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Development of a Multicultural Education Integration Framework in BS Nutrition and Dietetics Curriculum

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Chapter 1

The Problem and Literature Review

The Philippines is a very diverse nation. It has numerous ethnic groupings, and about 120-170 languages are spoken by 110 ethnolinguistic groups, comprising 26.0% Tagalog, 8% Cebuano, 8% Ilocano, 14.3% Bisaya, 6.5% Bicol, 3.8% Waray, 1.9% Maguindanao, 1.9% Pangasinan, and 3.0% Kapangpangan (Philippine Statistics Authority, 2023).

Apart from ethnic groupings, the presence of other nationalities reflects the diversity of individuals residing in the Philippines. As evidence, there are 78,396 foreigners living in the country, including Chinese, who make up the largest population (22,494), Indians (18,959), Americans (6,306), and other foreign nationalities (7,608) (Philippine Statistics Authority, 2023). These foreign nationalities are residing in different regions of the Philippines, for instance, two out of every five (39.8%) living in the National Capital Region (NCR), (13.3%) reside in CALABARZON, (9.2%) in Central Visayas, and (9.6 %) are living in Central Luzon.

The increasing diversity of the Philippines represents various cultural traditions, languages, beliefs, norms, and food habits and selections they acquired from their earlier lives. These cultural factors may influence their daily lives and health, particularly when following instructions and treatments given by healthcare providers. Nevertheless, cultural differences should not prevent those in need from receiving quality healthcare

because attempting to change what has been customary in their culture may lead to unfavorable responses and poor comprehension.

One of the healthcare providers is the Nutritionist-Dietitians; they are professionals whose primary duty is to provide quality nutrition care to individuals with diverse cultures. Thus, they should view their nutritional advice within the context of their clients' unique cultures to improve health outcomes.

To provide quality nutrition care to diverse cultures, RNDs should possess multicultural competencies, including comprehensive multicultural perspectives, awareness, knowledge, and skills, so that they can effectively and ethically manage cultural complexities. Awareness of community environment, health disparities, socioeconomic status, etc. Knowledge about cultural diversity, historical context, cultural traditions and heritage, social structures, diversity of language, dietary practices, and styles in communication. Skills to enable individuals to effectively communicate, interact, and work with diverse cultural backgrounds.

Numerous nutrition organizations and accrediting councils abroad recognized the importance of multicultural competency. For instance, the International Confederation of Dietetics Associations (ICDA) emphasizes multicultural competencies such as respecting the emotions, social culture, religions, and ecology of individual groups in communities (Partnership for Dietetic Education and Practice, 2013). The Accreditation Council for Education in Nutrition and Dietetics (ACEND) in the U.S.A. mandated that cultural competency be part of the curriculum for nutrition programs to ensure that interns are prepared to collaborate effectively with diverse individuals in the community, staff, and

colleagues (Accreditation Council for Education in Nutrition and Dietetics (ACEND), 2022). Furthermore, in the Philippines, the extensive practice of nutrition care for people's overall wellness in a multidisciplinary and multicultural environment is articulated as one of the program outcomes of CMO 14s 2017 of the BS Nutrition and Dietetics.

However, despite recognition of the importance of multicultural competencies of different nutrition organizations and agencies, several studies reported that entry-level RNDs and nutrition students were deficient in some multicultural competence. For instance, in assessing the cultural competence of nutrition students, the findings revealed a low score in cultural knowledge (Hack et al., 2015). Moreover, entry-level RNDs' lack of cultural knowledge in providing nutrition care for individual Transgender and Gender Non-Binary (TGGNB) individuals was reported (Douglass et al., 2020). It was also assessed that some RNDs lack cultural competency when treating LGBTQ individuals, and they are not even aware of identity issues, which is important in tailoring nutrition interventions (Ferrero et al., 2023). Additionally, the dietetic training programs for students on Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) patients are lacking (Joy & Numer, 2018).

Furthermore, RNDs are unsure about delivering diabetic care among migrant patients in the Netherlands, whether they fulfill the needs of their patients or not. They also felt they lacked cultural knowledge, and this was exacerbated by a communication gap caused by language differences, which made it difficult to tailor their advice to those in need (Jager et al., 2020). Deficiencies in multicultural awareness, knowledge, and skills

may result in multicultural incompetence among RNDs. They may also result in reduced effectiveness in treating patients from diverse cultures (Ferrero et al., 2023).

The findings from various studies have been linked to the nutrition and dietetics curriculum. For instance, Knoblock-Hahn et al. (2010) revealed minimal evidence that cultural competency was included in the curriculum, and students weren't constantly exposed to or engaged with diverse cultures throughout the curriculum (Accreditation Council for Education in Nutrition and Dietetics (ACEND), 2022; 2017; Hack et al., 2015). The Council for Education in Nutrition and Dietetics stated that the absence of cultural competency in the curriculum of nutrition and dietetics can affect professional practice.

The challenge for RNDs these days is how they provide quality nutrition care to diverse individuals if they are inadequate in some multicultural competencies. Several studies conducted abroad have examined how multicultural competencies can be integrated in various disciplines, such as counseling, education, and pharmacy (Butler et al., 2020; Chang, 2020; Uzunboylu & Altay, 2021). However, limited research abroad has been reported on integrating multicultural competency in the nutrition and dietetics program (Charles et al., 2020). Likewise, no studies were reported in the Philippines, as are other gaps in this study.

This study aims to develop a multicultural education integration framework for the BSND curriculum that may serve as a standard guideline for educators in integrating multicultural education. The framework is intended to equip students with the competencies necessary for culturally responsive nutrition care to diverse individuals.

The significance of the study is the following:

For nutrition and dietetics students. The developed framework may help students gain multicultural competency essential for their future career as Nutritionists-Dietitians. By understanding cultural differences, future RNDs can tailor their nutrition intervention for diverse individuals, thereby improving the quality of nutrition care.

For RND educators. The framework may provide RND educators with systematic guidelines on integrating multicultural competencies within the curriculum, enabling them to deliver comprehensive topics. In addition, fostering knowledge and understanding about various cultures and cultural differences among their students may promote harmonious classroom interaction and overall student engagement. The study's findings may also be utilized in training programs or seminars.

For Registered Nutritionist-Dietitian. RNDs can benefit from this study because it provides information about essential competencies needed when interacting with diverse individuals or clients. Increasing their cultural knowledge and developing multicultural competencies may equip them with the skills necessary to work effectively both in community and clinical settings.

For patients/clients. The findings of the study may help patient/client(s) improve health outcomes, because an RND equipped with multicultural competencies can better understand their clients' needs, and provide tailored interventions, thus ensuring the best quality nutrition care.

Curriculum developers. This study guides them to develop a curriculum that thoroughly covers various cultures, ensuring that students receive an education that may

prepare them to work in multicultural settings. The output of this study may also be used to develop a tool or instrument for assessing the multicultural content of the curriculum.

For future researchers. This research focused on multicultural competencies that serve as a baseline for future research on global perspectives in nutrition, health, and cultural diversity, thereby extending their understanding of these topics.

Background of the Study

The demographic landscape of the Philippines has become increasingly diverse, and understanding unique cultures is empirical. In the healthcare system, this diversity challenges healthcare providers, particularly Registered Nutritionist-Dietitian (RND).

The practice of nutrition spans various settings and involves interactions with individuals or groups of people in society. While RNDs are knowledgeable about food and nutrition sciences, they must understand that advising clients on what to eat and what not to eat is not the only factor to consider when providing treatment. Thus, the nutrition and dietetics profession requires competencies in cultural aspects, as culture influences individual decisions when following treatment or recommendations.

According to Campinha-Bacote, culturally competent healthcare workers who understand and are sensitive to the needs of diverse and marginalized individuals could lead to favorable social change (Campinha-Bacote, 2018). Likewise, culturally competent healthcare providers can provide efficient services to their clients that address various cultural and social needs (Hickson, 2022). Respecting cultural differences highlights the value of multicultural competency in improving individuals' health conditions and

promoting health equality. Multicultural competence refers to an individual's ability to comprehend, engage, and appreciate cultural differences. Developing these competencies involves cultivating awareness, knowledge, and skills to enable effective interaction across cultures.

Cultural awareness is the number one step toward achieving multicultural competence. An RND must understand their culture, beliefs, values, and practices to broaden their perspectives towards others. Awareness of one's own culture and other cultures should be consistently taught in the classroom to foster better understanding during nutrition counseling. An RND deficient in knowledge of their client's uniqueness may be less effective in consultation (Ivey et al., 2017).

Furthermore, several studies reported barriers to health services, including poor communication and language issues among healthcare practitioners, clients, and their families, which may lead to dissatisfaction with their treatment (Tan & Li, 2016). Thus, cultural awareness is vital for healthcare professionals, particularly in terms of communication aspects, to recognize challenges in intercultural communication, enabling them to improve their communication skills (Kaihlanen et al., 2019).

The second component of multicultural competencies is knowledge. Multicultural knowledge is the foundation of cultural practice among healthcare students because it provides intellectual and theoretical understanding. It is about acquiring and retaining unique cultural information, such as knowledge of food practices or social interaction norms, like whether to shake hands or not (Domenech Rodríguez et al., 2022).

Multicultural knowledge focused on deep socio-linguistic and self-awareness. A nutritionist-dietitian must have broad multicultural knowledge, including an understanding of the different sociodemographic factors such as health beliefs and practices, food habits, cultural attitudes about health care, as well as physical, physiological, psychological, and biological differences among ethnic and racial groups, relevant cultural norms, values, worldviews, and practicalities of everyday life, to be able to provide patient-centered nutrition care. Charles et al. (2020) stated that the root cause of miscommunication between clients and healthcare providers is a lack of knowledge regarding the cultural background of diverse societies, which can be seen in both clinical and non-clinical settings.

The third component is multicultural skills. It emphasize the ability to interact appropriately with different cultures (Sue, 2001; Sue et al., 1982). It also includes observing, evaluating, and listening, which can be developed through cognitive competencies.

Multicultural awareness and knowledge are the vital components of multicultural skills; however, Borge et al. (2022) stated that multicultural skills, such as communication skills, are less developed than multicultural awareness and knowledge. This should not be the case, because communication skills are as important as other competencies, particularly when collaborating with a diverse community to foster a better understanding and adherence to treatment.

Today's world is composed of various cultures, and to provide quality nutrition care to those in need, RND must equip itself with the competencies essential when interacting with a diverse population. Providing culturally sensitive nutrition care is not a

simple remedy or treatment; instead, it requires a deeper understanding of how different cultural principles influence nutrition care. Thus, a Nutritionist-Dietitian with multicultural skills will be prepared to interact with individuals from varied cultural backgrounds.

BS Nutrition and Dietetics in the Philippines

The nutrition and dietetics discipline has three (3) specializations: Foodservice Management, Public Health Nutrition, and Clinical/Hospital Nutrition. Graduates of this program can choose any of these fields in their future employment. The curriculum is a 4-year program comprising professional courses and general education.

The program consists of one hundred sixty-five (165) units to finish, and the courses are categorized into general education, supportive/foundation, and professional courses. The professional courses for first-year to third-year level include Basic Foods 1 and 2, Foodservice System 1 and 2, Basic Nutrition, Research 1 and 2, Meal Management, Nutritional Assessment, Nutrition Care Process, Fundamentals of Food Technology, Nutrition in the Life Stages 1 and 2, Nutrition Therapy 1 and 2, Public Health Nutrition, and Nutrition Education. For 4th-year students, their first and second semesters are dedicated to practical experiences in community/public health nutrition, foodservice, and hospitals. Practicing the knowledge they learned in various fields (Commission on Higher Education, 2017).

The hospital dietetics practicum requires six hundred (600) hours of training. It is a practice application in a hospital setting where students are exposed to different clinical and administrative phases of hospital dietetics. The foodservice practicum is a supervised

training in foodservice establishments where students perform various foodservice tasks and services, and requires completion of three hundred (300) hours.

The community nutrition practicum is also a supervised training in the community that requires three hundred (300) hours. During the community practicum, students were required to stay in the community, with a day off per week. They were also required to participate in mini-training and workshops, nutrition intervention planning, and scheduled team activities (Commission on Higher Education, 2017).

Furthermore, the program outcomes of Nutrition and Dietetics include: (1) Promote the importance of dietetics and nutrition for people's health through educating them about their needs, resources, and capabilities as individual people, groups, and families; (2) Practice extensive nutritional care for people's overall wellness in a multidisciplinary and multicultural environment; (3) Incorporate nutrition issues in regional and nationwide environment initiatives; (4) Organize nutrition programs to a group and individual people as well as institutions; (5) Oversee hospital foodservice or other settings; (6) Implement a financially viable nutrition or dietetics related activity; (7) Design and/or carry out specific study on diet, food, and related subjects; (8) Uphold the profession's ethical norms; (9) Take part in activities that promote lifelong learning (Commission on Higher Education, 2017).

The current BS Nutrition and Dietetics program outcomes highlight the importance of collaboration between individuals and groups in the community; thus, nutrition and dietetics students must possess multicultural competency when interacting with individuals and executing nutrition activities effectively.

Bank's Five Dimensions of Multiculturalism

Multicultural perspectives are a crucial component for developing inclusive and unbiased learning environments that respect and celebrate the students' varied cultures. Dr. James A. Banks' five dimensions of multiculturalism were created to help educators integrate multicultural principles into their teaching and learning process. The dimensions include content integration, knowledge construction process, prejudice reduction, equity pedagogy, and strengthening school culture and social structure.

The first dimension is content integration. It involves integrating topics from diverse cultural backgrounds into the curriculum, including historical examples, literature, and viewpoints from various cultures (Banks & Banks, 2020; Campinha-Bacote, 2018). This approach may provide students with a broader understanding and appreciation of diverse cultures. The approach also fosters an inclusive learning environment.

Next is the knowledge construction process, which points out the need for educators to help students understand how knowledge is constructed and influenced by cultural assumptions, perspectives, and experiences (Banks & Banks, 2020). By doing this, students developed critical thinking skills and increased their awareness of varied cultures. This includes teaching students how to critically assess knowledge and identify biases and stereotypes that could affect their understanding of various cultures.

The third dimension of multiculturalism is equity pedagogy, which involves adapting teaching strategies to support the academic achievements of diverse cultures. This dimension aims to provide students equal opportunities to succeed in education, feel a sense of worth, and receive support throughout their educational journey.

Prejudice reduction is the fourth dimension, focusing on various activities and strategies educators may use to help students develop their attitudes and values towards varied cultures. This dimension entails fostering classroom environments that dispel prejudice and stereotyping, encourage respect and empathy among students, and promote positive interactions between different cultures.

The last dimension is strengthening school culture and social structure. It addresses the need to establish an inclusive and equitable school culture. It entails assessing and transforming schools' organizational structures, policies, and practices that stop discrimination and inequality. By doing so, educators can create an empowering and supportive learning climate for their students (Banks, 2015; Banks & Banks, 2020).

As schools grow more diverse, multicultural education concepts have become more important. Recognizing this need, the Bank's Five dimensions of multicultural education provides educators with a comprehensive framework for developing inclusive, egalitarian, and culturally sensitive learning environments.

Bank's Four Levels of Multicultural Integration. Multicultural education remains a continuous topic of discussion globally. Many are still searching for strategies on how it can be implemented and maintained in education. The importance of integrating multicultural components into different educational programs has been recognized primarily because it equips students with the multicultural competencies necessary for their future employment.

In content integration, instructors incorporate examples and information from many cultures and groups to demonstrate essential concepts, generalizations, and

challenges within their subject areas or disciplines. The content integration approach does not require changing the entire curriculum.

Although several educators have attempted to better integrate multicultural education into the school curriculum since the 1960s civil rights movement, many are unable to do so because there is no solid structure for integrating multicultural elements that will guide them (Banks, 2015).

Recognizing the issue, this research focused on the first level of Banks' five-dimensional model, the "content integration approach". Although the entire dimension is a comprehensive approach to multicultural education, the "content integration approach" specifically addresses the teaching and development of multicultural competency for the nutrition and dietetics students.

Integrating multicultural content may provide an opportunity to learn about and understand diverse cultures. According to Banks, there are four approaches to incorporating multicultural topics into the curriculum: contribution, additive, transformation, and social action approaches (see Figure 1). Together, they provide comprehensive strategies for integrating cultural perspectives.

Level 1. The Contribution Approach. This approach integrates cultural activities into the curriculum, for instance, holidays, special events, and heroes from varied cultures. It also emphasizes ethnic groups' lifestyles rather than the institutional barriers, such as racism and discrimination, that have a huge impact on their own lives. However, it restricts ethnic content to particular days, weeks, and months associated with ethnic celebrations (Banks, 2015). In this approach, teachers immerse students in lectures and

pageants about the honored ethnic group and its experiences during these events. The typical curriculum retains its core structure, goals, and salient qualities in this approach, which is one of the important features of this level.

