and potential drug interactions between C/AM treatment modalities and allopathic medications

(p.42)

[1] US Department of Health and Human Services Health Resources and Services Administration. *Transforming the Face of Health Professions Through Cultural and Linguisitic Competence Education: The Role of the HRSA Centers of Excellence*. 2005.

## PART 2: CURRICULAR COMPETENCIES RELATED TO CULTURAL COMPETENCE FOR THE EDUCATION AND TRAINING OF REGISTERED DIETITIANS

## ABSTRACT

Though a multidisciplinary body of literature on developing curricula related to cultural competence for health professionals exists, still lacking from this literature is sufficient input from the dietetic profession. The purpose of this cross-sectional internet-based research was to create a curricular model of core curricular competencies related to cultural competence for the education and training of registered dietitians. A random sample of registered dietitians rated 73 proposed curricular competencies for essentiality on a 7-point Likert-like scale (1 = Not a priority; 7 = Essential). Exploratory principal components analysis (PCA) with Varimax rotation condensed the proposed competencies with similar variances of responses into factors (model domains) and eliminated competencies which accounted for too little or ambiguous variance. Factors were assigned unique labels based on the prevailing themes of their respective competencies and further interpreted in terms of respondent characteristics via multivariate general analysis of variance (MANOVA). Results based on a 17.9% (n=1,090) rate of response produced a model with 69 competencies and 7 domains: Communication and Relationships; Community Collaboration; Disparities and Diversity in Health Care; Information Access, Analysis, and Use; Bias Management; Food Environments; and Models and Definitions. Significant differences in mean factor ratings were detected between respondents who differed by race and by experience working with diverse individuals and groups. This model is representative of existing research on cultural competence, but it is the first unique to dietetics. It may be used by dietetic education and training programs to systematically plan, implement, and evaluate curricula for cultural competence.

# CHAPTER 1: MANUSCRIPT

## INTRODUCTION

Increasing demographic diversity, persistent health disparities, and ongoing efforts to reduce health care costs have made cultural and linguistic competence in the United States health care system a premier concern (1-5). According to Cross et al. (6), cultural competence (including linguistic competence) is a set of attitudes, knowledge, and skills that "come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations" (p.13). As such, cultural competence may help to improve diagnoses, treatment prescriptions, client adherence to treatment protocols, client satisfaction, and overall health outcomes (4, 7-9).

Integral to achieving cultural competence in health care is providing health professionals with cultural competence education and training. Indeed, there has been increasing attention paid by academia across health-related disciplines, by national organizations, and by private and governmental health agencies to delineating what adequate cultural competence in health-related education and training entails. As a result, a multidisciplinary body of literature on curricular development for cultural competence exists.

Resources which are most comprehensive of prevailing ideas about components of culturally competent curricula for health professionals include the third standard on training from the Standards for Culturally and Linguistically Appropriate Services (CLAS) from the United States Department of Health and Human Services (US DHHS) Office of Minority Health (OMH) (10); the California Endowment's *Principles and Recommended Standards for Cultural Competence Education of Health Care Professionals* (11); the curricular guide for cultural competence entitled *Transforming the Face of Health Professions Through Cultural and Linguistic Competence Education: The Role of the HRSA Centers of Excellence* from the US DHHS Health Resources and Services Administration (HRSA) (12); and the American Association of Medical College's (AAMC) *Tool for Assessing Cultural Competence Training* (TACCT) (13-14). Whereas the CLAS training standard, the California Endowment's publication, and HRSA guide are multidisciplinary and largely address content development and implementation, TACCT was developed by the AAMC to evaluate medical curricula for inclusion of cultural competence content (14). Though discipline-specific, its items are germane to other health professions.

Still lacking from cultural competence-related literature, however, is sufficient input from the dietetic profession. It is important to ask if the competencies discussed by other disciplines are appropriate for dietetic education and training, especially considering the diverse settings in which dietitians work, the important roles of food-related beliefs and behaviors in culture, and how strongly these beliefs and behaviors can impact health (15-19). Previous research on multicultural nutrition counseling competencies by Harris-Davis and Haughton (20) does suggest there are competencies related to cultural competence which are unique to this field. Hence, the purpose of this study was to create a curricular model of core curricular competencies related to cultural competence for the education and training of registered dietitians.

## METHODS

### Participant Selection

Formal permission from the Commission on Dietetic Registration (CDR) for use of its registry of registered dietitians (RDs) was requested and affirmed (Appendices A-B) for recruiting subjects for this internet-based cross-sectional survey. Dietitians who were residing in the United States and had email addresses on file as of August 2010 (N=71,758) were randomly sampled at a rate of 8.5% (n=6,099). This rate was chosen to provide a strong (50:1) subjects-to-variables ratio given a projected response rate of 60%, indicated by previous literature using a similar population (20). To encourage response, subjects were offered a voluntary chance to win one of two $50 gift certificates from Amazon.com.

### Instrument Development

The instrument for this study contained four parts beginning with verification of status as an RD (Yes/No) to confirm participation eligibility. Next was a preface with the following definitions:

1. *Culture*: "an integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social group" (6, p.13);
2. *Cultural competence*: a set of attitudes, knowledge, and skills that "come together in a system, agency, or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations," (6, p.13) including cross-lingual situations;
3. *Curriculum*: the full set of education and training components for a given profession. For dietetics, a curriculum includes content from both the Didactic Program in Dietetics (DPD) and a dietetic internship (DI); and
4. *Essentiality*: the degree to which a proposed competency is needed in a dietetic curriculum considering: 1) applicability to the practice; and 2) relative priority among other curricular needs.

The remaining parts consisted of the instrument items (Appendix C): 73 proposed curricular competencies to be rated for essentiality on a seven-point Likert-like scale (1 = Not a priority; 2 = Very low priority; 3 = Low priority; 4 = Medium priority; 5 = High priority; 6 = Very high priority; 7 = Essential; 8 = No answer) and 11 questions addressing respondent characteristics in terms of demographics (i.e. age, sex, race, ethnicity, and education level), work characteristics (i.e. primary employment setting, years in profession, years working with diverse groups), and participation in continuing cultural competence education.

With copyright permission (Appendix D), TACCT items were used as the foundation for the proposed competencies. They appeared verbatim, in a modified form, or not at all, depending on six adaptation criteria. Criteria addressed issues of relevance; specificity and comprehensiveness; verb duality; redundancy; and respondent burden. Additional proposed competencies were adapted via the same set of criteria from the California Endowment (11) and HRSA (12) guides, Harris-Davis and Haughton (20), and other relevant literature.

Prior to survey administration, the project received approval from University of Tennessee Institutional Review Board for the Protection of Human Subjects. In addition, the instrument was tested on a pilot group of 19 registered dietitians to identify potential problems with survey administration and/or instrument items and mean (approximately 20 minutes). Revisions were made as warranted.

**Survey Administration**

All requests for participation were sent to sampled RDs via email (Appendix E) according to Dillman's Internet Survey Method (21). Subjects first received a brief announcement of the upcoming invitation to participate, followed three business days later by the actual invitation containing an electronic cover letter and web link to the *IBM Data Collection Interviewer Web* (22) survey interface. After this initial invitation, all sampled subjects were reminded on three occasions in consecutive intervals of three, four, and four business days to complete the survey. Responses were compiled in an electronic database created by the survey software and were free of identifiers except for respondents who chose to supply contact information for the incentive drawing.

**Statistical Analysis**

Exploratory principal components analysis (PCA), descriptive statistics, and multivariate analysis of variance (MANOVA) were accomplished using *IBM SPSS 18.0* (23). First, PCA with Varimax rotation condensed the proposed competencies with similar variances of responses into factors, or domains, and eliminated competencies which accounted for too little variance. Competencies with "8" ratings (No answer) were omitted from analysis. From the first PCA, all factors with eigenvalues $\geq 1.0$ were extracted. These factors were reduced in number through additional PCAs with Varimax rotation at several number possibilities. The preferred amount was selected quantitatively via a reliability coefficient (Cronbach's $\alpha \geq 0.700$) and qualitatively via conciseness and logical consistency. Competencies with factor scores $< 0.400$ for all factors in the rotated components matrix were eliminated, as were items with ambiguous scores (approximately 0.400-0.500 for every factor). Finally, mean ratings ($\pm$SD) were calculated, and factors were assigned unique labels based on the prevailing themes of their respective competencies.

Next, descriptive statistics on respondent characteristics were calculated, and MANOVAs with Wilks' Lambda F test determined relationships between factor ratings and five independent variables (race, ethnicity, experience working with diverse groups, participation in continuing education, and education level). Relationships were considered significant at $p < 0.05$. To minimize the likelihood of a Type 1 error, independent variables were separated into two MANOVA models: one containing race and ethnicity and the other containing experience working with diverse groups, participation in continuing education, and education level. All final factors were included in these models.

## RESULTS AND DISCUSSION

### Respondents

At survey end, over 30% (31.6%, n=1,926) of subjects had accessed the instrument, and 17.9% (n=1,090) successfully completed it. Response rates (accessed/completed) at each invitation were, sequentially, 12.5%/6.8%, 7.7%/5.6%, 7.2%/3.6%, and 4.3%/1.8%. Those who completed the survey were predominantly female (96.0%), White (84.5%), not of Hispanic, Latino, or Spanish origin (82.8%), had earned graduate degrees (54.2%) and participated in some form of cultural competence education (61.7%). The top two primary employment settings of currently employed respondents (n=981) were hospitals, clinics, care centers, and HMOs (46.6%); and community/public health programs (18.8%). Ages ranged from 23 to 78 years with a mean of 43.7 (±12.4), and full years in the profession ranged from 0 to 57 with a mean of 16.4 (±11.7). Over half of those years (9.0 ± 9.0) were spent working with culturally diverse individuals or groups (Table 2.1).

The sample's demographic and work profile was comparable to that of all RDs in terms of gender, race, ethnicity, age, and top two primary employment settings. As of 2008, RDs were 97% female; 84% non-Hispanic White; 5% Asian; 2% Black or African-American; 1% some other race(s); 3% of Hispanic, Latino, or Spanish origin; 38% employed in inpatient or outpatient clinical settings; and 11% employed in community nutrition. The median age was 44 years, and the median number of years in the profession was 18 (19).

Education level and current employment status were the main differences between the sample and the population. A Bachelor's degree was the highest education level attained among 45.8% of respondents and 57% of RDs. Only 10% of respondents were not currently employed in dietetics, compared to 22% of RDs (19). The population's participation in cultural competence education and experience working with diverse groups is unknown.

### Curricular Competencies

Seven curricular competency factors with 69 competencies emerged (Table 2.2). Together, these factors explained 60.5% of the total variance of responses at an overall reliability (Cronbach α) of 0.981. The percentages of total variance explained individually by Factors 1 through 7 were 14.4%, 12.0%, 8.0%, 7.4%, 6.9%, 5.9%, and 5.9%, respectively. Individual reliability coefficients were 0.952, 0.933, 0.915, 0.919, 0.937, 0.879, and 0.836. Mean factor ratings ranged from 4.9±1.0 to 5.5±0.9, indicating medium to high priority for curricular inclusion.

Each factor offers a distinct domain to a curricular model for cultural competence. Factor 1, named "Communication and Relationships" (5.2±0.9), addresses cross-cultural interactions, largely on an individual-level, between providers and patients/clients, colleagues, and/or staff. In contrast, Factor 2 targets community-level relations for improving community health status and was thus named "Community Collaboration" (4.9±1.0). Factor 3, "Disparities and Diversity in Health Care" (5.2±1.0), involves the histories, components, and functions of cultural

**Table 2.1. Respondent Characteristics**

| Characteristics | Respondents (n=1082)[1] | |
|---|---|---|
| | **s** | **x** |
| **Age (years)** | 12.4 | 43.7 |
| | **Respondents (n=1,090)** | |
| **Gender** | **%** | **No.** |
| Female | 96.0 | 1046 |
| Male | 3.1 | 34 |
| No answer | 0.9 | 10 |
| **Race** | **%** | **No.** |
| Majority/White | 84.5 | 921 |
| Minority[2] | 10.7 | 116 |
| Black or African-American | 3.9 | 42 |
| Chinese | 1.9 | 21 |
| American Indian or Alaskan Native | 1.4 | 15 |
| Asian Indian | 1.2 | 13 |
| Some other race | 1.0 | 11 |
| Japanese | 0.6 | 7 |
| Other Asian | 0.6 | 6 |
| Guamanian or Chamarro | 0.1 | 1 |
| No answer | 3.7 | 40 |
| **Ethnicity** | **%** | **No.** |
| Not Hispanic, Latino, or Spanish origin | 82.8 | 903 |
| No answer | 13.4 | 146 |
| Hispanic, Latino, or Spanish origin[2] | 3.8 | 41 |
| Mexican, Mexican American, Chicano | 1.6 | 17 |
| Puerto Rican | 0.7 | 8 |
| Other | 1.5 | 16 |
| **Education Level** | **%** | **No.** |
| Bachelor's | 45.8 | 499 |
| Graduate | 54.2 | 591 |
| Master's | 49.9 | 544 |
| Doctoral | 3.4 | 37 |
| Post-doctoral | 0.9 | 10 |
| **Participation in Cultural Competence Continuing Education** | **%** | **No.** |
| Yes | 61.7 | 672 |
| No | 38.3 | 418 |
| **Professional Work Experience (years)** | **s** | **x** |
| Total | 11.7 | 16.4 |
| With diverse individuals or groups | 9.0 | 9.0 |

**Table 2.1. Continued**

| | Respondents (n=981)[3] | |
|---|---|---|
| **Primary Employment Setting** | **%** | **No.** |
| Hospitals, clinics, care centers, HMO's | 46.6 | 457 |
| Community/Public health programs | 18.8 | 184 |
| Colleges/Universities for instruction and/or research | 10.0 | 98 |
| Extended-care facilities or home care | 7.1 | 70 |
| Other, for-profit organizations/industries | 7.1 | 70 |
| Private practice/Consultation | 6.8 | 67 |
| Foodservice operations | 3.6 | 35 |

[1] missing cases = 8, due to fill-in responses for birth year producing illogical ages
[2] Only options selected by respondents are shown. No respondents indicated "Vietnamese," "Samoan," "Native Hawaiian" or "Other Pacific Islander for race or "Cuban" for ethnicity.
[3] respondents who were currently employed

differences in health care. The appropriate contribution to dietetic practice of various types of culturally- and cultural competence-related resources are addressed in Factor 4, named "Information Access, Analysis, and Use" (4.7±1.0). Factor 5, "Bias Management" (4.8±1.2), addresses bias reduction in the self and in others. Perhaps the most unique to dietetics of all factors is Factor 6, "Food Environments" (5.5±0.9), as the majority of its competencies are specific to food and nutrition. Finally, Factor 7, "Models and Definitions" (4.8±1.0), includes fundamental concepts of cultural competence.