Level 2. The Additive Approach. This approach is about incorporating ethnic content into the curriculum. It involves adding content, ideas, themes, and viewpoints to the curriculum without altering its core structure, objectives, or qualities. A book is frequently used to achieve the additive technique. It requires teachers' significant time, effort, training, and rethinking of the program's aims, nature, and goals. The additive approach could be the initial step in a transformative paradigm reform initiative to redesign the curriculum and integrate ethnic content and views (Banks & Banks, 2020).

Level 3. The Transformation Approach. Cultural material is introduced to the curriculum without changing its basic assumptions or structure. Students can utilize the transformation approach to eliminate ethnic or racial encapsulation and help oppressed racial, ethnic, and cultural groups to gain power. Through this approach, students can see topics, events, themes, and barriers from several ethnic perspectives (Banks & Banks, 2020).

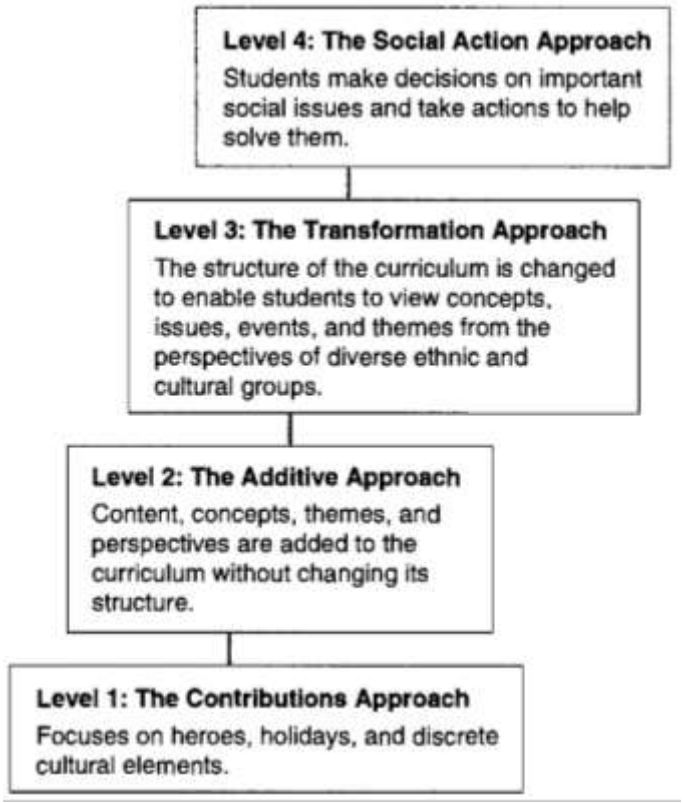
Level 4. The Social Action Approach. This method embodies all the elements of the transformation approach. It also includes components that encourage students to make decisions and perform mindful actions in resolving problems or issues. The social action approach enhances students' critical thinking ability, social action, data gathering, decision-making, and group collaboration. They are also becoming more politically aware (Banks & Banks, 2020).

Banks identified social action as the most difficult level, followed by transformative, additive, and contributing levels, implying a developmental trend of integrating multicultural information in classroom practices (Freire & Valdez, 2021). However, despite the difficulties, the approaches ensure effective teaching and learning outcomes.

The study benefits from this multicultural integration approach because it provides the researcher with a clear strategy for integrating multicultural competencies in the curriculum, which RND educators can implement in the classrooms.

Figure 1

Banks' Four Levels of Multicultural Integration



Literature Review

RND's multicultural competencies are significant for providing high-quality healthcare to a various individuals. Healthcare providers with multicultural competencies may reduce health disparities. Conversely, a lack of multicultural competency may lead to patients' breakdown of trust, misunderstandings, and poor adherence to intervention and treatment (Stubbe, 2020).

Organizations and accrediting councils on nutrition globally emphasize the value of multicultural competency, which is why they set standards of competencies for nutritionist-dietitians, such as the International Confederation of Dietetics Associations (ICDA), the Accreditation Council for Education in Nutrition and Dietetics (ACEND), and the Commission on Accreditation for Dietetics Education (CADE).

Moreover, the Partnership for Dietetic Education and Practice (PDEP) in Canada developed an integrating cultural competencies standard for registered dietitians. The competencies for dietetic practice, education, and training include the provision of culturally competent treatment and cultural knowledge (Partnership for Dietetic Education and Practice, 2013).

Integrating multicultural competencies into the curriculum may help students explore and understand different cultures, connect and interact with a diverse population (Supsiloani et al., 2021). Likewise, research suggests that cultural competency training in dietetic education may eliminate health disparities among people of diverse cultural backgrounds (McCabe et al., 2020). Additionally, implementing cultural competency in

tertiary institutions is crucial for fostering cross-cultural environments in which students and educators can understand how cultural beliefs and traditions influence professional decision-making (Cross et al., 2020).

Many efforts have been made to incorporate multicultural competencies into educational practice, but several studies have identified issues and challenges in integrating them into the curriculum. For instance, McCabe et al. (2020) reported inconsistencies in the types and methods of delivering cultural competency care within the area of nutrition and dietetics. Another challenge was that educators had limited knowledge about various cultures, resources, and training avenues (Naz et al., 2023).

Moreover, the inconsistency in integrating cultural competency and the lack of agreement on the domain of cultural competency to be included in teaching were also evident in the medical schools (George et al., 2015). In the area of counseling, an insufficiency in various cultural materials is also reported (Hack et al., 2015).

Strahley (2020) stated that, to equip students with multicultural competencies, they require more research to gain the necessary knowledge to counsel patients from diverse cultures, and when communicating with team members during planning and assessment. He also added that to strengthen students' cultural competencies, integrating cultural competencies should start in the first year and continue throughout the year levels.

The significance of cultural competence in counseling was also recognized in the College of Dietitians of Ontario, Canada. The competencies include the capacity to identify the cultural norms, values, attitudes, traditions, and health practices of varied clients. However, despite established standards and recognition of cultural competencies for

dietetic programs in Canada, students still performed poorly in the five areas of multicultural competency: knowledge, skills, awareness, attitudes, and desire (Hack et al., 2015). This emphasizes the need to consider various factors when integrating multicultural aspects into the teaching and learning process, such as teaching materials, learning approaches, and guidelines.

The world is constantly evolving and change is inevitable. With the progress of time, the need to transform or enhance the curriculum arises so that students can keep up with the changing times. Because education should prepare students for life, it should equip them with specialized abilities.

The Curriculum Models

The curriculum models are a structured framework that guides developers in designing, implementing, and evaluating programs. The curriculum models vary in many ways, but they share a common goal: to attain the intended learning outcomes and to ensure that students' educational experiences align with the objectives.

Curriculum development is a systematic process designed to improve and structure curricular content. It refers to what is taught in school. A curriculum is a series of experiences that students must go through to develop their abilities, whether these learning experiences are direct or indirect. It can also be viewed as a series of content units organized so that learning each item can be completed, assuming the learner has already mastered the competencies indicated by preceding units (Bobbitt, 1913; Romo, 2019).

Numerous scholars developed various models of curriculum based on unique perspectives and approaches. A well-known curriculum development model is discussed to provide insights into this study.

The most frequently cited curriculum model is Tyler's Behavioral model. A linear and deductive structure that moves from general to specific, and follows a sequence of procedures from goal selection to learning experiences, and assessment. The model is also prescriptive because it suggests what should be done, like many curriculum developers do.

The logical basis of Tyler's model is stated in four (4) inquiries, and it must be answered when developing a curriculum: "What educational goal should the school seek to achieve?", "What educational experiences can be given to fulfill these purposes?", "How can these educational experiences be properly organized?", and "How can we determine whether purposes are being achieved?" (Maheshwari, 2015; Romo, 2019). These inquiries are a meaningful learning process, and being educated should not be limited to merely knowing facts (Maheshwari, 2015). Thus, education is not just recalling information; it should also involve problem-solving, critical thinking, and application of knowledge in meaningful ways.

Organizing learning experiences according to Tyler's model required three (3) main criteria in constructing educational experiences: (1) Continuity in learning, as students' progress, they will have the opportunity to assess knowledge and skills in greater depth; (2) The sequence of content, to which learning experiences will be provided to students based on their level of development, and (3) Integration. Integrating the learning

experience into the curriculum should be functional and useful in attaining its objectives, and it should be obtained from other areas. Learning experiences can be organized vertically and horizontally.

Furthermore, the curriculum evaluation of Tyler's model involves two assessments. The first is to determine if the students' behavior has changed in line with the specified educational goals, and the second assessment should ideally use more than one assessment tool at a given time.

Moreover, the fundamental structure of Tyler's curriculum model neglects the connections between the different aspects of the curriculum. Thus, another curriculum model was created to address the shortcomings of Tyler's model. David K. Wheeler, a British researcher and educator, developed Wheeler's model. A curriculum design that is cyclical and aims to assist educators in creating and implementing dynamic curricula. Wheeler's model emphasizes the crucial need for real-world learning experiences and critical thinking skills as applied within the curriculum to improve students' learning and engagement.

Wheeler's model consists of five stages. The first stage of the model concerns formulating aims, goals, and objectives as the desired outcomes for the students. The second stage is selecting a learning experience, which refers to activities, interactions, subject matter, or topics, and other learning materials designed to achieve the curriculum's goals. Selecting and integrating subjects is the third stage of the model, including choosing topics or content relevant to the curriculum's aims, goals, and objectives. This stage is

crucial because it guides educators to stay within the curriculum and not exceed beyond what is required of them (Owen, 2023).

The fourth stage of the model is organizing selected learning experiences in sequences based on the students' readiness, and the final stage focuses on assessing the effectiveness of the curriculum to determine whether the set objectives have been achieved. This action can be conducted by collecting data, feedback, and analysis, which leads to revising the curriculum for continual improvement and adaptation to a changing world. Furthermore, the model also emphasizes the interdependence of multiple aspects of the curriculum (Owen, 2023). Wheeler's model reinforces the interconnections of various curriculum elements, emphasizing that each component influences the others. Using this model may begin at any stage.

Moreover, another curriculum model, widely used by many schools, is Taba's model, developed by Hilda Taba. The curriculum model inspires new ideas in developing curricula (Hunkins & Hammill, 1994). The model is a modified version of Tyler's model. It is non-linear compared to Tyler's model. Tabas' model is summarized into seven (7) procedures: (1) diagnosis of needs; (2) formulation of objectives; (3) selection of content; (4) organization of content; (5) selection of learning experiences; (6) organization of learning experiences; (7) determination of what to evaluate and ways and mean of doing it (Romo, 2019).

The Taba curriculum model is beneficial in determining the aim of learning because it applies a grassroots approach. The grassroots approach emphasizes the involvement of teachers rather than academic administrators in developing the curriculum. The

model proposed that teachers must participate in creating the curriculum from the beginning to the end, and ensure that the components of teaching methods are best suited for the students (Papakitsos, 2016). Additionally, to provide effective and meaningful learning, teachers should select appropriate learning content and arrange it in a logical and intended order, considering students' developmental stage, individual needs, and academic progress.

The curriculum models presented in this study can be useful in developing a curriculum framework. The Tylers' model is a systematic approach that defines clear educational objectives and aligns them with relevant learning experiences. Taba's curriculum model emphasizes the crucial needs of evaluation and inductive reasoning, which can be employed through identifying the particular needs of diverse clients. Wheeler's cyclical model emphasizes the iterative nature of the curriculum and its need for continuous evaluation and improvement.

Tyler, Taba, and Wheeler's curriculum models are all rational and logical approaches; they explain a way to seek what is desirable in learning and outline the steps involved in the learning process. The curriculum models make a substantial contribution to the development of a curriculum framework for the BSND program, ensuring that it is responsive and relevant to the learners' needs.

The Curriculum Integration Process

The integration process was rooted in constructivist theories of education, which facilitate learning opportunities driven by students' interests connected to real-world situations. For many years, content integration across courses has been a popular educational

innovation (Michigan Department of Education, 2017). The concept of curriculum integration has gained significant attention in education because it provides students with a deeper and meaningful learning experience (Banks & Banks, 2020).

According to Beane (2016). The traditional education model is often inadequate for preparing students for this increasingly globalized world. Curriculum integration is designed to be sensitive to students' needs. It is a process that combines various subjects or topics and learning experiences, making learning more cohesive and relevant. Likewise, integration also entails relationships between different subject areas, content, and skills (Banks & Banks, 2020).

Curriculum integration has four (4) aspects: (1) Experiences integration. It refers to integrating the present and past experiences to promote new learning; (2) Social integration, which happens when students from various cultural backgrounds participate by sharing common educational experiences; (3) Knowledge integration, which occurs when concepts from different content areas are incorporated by concentrating on specific issues; and (4) Curriculum design integration, highlighting project-oriented learning and various knowledge application (Beane, 2016). It can be done in many ways, from simple topic areas connecting two or more other topic areas to a very intricate representation where topics are combined into one interdisciplinary course.

Studies reported that students exposed to multicultural education achieved higher academic performance, gained deeper learning, and enhanced engagement in real-world situations (Nieto, 2017). Likewise, it enhances the students' cultural competence, comprehension, and builds confidence in serving diverse populations (Huda et al., 2021).

Furthermore, the integration process has been shown to support the 21st-century skills of students, such as critical thinking, problem-solving, collaboration, creativity, and communication, which are significant in this diverse world (Banks, 2015; Banks & Banks, 2020; Beane, 2016).

The wide range of benefits of integrating multicultural education into the curriculum also faces challenges, such as issues in the curriculum design, current materials, teaching strategies, inconsistency in integration, and educators' lack of training to teach multicultural education (Hack et al., 2015; McCabe et al., 2020; Naz et al., 2023). Likewise, agreement on what cultural domain should be included in teaching is insufficient (George et al., 2015; Liu et al., 2022).

Various strategies have been proposed to address these challenges, including educators' professional development, which emphasizes cultural competence and inclusive instructional practice. Moreover, the curriculum design should be culturally relevant (Ladson-Billings, 2014). Providing a guideline for curriculum integration may help educators organize their culturally relevant teaching topics. In this case, learners may explore cultures in various ways that may relate to their world and others.

Synthesis

The increasing diversity of populations requires a culturally sensitive educational approach for learners, particularly in the nutrition and dietetics program. The related literature highlights the significance of RNDs' multicultural competencies in delivering culturally sensitive nutrition care to diverse clients (Cross et al., 2020; McCabe et al., 2020; Strahley, 2020; Supsiloani et al., 2021).

Many organizations, accrediting councils, and agencies in nutrition recognize the value of multicultural competencies (Accreditation Council for Education in Nutrition and Dietetics (ACEND), 2022; Partnership for Dietetic Education and Practice, 2013). However, reported studies have shown that RNDs and nutrition students lack multicultural competencies in delivering nutrition care to diverse clients (Ferrero et al., 2023; Hack et al., 2015; Jager et al., 2020; Joy & Numer, 2018; Knoblock-Hahn et al., 2010).

Many efforts have been made to integrate multicultural contexts in the curriculum; however, some issues and challenges have been reported, such as inconsistency in the integration of competencies in teaching, educators deficient in cultural knowledge, limited learning resources, and training for the educators (Hack et al., 2015; McCabe et al., 2020; Naz et al., 2023). Additionally, there is a lack of agreement on cultural domains that should be included in teaching (George et al., 2015; Liu et al., 2022).

The curriculum model of Tyler, Taba, and Wheeler presented a unique yet complementary strategy for curriculum development. Tyler's linear model is a deductive approach focused on objectives, targeted experiences, and assessment, ensuring an organized and goal-oriented strategy (Maheshwari, 2015). On the contrary, the inductive model of Taba prioritizes the learners' needs, fostering a more responsive and flexible curriculum (Hunkins & Hammill, 1994). The cyclical model of Wheelers emphasizes the interrelation of curriculum elements, fostering continuous evaluation and improvement (Owen, 2023). Each curriculum model has strengths and weaknesses; at the same time, they collectively offer a systematic design that promotes a meaningful learning experience to the learners.

The integration process was rooted in constructivist theories of education, which facilitate learning opportunities driven by students' interests connected to real-world situations and designed to meet the students' needs. The four aspects of curriculum integration are experience, social, knowledge, and curriculum design integration (Beane, 2016).

Curriculum integration can be accomplished in several ways, from simple topic areas to connecting two or more topics to an intricate representation in which topics are combined into an interdisciplinary course. The integration process has been shown to support the learners' 21st-century skills, which are vital in this diverse world. Also, it enhances students' cultural competence and comprehension (Taylor, 2020)

Integrating multicultural education into the curriculum brings a wide range of benefits; however, Ladson-Billings (2014) highlights challenges in implementation. To address these challenges, various strategies have been proposed, including educators' professional development emphasizing cultural competence, inclusive instructional practices, formulation of curriculum integration guidelines, and curriculum design based on the students' needs.