Figure 2.1 illustrates how these domains fit within a curricular model related to cultural competence for the education and training of registered dietitians. Though this model is the first of its kind for dietetics, it echoes existing philosophies on cultural competence expressed in discipline-specific literature (13-14, 24-50) and in multidisciplinary public documents (10-12). Differences between this model and the aforementioned resources are less in content than in the organization thereof.

For example, the seven curricular domains of this model appear to have close parallels with the five TACCT domains, but the specific competencies contained within the apparently similar domains of each resource vary considerably. "Communication and Relationships" conveys a similar idea as TACCT's "Cross Cultural Clinical Skills." Likewise, "Diversity and Disparities in Health Care," conveys a similar idea as TACCT's "Impact of Stereotyping on Medical Decision-Making" and "Health Disparities and Factors Influencing Health." Similarly, "Models and Definitions" is akin to TACCT's "Cultural Competence Rationale, Context and Definition." Yet, even those competencies which are the same as or just slightly modified from TACCT are reorganized under seemingly dissimilar domains in this new model, indicating a different conceptual structure of cultural competence education and training for RDs compared to that of physicians.

**Table 2.2. Curricular Competency Factors and Competency Statements with Factor Loading Scores.**

| **Communication and Relationships (Factor 1)** | **Factor Score** |
|---|---|
| 1. Ask questions to elicit patient/client preferences. | 0.694 |
| 2. Exhibit comfort when conversing with patients/clients, colleagues, and staff about cultural issues. | 0.694 |
| 3. Value the importance of the link between effective communication and quality care. | 0.670 |
| 4. Use reflective practices when in patient/client care. | 0.667 |
| 5. Value curiosity, empathy, and respect in patient/client care. | 0.664 |
| 6. Use negotiating and problem-solving skills in shared decision-making with patients/clients. | 0.647 |
| 7. Hold nonjudgmental dialogue with patients/clients about their health and dietary beliefs. | 0.642 |
| 8. Elicit information from patient/client in context of family-centered care. | 0.638 |
| 9. Respond appropriately to patient/client feedback about key cross-cultural issues in your employment setting. | 0.620 |
| 10. Describe common challenges in cross-cultural verbal and non-verbal communication. | 0.564 |
| 11. Exhibit comfort with differences between practitioner and patients/clients, colleagues, and staff regarding race, ethnicity, culture, beliefs, and food practices. | 0.552 |
| 12. Elicit a cultural and social history, including patients'/clients' health beliefs and a model of their illness. | 0.549 |
| 13. Assess patients'/clients' language and reading skills. | 0.539 |
| 14. Describe the power imbalance between practitioner and patient/client and how it affects the clinical encounter. | 0.531 |
| 15. Use a validated framework for assessing culturally-based food and nutrition beliefs, diet practices, and eating behaviors. | 0.525 |
| 16. Establish trust and repertoire with diverse individuals and communities. | 0.490 |
| 17. Collaborate effectively with medically trained interpreters or language services. | 0.482 |
| 18. Base assessment and enhancement of patient/client adherence on their explanatory model. | 0.481 |
| 19. Remedy violations of cultural norms in cross-cultural communication. | 0.469 |
| 20. Describe models of effective cross-cultural communication and negotiation. | 0.464 |
| 21. Describe cultural factors that may impact the nutrition care process. | 0.440 |
| **Community Collaboration (Factor 2)** | |
| 1. Collaborate with communities to address their needs. | 0.769 |
| 2. Describe strategies for partnering with community activists to eliminate bias from health care. | 0.757 |
| 3. Plan ways to address social and community factors that affect nutrition status. | 0.748 |

**Table 2.2. Continued**

| | |
|---|---|
| 4. Develop a proposal for a community-based health intervention. | 0.743 |
| 5. Describe methods of working with key community leaders. | 0.686 |
| 6. Empower clients and communities to engage in self-advocacy to overcome barriers. | 0.683 |
| 7. Use community resources, including traditional and other community leaders, to foster culturally appropriate therapeutic alliances to enhance patient/client adherence. | 0.674 |
| 8. Describe important elements of community-based work and training experiences. | 0.661 |
| 9. Recognize when systemic or institutional barriers to service access by diverse groups are present. | 0.601 |
| 10. Outline a framework to assess communities according to population health criteria, social mores, cultural beliefs, and needs. | 0.523 |
| 11. Identify questions about food, nutrition, and health beliefs and practices that might be important in a specific local community. | 0.435 |
| 12. Acquire proficiency in a language other than English. | 0.435 |
| **Disparities and Diversity in Health Care (Factor 3)** | |
| 1. Discuss barriers to eliminating health disparities. | 0.699 |
| 2. Value eliminating disparities. | 0.654 |
| 3. Address challenges and opportunities of diversity in health care. | 0.627 |
| 4. Realize the historical impact of racism and discrimination on health and health care. | 0.582 |
| 5. Identify how practitioner bias and stereotyping in terms of race/ethnicity, class, and culture, can affect interaction with patients/clients. | 0.571 |
| 6. Discuss race, ethnicity, class, and culture in the context of the patient/client interview. | 0.530 |
| 7. Value diversity in health care. | 0.525 |
| 8. Identify key nutrition-related health disparities. | 0.509 |
| 9. Describe systemic and clinical encounter issues, including communication, decision-making, and patient/client preferences. | 0.500 |
| 10. Discuss factors other than bio-medical that underlie nutrition-related health problems and health disparities (ex. access, history, politics, socioeconomics, education, culture, environment). | 0.455 |
| 11. Appraise potential benefits and complications of complementary and alternative treatments featuring foods, herbs, and supplements. | 0.440 |
| **Information Access, Analysis, and Use (Factor 4)** | |
| 1. Critically appraise the literature as it relates to health disparities, including systems issues and quality in health care. | 0.714 |
| 2. Critically appraise new techniques, knowledge, and research for applicability to diverse groups. | 0.692 |
| 3. Access sources of current research about nutrition-related health problems of diverse groups. | 0.673 |

**Table 2.2. Continued**

| | |
|---|---|
| 4. Identify policy statements or standards related to cultural competence supported by the American Dietetic Association. | 0.610 |
| 5. Access resources about cultural issues and cultural competence enhancement. | 0.598 |
| 6. Appropriately use emergent nutrigenomic data regarding specific racial and ethnic groups. | 0.580 |
| 7. Understand legal, regulatory and accreditation implications of cultural competence in health-related services. | 0.568 |
| 8. Use sources of national and local data on health, health care disparities, and quality of health care regarding diverse populations. | 0.513 |
| **Bias Management (Factor 5)** | |
| 1. Evaluate own cultural background, beliefs, practices, values, norms, stereotypes, and biases. | 0.718 |
| 2. Demonstrate strategies for reducing own bias. | 0.708 |
| 3. Acknowledge own biases and their potential impact on health care quality. | 0.677 |
| 4. Demonstrate strategies for addressing bias and stereotyping in others. | 0.672 |
| 5. Manage the impact of bias, class, and power on the nutrition care process. | 0.636 |
| 6. Use self-assessment tools, asking: What is my culture? What are my assumptions/stereotypes/biases? | 0.610 |
| **Food Environments (Factor 6)** | |
| 1. Be knowledgeable about diverse eating patterns and traditions, including core foods, celebrations, and fasting. | 0.604 |
| 2. Be knowledgeable about diverse cultures, particularly those most represented in a practice/community. | 0.573 |
| 3. Understand cultural implications of food access, selection, preparation, and storage. | 0.570 |
| 4. Develop ways to accommodate diverse patients/clients using available food systems. | 0.557 |
| 5. Develop culturally-appropriate treatment and prevention/promotion interventions for individuals and communities. | 0.541 |
| 6. Develop culturally-appropriate recipes and menus. | 0.517 |
| **Models and Definitions (Factor 7)** | |
| 1. Explain individual and organizational cultural competence. | 0.718 |
| 2. Define race, ethnicity, and culture. | 0.715 |
| 3. Define ethnocentrism. | 0.691 |
| 4. Understand current cultural competence models pertaining to both individuals and organizations. | 0.666 |
| 5. Provide a description and examples of acculturation in the United States. | 0.585 |