Theoretical Framework

The development of this study was influenced by the Multicultural Counseling Competency (MCC) model, the Social Efficiency Theory, and the Constructivist Theory. The Multicultural Counseling Competency model, developed by Sue et al. in 1982, defines multicultural counseling competence as awareness, knowledge, and skills to work

effectively with people from diverse backgrounds (Shi & Carey, 2021; Sue, 2001; Sue et al., 1982).

The main focus of awareness is on examining one's culture, values, and biases, and how these affect other people's opinions (Sue, 2001; Sue et al., 1982). Self-reflection and the capacity to evaluate one's values and views on different cultures are essential for awareness development. One can better accept differences with others once they are conscious of and willing to question personal biases. Sue (2001) affirms that counselors must be knowledgeable about different cultures, beliefs, and traditions to work effectively with various communities. They also need to be aware of their own culture, beliefs, attitudes, and the social environment in which their clients live.

The concept of knowledge is actively learning the values, beliefs, customs, practices, and experiences of others from various cultures. A person must be aware and knowledgeable of the cultures surrounding healthcare and the inherent values that could affect interactions with people from other cultures (Sue, 2001; Sue et al., 1982).

The skills focus on a person's ability to interact effectively with diverse cultures. These include effective communication, recognizing biases, respecting and understanding food practices, collaborating, and tailoring dietary interventions. Additional skills are being comfortable and competent with a wide range of therapeutic modalities, having the capacity to accurately and appropriately send and receive verbal and nonverbal communication, and being skillful in advocating for their client when appropriate (Sue et al., 1982).

To collaborate effectively with various ethnic groups, one must be willing to learn and improve multicultural competencies. Hulteng (2022) stated that the MCC components of awareness, knowledge, and skills may provide an excellent theoretical framework for fostering cultural competence.

Additionally, the Social Efficiency theory emphasizes that educators should use scientific methods in curriculum development to determine the objectives that the students need to learn and become productive contributors to society. The scientific methodology of Social Efficiency theory includes identifying the subject matter, explaining why it needs to be studied, how students intend to understand it, what books are required for reading, and the activities they will be undertaking (Alanazi, 2017). Educators focus on helping their students acquire the skills essential for interacting with society. Thus, educators control the students' learning (Alanazi, 2017). The Social Efficiency theory aims to educate students in the competencies required in their future workforce (Schiro, 2008).

The Constructivist theory proposes that students actively develop knowledge through interaction and experience with their surroundings, rather than passively assimilating external influences. Constructivist theory emphasizes student-centered approaches where learners take ownership of their learning experiences as they progress through a program or course. It promotes critical thinking, collaboration, reflection, and exploration as vital elements of success in today’s education system. In this theory, students actively participate in attaining information (Bada, 2015). Likewise, Steffe and Gale (1995) point out that learning is not limited to automatic stimuli but a procedure that requires self-

direction and cognitive structure, which may be developed through conceptualization and reflection.

The theories outlined provide a strong foundation for this study. The Multicultural Counseling Competency (MCC) Model emphasizes the significance of awareness of one's culture and that of others, gaining knowledge, and developing skills in cultivating respect, empathy, and effective communication in cultural settings. This will be useful for future RNDs in tailoring the nutritional needs of different cultures within the community. Social Efficiency theory highlights the importance of developing students' knowledge and skills to interact effectively with diverse cultures. The Constructivist theory emphasizes experiential learning for students by engaging them in simulations and hands-on experiences in a real-world setting.

Thus, both theories emphasize the importance of teaching students the competencies vital to raising them as adults. Together, these theories make an important contribution to enhancing multicultural competencies, improving cultural communication, fostering inclusivity, and equipping students with knowledge and skills vital to succeed in this diverse world.

Conceptual Framework

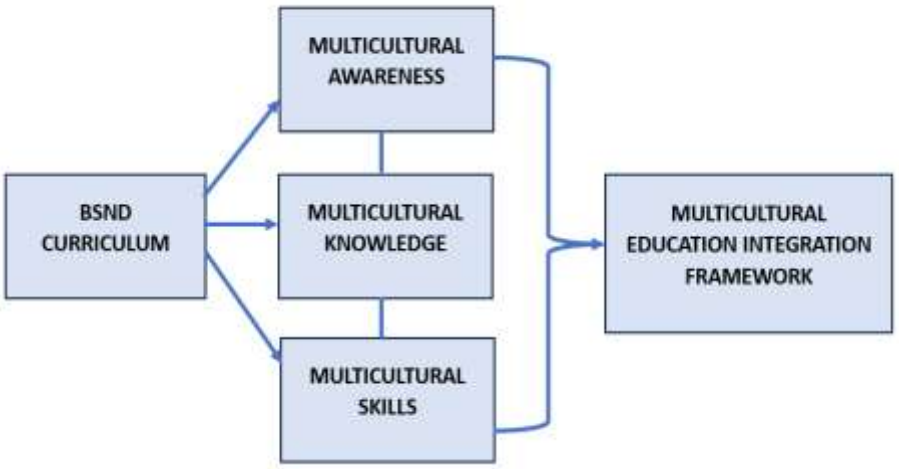
The conceptual framework served as a blueprint for this study. It outlined the variables investigated and described how these variables interacted. Also, the framework helped provide meaning to the study derived from social constructs created by experiential participants (Huberman & Miles, 2002).

This study employed a mixed-method design. It assessed the participants' perceived multicultural competencies awareness, knowledge, and skills, which are important competencies in the healthcare system (Deardorff, 2009; Sue, 2001; Sue et al., 1982). Awareness refers to understanding and being sensitive to varied cultural backgrounds. Knowledge encompasses information about various cultures, including dietary practices and nutrition-related health disparities, as well as skills that enable effective communication and engagement across different cultural backgrounds.

Followed by assessing the extent of multicultural education competencies: awareness, knowledge, and skills, in the context of the current BSND curriculum. The research output was the developed multicultural education integration framework for the BSND Curriculum (see Figure 2).

Figure 2

Conceptual Framework of the Study



Research Problems

The world is becoming increasingly interconnected, and understanding and respecting diverse cultural practices when providing nutritional interventions is crucial to RNDs. Multicultural competencies, including awareness, knowledge, and skills, are critical for effective nutrition practice. Several studies reported significant gaps in multicultural competencies among entry-level RNDs and nutrition and dietetics students, as well as the multicultural aspects of the nutrition and dietetics curriculum, as reported by Hack et al. (2015), Accreditation Council for Education in Nutrition and Dietetics (2022) Douglass et al. (2020), Ferrero et al. (2023), and Jager et al. (2020). Additional gaps presented in this study include limited research on integrating multicultural competencies in nutrition and dietetics abroad (O'Donovan et al., 2022) and in the Philippines.

Thus, the general objective of this study is to develop an integration framework, particularly a multicultural education integration framework for the BSND curriculum. The developed framework may guide educators in integrating multicultural competencies into their teaching. Through this framework, students can be equipped with the multicultural competencies needed for providing culturally responsive nutrition care to people from diverse backgrounds.

Hence, to shed light on this study, the following questions are sought to answer:

1. What are the multicultural competencies of the Registered Nutritionist-Dietitian (RND) practitioners in terms of?

    1.1 Awareness

1.2 Knowledge

1.3 Skills

2. What is the extent of integration of multicultural education competencies in the context of the BSND curriculum?
3. How do RND educators perceive multicultural competencies within the BS Nutrition and Dietetics curriculum?
4. What multicultural education curriculum integration framework may be developed for the BSND program?

Definition of Terms

The terminologists listed below are particular to this research to provide a common understanding and clarity of the key concepts in this study, eliminate confusion, and provide an accurate foundation for analyzing the findings and discussions within the study. The following terms were operationally defined:

BSND Curriculum

The Bachelor of Science in Nutrition and Dietetics (BSND) curriculum is a 4-year degree program with three areas of specialization: Foodservice, Hospital, and Community/ Public Health. The curriculum was made to equip students with the skills vital to work in various settings. Graduate students from this program who passed the licensure exam for nutrition and dietetics are called Registered Nutritionist-Dietitian (RND).

Multicultural Education

A transformative approach to teaching and learning that highlights the integration of multicultural competencies, awareness, knowledge, and skills across the Nutrition and Dietetics curriculum. Its goal is to equip ND students with the multicultural competencies necessary to provide quality nutrition care to various cultures.

Multicultural Competencies

Refer to the awareness, knowledge, and skills that RNDs need to deliver nutrition care effectively to diverse cultural backgrounds.

Multicultural Awareness

Awareness of one's own and others' cultural views, beliefs, and values.

Multicultural Knowledge

It provides the documentation and factual information required to move beyond awareness and toward successful and appropriate transformation.

Multicultural Skills

A person's skills and ability to engage effectively with diverse cultural backgrounds (Sue, 2001).

Integration Framework

It is a structured framework for integrating multicultural competencies awareness, knowledge, and skills into the curriculum, grounded in the Bank's four levels of integration. It is presented in a circular layered design to convey that developing multicultural competencies is a continuous cycle and interconnected process of learning and growth.

The framework integrates theoretical foundations and fosters the inclusion of culturally responsive nutrition care.

Chapter 3

Results and Discussion

This chapter presented the results and discussed the findings. The comprehensive findings not only answered the research questions but also fulfilled the study's general purpose.

Results

The results of this study were presented in detail, highlighting significant findings in light of the research questions.

To answer the statement of the problem number 1: What were the multicultural competencies of the registered Nutritionist-Dietitian practitioners as identified in this study?

Twenty-five (25) RND participants answered the closed-ended question. The instruction was to write the multicultural competencies they perceived as significant to the profession. The data revealed the following results: Based on the three categories, four (4) multicultural awareness, six (6) multicultural knowledge, and ten (10) multicultural skills were identified.

The four (4) multicultural awareness competencies identified are: customs and traditions. These competencies gained the highest percentage (47%), followed by values (32%), cultural environment (17%), and lifestyles (4%). Among the multicultural awareness competencies identified by the participants, customs and traditions scored the

highest percentage, indicating that many participants value multicultural awareness of their own and other customs and traditions. Customs are widely recognized and accepted within a specific culture. This may include day-to-day manners, diets, rituals, or social norms, whereas tradition is a belief or practice; it may comprise customs but is wider in scope. Tradition frequently involves historical or symbolic significance. Both custom and tradition play a critical role in maintaining a self-identity.

While many RND participants recognized the importance of multicultural awareness of their customs and traditions, other participants also recognized multicultural awareness of values. Awareness of the values of various cultures leads to respecting individual differences and sociocultural awareness. It is closely related to fundamental procedures that shape an individual's identity (Lindgreen et al., 2019), preferences, and decision-making regarding healthcare. Furthermore, understanding the surroundings and lifestyles of various cultures is as important as being aware of customs, traditions, and beliefs, since it influences the client's behavioral change during nutrition counseling and education.

Awareness competency is defined as examining one’s culture, values, and biases, and how these affect other people’s opinions (Sue et al., 1982). Developing awareness should begin with self-reflection and evaluation of one's values and views. One can accept differences with others once they are conscious of and willing to question personal biases (Moore, 2023).

With regards to multicultural knowledge, six (6) competencies were revealed, namely religious practices (40%), cultural and international language (6.0%), socio-

demographics in the community (6.0%), regional foods (22.0%), health beliefs and practices (13%), and dietary practices (13.0%). Knowledge of religious practices is the most common response, gathering forty percent (40%).

Cultural knowledge is acquired through a strong educational foundation of other cultures (Campinha-Bacote, 2018). Many participants recognized Knowledge of religious practices as a significant competency for RNDs, particularly when planning a diet for clients from different cultures. For instance, in the Islamic religion, there are several restrictions, such as dietary practices, privacy, modesty, and touching (Attum et al., 2023). Additionally, other symbolic foods, such as grains and fruits, are associated with religious traditions and may hold importance during special religious ceremonies. Knowledge of various cultural aspects may allow practitioners to achieve respect from one another (Liang et al., 2021).

Multicultural skills refer to an individual's competencies in interacting effectively with other cultures. They develop from awareness and progress to a deeper understanding of various multicultural aspects. Nine (9) multicultural skills are identified by the participants, from highest to lowest percentage of responses including effective communication with twenty-four percent (24.0%) responses, respect for diversity with fifteen percent (15.0%), collaboration, and adaptability/openness to change in the third spot at thirteen percent (13.0%), compassion and research-oriented gathered seven percent (7.0%) responded, responsive to the needs and, critical thinking both earned five percent responses (5.0%) and empathy garners the lowest percentage with four percent (4.0%).

Multicultural skills focus on a person's ability to engage effectively with diverse cultural backgrounds. Likewise, Sue et al (1982) emphasized that multicultural skills are being comfortable and competent in interacting with diverse cultural backgrounds, as well as having the capacity to accurately and appropriately send and receive verbal and nonverbal communication. Consequently, patients from different cultures often experience communication issues, specifically if social and cultural distinctions are not fully understood and accepted (Betancourt et al., 2003).

RNDs are involved in activities requiring effective communication skills for collaboration during program planning. Collaboration skills mean working together to achieve a common goal. Through collaboration, students' knowledge and skills learned in school were used with proper communication. Indeed, without effective communication, collaboration is not possible.

Overall, participants recognized various multicultural competencies vital to their profession, particularly multicultural skills, gaining the highest recognition. However, multicultural awareness received the lowest recognition, while multicultural knowledge gained moderate recognition based on the identified responses. The results were summarized in Table 3.

Multicultural competency is a dynamic and continuous process that promotes constructive interactions and connections across various cultural barriers. RND practitioners must explicitly utilize cultural awareness, knowledge, and skills, and adopt an other-oriented stance to benefit the individual's health outcomes and quality of life (Campinha-Bacote, 2018).

Culture influences people's way of life and the way individuals behave. Even though each person has unique differences, they also share similarities. Hence, in the context of a multicultural society, the existence of cultural diversity must be respected (Atmarizon et al., 2020).

Multicultural competencies embody a set of awareness, knowledge, and skills that equip professionals to perform effectively in cross-cultural settings (Cross et al., 2020). With these three key components, students may engage more effectively in culturally diverse settings, establishing inclusive, productive, and respectful relationships across cultural differences (Sue, 2001). We live in a diverse society, and understanding the differences can be achieved through multicultural competency that promotes inequalities.

Table 3

Multicultural Competencies of the RND Practitioners

	Multicultural Competencies	Responses (%)
Awareness		
	Customs and traditions	47.0
	Lifestyles	4.0
	Values	32.0
	Cultural environment	17.0
Knowledge		
	Religious practices	40.0
	Cultural and international language	6.0
	Socio-demographics in the community	6.0
	Regional foods	22.0
	Health beliefs and practices	13.0
	Dietary practices	13.0
Skills		
	Effective communication	24.0

Multicultural Competencies	Responses (%)
Collaboration	13.0
Adaptability/Open to change	13.0
Responsive to the needs	5.0
Respect diversity	15.0
Empathy	4.0
Critical thinking	5.0
Compassion	7.0
Research oriented	7.0

For the statement of the problem number 2: What is the extent of integration of multicultural education competency in the context of the BSND curriculum? After collecting and analyzing the quantitative data, the results were transferred to another research instrument, the curriculum heat map, as seen in Table 4. Utilizing a heat map for this study provides better visualization and interpretation of the generated patterns. The curriculum heat map was color-coded with corresponding numbers and interpretations, such as Yellow (3) Quite Integrated, Green (2) Sometimes Integrated, and Red (1) Never Integrated.

Table 4

Heat Mapping on the Extent of Integration of Multicultural Education Competency in the Context of the BSND Curriculum

Teaching Areas	Professional Courses														
	1st Year			2nd Year							3rd Year				
	Basic Foods 1	Basic Foods 2	Basic Nutrition	Meal Management	Nutrition Assessment	Nut. in the Life Stages 1	Nut. in the Life Stages 2	Nutrition Care Process	Fundamentals of Food Technology	FSS 1	Nutrition Therapy 1	Public Health Nutrition	FSS 2	Nutrition Education	Nutrition Therapy 2
A. Multicultural awareness (Reflecting one's own culture) Be aware of:															
One's values, cultures, and beliefs	3	3	3	3	2	2	2	1	1	1	2	2	1	3	2
Techniques for reducing prejudice and stereotyping of others	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Awareness of the difficul-ties associated with cross-cultural communication	1	1	1	3	2	2	2	1	1	1	3	2	1	3	3
Health disparities in healthcare	1	1	1	1	1	1	1	3	1	1	1	2	1	2	1
B. Multicultural knowledge Knowing of the:															

Teaching Areas	Professional Courses														
	1st Year			2nd Year							3rd Year				
	Basic Foods 1	Basic Foods 2	Basic Nutrition	Meal Management	Nutrition Assessment	Nut. in the Life Stages 1	Nut. in the Life Stages 2	Nutrition Care Process	Fundamentals of Food Technology	FSS 1	Nutrition Therapy 1	Public Health Nutrition	FSS 2	Nutrition Education	Nutrition Therapy 2
Definition of a multicultural society	1	1	1	2	1	1	1	2	1	1	1	3	1	3	2
Multicultural society's views (culture, ethnicity, race, gender, and sociodemographic)	1	1	1	1	2	2	2	2	1	1	1	1	1	3	3
Religious dietary restrictions (Buddhism, Christianity, Hinduism, Jainism, Judaism, Mormonism, Islam, etc.	3	3	3	3	1	3	3	2	1	1	1	2	1	2	2
Traditional foods during events or celebrations	3	3	3	3	1	1	1	1	2	1	1	1	1	1	1
Food patterns, habits, and preferences	2	1	2	2	1	2	2	1	1	2	1	1	2	2	2
Names of regional foods and dishes	2	2	1	2	1	1	1	1	2	2	1	1	2	1	1
Availability and accessibility of foods in the region or community	2	1	2	2	1	1	1	1	2	2	1	1	2	1	1

Teaching Areas	Professional Courses														
	1st Year			2nd Year							3rd Year				
	Basic Foods 1	Basic Foods 2	Basic Nutrition	Meal Management	Nutrition Assessment	Nut. in the Life Stages 1	Nut. in the Life Stages 2	Nutrition Care Process	Fundamentals of Food Technology	FSS 1	Nutrition Therapy 1	Public Health Nutrition	FSS 2	Nutrition Education	Nutrition Therapy 2
Selecting, preparing, and storing foods in a cultural setting.	3	3	2	3	1	1	1	1	3	2	1	1	2	2	1
Health beliefs and practices	1	1	1	2	2	2	2	1	1	1	3	3		2	2
Verbal and non-verbal communication	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1
Nutritional health issues of each culture	1	1	1	1	1	2	2	2	2	1	1	1	1	2	1
Laws protecting against health disparities															
Republic Act no. 11223 or the “Universal Health Care Act (UHC) of 2019	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1
Republic Act No. 11036: The Mental Health Act	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Republic Act No. 8371: The Indigenous People's Rights	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Teaching Areas	Professional Courses														
	1st Year			2nd Year							3rd Year				
	Basic Foods 1	Basic Foods 2	Basic Nutrition	Meal Management	Nutrition Assessment	Nut. in the Life Stages 1	Nut. in the Life Stages 2	Nutrition Care Process	Fundamentals of Food Technology	FSS 1	Nutrition Therapy 1	Public Health Nutrition	FSS 2	Nutrition Education	Nutrition Therapy 2
Republic Act No. 7277 Magna Carta for Disabled Persons	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Anti-Discrimination Act 2017	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C. Multicultural Skills Have the ability to:															
Facilitate collaboration in the community.	1	1	1	1	2	1	1	2	1	1		3	1	3	2
Demonstrate respect for cultural beliefs during nutrition counseling practice.	1	1	1	1	2	1	1	3	1	1	3	3	1	3	1
Practice critical thinking skills when interpreting viewpoints from other cultures.	1	1	1	1	2	1	1	3	1	1	1	3	1	3	3
Practice openness to one's opinion and avoid criticism	1	1	1	1	3	1	1	3	1	1	3	2	1	2	2
Creating nutrition education programs, interventions,	1	1	1	1	2	1	1	2	1	1		2	1	2	1

Teaching Areas	Professional Courses														
	1st Year			2nd Year							3rd Year				
	Basic Foods 1	Basic Foods 2	Basic Nutrition	Meal Management	Nutrition Assessment	Nut. in the Life Stages 1	Nut. in the Life Stages 2	Nutrition Care Process	Fundamentals of Food Technology	FSS 1	Nutrition Therapy 1	Public Health Nutrition	FSS 2	Nutrition Education	Nutrition Therapy 2
and instructional materials for a diverse society.															
Communication skills in a multicultural society	1	1	1	1	2	1	1	2	1	1	2	2	1	2	2
Plan and prepare foods according to a multicultural setting	1	1	1	3	2	1	1		2	1	1	2	1	1	1
Conduct research on ethnic or cultural groups about nutritional issues, eating practices, and beliefs.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Legend: Yellow color (3) =Quite Often Integrated; Green color (2) = Sometimes Integrated; Red color (1) = Never Integrated.

The data demonstrated varying levels of integration of multicultural competencies across professional subjects in the BSND curriculum. For multicultural Awareness, such as awareness of one's values, cultures, and beliefs, the green color dominates in the heat map which means that it was "sometimes integrated" by many participants into their teaching, particularly in the second and third-year level courses such as Nutritional Assessment, Nutrition in the Life Stages 1 and 2, Nutrition Therapy 1 and 2 and public health. Moreover, responses "quite often integrated" (yellow color) were revealed, particularly in the first and third-year courses.

When it comes to being aware of techniques in reducing prejudice, and stereotyping of others; awareness of the difficulties associated with cross-cultural communication; and health disparities in healthcare, many participants responded that they "never integrated" these competencies into their teaching, however, a few participants responded with varying degrees of integration such as "sometimes integrated" (green), and "quite integrated" (yellow) were reported.

The findings showed that while multicultural awareness was integrated into various courses, the integration revealed inconsistency. Generally, multicultural awareness competencies were "not integrated" into participants' teaching, particularly in awareness of techniques for reducing prejudice and stereotyping others.

The integration of multicultural knowledge competencies regarding the definition of a multicultural society and views was "never integrated" (red) into the first-year courses. In second-year and third-year courses, this competency was "sometimes integrated" (green) and was "quite often integrated" by a few participants into their teaching.

Regarding knowledge of the religious dietary restrictions, many participants "quite often integrated" (yellow) this competency into their teaching, particularly in courses such as Basic Foods 1 and 2, Basic Nutrition, Meal Management, and Nutrition in the Life Stages 1 and 2. It was "sometimes integrated" (green) into courses such as Nutrition Care Process, Public Health Nutrition, Food and Nutrition Research 1, and Nutrition Education. However, in the remaining courses, it was "never integrated" (red) into teaching.

Moreover, the competency of knowledge of traditional foods during events or celebrations was "quite often integrated" into all courses of the 1st-year level, as indicated by the color yellow, "sometimes integrated" (green) into the course of Fundamentals of Food Technology, and was "never integrated" (color) into the rest of the courses in the curriculum.

Regarding knowledge of food patterns, habits, and preferences, the colors red and green were observed in the curriculum heat map. The prominent green color as presented in the curriculum heat map indicated that more participants "sometimes integrated" this competency into their teaching, outnumbering the red color, which represented "not integrated". Likewise, two colors, "red" and "green," were also revealed in the knowledge competency regarding the names of regional foods, dishes, and the availability and accessibility of food in the region or community. These findings demonstrated that the competency was "never" and "sometimes" integrated in teaching. However, the majority of the respondents had "never integrated" the competency into their teaching.

Whereas, in the competency of selecting, preparing, and storing foods in a cultural setting, and knowledge of health beliefs and practices, most participants had “never integrated” (red) these competencies, with a few participants indicating that they “quite integrated” (yellow) and “sometimes integrated” (green) them into their teaching.

Furthermore, verbal and non-verbal communication competency was “sometimes integrated” (green) into two courses, Nutrition Therapy 1 and Nutrition Education, but was “not integrated” (red) by most participants into the other professional courses. The result, “never integrated” by most participants, was also shown in the multicultural knowledge competency of the nutritional health issues of each culture.

For Laws Protecting Health Disparity: R.A. no. 11036, The Mental Health Act; R.A. no. 8371, The Indigenous People's Rights; R.A. no. 7277, Magna Carta for Disabled Persons, and Anti-Discrimination Act 2017, the majority of the participants had “never integrated” (red) the competency into the professional courses of BSND. Although knowledge of R.A. no. 11223 or the “Universal Health Care Act (UHC) of 2019 was “never integrated (red) as responded by the majority of the participants, a few participants responded “sometimes integrated” (green) the competency specifically in the Public Health Nutrition course.

As presented in the curriculum heat map, a well-established integration of knowledge competency in religious dietary restrictions and traditional foods associated with events or celebrations was observed at the first-year level. However, regarding knowledge competency in laws protecting health disparities, most participants had “never integrated” these competencies into their teaching. As with multicultural awareness, the

overall integration of multicultural knowledge competencies revealed inconsistency, with most competencies being “not integrated”.

Whereas findings for multicultural skills competencies, such as facilitating collaboration in the community, showed that most responses were “not integrated” (red) among professional courses. However, it was “sometimes integrated” (green) into the courses of Nutrition Assessment and Nutrition in Life Stages 1 and 2, and “quite often integrated” into Public Health Nutrition and Nutrition Education. Likewise, demonstrating respect for cultural beliefs during nutrition counseling practice, the frequent response was “not integrated”; however, it was “sometimes integrated” into Nutritional Assessment and “quite often integrated” into four courses, such as Nutrition Care Process, Nutrition Therapy 1, Public Health Nutrition, and Nutrition Education.

Moreover, regarding critical thinking skills when interpreting points of view from other cultures, this competency was “sometimes integrated” into Nutrition Assessment and “quite often integrated” into Nutrition Care Process, Nutrition Education, and Nutrition Therapy 1 and 2.

The competencies practice openness to one’s opinion and avoiding criticism, creating nutrition education programs, interventions, and instructional materials for a diverse society, communication skills in a multicultural society, planning and preparing foods according to multicultural settings, and conducting research on ethnic or cultural groups about nutritional issues, eating practices, and beliefs, were generally “not integrated” (green) as a respond by many participants of the study. Overall, the multicultural skills

result of the study, as shown in the curriculum heat map, visualized poor integration or "not integrated".

In summary, as viewed in the curriculum heat map, the extent of integration of multicultural education competencies in the BSND curriculum indicated that most competencies were "not integrated" into the entire curriculum. Although multicultural competencies were evident in some courses, inconsistencies and a lack of continuity in the integration into participants' teaching were observed. These findings of the study also correspond with the assessment conducted by Hack et al (2015) and Knoblock-Hahn et al. (2010).

Additionally, participants were interviewed to explore the depth of the study in answering the statement of problem number 3: How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum? The interview resulted in four (4) significant emergent themes and nine (9) subthemes as presented:

Theme 1: Multicultural Competencies Towards Nutrition Care

The components of multicultural competency are multifaceted. A broad understanding of multicultural competencies is important to students because it may serve as a foundation for providing effective, fairly comprehension, and assist those in need from different cultures. The interviews with the participants highlighted several key aspects of multicultural competencies vital for effective interaction with various cultural backgrounds. Three (3) sub-themes emerged from this theme, including multicultural awareness, knowledge, and skills.

Sub-Theme 1: Multicultural Awareness. Competencies in awareness of cultural views, values, and beliefs provide a significant impact when working with various clients. Awareness of one's culture is the initial requirement for providing accurate opinions, attitudes, and assumptions. If awareness is disregarded, knowledge and skills may be based on incorrect assumptions.

Participants were asked about their understanding of multicultural competency. Almost all participants agreed that it's about an awareness of one's own and other cultures. For instance, "P1" mentioned, "multicultural competency is awareness of the differences of various cultures. Similarly, "P12" also mentioned, "multicultural competency is about awareness not only of their own culture but others as well."

Additionally, "P2" explained that "we have different cultures, and we should not argue with the beliefs of one another. That is why we should be aware of other cultures. "Participant 7" explained that to foster multicultural awareness, "we should provide an introduction to each culture and the origins of each belief. It is about awareness of the multi-cultural dimension in the Philippines".

RND participants emphasized their understanding of multicultural competencies, with the majority indicating that it involves awareness of one's own culture and others. This perspective underscored that multicultural awareness is one of the competencies essential when dealing with diverse societies. Furthermore, to become culturally competent, RNDs must examine their cultural identity as a preliminary step in understanding and respecting varied cultures. Understanding the client's cultural background may facilitate building rapport and trust with the healthcare providers (Harris, 2022).

Sub-Theme 2: Multicultural Knowledge. In multicultural contexts, knowledge provides the documentation and factual information necessary to move beyond awareness and toward successful and appropriate transformation. Learning or grasping different cultures from a point of view is possible using acquired facts and knowledge based on proper assumptions.

A participant mentioned that a comprehensive understanding of various multicultural aspects could help in preventing stereotyping. “P2” “multicultural competency is about knowledge and understanding various multicultural aspects to prevent stereotyping. … so that students can understand the reality of each culture.”

Another participant mentioned that multicultural competencies involve being knowledgeable and well educated about various cultural beliefs, food preferences, habits, backgrounds, and religions. As mentioned by “P1”, “multicultural competency is knowing the differences between various cultures, such as the strong background of food preferences, habits, and patterns”.

Participants 5 and 6 emphasize the multicultural knowledge that students need to grasp. As expressed by “P5,” “multicultural knowledge on food habits and food preferences of other cultures is an important multicultural competency”. Likewise, “P6” highlights that “multicultural competency is about knowledge of religious and dietary practices of different cultures.”

The participants emphasize multicultural knowledge as another important competency for bridging the gap between cultural awareness and effective cross-cultural

engagement. They suggest that cultural foods, habits, and preferences, as well as knowledge of religious practices, are important topics for the students to grasp.

Moreover, multicultural knowledge also encompasses an understanding of norms, values, customs, and the history of diverse cultures (Presseau et al., 2019).

Sub-Theme 3: Multicultural Skills. In this study, multicultural skills were defined as multicultural competency that facilitated awareness and knowledge application toward achieving effective transformation in various situations. It is the ability to interact effectively with people from diverse backgrounds (Presseau et al., 2019). Through acquiring multicultural skills, RNDs and students may organize, implement, and assess a multicultural environment, accurately analyze the demands of different cultures, and comprehend and interpret the actions of people in the community.

Participants also mentioned various multicultural skills, including communication skills, respect for other cultures, empathy, interaction, and openness, during the interview. For instance, being open-minded, as emphasized by participants 2, 12, and 3. As stated by "P2, "they should be open-minded because the real world is very different from what they have learned in class. "P12" pointed out that one should be "open to change and adapt quickly", and "P3" discussed that, "first and foremost, we should be open-minded and humanitarian because we have similarities even though we have different cultural beliefs and practices. Because more than just the curriculum, we also tell them to become better people. It is important to learn how to get along with or socialize with other cultures."

As Participants 4-, 5-, 7-, and 10 pointed out, effective communication and critical thinking skills are essential in multicultural environments. For instance, effective

communication entails not only knowing what to say but also knowing how to present ideas appropriately in various cultural situations. Participants discussed the importance of communication skills when interacting with diverse societies. As mentioned, “P4 “communication skills are important because you may know what to say but not how to say it……. sometimes simple gestures have meaning in other cultures.” On the other hand, “P5” stated that “willing to listen to the opinions of others” is needed for effective communication. Moreover, “P7” highlights the importance of “having the ability to comprehend and keep up with different cultures through a broad understanding and deep thoughts on the importance of each culture that each one has.”

RNDs and future Nutritionist-Dietitians must also understand the nonverbal cues and simple gestures when communicating, as these can have significant cultural connotations for how individual clients interpret messages from different cultures. Furthermore, the efficacy of dietary recommendations and treatments may be affected by miscommunication.

Furthermore, multicultural skills, such as collaboration, critical thinking, and writing, are important in 21st-century education. Collaboration is defined as working together to achieve a common goal. Applying collaboration skills among the healthcare team regarding patient care may contribute to positive health outcomes for the patient (Martin & Bryant, 2025). As highlighted by “P10”, “Students need to learn how to collaborate with community and government agencies, as well as develop their critical thinking skills, and research skills”.

Moreover, participants frequently mentioned “respect” as another important competency for delivering efficient and culturally competent nutrition care for individuals. RNDs may foster confidence, prevent disputes, and provide more individualized and useful nutritional recommendations by respecting their customers' cultural and religious customs. Respect for clients' beliefs and behaviors ensures that suggestions are congruent with their cultural background. This not only improves the professional relationship but also improves health results. As emphasized by the participants during the interview. For instance, “P4” mentioned that “multicultural competency is about respecting other cultures' food, customs, and religions. Likewise, “P6” also mentioned that “respecting their beliefs and traditions during nutrition counseling is important so that they will adhere to the intervention given.”

The various multicultural skills facilitate the application of awareness and knowledge for effective transformation in different situations. By acquiring multicultural skills, students accurately analyze the demands of varied cultures and comprehend and interpret the actions of people from diverse societies.

According to Sue (2001) Awareness, knowledge, and skills are the three strategies of multicultural counseling. The interview responses provided evidence that the participants fully understood the multicultural competencies. Hence, multicultural competency is a dynamic and continuous process that involves a range of awareness, knowledge, and abilities intended to promote constructive interactions and connections across cultures.

Moreover, participants were asked about their thoughts on the multicultural competency content of the BSND curriculum. From their perspectives, the "curriculum integration" theme emerged from the interview.