There are some important content differences between this model and other cultural competence education/training resources, however. Foremost, this model contains several competencies

specific to the scope of dietetic practice which are not included elsewhere (e.g. "Develop culturally appropriate recipes and menus"), except for two studies on cultural competence in nutrition counseling from which several of the nutrition-specific competencies for this study were adapted (20, 50). Secondly, this model does not contain some competencies frequently discussed by other disciplines. Four competencies were eliminated for having low factor scores: 1) "Demonstrate basic knowledge of epidemiology and biostatistics;" 2) Avoid making inappropriate generalizations about patients/clients using epidemiologic data;" 3) "Describe common models of diverse health beliefs;" and 4) "Identify how race, ethnicity, culture, and class related to health and health care quality, cost, and consequences." All of the eliminated competencies had been adapted from TACCT.

The eliminated competencies are noteworthy for several reasons. Because epidemiology and biostatistics are generally components of graduate-level education, which is not required currently for dietitians to gain practice entry, the first listed competency's absence may suggest that RDs consider the present educational requirements adequate. Alternatively, the nearly 46% of respondents who earned a Bachelor's degree as their highest degree level may not have recognized fully the relevance of these subjects to cultural competence. Elimination of the second competency is important because the notion of "individuation" (33-34, 39), also referred to as "multiculturalism" (47) or "contextual competence (48)," is a common theme in related literature (11, 33-34, 39, 42, 47-48). Individuation, the opposite of categorization, encourages providers to avoid reinforcing simplified stereotypes and to recognize the complexity of patients' individual socio-cultural situations, as opposed to their membership in a larger cultural group with "distinct" homogeneous characteristics. Avoiding inappropriate generalizations based on epidemiologic data follows this concept; its absence may suggest either low priority or alternatively, the low priority assigned to having knowledge of epidemiology. Elimination of the third competency may indicate irrelevance to practice, as several other competencies focus on eliciting patients'/clients' health beliefs or explanatory models directly from them. Similarly, elimination of the fourth competency may suggest greater emphasis on cultural competence issues at the individual level compared to the systemic level, as other competencies addressing the impacts of race, ethnicity, and culture pertain to direct interaction with patients/clients.

Results from the MANOVA models revealed significant differences in mean factor ratings between respondents who differed by race and by experience working with diverse individuals and groups. In the model which included race and ethnicity as independent variables, "Community and Collaboration" ($p=0.004$), "Information Access, Analysis, and Use" ($p=0.047$), and "Models and Definitions" ($p=0.005$) had significantly higher rankings among those belonging to a minority race compared to those who identified themselves as White/Caucasian. Because the American Dietetic Association (ADA) has declared increasing racial and ethnic diversity within the field as an important goal, these differences may be a glimpse at the types of changes in professional emphasis that may occur by reaching this goal, at least in terms of race. The lack of difference by ethnicity may be a function of the variable's low *n* or perhaps indicative of a stronger personal identification with race than ethnicity. A possible interaction between the variables was tested post hoc, and none was found ($p=0.520$).

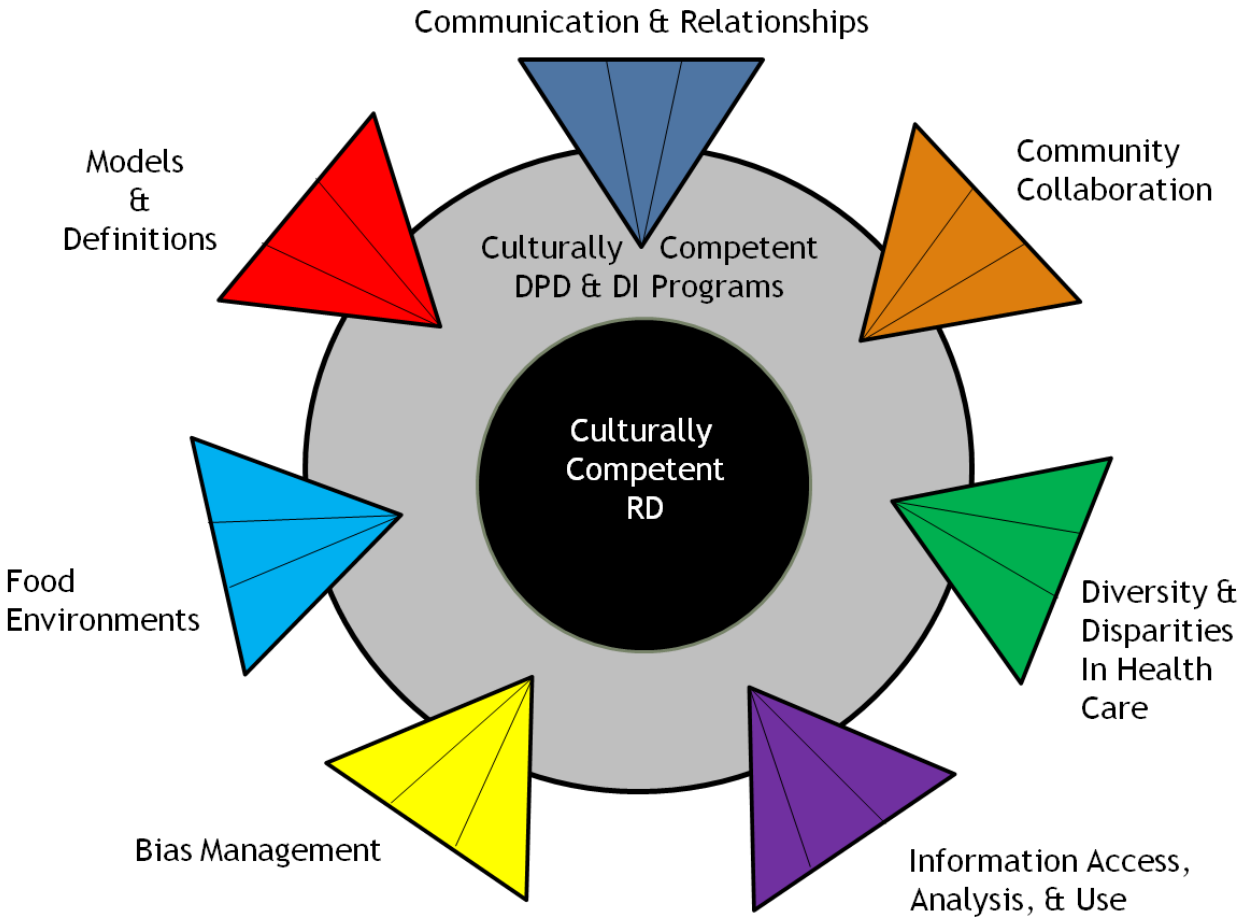
In the MANOVA model that included education level, continuing education in cultural competence, and experience working with diverse individuals or groups as independent variables, "Communication and Relationships" ($p=0.000$) had a significantly higher ranking among those who had 5 or more total years of experience working with diverse individuals or groups compared to those who had less than 5 total years. This domain involves the most direct cross-cultural contact, so it follows that those most experienced in cross-cultural contact would account for its highest priority ratings. Because ratings for this domain did not differ by education level or continuing education in cultural competence and because no interactions among all combinations of variables existed, it suggests that adequate experience and not instruction alone effectively relays the value and machinery of cross-cultural exchanges.

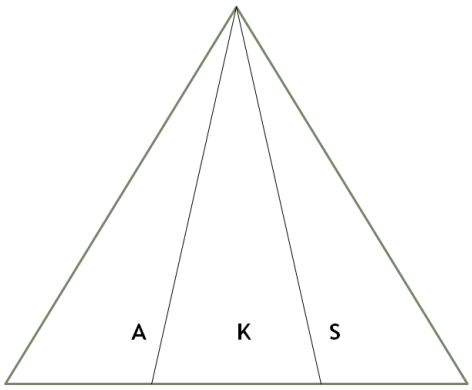
A crucial aspect of this model deserving emphasis is that it only conveys *what* can be integrated into dietetic education and training; it makes no distinction as to *how* this integration should be achieved, particularly in regards to separating competencies appropriately between Didactic Programs in Dietetics (DPDs) and Dietetic Internships (DIs). Though competencies included in this study were developed from Bloom's (51-53) taxonomy to touch purposely upon the basic attitudes/awareness-knowledge-skills paradigm for individual cultural competence (24-25), the model includes no inherent structure for progressing students through this paradigm. Competencies of all taxonomic levels are mixed among the domains. Hence, it is unclear how DPDs and DIs may wish to apply the model for their purposes. Also, it is unclear which delivery methods are most effective for teaching each competency. These questions remain topics for future research.

Nonetheless, the model can be used by education and training programs to plan, implement, and evaluate their curricula for cultural competence in a systematic and detailed way, similarly to the *Blueprint of Integration of Cultural Competence in the Curriculum Questionnaire* (BICCCQ) developed by the School of Nursing at the University of Pennsylvania (45-46). It serves to add specificity to the existing objectives for cultural competence set by the Commission on Accreditation of Dietetic Education (CADE). In the future, the model and its items could be tested further and transformed into an individual self-assessment tool for dietetic students and/or dietitians, the former for assessing learning outcomes and the latter for developing continuing professional education plans required by CDR for ongoing professional certification. Likewise, workplaces may use the model as a guide for staff assessment and/or development.

This study includes some limitations. First, the low response rate of 17.9% weakened the subjects-to-variables ratio to 15:1, though this ratio is still considered acceptable (54). The low response rate resulted despite multiple email contacts, recently-updated email addresses such that none of the 6,099 emails bounced following the first two contacts, a reasonable incentive, and a mass emailing method known to bypass spam filters. Fortunately, high internal consistency of responses (Cronbach $\alpha=0.981$) and a sample largely representative of the population in terms of demographic and work characteristics provides assurance of the model's applicability to the profession. Another limitation is the possibility of response bias due to the sensitive nature of cultural competence. Though respondents provided both positive and negative comments about the study's topic, it is possible that RDs with special interests in cultural competence were most

**Figure 2.1. Curricular Model of Cultural Competence for the Education and Training of Registered Dietitians.**




A=Awareness/Attitudes

K=Knowledge

S=Skills

inclined to participate. On the other hand, these special interests may have contributed useful insight.

## CONCLUSION

A model with seven domains of core curricular competencies related to cultural competence for the education and training of registered dietitians was developed. This model is representative of existing research on cultural competence but is the first unique to dietetics. It may be used by dietetic education and training programs to systematically plan, implement, and evaluate curricula for cultural competence.

# CHAPTER 2: CONCLUSION

The importance of providing culturally competent health care is underscored by objective and subjective indicators of need, projected improvements in health and business outcomes, and the diversifying United States population (1-5, 7-9). Accordingly, several health disciplines, professional organizations, and public and private agencies have informed each other for a variety of efforts to provide recommendations about developing curricula to instill cultural competence in students entering the health care field. Missing from these efforts is sufficient input from the dietetic profession, however, even though forthcoming accreditation standards specifically related to cultural competence will impact dietetic education, training, and practice. Given the diverse settings in which dietitians work, how integral food-related beliefs and behaviors can be in a given culture, and how strongly these beliefs and behaviors can impact health (15-19), it is important to ask if the competencies included in the present literature base are adequate and appropriate for dietetic education and training.

Therefore, the purpose of this study was to provide the dietetic profession with a resource on cultural competence education and training that is detailed and tailored to its needs and obligations. Results based on a 17.9% (n=1,090) rate of response from a random sample of registered dietitians in the United States effectively answered the primary research question:

*What are the core curricular competencies related to cultural competence for the education and training of registered dietitians?*

Via exploratory principal components analysis (PCA), a curricular model with 69 competencies and 7 domains emerged. Domains were assigned unique labels based on the prevailing themes of their respective competencies: Communication and Relationships; Community Collaboration; Disparities and Diversity in Health Care; Information Access, Analysis, and Use; Bias Management; Food Environments; and Models and Definitions. Though some domain names are similar to those in the *Tool for Assessing Cultural Competence Training* (TACCT) (13-14), which served as a foundation for the survey instrument, competencies which are the same as or just slightly modified from TACCT are reorganized under seemingly dissimilar domains in the new model, indicating a different conceptual structure of cultural competence education and training for RDs. Furthermore, although this model shares many competencies promoted across disciplines, it does not include some relatively common competencies and does include several competencies specific to the scope of dietetic practice not mentioned elsewhere.

Further interpretation of the model was accomplished by comparing factor ratings to five independent variables (race, ethnicity, experience working with diverse groups, participation in continuing education, and education level), addressed in four research sub-questions:

1. *How do dietitians who belong to a racial/ethnic minority group rate core curricular competencies compared to those who do not belong to a racial/ethnic minority group?*
2. *How do dietitians who have five or more years of professional experience working with diverse individuals, groups, and/or populations rate core curricular competencies compared to those with less than five years of experience?*

3. *How do dietitians who have participated in non-degree-related continuing education on cultural competence in the past five years rate core curricular competencies compared to those who have not participated in continuing education on cultural competence?*
4. *How do dietitians with a bachelor's degree as their highest education level attained rate core curricular competencies compared to those with a graduate degree-level education?*

Multivariate analysis of variance (MANOVA) testing revealed two significant differences. First, respondents belonging to a minority race ranked "Community and Collaboration" ($p=0.004$), "Information Access, Analysis, and Use" ($p=0.047$), and "Models and Definitions" ($p=0.005$) significantly higher than those who identified themselves as White/Caucasian. These differences may be a glimpse at the types of changes in professional emphasis which may occur should the American Dietetic Association achieve increased racial diversity in the profession. Second, respondents who had 5 or more total years of experience working with diverse individuals or groups ranked "Communication and Relationships" significantly higher than those who had less than 5 total years ($p=0.000$), suggesting that adequate experience and not instruction alone effectively relays the value and machinery of cross-cultural exchanges.