Theme 2: Curriculum Integration

Curriculum integration is the process of incorporating and combining topics in teaching to create a meaningful learning experience. Teachers commonly integrate content and examples of different cultures to explain fundamental principles, ideas, and theories in their lessons or discussions (Banks, 2019). Several studies reported that integrating multicultural education topics leads to higher academic achievements, deeper learning, and enhanced engagement in real-world situations (Nieto, 2017). From the theme "curriculum Integration", two sub-themes emerged: inconsistent integration and challenges in integration.

Sub-Theme 1: Inconsistent Integration. The concept of "inconsistent integration" describes how multicultural competencies are not always integrated or are integrated only in a few parts of the curriculum or in teaching. Participants in this study expressed their views on the multicultural competencies within the current BSND curriculum. For instance, "P1" mentioned that "in my experience during my college years, multicultural competencies were not integrated, even into my master's degree, but now, I try to incorporate them into my teaching". This claim was also supported by "P5" that integration of multicultural competencies is "not particular in all levels."

Contrary to the statements of participants 1 and 5, participants 2, 3, 4, 6, 8, and 9 stated that it was integrated into particular subjects only, and sometimes competencies are

inserted through examples. For instance, “P2” mentioned that “it is present in particular subjects, but evidence of multicultural competencies at each level is only top-down.”

In addition, “P3” stated that “because the BSND program's outcome is to build multicultural competence, the competencies should not just be inserted through examples, so it does not look like an add-on. There are some competencies integrated, but in particular subjects only.” Likewise, participants 4, 6, 8, and 9 also agreed that multicultural competencies are integrated in particular subjects only, as “P4” mentioned, “there are, however, it was incorporated in particular subjects only and sometimes inserted through examples.” This statement was also supported by “P6” during the interview as he mentioned “not everything is present; it was embedded in particular subjects only.”. Likewise, “P8” also revealed that “teachers integrate multicultural content into the examples during the discussions.”. Whereas, “P9” expressed that “there is no clear representation of multicultural topics at each program level; instead, it is embedded in particular subjects or courses. It is much better if we integrate the topics per level because the scope of multicultural competencies is wide.”

Interviews revealed participants' perspectives on multicultural competencies within the BSND curriculum. For instance, participants stated that multicultural competencies are deficient, and the representation of topics is unclear. Sometimes, competencies are inserted through examples. According to Adkins (2017) fostering cultural competency is insufficient without strategies or guidelines on how and where competencies are integrated into the curriculum.

Sub-Theme 2: Challenges in Integration. Integrating multicultural competencies into the curriculum presents several challenges that may affect the effectiveness of delivering education. The conversation surrounding these challenges brings up several important points. For instance, one participant identified the availability of learning resources, particularly the available books, as "P6" stated, "challenges are the resources, especially books."

Insufficient resources, such as textbooks can potentially restrict students' exposure to various cultures, which is crucial for developing multicultural competencies for BSND students. Banks suggested that cultural books and literature be incorporated into the teaching and learning process (Banks & Banks, 2020). By engaging with diverse learning resources, learners may acquire comprehension, empathy, and acknowledge cultural differences and opinions.

Additional challenges in integrating multicultural competency in teaching are internet connection, facilities, availability of local foods, students' cultural exposure, and operational challenges such as scheduling and policies, as mentioned by the participants during the interview. For instance, "P8" expressed that "the challenges I encountered in integrating multicultural competencies into my teaching are the following: internet stability, access to the laboratory community, subject /teaching schedule, and University policy concerning community immersion."

Moreover, "P10" mentioned that "My challenge in integrating multicultural competencies into my teaching of basic foods is the availability of the local foods of a specific region, because they are hard to find. It is much better if there are real food samples

so that students can taste and describe their texture and cook appropriate dishes. Sometimes, a PowerPoint and visual aids are not enough for teaching." And "P12" mentioned challenges are "the student has limited cultural exposure."

Integrating multicultural competencies into the BSND curriculum is vital yet challenging. The challenges experienced by the RND educators highlight several issues that need attention. These include scarcity of educational resources, particularly textbooks and regional food samples, which may restrict students' access to diverse cultural information, thereby hindering the development of competencies in understanding and interacting with diverse cultures.

The challenges encountered by the participants are compounded by various issues on modern instructional platforms, e.g., internet stability, laboratory facilities, and institutional guidelines for community immersion. Sengupta et al. (2019) stated that implementing different methods of instruction tailored to varied cultures and learning styles may promote classroom inclusivity. Additionally, social interactions through community immersion can increase knowledge and skills (Zeydani et al., 2021).

Moreover, integrating examples, materials, and resources into teaching can create a meaningful educational experience for students (Eden et al., 2024). Using online platforms can engage students in discussions, cultural exchanges, and joint projects (Verzella, 2019).

Addressing the challenges mentioned by the participants is vital for enhancing the effectiveness of integrating multicultural competencies and ensuring students are prepared to navigate and value a diverse world.

Furthermore, developing multicultural competencies for future RNDs can be achieved through various learning approaches inside and outside the classroom. During the interview, participants were asked how they incorporate multicultural competencies into their teaching; from their responses, the theme "Learning Approaches" emerged.

Theme 3: Learning Approaches

This refers to various learning methods through which students learn and organize information. Learning approaches are typically based on sensory (Sankey & Gardiner, 2010) and cognitive channels that may help students comprehend, retain, and adopt new knowledge. During the interview, participants mentioned various learning approaches in their teaching. For instance, "P1" stated that "mostly, I use case analysis and provide examples based on theories. I also conduct laboratory activities and analysis under specific conditions or situations that align with the intervention."

In addition, "P2" mentioned that "visual aids are essential since students prefer to see what you're saying. Also, my experience is perhaps one of the most valuable assets I can contribute to my teaching.". Case studies also employed in the teaching process of "P3" as mentioned, "I used case studies and reading literature, and I encouraged my students to think in a broader sense." While "P4" indicated that "I used PowerPoint and videos, and before I used my instructional materials, I reviewed them many times, making sure that there was no wrong information that would offend other cultures."

Other learning approaches revealed by the participants during the interview are by incorporating the advent of technology and application of critical thinking skills, as mentioned by "P5": "I always asked my students for their insights, provided situational

analysis, and incorporated the advent of technology, such as YouTube videos and Tik-Tok, to express what they learned." In addition, "P7" employed various learning approaches as mentioned, "teaching multicultural competencies is through readings and reporting about historical accounts of certain foods, role-playing, case studies, community visits, and field trips". And "P9" also mentioned that "I implement field trips or exposure trips, allowing students to experience and see how things are done on aspects of the subject matter because learning is not only in the classroom."

Participants mentioned using various learning modalities for delivering multicultural competencies, including case studies, personal experiences, videos, cultural readings, reporting, field trips, community visits, and role-playing. Among these, case studies are proven to promote critical thinking skills (Mahdi et al., 2020), while service learning or community service improves learning experiences (Gupta et al., 2021). Additionally, various digital technologies, such as YouTube and TikTok, are continuously reshaping how students share ideas and communicate in today's world. Generally, participants employed different modalities in their teaching.

Furthermore, as RNDs encounter clients from diverse cultures, acknowledging and respecting their cultural beliefs, values, and practices is increasingly important for providing culturally responsive nutrition care. The theme "Culturally Responsive Nutrition Care" emerged from participant interviews regarding guidelines for integrating multicultural competency into the curriculum.

Theme 4. Culturally Responsive Nutrition Care

Culturally responsive nutrition care involves providing nutrition counseling and interventions that are respectful to individuals or communities. It entails understanding cultural differences in food choices, dietary habits, communication styles, and health beliefs and practices to ensure that nutrition care is aligned with their distinct cultural backgrounds (Santiago & Silveira, 2024).

Four sub-themes emerged from culturally responsive nutrition care: creating a diet tailored for the patient's needs, fostering inclusivity and reducing biases, engaging in continuous learning and innovation, and promoting nutrition care.

Sub-Theme 1: Create a Diet Suitable for the Patient's Needs. Creating a specific diet for patients is an essential skill of the RNDs. Creating a diet is not a one-size-fits-all approach. Thus, RNDs should consider their patients' cultural background, including their beliefs, dietary habits, and food choices, when preparing a diet. The participants also identified these aspects during the interview. For instance, "P1" mentioned the need for having "a strong background of food preferences, habits, and patterns so that we can prescribe the diet available in the community that is also suitable for their culture." Likewise, "P7 stressed to "understand regional or cultural beliefs to create a diet that suits the patient's needs, while "P12" stated that "knowledge of cultural foods is important to create a diet suitable for patients with different cultural backgrounds".

Culture influences what people eat and when (Nemec, 2020). Hence, creating a diet suitable for patients' needs requires awareness and knowledge of cultural eating

patterns and practices. As a result, nutritional advice tailored to cultural norms increases its acceptance and assures diet interventions are culturally sensitive.

Sub-Theme 2: Foster Inclusivity and Reduce Biases. In this increasingly diverse world, fostering inclusivity and reducing biases within RNDs are crucial for effective nutrition care. Participants mentioned vital strategies and practices students may adopt to promote inclusivity and reduce biases. For instance, “P2” emphasized the need to “not to be biased in one sector only, but instead in the whole sector.” Additionally, “P9” indicated that “It's about acceptance and a wide understanding of multicultural dimensions.”, and “P12” suggests that “RND should be sensitive to the needs of the patient. This competency would be able to provide individualized care for the patient”.

In brief, the participants emphasized that culturally sensitive nutrition care and multicultural acceptance are vital when interacting with their clients. When integrating these skills, it can create effective, considerate, and personalized care.

By fostering culturally responsive nutrition care, future Nutritionist-Dietitians may successfully manage the unique needs of various populations, resulting in increased compliance, improved client satisfaction, and better health outcomes. This action not only promotes the well-being of individuals but also contributes to the broader goals of attaining health equality.

Sub-Theme 3: Engage in Continuous Learning and Innovation. This subtheme illustrates an ongoing process of acquiring new knowledge, capabilities, and critical thinking to improve competencies and adapt to evolving situations. The participants' responses emphasized the value of continuous learning and innovation in gaining

the competencies required to interact with diverse societies. For instance, “P1” mentioned that “I need to study and read cultural books that can be incorporated into the teaching, and also learn how to integrate the ideas of multiculturalism, maybe because what I am telling my students is inaccurate or untrue.” Similarly, “P5” stated that “Continuous learning is needed to deal with various cultures.” “P6” supported this perspective by noting that “training in cultural competencies is also needed.”

Another participant echoed the importance of knowing other cultures, which is vital in research, as “P7” mentioned, “Understanding culture is important to be able to research well, and also it provides an opportunity to meet different kinds of people who can teach us new things.” In addition, "P9” emphasized “more innovation in learning…the society will benefit from continuous learning.”

Participants highlight the importance of continuous learning and innovation for the benefit of the students and educators. Thus, future healthcare practitioners must be educated about various factors that may affect the health of their patients. These include religious practices, communication styles, customs and traditions, and cultural patterns (Byrne, 2020; Turkelson et al., 2021).

Participants mentioned that reading cultural books and training about cultural competence, research, and innovation in learning are important in interacting with different cultures. Also, training is beneficial in increasing awareness of one's culture and other cultures when communicating with diverse clients (Kaihlanen et al., 2019). McCabe et al. (2020) stated that training in cultural competency for dietetic education may eliminate health disparities among people of diverse cultural backgrounds.

Further, to adapt to this changing world, healthcare practitioners must be motivated to learn and innovate ("The Importance of Continuous Learning for Innovation, Progression, and Survival," 2018). Innovations in learning approaches, such as simulations, collaborative learning, and community-based learning projects, are other examples of innovations for inclusive pedagogy (McCabe et al., 2020). Thus, to keep up with the changing times, continuous learning and innovation are necessary so that educators can learn new knowledge and skills that can be passed on to their students.

Sub-Theme 4: Promote Nutrition Care. Promoting nutrition care to every individual in a diverse society is a strategy that enhances the nutritional welfare of individuals in the communities. The participants' responses highlight the need for curriculum improvement to promote nutrition care successfully, as they mentioned: "P8" "The BSND curriculum prepared students to promote nutrition care in a diverse society, by including multicultural content in teaching" "P6" "The current curriculum needs improvement to address the promotion of nutrition care in a diverse society".

While "P8" acknowledges multicultural content in the curriculum, "P6" calls for improving the BSND curriculum. "The current curriculum needs improvement." Additionally, "P11" emphasizes the importance of "Integrating multicultural content at all levels of the BSND program, ensuring that graduates of the program can promote nutrition care in a diverse community."

Promoting nutrition care plays an important role in preventing diseases. In this complex world, enriching knowledge about nutrition science, cultural foods, social

factors influencing health, and food systems is crucial for the RNDs in promoting nutrition care (Ash et al., 2023).

Recognizing the diversity in a globalized world is essential in providing culturally responsive care. Responsive nutrition care is an approach that considers the unique cultural backgrounds of individual clients. Additionally, it fosters inclusivity and reduces biases. This approach nurtures trust and strengthens the relationship between patients and providers. To improve adherence to nutritional intervention and improve health outcomes

Integrating multicultural competencies into the curriculum requires continuous learning and innovation in promoting nutrition care. Continuous learning can enhance RNDS's knowledge and skills, which are vital to developing nutrition education strategies essential for promoting the health of individuals and communities (Ash et al., 2023).

To answer the statement of the problem number 4, “What multicultural education curriculum integration framework may be developed for the BSND program?”

The developed framework is a Multicultural Education Integration Framework for the BSND Curriculum. It highlights multicultural education competencies of awareness, knowledge, and skills across the Nutrition and Dietetics curriculum. Its goal is to develop students' multicultural competencies for delivering culturally responsive nutrition care to people with diverse backgrounds.

The framework was influenced by the study’s findings and issues raised from previous studies. The integration was grounded by the Bank's integration approaches, namely the contribution approach, the additive approach, the transformation approach, and the social action approach.

The multicultural competencies and the Bank's integration approaches are applied at progressive stages of education from the 1st year up to the 4th year. The integration process was rooted in constructivist theories of education, which facilitate learning opportunities driven by students' interests connected to real-world situations and designed to meet the needs of the students.

As Bobbitt implies, the curriculum is a series of experiences that students must push through to develop their abilities, whether the experiences are direct or indirect (Bobbitt, 1913). Additionally, the social efficiency theory emphasizes that the series of competencies should be organized across each level so that learners master the competencies demonstrated in the previous unit (Bobbitt, 1913).

Moreover, Tyler's curriculum model implies that organizing learning experiences for learners requires three criteria: continuity in learning, sequence of content, and integration (Maheshwari, 2015). Likewise, Taba contends that content should be arranged in a logical order and should be based on students' developmental stage, individual interests, and academic progress, while Wheeler's curriculum model implies that determining the subject content should be based on students' learning experiences (Prihantoro, 2021).

The curriculum framework was designed as a circular and multilayered structure, indicating that each element is interconnected and interacts dynamically. The framework design also emphasizes the continuous nature of cultivating the multicultural competencies of the BSND students, and the circular flow illustrates how development in one area is usually influenced by others, emphasizing that becoming a multicultural competent

Registered Nutritionist Dietitian is a continuous learning process rather than a linear end-point.

The framework comprises learning outcomes, integration approaches, key multi-cultural competencies and their components, the central core (BSND curriculum), learning approaches, and assessment.

Learning Outcomes. Learning Outcomes are located at the first layer of the framework. They are the cornerstone for organizing learning experiences and assessing students' progress. Learning outcomes indicate the success of the educational program implementation (Mahajan & Singh, 2017). Within the curriculum framework, learning outcomes specify the attitudes, knowledge, and skills that students gain after completing the program.

The learning outcomes of the framework are based on the theme that emerged, “Culturally Responsive Care”, which includes the following: First, to create a diet suitable for the patient’s needs. This essential output of the framework emphasizes applying the information and skills learned from cultural food practices throughout the course program to create an appropriate diet intervention. Integrating cultural elements into the curriculum can enhance students' understanding of food diversity, the significance of traditional foods, the various local food ingredients, and a balanced diet appropriate for each culture (Hamed Kandil, 2022).

Second is to foster inclusivity and reduce biases. Inclusivity is respecting, valuing, and providing everyone an equal opportunity to receive better treatment, regardless of their cultural background. Combining these perspectives may foster environments that

value diversity, promote community participation, and lessen the effects of prejudice. Such efforts not only enhance individuals' well-being but also contribute to the broader goal of achieving health equity (Vincze et al., 2021).

Third, is to engage in continuous learning and innovation. This third learning outcome may equip future practitioners with the latest information and trends in nutrition and dietetics. This action is necessary to succeed in this diverse and changing world. Thus, adopting this framework may enhance professional growth and promote health equality.

The last learning outcome is to promote nutrition care. One of the ASCEND recommendations and guidelines for competency for RDs is to promote nutrition care to all individuals in need (Accreditation Council for Education in Nutrition and Dietetics (ACEND), 2022). Promoting nutrition care as the learning outcome of the framework highlights the development of accountability, empathy, and moral awareness in students. It goes beyond simply advocating good works; it attempts to establish deep-rooted values, enabling individuals to understand the importance of supporting and promoting welfare inclusively.

The emerging learning outcomes of the developed framework for the BSND curriculum demonstrate a deep commitment to cultural sensitivity, inclusivity, and global competency. Hence, the framework ensures that future professionals are equipped to address emerging challenges when delivering nutrition care in diverse cultures.

The Integration Approaches. After defining the learning outcomes, the next layer of the circle represents the integration approaches, which show how multicultural

competencies are applied actively. Integration is a process that combines various subjects or topics and learning experiences, making learning more cohesive and relevant. It also entails relationships between varied subject areas, content, and skills (Banks & Banks, 2020).

The four levels of Banks' integration approaches (contribution, additive, transformation, and social action) provide a systematic framework for the curriculum. It is a progressive integration of multicultural competencies into the curriculum. By employing Banks' integration approaches, the developed framework may ensure that cultural information is strategically integrated into every curriculum course and not taught in isolation. The approaches are the following: the Contribution approach integrates fundamental principles, truths, or examples from various cultures. The contribution approach is implemented at the first-year level of the program as the primary approach in the developed framework. This level depends mainly on acknowledging and showcasing cultural practices through lessons and interactive discussions. The objective is to stimulate students' curiosity and deepen their viewpoints regarding foods and cultures.

For example, RND educators may assign students to explore how indigenous foods of various cultures influenced or improved their health. With this gradual acquisition of cultural openness, understanding, and respect, students can engage with diverse cultures more sensibly and critically. This early integration provided an opportunity for deeper learning as they advanced to the next level.

Next is the Additive approach. In this second integration approach, the curriculum is extended without altering its basic structure by adding new ideas, topics, or concepts to

the curriculum (Banks, 2015; Banks & Banks, 2020). After gaining multicultural awareness at the first level, this shifts to a more in-depth multicultural knowledge at the second-year level. The multicultural knowledge competency in this framework is about acquiring and retaining unique cultural information (Domenech Rodríguez et al., 2022).

RND educators should move from awareness to investigating how various cultural practices, viewpoints, and customs influence professional practices. They should focus on broadening subject content by including a wider range of cultural perspectives, concepts, and case studies. For instance, inquiry about environmental, social, and economic factors that impact food and nutrition in varied cultures. For example, at the 2nd-year level, RND educators may assign students to assess the effect of globalization on dietary habits and choices and analyze the significance of food in various cultures.

Through this, students deepen their understanding of various cultural aspects, like the relationship between their food choices and health. At the end of the second year, students gain a deeper understanding of different cultures necessary within their field, which will make them more prepared for complex problem-solving and critical thinking in the later years.

Additionally, the Transformation approach involves developing skills that begin in awareness and knowledge, and move between theories and real-world applications. This level transforms students by engaging, critically evaluating cultural viewpoints, and encouraging them to apply their critical thinking skills.

Educators at this level may engage their students in learning activities such as role-playing, conducting community visits, and creating diet plans for various cultures.

The objective of the transformational approach is to prepare students to engage with different cultural backgrounds. For example, at the 3rd-year level, students critically explore food sovereignty and analyze environmental and social factors that may influence individual food choices.

By applying this approach, multicultural aspects are not just a topic added to the curriculum; instead, they reshape the program into an inclusive, comprehensive, and culturally rooted discipline. These foster students are becoming multicultural competent professionals.

The last approach is the social action approach. In this final stage of integration, students at the 4th-year level are taught to grasp various perspectives and enhance their skills in decision-making, social action, data gathering, and collaborating with groups (Banks, 2015). In the social action approach, students are empowered to become agents of change (Banks & Banks, 2020).

Within this framework, the action involves creating and implementing programs for the community, collaborating with various organizations to address nutritional issues, and promoting nutrition care. The RND educator's role is to facilitate, mentor, and guide the students in their activities rather than being a source of information. The objective of this approach is to provide guidance and support to students, such as in planning and implementing a nutritional intervention or program.

Students at this level can be advocates and leaders who are equipped with the competencies necessary to collaborate with varied cultures about issues in health and nutrition. Additionally, this approach may enhance students' participation in community

projects or activities, foster a sense of responsibility, and empower them to provide a favorable outcome within the community. For instance, a teacher may assign 4th-year nutrition and dietetics students to conduct a nutrition assessment in a community and identify immediate nutritional concerns (e.g., underweight, obesity) for various cultures, then create and implement appropriate community nutrition programs, like a feeding program and backyard gardening.

Through this, students actively engage in the community, collecting feedback and information, and advocating for ongoing support from NGOs and local government. Thus, they are expected to apply their knowledge and skills in the community or group of people to create a positive impact. The examples provided are suggestions that may guide RND educators in integrating multicultural competencies into their teaching in the entire BSND curriculum.

Multicultural Competencies and Components. The third layer of the framework, after the integration approaches, is the key multicultural competencies, awareness, knowledge, and skills. These key competencies are based on the multicultural competency model of Sue et al. (1982), which enables practitioners to interact effectively with people from diverse backgrounds. They define what students must acquire to achieve the learning outcomes.

Multicultural competency refers to developing the abilities and attitudes necessary to interact with people with diverse backgrounds (Eden et al., 2024). Multicultural competency differs from multicultural content, which presents information and viewpoints from various cultures presented in materials such as media, books, and other resources.

On the other hand, multicultural competency emphasizes understanding, respect, adaptability, and empathy in real-world engagement, which can be applied in daily interactions and when making decisions. Below are the competencies and descriptions based on the results of this study.

Integrating multicultural competencies into the educational framework promotes equity and inclusivity by recognizing and respecting different cultural backgrounds. This approach enhances students' communication and collaboration skills by making them conscious of various cultural values, norms, and languages, thereby reducing inequalities and removing barriers when tailoring dietary interventions within their cultural contexts.

The arrow design of the multicultural competencies signifies that it is a continuous and progressive learning process. This developmental approach is integrated across four levels of the BSND program, from the first year up to the fourth-year level, where students gradually deepen their awareness, understanding, and skills regarding cultural diversity. Thus, the continuous process enhances students’ capacity to comprehend, appreciate, and react effectively to diverse cultures, developing a solid foundation of competencies as students advance.

At the first-year level, the concentration is on raising awareness and familiarizing students with self-awareness and cultural diversity. Awareness of one's culture is the initial requirement for providing accurate opinions, attitudes, and assumptions. If the awareness stage of multicultural education is disregarded, knowledge and skills may be based on incorrect assumptions (Harris, 2022)

At the second-year level, students acquire in-depth knowledge of cultural beliefs, practices, traditions, and values regarding nutrition and health. At the third-year level, the emphasis shifts to applying knowledge and developing multicultural skills. Students at this level may learn to navigate cultural diversity in real-world settings. In their fourth year, they are expected to practice multicultural competencies in real-world settings. This last level of education prepares them for professional practice.

The vital components of multicultural competencies are based on the participants' perceptions and illustrated by the arrows that extend from the key multicultural competencies. These components encircle the framework, highlighting the competencies students need to achieve to become competent RNDs, capable of providing equitable and culturally competent nutrition care. Table 5 presents multicultural competencies and descriptions.

Table 5

Multicultural Competencies and Description

Core Competencies	Description
Multicultural Awareness	Awareness of one's and others' cultural views, beliefs, and values, such as sources of foods and eating patterns, is necessary for building rapport with the client and providing appropriate nutrition education (Nemec, 2020). Thus, it provides a valuable impact when working with various clients. Learners are taught to be aware of their own culture and others, such as: Customs and Traditions Lifestyles Values Cultural Environment
Multicultural Knowledge	In multicultural contexts, knowledge provides the documentation and factual information required to move beyond awareness and toward successful and appropriate transformation. RNDs must be knowledgeable about various aspects of culture, such as food preparation, ingredients, cultural significance, and other factors influencing lifestyle behaviors, to communicate effectively and provide suitable nutrition interventions (Atomei et al., 2024). The following is the multicultural knowledge that should be taught to the students for a better understanding of the different aspects of cultures: Religious Practices Cultural and International Language Socio-Demographics Regional Foods Health Beliefs and Practices Dietary practices

Core Competencies	Description
Multicultural Skills	A person's set of skills and ability to engage effectively with diverse cultural backgrounds (Sue, 2001). Acquiring cultural skills may improve the health outcomes of diverse individuals and eliminate health disparities (McCabe et al., 2020). Tyler emphasizes that education is not solely about knowing facts (Maheshwari, 2015). Instead, it includes the application of skills in meaningful ways. The following are the multicultural skills that should be taught to the students: Effective Communication Collaboration Adaptability/Open to Change Responsive to the needs Respect Diversity Empathy Critical Thinking Compassion Research Oriented

Core. The core of the framework is the BSND curriculum. It serves as the fundamental basis for the entire framework, directing the development of multiculturally competent future RNDs. Placing the BSND curriculum at the center of the developed framework indicates that all multicultural competencies, integration approaches, learning outcomes, and learning assessments revolve around it.

Moreover, placing the BSND curriculum at the center of the framework may clearly define educational goals. According to Tyler, formulating educational goals, aims, or objectives of the intended outcome of the curriculum is the first stage in developing an academic program (Fortepiani & Marsh, 2023).

Learning Approaches. Learning approaches are teaching strategies that promote understanding and acknowledgment of the perspectives of various cultures. They are the basis for assessing whether the learning objectives are achieved (Fortepiani & Marsh, 2023).

Learning approaches are placed at the bottom of the framework as part of the support system in teaching and learning. Integrating multicultural competencies into the BS Nutrition and Dietetics program, along with a variety of learning approaches, is imperative to ensure that students are equipped to navigate the challenges of nutrition and dietetics practice in cultural settings.

Various learning approaches can be applied when using this framework. These include collaborative learning, experiential learning, and multimodal learning. These learning approaches may not only influence the learning experiences but also impact how students comprehend the content and apply their knowledge learned in real-world settings.

A collaborative learning approach enhances students' learning experiences, social-emotional learning, and communication skills (Laal & Ghodsi, 2012). By applying this approach, ND students can collaborate effectively with diverse groups, create nutrition programs or interventions tailored to a particular cultural group from each other’s viewpoints, and gain experiences.

Collaborative learning can be applied in various subjects within the program, such as public health nutrition. For instance, providing an activity like a community group project. For this activity, students were instructed to work in groups to evaluate the

nutritional status of a specific barangay and plan an intervention for an identified nutritional problem.

Experiential learning is a learning-by-doing approach through which students gain additional knowledge through direct experience rather than just passively obtaining information (Institute for Experiential Learning, 2024). According to Wheeler's curriculum model, experiential learning may improve students' engagement and learning. The Wheeler curriculum model reported that experiential learning may improve students' engagement and learning (Vygotsky, 1980). Likewise, the constructivist theory articulated by Vygotsky emphasizes that knowledge is learned through personal experience and social interaction (Gajdamaschko, 2011).

Providing students with opportunities to explore how their culture and other cultures influence their food choices may help them develop meaningful and relevant knowledge that can be applied to their everyday lives and when interacting with diverse cultures.

Experiential learning can be applied through practicum rotations, laboratory activities, and community visits in courses like public health nutrition, nutrition education, and foodservice systems. For instance, in a nutrition education course, students may be required to conduct nutrition counseling sessions in the community, applying theoretical concepts in a real-world setting.

Using these approaches within the curriculum framework may build students' confidence in participating in community-based programs or activities such as mother

classes, feeding programs, and nutrition workshops. Thus, it deepens students' understanding of how culture influences their health behavior.

Multimodal Learning**.** These are various teaching methodologies, such as sensory, visual, tactile, auditory, kinesthetic, writing/reading, and technological resources, to deliver better cultural knowledge and skills in teaching (Kennedy, 2023). With this approach, students' learning becomes more responsive and inclusive of their needs.

Multimodal learning facilitates better comprehension, retention, and engagement. It may be employed across theoretical and practical courses such as Basic Foods, Basic Nutrition, Nutritional Assessment, and Nutrition in the Life Stages. For instance, the Basic Nutrition course may employ learning activities such as visual presentations (e.g., the digestion process and metabolic pathway), video documentaries about nutritional issues, and hands-on reading of food labels.

Employing these learning approaches throughout the program enriches students' learning process and fosters broad understanding, adaptability, and professional advancement.

Assessment. The learning assessment, also located at the bottom of the framework, plays a significant role in determining students' abilities and readiness to provide culturally responsive nutrition care. The assessment process also serves as a support system of the curriculum framework to determine whether the students have achieved the learning objectives (Maheshwari, 2015). In implementing this framework, a variety of assessments can be applied.

First is the formative assessment, the goal of which is to assess students' learning performance throughout the educational process (Black & Wiliam, 2018). and give feedback for enhancement. The purpose is to promote self-regulation and reflective thinking, identify learning gaps, and adjust instructional learning.

Formative assessments are short quizzes, classroom discussions, journal reflections, case studies, and laboratory exercises. These assessments can be applied throughout the educational process, during classroom workshops, discussions, and assignments.

Next is the Summative assessment. The summative assessment evaluates students' mastery of multicultural competencies at the end of the course module (Harlen, 2005). It includes periodic examinations, final case study analysis, and presentation, or a project formulating a culturally appropriate meal plan. This assessment may be applied at the end of the semester, module, or unit.

Additional assessment in the framework is the Real-world assessment. This refers to assessing students' attitudes, knowledge, and skills in an authentic, practical environment. This entails tasks that reflect obstacles students may face in actual practice (Herrington & Oliver, 2000). The real-world assessment for this framework involves on-the-job training or a practicum in diverse communities. It can be applied in the final year or semester to assess students' preparedness to practice in real-world settings.

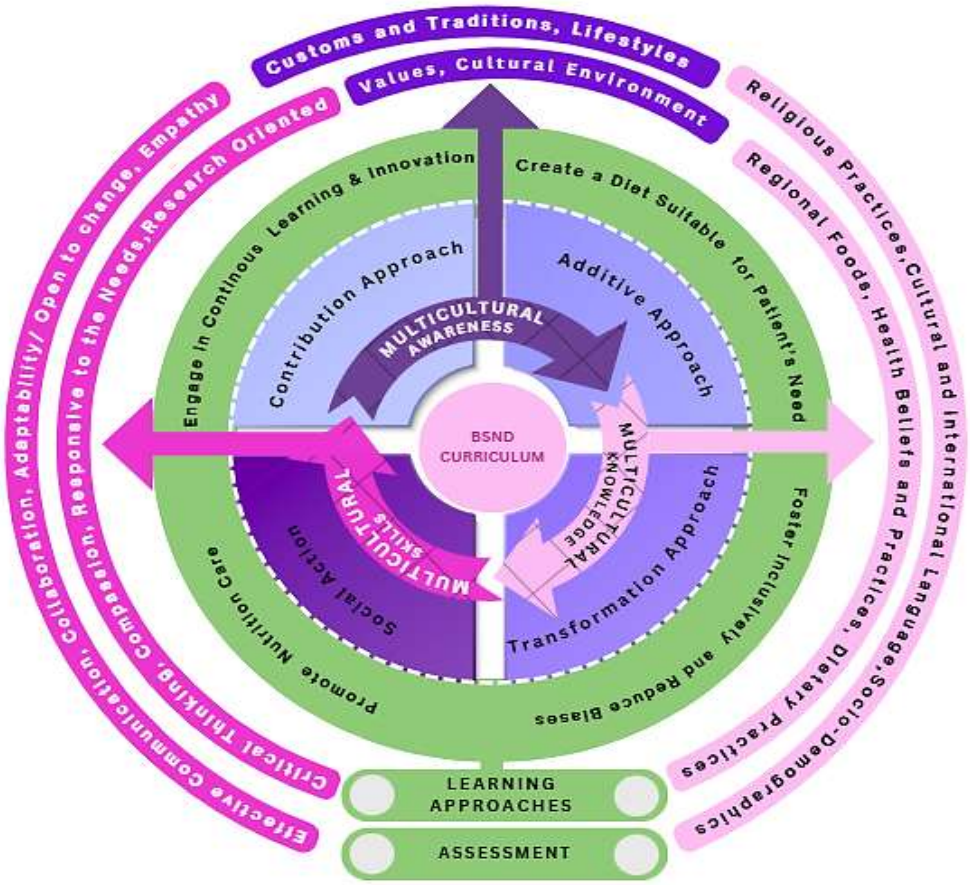
The last assessment is the Skills-based assessment. These assessments evaluate practical skills crucial for future RNDs, like counseling, cultural adaptability, and communication. The skills-based assessment may include counseling simulations or client

interaction through role-playing. Suggest employing these assessments in the middle or late semester after introducing fundamental theories or simulated learning environments.

Employing various assessments within the curriculum ensures that learning is enhanced and intended competencies are achieved. These assessments may guide teaching instruction, support students' growth, and maintain the academic program’s integrity.