Study limitations include a low response rate of 17.9% and the possibility of response bias. The low response rate resulted despite prudent efforts to maximize response, but the resulting subjects-to-variables ratio of 15:1 is still considered acceptable (54). Fortunately, high internal consistency of responses (Cronbach $\alpha=0.981$) and a sample largely representative of the population in terms of demographic and work characteristics provides assurance of the model's applicability to the dietetic profession. Response bias was possible due to the sensitive nature of cultural competence; registered dietitians with special interests in cultural competence may have been most inclined to participate. Nonetheless, these special interests may have contributed useful insight.

A crucial aspect of this model deserving emphasis is that it only conveys *what* can be integrated into dietetic education and training; it makes no distinction as to *how* this integration should be achieved, particularly in regards to separating competencies appropriately between Didactic Programs in Dietetics (DPDs) and Dietetic Internships. Though competencies included in this study were developed to touch purposely upon the basic attitudes/awareness-knowledge-skills paradigm for individual cultural competence (24-25), the model includes no inherent structure for progressing students through this paradigm. Hence, it is unclear how DPDs and DIs may wish to apply the model for their purposes. Also, it is unclear which delivery methods are most effective for teaching each competency. These questions remain topics for future research.

Though the work on developing curricula related to cultural competence in the education and training of registered dietitians is not complete, this study has produced a model with several functional applications. Currently, it can be used by education and training programs to plan, implement, and evaluate their curricula for cultural competence in a systematic and detailed way. It serves to add specificity to the existing objectives for cultural competence set by the Commission on Accreditation for Dietetic Education. In the future, the model and its items could be tested further and transformed into an individual self-assessment tool for dietetic students and/or dietitians, the former for assessing learning outcomes and the latter for developing

continuing professional education plans required by the Commission on Dietetic Registration for ongoing professional certification. Likewise, workplaces may use the model as a guide for staff assessment and/or development.

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**APPENDICES**

## Appendix A: Letter of Research Intent to CDR

Tegan Jean Medico
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Email: haughton@utk.edu

March, 2010

Commission on Dietetic Registration
120 South Riverside Plaza, Suite 2000
Chicago, Illinois 60606-6995

Dear Commission on Dietetic Registration:

My name is Tegan Medico, and I am a master's degree student in the Public Health Nutrition program at the University of Tennessee. My academic advisor is the program director, Betsy Haughton, EdD, RD, LDN. We are currently developing a proposal for a research study to identify the core curricular competencies related to cultural competence for the education and training of registered dietitians. The study design is a cross-sectional electronic survey for which respondents will rate proposed competencies on a Likert-like scale in addition to providing basic demographic information. We are requesting permission to use CDR's registry to select a random sample of registered dietitians with email addresses. The following are the main research question, sub-questions, and an excerpt of the survey instrument.

Thank you for your consideration of this request.

Tegan Medico

**Research Question:**

What are the essential core curricular competencies related to cultural competence for the education and training of registered dietitians?

- *How do dietitians who have five or more years of professional experience working with diverse individuals, groups, and/or populations rate core curricular competencies compared to those with less than five years of experience?*

- *How do dietitians who belong to a racial/ethnic minority group rate core curricular competencies compared to those who do not belong to a racial/ethnic minority group?*

- *How do dietitians who have participated in non-degree-related continuing education on cultural competence in the past five years rate core curricular competencies compared to those who have not participated in continuing education on cultural competence?*

- *How do dietitians with a bachelor's degree-level education rate core curricular competencies compared to those with a graduate degree-level education?*

**Example: The following is an example of survey instrument items.**

Instructions: The following are proposed competencies related to cultural competence that may be included in the curricula of education and training programs for registered dietitians. While all items may be important on principle, not all of them may be feasible to include in a curriculum. Please assign a priority level to each curricular competency according to the scale provided.

1 = Not a priority
2 = Very low priority
3 = Low priority
4 = Medium priority
5 = High priority
6 = Very high priority
7 = Essential

| | What are the essential core curricular competencies related to cultural competence for the education and training of registered dietitians? | Not a priority | Very low priority | Low priority | Medium priority | High priority | Very high priority | Essential |
|---|---|---|---|---|---|---|---|---|
| **1** | Define—in contemporary terms—race, ethnicity, and culture. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **2** | Describe common challenges in cross-cultural verbal and non-verbal communication. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **3** | Outline a framework to assess communities according to population health criteria, social mores, cultural beliefs, and needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **4** | Recognize practitioners' own potential for biases and stereotyping. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **5** | Discuss key nutrition-related health disparities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **6** | Understand legal, regulatory and accreditation implications of cultural competence in health-related services. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **7** | Describe models of effective cross-cultural communication and negotiation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## Appendix B: Request Form to Access CDR Registry

**REQUEST FORM FOR USE OF CDR DATABASE INFORMATION**

**Applicant Information**

**Name** _____
*(Last)* *(First)* *(MI)*

**Mailing Address** _____
_____
_____

**Daytime Phone** _____ **Cell Phone** _____

**E-Mail Address** _____

**I am currently an enrolled student at** _____

**My Research Advisor is**_____ _____

**Advisor Contact information**

**Address** _____
_____

**Daytime Phone Number** _____ **E-mail address** _____

**Research is funded by** _____
_____

**Commission on Dietetic Registration Database Requested:**

*(Please select from the following three options.)*

**1. Database Selections**

Please choose one of the following options:

- ○ Option 1 - Credentialed Status
- ○ Option 2 - State of Residence, US & US Territories

Please list specific US of Residence &/or US Territories:

_____
_____

- ○ Option 3 - City of Residence (City/State)
- ○ Option 4 - City of Residence (Zip Code)
- ○ Option 5 - Recertification Period

**2. Format**

- ○ Option 1 - Pressure Sensitive Mailing Labels
- ○ Option 2 - CD-ROM (Excel file)
- ○ Option 3 - E-Mail (Excel file)

(transmit to e-mail address – _____)

**3. Sequence**

- ○ Option 1 - Zip code order
- ○ Option 2 - Alphabetical order

**CDR Database Usage Agreement:**

**The submission of this CDR Database Request Form is subject to the approval of the Commission on Dietetic Registration (CDR) in its discretion. Upon review of the information submitted, you will receive a communication advising whether your request has been approved. Please allow five days for approval notification. Please note that CDR reserves the right to request additional information upon review of information submitted.**

**I agree to utilize the CDR Database subject to the following conditions:**

**1. The CDR database will be used only for the purpose for which it was approved.**

**2. CDR database will not be duplicated, resold or integrated into a permanent database.**

_____

**Applicant Signature** **Date**

_____

**Academic Program Advisor Signature** **Date**

## Appendix C: Instrument Hard Copy

**Section I.**

Questions in this section address basic demographic characteristics and other relevant information such as primary employment setting and work experience. Please read each question and provide the appropriate response.

1. How many years have you worked in the dietetics profession? (Include the current year and round up. For example, if you have worked for 5 years and 3 months, please fill in 6 years.)

_____

2. What percentage of this time have you spent working with clients and/or colleagues who are different from you in regards to race, ethnicity, socioeconomic class, religion, sexual orientation, disability status, etc.?

_____

3. Are you currently working in the dietetics profession or a nutrition-related field?
    a. Yes
    b. No

*If b:* 4. Which of the following best describes your current employment setting?
    i. Hospitals, clinics, care centers, or HMO's
    ii. Extended-care facilities or home care
    iii. Private practice/Consultation
    iv. Community/Public health programs
    v. Colleges/Universities for instruction and/or research
    vi. Foodservice operations
    vii. Other, for-profit organizations/industries

4. Please indicate the highest degree you completed.
    a. Bachelor's Degree
    b. Master's Degree
    c. Doctoral Degree
    d. Post-Doctoral Fellowship

*If b, c, or d:* 5. Was this degree health-related?
    i. Yes
    ii. No

5. What is your ethnicity?
    a. Mexican, Mexican American, Chicano
    b. Puerto Rican
    c. Cuban
    d. Other Hispanic, Latino, or Spanish origin
    e. Not Hispanic, Latino or Spanish origin
    f. No response

6. What is your race? Check all that apply.
    a. American Indian or Alaskan
    b. Asian Indian
    c. Chinese
    d. Japanese
    e. Vietnamese
    f. Filipino
    g. Other Asian
    h. Guamanian or Chamorro
    i. Samoan
    j. Native Hawaiian
    k. Other Pacific Islander
    l. Black or African-American
    m. White
    n. Some other race
    o. No response

7. What year were you born?

_____

8. What is your gender?
    a. Male
    b. Female
    c. No response

9. Have you participated in any non-degree-related continuing education opportunities on cultural competence within the past five years (e.g. a class on cultural competence, diversity, or health disparities; workplace-based cultural competence or diversity training/workshop; or self-guided learning on cultural competence)?
    a. Yes
    b. No

**Section II. Curricular Competencies for the Education and Training of Registered Dietitians**

**Instructions:** The following are proposed competencies related to cultural competence that may be included in the curricula of education and training programs for registered dietitians. While all items may be important in principle, not all of them may be feasible to include in a curriculum with limited capacity. Please assign a priority level to each curricular competency according to the scale provided.

1 = Not a priority
2 = Very low priority
3 = Low priority
4 = Medium priority
5 = High priority
6 = Very high priority
7 = Essential

| | **What are the essential core curricular competencies related to cultural competence for the education and training of registered dietitians?** | **Not a priority** | **Very low priority** | **Low priority** | **Medium priority** | **High priority** | **Very high priority** | **Essential** |
|---|---|---|---|---|---|---|---|---|
| | Explain individual and organizational cultural competence. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Understand current cultural competence models pertaining to both individuals and organizations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Define race, ethnicity, and culture. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Define ethnocentrism. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Provide a description and examples of acculturation in the United States. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Demonstrate basic knowledge of epidemiology and biostatistics. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Identify how race, ethnicity, culture, and class relate to health and health care quality, cost, and consequences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Realize the historical impact of racism and discrimination on health and health care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Identify how practitioner bias and stereotyping in terms of race/ethnicity, class, and culture, can affect interaction with patients/clients. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Discuss race, ethnicity, class, and culture in the context of the patient/client interview. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe systemic and clinical encounter issues, including communication, decision-making, and patient/client preferences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Discuss barriers to eliminating health disparities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Value eliminating disparities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Address challenges and opportunities of diversity in health care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Value diversity in health care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Identify key nutrition-related health disparities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Discuss factors other than bio-medical that underlie nutrition-related health problems and health disparities (ex. access, history, politics, socioeconomics, education, culture, environment). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Appraise potential benefits and complications of complementary and alternative treatments featuring foods, herbs, and supplements. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Be knowledgeable about diverse cultures, particularly those most represented in a practice/community. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Understand cultural implications of food access, selection, preparation, and storage. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Be knowledgeable about diverse eating patterns and traditions, including core foods, celebrations, and fasting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe common models of diverse health beliefs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe cultural factors that may impact the nutrition care process. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Value curiosity, empathy, and respect in patient/client care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe the power imbalance between practitioner and patient/client and how it affects the clinical encounter. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Value the importance of the link between effective communication and quality care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe common challenges in cross-cultural verbal and non-verbal communication. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Ask questions to elicit patient/client preferences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Elicit information from patient/client in context of family-centered care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use a validated framework for assessing culturally-based food and nutrition beliefs, diet practices, and eating behaviors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Respond appropriately to patient/client feedback about key cross-cultural issues in your employment setting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Hold nonjudgmental dialogue with patients/clients about their health and dietary beliefs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use reflective practices when in patient/client care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Exhibit comfort when conversing with patients/clients, colleagues, and staff about cultural issues. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Assess patients'/clients' language and reading skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Acquire proficiency in a language other than English. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Exhibit comfort with differences between practitioner and patients/clients, colleagues, and staff regarding race, ethnicity, culture, beliefs, and food practices. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Remedy violations of cultural norms in cross-cultural communication. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe models of effective cross-cultural communication and negotiation. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Elicit a cultural and social history, including patients'/clients' health beliefs and a model of their illness. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use negotiating and problem-solving skills in shared decision-making with patients/clients. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Collaborate effectively with medically trained interpreters or language services. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Develop culturally-appropriate treatment and prevention/promotion interventions for individuals and communities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Develop ways to accommodate diverse patients/clients using available food systems. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Develop culturally-appropriate recipes and menus. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Base assessment and enhancement of patient/client adherence on their explanatory model. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Establish trust and repertoire with diverse individuals and communities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Outline a framework to assess communities according to population health criteria, social mores, cultural beliefs, and needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Identify questions about food, nutrition, and health beliefs and practices that might be important in a specific local community. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Develop a proposal for a community-based health intervention. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Collaborate with communities to address their needs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Plan ways to address social and community factors that affect nutrition status. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Recognize when systemic or institutional barriers to service access by diverse groups are present. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe strategies for partnering with community activists to eliminate bias from health care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Empower clients and communities to engage in self-advocacy to overcome barriers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe important elements of community-based work and training experiences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Describe methods of working with key community leaders. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use community resources, including traditional and other community leaders, to foster culturally appropriate therapeutic alliances to enhance patient/client adherence. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use self-assessment tools, asking: What is my culture? What are my assumptions/stereotypes/biases? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Demonstrate strategies for reducing own bias. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Demonstrate strategies for addressing bias and stereotyping in others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Evaluate own cultural background, beliefs, practices, values, norms, stereotypes, and biases. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Manage the impact of bias, class, and power on the nutrition care process. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Acknowledge own biases and their potential impact on health care quality. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Use sources of national and local data on health, health care disparities, and quality of health care regarding diverse populations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Avoid making inappropriate generalizations about patients/clients using epidemiologic data. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Appropriately use emergent nutrigenomic data regarding specific racial and ethnic groups. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Access sources of current research about nutrition-related health problems of diverse groups. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Critically appraise the literature as it relates to health disparities, including systems issues and quality in health care. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Critically appraise new techniques, knowledge, and research for applicability to diverse groups. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Understand legal, regulatory and accreditation implications of cultural competence in health-related services. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Identify policy statements or standards related to cultural competence supported by the American Dietetic Association. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| | Access resources about cultural issues and cultural competence enhancement. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## Appendix D: Request and Approval for Copyright Permission from the AAMC

------ Forwarded Message
**From:** Amber Sterling <asterling@aamc.org>
**Date:** Mon, 5 Oct 2009 15:13:23 -0400
**To:** Betsy Haughton <haughton@utk.edu>
**Cc:** Norma Poll <npoll@aamc.org>
**Subject:** RE: Request to use and modify statements from the TACCT

Hi Betsy,

The Association of American Medical Colleges (AAMC) grants permission to Tegan Medico (Medico) to adapt, modify, reproduce and distribute AAMC's *Tool for Assessing Cultural Competence Training* (the Work). This permission is granted for the purpose of Medico completing her thesis research project on dietetics curricula.