Figure 3

Multicultural Education Integration Framework for BSND Curriculum



In summary, as shown in Figure 3, the framework focuses on integrating multicultural education competencies vital to the nutrition and dietetics profession. This framework adopts a circular layered design to convey that developing multicultural competencies necessary for the profession is a continuous cycle and interconnected process of learning and growth in cultural awareness, knowledge, and skills.

The first layer of the circle is the learning outcomes, which serve as the foundation and the guiding force for all learning design. It answers the question “What learners should be expected to know, perform, or value after learning?”. After defining the learning outcomes, the next layer of the circle is the integration approaches. The integration approaches provide a guideline for teaching multicultural competencies throughout the program. The next feature of the development framework is the key multicultural competencies, awareness, knowledge, and skills. This defines “What learners must learn to meet the learning outcomes.”

The framework is a continuous and gradual process of integrating multicultural competencies, beginning with awareness, knowledge, and skills, guided by Banks' four levels of integration. The process implies that developing multicultural competencies should be woven into the entire BSND program to achieve a solid foundation of learning.

The inclusion of learning approaches and assessment serves as the framework support system. They act as the foundation for learning implementation and evaluation, ensuring that all planned activities can be effectively executed within the classroom, community, and laboratory.

Lastly, the core of the framework is the BSND program, which is the center of all the curriculum elements (learning outcomes, multicultural competencies, and approaches) that revolve around. The core represents the identity and intent of the entire educational structure.

Discussion

Conducting this study was motivated by the findings of previous studies regarding the deficiency of multicultural competencies of entry-level nutritionist practitioners and nutrition students (Douglass et al., 2020; Ferrero et al., 2023; Hack et al., 2015; Jager et al., 2020; Joy & Numer, 2018); Integration of multicultural competencies into the curriculum of nutrition and dietetics (Accreditation Council for Education in Nutrition and Dietetics (ACEND), 2022; Adkins, 2017; George et al., 2015; Hack et al., 2015; Knoblock-Hahn et al., 2010; Liu et al., 2022; McCabe et al., 2020) and a limited related study conducted (O'Donovan et al., 2022) abroad and in the Philippines.

This study aims to develop a multicultural education integration framework for the BSND curriculum that may serve as a standard guideline for educators in integrating multicultural education. Through this, students may be equipped with multicultural competencies necessary for providing culturally responsive nutrition care to people from diverse backgrounds.

This study investigated the multicultural competencies of RND practitioners, the extent of multicultural education integration in the BSND curriculum, and the perceived multicultural competency within the curriculum.

The framework is grounded in both quantitative and qualitative findings and presented in a circular layered design to convey that developing multicultural competencies necessary for the ND profession is a continuous cycle and interconnected process of learning and growth. The design visualizes how components work together in building

students' multicultural competencies, awareness, knowledge, and skills. By cultivating these competencies, RND educators prepare students to interact appropriately with individuals from diverse cultures (Sue et al., 1982).

As Tyler implies, organizing learning experiences requires continuity in learning, a sequence of content, and integration (Ibeh, 2021; Maheshwari, 2015). In alignment with this view, Wheeler's curriculum model implies that determining the subject content should be based on students' learning experiences (Prihantoro, 2021). Likewise, Taba contends that teachers must not only choose appropriate content but also arrange it in the logical and intended order, considering students' developmental stage, individual interests, and academic progress to provide effective and meaningful learning.

Moreover, according to the Social efficiency theory, learning is a series of experiences that students must go through to develop their abilities, whether the experiences are direct or indirect, and it must be tailored to the students to equip them for their roles as contributing members of society (Bobbitt, 1913; Schiro, 2008). Likewise, the constructivist theory articulated by Vygotsky emphasizes that knowledge is learned through personal experience and social interaction (Gajdamaschko, 2011) . Thus, the viewpoints of various theories presented are aligned for developing the framework because they emphasize the importance of a systematic approach to learning.

The multicultural education integration framework comprises six interconnected components: learning outcomes, the Bank's integration process, multicultural competencies, pedagogical approaches, assessment, and the core (BSND program).

The learning outcomes are the cornerstone for organizing learning experiences and assessing students' progress, which may serve as the indicators of the educational program (Mahajan & Singh, 2017). The learning outcome of the integration framework emphasized the significance of delivering culturally responsive nutrition care to diverse cultures. This involves acknowledging diverse cultural customs, traditions, food habits, and preferences to provide more individualized and effective nutrition interventions. At the end of the program, students will be able to create a diet suitable for the patients' needs, foster inclusivity and reduce biases, engage in continuous learning and innovation, and promote nutrition care**.**

Food provides nourishment to our bodies, but for others, it has symbolic importance (Reddy & Anitha, 2015). Students must be knowledgeable about this aspect and know how to plan a diet tailored to the context of their client's culture so that the client may feel valued and respected. Culturally sensitive healthcare can bridge gaps and eliminate biases in providing care from varied cultures (Vincze et al., 2021). Thus, fostering inclusivity and reducing biases are vital components in creating fair environments where clients feel respected, valued, and able to engage completely.

Students should also cultivate continuous learning and innovations in their field, because it may empower them to face the emerging challenges they may encounter in their future profession. This mindset promotes professional growth and guarantees that their nutrition interventions are inclusive, effective, updated, and relevant for diverse cultures. Berg (2023) emphasized that RND practitioners require up-to-date information on the latest trends and issues to adapt to the changing world.

Furthermore, promoting nutrition care as another learning outcome of the framework is vital for students because it is an initiative to enhance individuals' well-being. This action comprises a wide range of undertakings, ensuring that individuals have access to proper nutrition and recognize its importance. The curriculum may play a crucial role in these aspects by shaping students to develop multicultural competencies when interacting with diverse individuals. Thus, this framework fosters future professionals who are not only equipped with knowledge but also compassionate and culturally competent.

Developing this framework utilized the Banks' four levels of integration, namely contribution, additive, transformation, and social action approach. It's all about integrating various concepts into one idea. These approaches ensure that the topics are progressively integrated into the curriculum across courses (Banks & Banks, 2020) and address the inconsistencies of integrating multicultural education context from the study's findings and issues raised from the previous related literature.

For many years, content integration across courses has been a popular educational innovation (Michigan Department of Education, 2017) because it enhances cultural competence and comprehension and builds confidence in serving diverse populations (Huda et al., 2021). Undertaking this strategy is crucial in the BSND curriculum because it may equip students with the competencies needed in a real-world setting.

The contribution approach integrates fundamental principles, truths, or examples from various curriculum courses. It is all about multicultural awareness as the starting point for gaining multicultural competencies. The approach is implemented at the first-year level.

The additive approach is all about incorporating multicultural knowledge (Domenech Rodríguez et al., 2022), such as inquiry regarding social, economic, and environmental factors that influence food and nutrition in varied cultures. This approach may broaden students' understanding of various cultures. The contribution approach is implemented at the second-year level.

The transformation approach is where awareness and knowledge develop into skills. It encourages students to see topics, events, themes, and barriers from several ethnic perspectives. Thus, enhancing students' critical thinking skills, data gathering, decision-making, and group collaboration (Banks & Banks, 2020). This approach is implemented in the 3rd year because students have already built a strong foundation of comprehension.

Lastly, the social action approach. This approach encompasses all three levels of approaches. With this, students enhance their skills and are empowered to become agents of change (Banks, 2015; Banks & Banks, 2020). The social action approach should be implemented at the 4th year level of education.

Multicultural competencies are an integral part of the framework because they are the key competencies for providing effective, respectful, and equitable nutrition care to diverse cultures. The three stages of multicultural counseling are awareness, knowledge, and skills (Sue et al., 1982), which are significant for students and professionals to interact effectively in cross-cultural settings (Cross et al., 2020; Shi & Carey, 2021; Sue, 2001; Sue et al., 1982). As Moore (2023) emphasized, a person with a high level of

multicultural competency is consciously aware of their own culture, actively considers other cultures, and often appreciates other cultures unfamiliar to them.

According to the National Center for Cultural Competence (NCCC), multicultural awareness is described as one of the major cultural competencies and the first fundamental element of competency because, without awareness, acquiring knowledge and skills would be impossible (Goode, 2001). Multicultural awareness entails acknowledging prejudices against other cultures while taking time to assess one's own culture (Harris, 2022). Based on the findings, multicultural awareness is deficient among RND practitioners and in the curriculum. These findings indicate the deliberate incorporation of multicultural awareness into the framework to equip future ND professionals for multicultural settings.

Multicultural awareness, identified by the participants, encompasses values, customs, traditions, lifestyles, and cultural settings. These multicultural aspects may promote cultural sensitivity to diverse individuals. It also helps establish rapport with clients, making them more responsive to guidance (Nemec, 2020). Indeed, the obstacle to providing competent nutrition care to diverse cultures is not a deficiency in cultural knowledge but the inability of healthcare professionals to develop multicultural awareness competencies.

Likewise, Leininger (2013) stated that ignorance of cultural awareness may result in cultural conflict, in which health professionals may impose their values, beliefs, and behavioral norms from varied cultural origins. Also, practitioners unaware of other cultural issues may contribute to client resistance and non-adherence to health services (Goode, 2001).

The multicultural knowledge competency encompasses cultural beliefs, behaviors, and practices of individuals in societies. It also includes an understanding of how our cultural stereotypes contribute to inequality and prejudice, as well as the intellectual and theoretical comprehension.

Understanding various food practices and habits is vital in enhancing the well-being of people from diverse cultures. Through knowledge of varied food practices and preferences, future RNDs may tailor diet planning based on the needs of clients' cultural origins. To ensure that dietary interventions are realistic and practical within the cultural context.

Food practices of individuals are influenced by cultural beliefs and traditions (Nemec, 2020). For instance, in Islam, there are many restrictions, including diet, privacy, modesty, and restrictions on touching (Attum et al., 2023). Moreover, some symbolic foods are associated with religious traditions; for instance, in some cultures, symbolic foods with significant meaning, such as grains and fruits, may hold importance during special religious ceremonies.

The components of multicultural knowledge included in the framework are religious practices, cultural and international languages, socio-demographics in the community, regional foods, health beliefs and practices, and dietary practices. These aspects are the competencies that students need to develop to enhance their engagement with various cultures.

Furthermore, knowing something does not mean that you can perform it. The knowledge needed to practice nutrition and dietetics effectively is applied practically

through skills. Skills are the progression from being aware of one's culture to having knowledge that may fully develop into skills appropriate to the client. Multicultural skills not only focus on a set of abilities of individuals to engage effectively with diverse cultural backgrounds, but also on being comfortable and competent with a wide range of therapeutic modalities, having the capacity to accurately and appropriately send and receive verbal and nonverbal communication (Sue et al., 1982).

The framework incorporates multicultural skills such as effective communication, collaboration, adaptability/openness to change, responsiveness to needs, respect for diversity, empathy, critical thinking, compassion, and research-oriented. Participants of this study believed that these skills are crucial in their workplace as they promote equity, better communication, and collaboration. By clearly outlining and properly integrating these fundamental skills into the framework, educators can better help students become competent, moral, and socially responsible persons.

Cultures influence people's way of life and the way they behave. We live in a world where diversity exists, and understanding and respecting differences is important (Atmarizon et al., 2020). ND students must develop these competencies so that when they practice their profession, they will be confident to face diverse populations. This, in turn, contributes to improving individual health outcomes and quality of life (Campinha-Bacote, 2018).

Moreover, implementing this curriculum framework required various learning approaches to ensure that students acquire the learning outcomes at the end of the program. The learning approaches mentioned by the participants during the interview aim to

provide a more in-depth interaction with the diverse community, foster the application of knowledge gained in school to the real-world environment, and enhance mindful reflection.

Learning approaches include collaboration, experiential, and multimodal learning; each approach contributes to a more comprehensive cultural learning on nutrition. Through collaboration, learners can share their viewpoints and insights. Thus, enriching their understanding of various cultural content and promoting interpersonal skills are crucial for building rapport with diverse cultures. Employing this strategy may help students create meaningful connections from a variety of cultural aspects rather than just absorbing knowledge.

Experiential learning focuses on active or hands-on learning, permitting students to engage directly within the community. According to Wheeler’s curriculum model, learning experiences can enhance students' training and engagement (Bhuttah et al., 2019). Additionally, cultural exposure is an effective strategy for fostering students ' development of their multicultural competency (Sodowsky et al., 1994; Taylor, 2020). This approach is essential for students because it encourages them to participate in various community programs concerning nutrition.

Education has long relied on text-based instruction; however, the evolving demographics of the students require multimodal learning, which utilizes various teaching methodologies to address the students' needs in the teaching-learning process (Bouchey et al., 2021).

Accordingly, participants mentioned that they apply various learning modalities in their teaching, including case studies, personal experiences, videos, cultural readings and reporting, field trips, community visits, role-playing, and social media platforms such as TikTok and YouTube. Participants believe that these are beneficial to their teaching.

Tunnel et al. (2012), Banks (2014), and Taylor (2020) emphasized that utilizing case studies and hands-on experience involving various cultures, as well as reading literature and cultural books, may demonstrate greater cultural awareness. These learning approaches significantly enrich the development of students' multicultural competencies (Sankey & Gardiner, 2010). Thus, applying learning approaches is required for diversifying the curriculum (Banks & Banks, 2020).

Moreover, the assessment provides a comprehensive process to assess students' learning and application of skills, ensuring that learning objectives are measured effectively and reinforced. Four types of assessments are included for implementing the developed framework: formative, summative, real-world, and skills-based assessments. Each assessment has a unique advantage for effectively assessing student learning.

The formative assessment goal is to evaluate students' learning performance throughout the educational process (Black & Wiliam, 2018). The summative assessment evaluates students' mastery of multicultural competencies at the end of the course module (Harlen, 2005). The real-world assessment evaluates tasks that reflect obstacles students may face in actual practice (Herrington & Oliver, 2000), while the skills-based assessment evaluates practical skills. Thus, the education assessment included in the framework

captures both cognitive and affective domains of cultural competency in nutrition education.

The developed framework highlighted the detailed information needed for developing students' multicultural competencies. Being interconnected, the framework components are woven together to support the holistic development of a multicultural, competent individual. This framework ensures that future RNDs are not only skilled in their field of specialization but also culturally sensitive in the provision of nutrition care.

RND educators can integrate multicultural competencies into their teaching with the help of this framework. To utilize this framework effectively, they may start by reviewing and mapping their syllabi and identifying areas of opportunity. For instance, the Basic Nutrition course may include discussing regional cuisines, food taboos, and food rituals. This alignment will ensure that cultural content is not an “add-on” but is integrated into the course framework.

Another is to contextualize the content when delivering the lesson. For instance, discuss the influence of various cultures on health beliefs in the Basic Nutrition course. Likewise, applying diverse pedagogical approaches such as collaboration, experiential, skill-based, and multimodal. For instance, field-based learning, such as a community or barangay visit, facilitates nutrition counseling, role-playing, and interviews with clients from diverse cultures.

For successful integration and implementation of the framework, RND educators should consider several factors: they must be equipped with multicultural competencies required for the teaching and learning process, this may be enhanced through professional

development, such as workshops, seminars, training, etc., or collaborate with experts from various fields to deepen their understanding of multicultural aspects and to improve their teaching approaches. Additionally, RND educators must go beyond conventional teaching strategies and foster a culturally inclusive attitude, paired with learning modalities. Lastly, resources for effective teaching should also be considered, such as diverse teaching materials, including multicultural books, literature, and case studies that represent various cultural ideas. Digital or multimedia resources are needed for the effective teaching-learning process.

RND educators can adopt and implement the framework effectively by preparing themselves to teach the cultural context. They also need to change instructional planning and assess their courses. As Taba implies, teachers must participate in creating the curriculum from the beginning until it is finished, and the components of teaching methods are best suited for the students (Papakitsos, 2016). By doing this, RND educators not only improve their learning instruction to students but also produce culturally competent graduates.

Chapter 4

Summary, Conclusion, and Recommendations

The study is a mixed-method design and is developmental. It is presented in two (2) parts. Phase 1 focused on the multicultural competency of the RND practitioners and the extent of multicultural context in the nutrition discipline. Phase 2 was the development of a multicultural education integration framework for the BSND curriculum.

Twenty-five (25) RND educators participated in the study through a face-to-face quantitative survey. From twenty-five (25) participants, twelve (12) were selected for interviews to assess RNDs' multicultural competencies and the extent of multicultural integration in the context of the BSND curriculum. Participants were selected through a purposive sampling technique.

The general objective of this study is to develop an integration framework, particularly a multicultural education integration framework, for the BSND curriculum. The developed framework may guide educators in integrating multicultural competencies into their teaching. To equip students with multicultural competencies and enable them to provide quality nutrition care in the future when dealing with diverse cultures.