This is a one-time, non-transferrable, royalty-free grant. The Work must be accompanied with the following permissions statement:

©2006 Association of American Medical Colleges. All rights reserved. Reproduced and modified with permission.

Additionally we request that any reports or publications using the Work, or any adaptation, be sent to Norma Poll (npoll@aamc.org).

Norma has also kindly offered to make herself available if you or Tegan have any specific questions about the tool.

Kind regards,
Amber

Amber Sterling
Business Development Specialist
Association of American Medical Colleges

**From:** Betsy Haughton [mailto:haughton@utk.edu]
**Sent:** Friday, October 02, 2009 12:36 PM
**To:** Amber Sterling
**Subject:** Request to use and modify statements from the TACCT

Hello, Amber. Thanks for sending your email address, so that I could explain my request. First, let me introduce myself. I am a Professor at the University of Tennessee and Director of our Public Health Nutrition Program. I have been developing a research agenda focused on organizational cultural competence of health-related academic units. Currently, I am the major professor for a Master's-level nutrition graduate student, Tegan Medico, who is interested in completing her thesis about what components of a nutrition/dietetics curriculum are important for cultural competence. Specifically, she is proposing to ask Registered Dietitians what components of a dietetics curriculum are essential for entry-level practice as a dietitian.

The tool developed through AAMC titled *Tool for Assessing Cultural Competence Training (TACCT)* is excellent. It includes knowledge, skill, and attitude statements in 5 domains for medical school curricula. We would like to use these statements as a foundation for our research, but, because they focus on medical school curricula, we would like to draw from them, but with adaptation. For example, because we are focusing our research on dietetics curricula, we would like to use, delete, or adapt the knowledge, skill and attitude statements so that they are more appropriate for dietetics programs.

As a thesis research project, we will be going through all appropriate IRB approvals and, if approval is granted to use and modify the statements, then this will be included in the final thesis document and any resulting peer-reviewed research publications. This is not a for-profit venture, but rather is an educational request.

I hope that this request can be approved. If you have questions, I will be more than happy to answer them either via phone or email.

Thanks, Amber.
Betsy Haughton
--
Betsy Haughton, EdD, RD, LDN
Professor
Director, Public Health Nutrition
Department of Nutrition
1215 Cumberland Avenue
The University of Tennessee
Knoxville, TN 37996-1920
Tele: 865/974-6267
FAX: 865/974-3491
email: haughton@utk.edu

## Appendix E: Recruitment Emails

### EMAIL ANNOUNCEMENT

### Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians

Greetings!

You have been selected to participate in a survey conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence for the education and training of registered dietitians.

The purpose of this email is to provide advance notification of the invitation to participate in the study that you will receive by email in the upcoming week. Please watch your inbox for this opportunity!

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: tmedico@utk.edu

Betsy Haughton, EdD, RD, LDN
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: Haughton@utk.edu

This project has been approved by the University of Tennessee Institutional Review Board for the Protection of Human Subjects.

## EMAIL COVER LETTER

**Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians**

Greetings!

You are invited to participate in a survey conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence for the education and training of registered dietitians.

The estimated time to complete this survey is 20 minutes or less. To compensate you for your time, completing this survey will enable you to qualify for a random drawing for one of two $50 gift cards from Amazon.com. Should you choose to participate, please do so by [date].

You may access the survey at:

[hyperlink]

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: tmedico@utk.edu

Betsy Haughton, EdD, RD, LDN
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: Haughton@utk.edu

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**EMAIL REMINDER 1**

**Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians**

Greetings!

Several days ago, you received an email inviting you to participate in a research study conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence in the education and training of registered dietitians. If you have already completed the survey, thank you! You may disregard this email.

If you have not yet completed the survey, please remember to do so, as your input is very important to the success of the study, and you may still qualify for a random drawing for one of two $50 gift cards from Amazon.com. We need you!

You may access the survey at:

[hyperlink]

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: tmedico@utk.edu

Betsy Haughton, EdD, RD, LDN
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: Haughton@utk.edu

This project has been approved by the University of Tennessee Institutional Review Board for the Protection of Human Subjects.

**EMAIL REMINDER 2**

**Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians**

Hello,

Several weeks ago, you received an email inviting you to participate in a research study conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence in the education and training of registered dietitians. If you have already completed the survey, thank you! You may disregard this email.

If you have not yet completed the survey, please remember to do so, as your input is very important to the success of the study, and you may still qualify for a random drawing for one of two $50 gift cards from Amazon.com. We need you!

You may access the survey at:

[hyperlink]

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: tmedico@utk.edu

Betsy Haughton, EdD, RD, LDN
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: Haughton@utk.edu

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**EMAIL REMINDER 3**

**Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians**

Hello,

If you have already completed the survey for the research study conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence in the education and training of registered dietitians, thank you! You may disregard this email.

If you have not yet completed the survey, please remember to do so, as your input is very important to the success of the study, and you may still qualify for a random drawing for one of two $50 gift cards from Amazon.com.

You may access the survey at:

[hyperlink]

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
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1215 Cumberland Avenue
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Betsy Haughton, EdD, RD, LDN
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Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: Haughton@utk.edu

This project has been approved by the University of Tennessee Institutional Review Board for the Protection of Human Subjects.

**EMAIL REMINDER 4**

**Curricular Competencies Related to Cultural Competence for the Education and Training of Registered Dietitians**

Hello,

If you have already completed the survey for the research study conducted by the University of Tennessee's Public Health Nutrition Program on cultural competence in the education and training of registered dietitians, thank you! You may disregard this email.

If you have not yet completed the survey, please remember to do so. This email is the last reminder you will receive.

You may access the survey at:

[hyperlink]

If you have any questions or concerns, feel free to contact us. Thank you!

Tegan Medico
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
Knoxville, TN 37996-1920
Email: tmedico@utk.edu

Betsy Haughton, EdD, RD, LDN
University of Tennessee-Knoxville
Department of Nutrition
1215 Cumberland Avenue
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Email: Haughton@utk.edu

This project has been approved by the University of Tennessee Institutional Review Board for the Protection of Human Subjects.

## VITA

Tegan Jean Medico grew up in Weatherly, Pennsylvania, where she graduated from Weatherly Area High School in 2004. She gained entry into the Robert E. Cook Honors College (RECHC) of Indiana University of Pennsylvania (IUP), where she enrolled to study Nutrition with the Dietetics Track in IUP's Department of Food and Nutrition. Tegan received her Bachelor of Science Degree in Nutrition/Dietetics in 2008 and was awarded the American Dietetic Association Foundation's Lucille Johnson Memorial Scholarship.

Tegan was accepted into a dual MS-MPH program (Master of Science in Nutrition/Public Health Nutrition and Master of Public Health/Health Planning and Administration) at the University of Tennessee, Knoxville, from which submission of this thesis qualifies her to graduate in May 2011. While at UT, Tegan served as a teaching assistant for the university's introductory nutrition course from August 2008 to December 2010 and completed a block field experience at the Chattanooga-Hamilton County Health Department in Chattanooga, TN. The latter contributes to UTK's accredited dietetic internship program, which Tegan is scheduled to complete in June 2011.