Summary of the Study

RNDs are professionals whose fundamental duty is to provide nutrition care to individuals in need. The practice of nutrition spans different settings and involves

interactions with people from various cultures. An RND must acquire the multicultural competency needed to interact and deliver quality nutrition care to a diverse population.

The importance of multicultural competency in the nutrition program has been recognized worldwide, and various nutrition organizations, such as accrediting councils abroad for nutrition, the International Confederation of Dietetics Associations (ICDA), and the Accreditation Council for Education in Nutrition and Dietetics (ACEND) (International Confederation of Dietetics Associations, 2016). Furthermore, in the Philippines, the extensive practice of nutritional care is articulated as one of the program outcomes of CMO 14s 2017 of the BS Nutrition and Dietetics.

However, despite the recognition of the importance of multicultural competencies for entry-level RNDs and nutrition students, several studies consistently reported that they were deficient in some multicultural perspectives (Ferrero et al., 2023; Hack et al., 2015; Joy & Numer, 2018), such as cultural knowledge (Douglass et al., 2020; Jager et al., 2020).

According to Ferrero et al. (2023) Deficiencies in multicultural perspectives, including awareness, knowledge, and skills, may lead to multicultural incompetence among RNDs, resulting in ineffective treatment of patients from diverse cultural backgrounds. Additionally, limited research on integrating multicultural competency in nutrition and dietetics (O'Donovan et al., 2022).

This study utilized several instruments, including the modified Blueprint for Integration of Cultural Competence in the Curriculum Questionnaire (BICCQ) developed by Tulman and Watts. It was named "Multicultural Education Assessment Tool for the

BSND Curriculum". The instrument was tested for reliability using Cronbach's alpha, and the result has a value of .763, interpreted as acceptable but not ideal (Frost, 2024).

Another tool employed in this study is an interview questionnaire derived from the question "How has the BSND curriculum prepared students to promote nutrition care in a diverse society?" Constructing the questionnaire required expert feedback and suggestions for refinement of the questions. Six questions and two sub-questions were developed for the face-to-face interview. The qualitative survey instrument was tested for content validity index (CVI), which resulted in a score of 1.00, indicating that the assessment instrument is valid. Both quantitative and qualitative instruments were pilot-tested with ten (10) participants before it was implemented. Analyzing the data utilized the curriculum heat map, NVivo software, and Statistical Package for the Social Sciences (SPSS).

Multicultural competencies, awareness, knowledge, and skills are significant competencies required for multicultural counseling in cross-cultural settings (Cross et al., 2020; Sue, 2001; Sue et al., 1982).

The study revealed various competencies significant for the profession; however, awareness earned the lowest number of responses among the multicultural competencies, while multicultural skills gained the highest response. Of all the multicultural awareness competency responses, customs and traditions scored the highest frequency. This implied that many participants considered the importance of being aware of their own and others' customs and traditions. Regarding multicultural knowledge, knowledge of religious practices was the most recognized competency. Moreover, skills, such as effective communication, earned the highest frequency and were perceived as important.

Furthermore, on the extent of integrating multicultural education competencies in the BSND curriculum, the overall result revealed that the competencies were "not integrated". However, relative to the topic, knowledge of religious dietary restrictions and traditional foods during events or celebrations is "quite often integrated." The findings were supported by the study by McArthur et al. (2011), which supported that knowledge competency gained the highest score regarding food habits and cultural foods (Sargent et al., 2005; Schim et al., 2005).

The curriculum heat map highlighted inconsistent integration across courses, implying that many important facets of multicultural competency could be neglected. Inconsistencies in curriculum integration may create challenges in achieving the curriculum learning outcomes. This can be manifested in various factors, such as a lack of consensus between teaching and learning objectives, a lack of continuity of content delivery, and failure to incorporate cultural perspectives.

The themes and sub-themes developed from participants' interviews provide significant insight into the development of the multicultural education integration framework. The output of this study is the Multicultural Education Integration Framework for the BSND curriculum. This framework may provide a standard guideline for RND educators in integrating multicultural education. Through this, students may be equipped with multicultural competencies necessary for providing culturally responsive nutrition care to people with diverse backgrounds. The framework highlights the integration of multicultural competencies awareness, knowledge, and skills across the Nutrition and Dietetics curriculum.

The multicultural counseling competency model views that awareness, knowledge, and skills are vital to effectively working with people from diverse backgrounds (Shi & Carey, 2021). The benefits of integrating multicultural education topics have been reported in a conducted study, where students achieved higher academic achievements, deeper learning, and enhanced engagement in real-world situations (Nieto, 2017).

The framework presented in this study was a circular layered design structured to convey that developing multicultural competencies is a continuous cycle and an interconnected learning and growth process. It comprises six interconnected components: learning outcomes, the Banks' integration process, multicultural competencies, learning approaches, assessment, and the core (BSND program).

Guided by the curriculum theories of Tyler, Taba, and Bobbitt, which implies that organizing learning experiences requires continuity in learning, sequence of content, and integration to provide effective and meaningful learning (Bobbitt, 1913; Ibeh, 2021; Maheshwari, 2015; Schiro, 2008). Wheeler's model emphasizes the need for integration, flexibility, and feedback (Prihantoro, 2021). Likewise, the constructivist theory articulated by Vygotsky emphasizes that knowledge is learned through personal experience and social interaction (Gajdamaschko, 2011) .

Being interconnected, the framework components are woven together to support the holistic development of a multicultural, competent individual. The design visualizes how components work together in building students' multicultural competencies, awareness, knowledge, and skills.

The integration process was grounded in the Bank's four levels of approaches: the contribution approach, the additive approach, the transformation approach, and the social action approach, which are introduced in a continuous degree of integration from the 1st year to the 4th year level.

To implement this framework, various learning approaches were purposely selected, including a collaborative approach, experiential learning, and a multimodal approach, to foster a more in-depth interaction with diverse cultures, enhance mindful reflection, and foster the application of knowledge gained in school to the real-world environment.

Moreover, the assessment provides a comprehensive process to assess students' learning and application of skills. Four types of learning assessments are presented for implementing the developed framework: formative, summative, real-world, and skills-based assessments. Each assessment has a unique advantage for effectively assessing student learning.

To effectively utilize the framework, RND educators should start by mapping syllabi, contextualizing the content of lessons, and employing various pedagogical approaches and assessments. Considering that RND educators must be equipped with multicultural competencies required for the teaching and learning process, they must go beyond conventional teaching strategies and adopt a culturally inclusive attitude, paired with deliberate pedagogical approaches, as well as consider the availability of learning resources. Thus, RND educators can adopt and implement the framework competently.

The framework provides a comprehensive process of integrating multicultural competencies, ensuring the future RNDs are not only competent in their field of specialization but also culturally sensitive.

Moreover, as the framework is implemented and evaluated, patterns may arise and findings may serve as the basis for new theories on the importance of multicultural education in nutrition and dietetics programs.

Limitations of the Study

The study focused on assessing the multicultural competency content of the BSND curriculum and the multicultural competencies of the RND educators. The study's respondents are RND educators who have taught and integrated professional courses in nutrition for more than five (5) years in various colleges and universities in the National Capital Region (NCR). Racial diversity of participants is not necessary because the study focuses on its specific objectives.

The research locale is in the National Capital Region (NCR) because it has a significant number of colleges and universities offering nutrition and dietetics programs, making it an ideal location for recruiting the participants of this study. Moreover, the highest proportion of participants is in NCR. The location is also recognized as a melting pot of individuals from different economic backgrounds and cultures, which may influence the delivery of lessons.

Professional courses are the curriculum's evaluation-focused subjects. These include Basic Foods 1 and 2, Food Service Systems 1 and 2, Basic Nutrition, Research 1,

Meal Management, Fundamentals of Food Technology, Nutritional Assessment, the Nutrition Care Process, Nutrition in the life stages 1 and 2, Nutrition Therapy 1 and 2, Nutrition Education, and Public Health Nutrition. The general and supported courses are not included in the assessment. Although Research 2 is a professional course, it is not included because it's just the continuation of Research 1.

The researcher drew on studies on multicultural competence in nutrition published decades ago because there are inadequate studies related to this field, and limited research in the Philippines about multicultural competency or multicultural education in nutrition and dietetics. This led to another gap in the study that inspired the researcher. The study results were used to develop an integration framework, particularly a multicultural education integration framework for the BSND curriculum. The study was performed in the academic year 2023-2024.

Conclusion

The role of Registered Nutritionist-Dietitians (RNDs) was recognized globally for providing nutrition care to clients from different cultural backgrounds. The profession requires multicultural competencies, awareness, knowledge, and skills to effectively work with clients from diverse cultural backgrounds (Sue et al., 1982).

This study highlights multicultural competencies, including awareness, knowledge, and skills among RND practitioners and within the BSND program. The study findings showed a notable difference in how these competencies were recognized by participants and applied in classrooms and professional practice.

Participants recognized various competencies. Based on their responses, multicultural skills gained significant recognition, multicultural knowledge gained moderate recognition, and multicultural awareness gained the least recognition, indicating a crucial gap in multicultural awareness among participants.

While integrating multicultural education competencies into the existing curriculum, the general findings revealed that multicultural competencies were “not integrated” across the curriculum. Although it existed in some courses, inconsistency and a lack of continuity in integration were noticed. This inconsistent integration aligns with the previous research findings and indicates the need for curriculum reform.

Furthermore, the participants’ perspectives offer valuable insights into the current condition of the professional and academic landscape. For instance, participants acknowledge the multiple aspects of multicultural competency and stress its role in promoting quality nutrition care; they also recognize challenges in integrating the multicultural context into their teaching, including the scarcity of educational resources such as cultural textbooks, regional food samples, digital media, preparedness for teaching about cultures, and standard guidelines for integrating cultural topics. These challenges may restrict students' access to diverse cultural information. However, despite those challenges, they strive to employ a variety of learning approaches in their teaching.

Lastly, the reviewed literature and the overall findings of this study underscore the need for such curriculum reform in the Nutrition and Dietetics curriculum to bridge the identified gaps. A Multicultural Education Integration Framework for the BSND curriculum was developed. This framework outlines the essential elements needed for

developing students' multicultural competencies. It is presented in a circular layered design to convey that developing multicultural competencies is a continuous cycle and interconnected process of learning and growth. The curriculum framework not only integrates theoretical foundations but also fosters the inclusion of culturally responsive nutrition care.

The integration process is grounded in Banks' four levels of integration, delivering a progressive and meaningful inclusion of multicultural content. Moreover, the development of this framework is also anchored in Tyler, Bobbit, Taba, and Wheeler's curriculum theories. These curriculum theories share common interests, that is, to advocate for clearly defining goals, logical sequencing of content, and evaluation of learning (Bobbitt, 1913; Ibeh, 2021; Maheshwari, 2015; Prihantoro, 2021; Schiro, 2008)

Although the models differ in form, they all emphasize the importance of systematic planning, meaningful integration of course content, and continuous refinement of instructional development. Additionally, Vygotsky's constructivist theory supports theories that underscore knowledge constructed through active participation, social instruction, and personal experience. Together, these viewpoints guide the development of a culturally responsive framework.

The RND educators can adopt and implement the developed integration framework in their teaching if they strengthen their readiness with fundamental competencies, such as knowledge and skills to teach the cultural context. Additionally, they must rethink and transform how they plan, deliver, and assess their courses for alignment with

culturally responsive nutrition practices. By doing this, RND educators may enhance the quality of their teaching and foster the development of culturally competent graduates.

This study presents insights into the current situation of the BSND curriculum and the significant competencies of the RNDs. In an increasingly culturally diverse society, providing quality and equitable nutrition care requires that RNDs be equipped with the necessary competencies to address the needs of diverse cultures. Therefore, the curriculum must be aligned with the demands of the real world to prepare graduates to navigate the cultural diversity in delivering nutrition care. Culturally responsive nutrition care extends beyond just providing treatments; instead, it requires a deeper understanding of how cultures influence healthcare.

Recommendations

In light of the findings of the study and the developed multicultural education integration framework for the BSND curriculum, the following recommendations are presented:

Among the key competencies identified, multicultural awareness gained the least acknowledgement, indicating a critical gap in participants' multicultural awareness. Thus, it is recommended to formulate and implement an assessment tool to track the students' progress in competencies and inform the continuous enhancement of the curriculum.

The developed multicultural education integration framework for the BSND curriculum is the output of this study. The researcher believes that the framework can address the gaps presented because it provides a comprehensive process of integration that

may guide educators in teaching. However, there are things to consider when adopting this framework.

First, colleges and universities offering Nutrition and Dietetics programs should formally adopt this framework into their curriculum to better equip students with multicultural competencies in serving diverse populations, and policymakers and educational administrators should facilitate the implementation of this integration framework by providing learning materials that embrace diversity, institutional guidelines, and policies that promote a responsive learning environment.

Second, the participants' study highlights the importance of preparedness and competencies for teaching cultural context to the students. To enhance their abilities, educational institutions must support the professional development of faculty members focused on cultural sensitivity, competency, and inclusive learning approaches.

Third, during the implementation of the framework, educators or academic administrators should undergo regular assessment of the framework to ensure its effectiveness and that the content is up to date. Thus, feedback from faculty, students, and community stakeholders is necessary.

For future studies, researchers may investigate the long-term effects of integrating multicultural competencies in the curriculum on the professional performance of the RNDs in delivering nutrition care to people from diverse cultural backgrounds. Additionally, this study employs RND educators as participants. Researchers may conduct qualitative research, including the perspectives of both faculty and ND students about challenges in curriculum integration. This may also be an opportunity to conduct another study, such

as a comparative analysis between faculty and students or between nutrition and other health disciplines.

References

Accreditation Council for Education in Nutrition and Dietetics (ACEND). (2022). ACEND accreditation standards for nutrition and dietetics internship programs (DI). *Academy of Nutrition and Dietetics*. https://tinyurl.com/2s39am3c

Adkins, C. (2017). *Instructional strategies that promote cultural competence in nutrition and dietetics education* [Doctoral dissertation, Walden University]. Walden University Scholar Works. https://tinyurl.com/2mckt2wb

Alanazi, S. (2017). Comparison of curriculum ideologies. *American Research Journal of Humanities and Social Sciences, 2*(1). https://doi.org/10.21694/2378-7031.16021

Arkkelin, D. (2014). Using SPSS to understand research and data analysis. *Psychology Curricular Materials.* https://scholar.valpo.edu/psych_oer/1

Ash, S., Contento, I., Olfert, M. D., & Koch, P. A. (2023). Position of the society for nutrition education and behavior: Nutrition educator competencies for promoting healthy individuals, communities, and food systems: Rationale and application. *Journal of Nutrition Education and Behavior*, *55*(1), 3–15. https://doi.org/10.1016/j.jneb.2022.07.010

Atmarizon, D., Efendi, N., & Franchisca, S. (2020). Implementing authentic assessment in the 2013 curriculum by English teachers of a modern boarding high school. *Jurnal Iqra' : Kajian Ilmu Pendidikan*, *5*(1), 26–42. https://doi.org/10.25217/ji.v5i1.617

Atomei, O.-L., Sânpălean, M., & Tarcea, M. (2024). Cultural competence in dietetic practice. *Dietetics*, *3*(4), 555–567. https://doi.org/10.3390/dietetics3040038

Attum, B., Hafiz, S., Malik, A., & Zafar, S. (2023). *Cultural competence in the care of muslim patients and their families.* StatPearls. Treasure Island (FL): StatPearls Publishing. https://tinyurl.com/2f8wpuja

Bada, S. O. (2015). Constructivism learning theory: A paradigm for teaching and learning. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, *5*(6 ver. 1), 66–70. https://tinyurl.com/bddvyuca

Banks, J. A. (2014). *An Introduction to Multicultural Education* (5th ed.). Pearson.

Banks, J. A. (2015). *Multicultural education: Issues and perspectives* (9th ed.). Wiley.

Banks, J. A. (2019). *An introduction to multicultural education* (Sixth edition). Pearson.

Banks, J. A., & Banks, C. A. M. (Eds.). (2020). *Multicultural education: Issues and perspectives* (10th ed.). Wiley.

Beane, J. A. (2016). *Curriculum integration*. Teachers College Press.

Berg, A. (2023). What you didn't know about "the nutrition factor." *Food and Nutrition Bulletin*, *44*(4), 226–228. https://doi.org/10.1177/03795721231217157

Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Reports*, *118*(4), 293–302. https://doi.org/10.1016/S0033-3549(04)50253-4

Bhuttah, T. M., Xiaoduan, C., Ullah, H., & Javed, S. (2019). *Analysis of curriculum development stages from the perspective of Tyler, Taba, and Wheeler. European journal of social science. 58*(1), 14–22. https://tinyurl.com/y7rxs3mm

Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*, *25*(6), 551–575. https://tinyurl.com/426z6zey

Bobbitt, F. (1913). Some general principles of management applied to the problems of city-school systems. *Teachers College Record: The Voice of Scholarship in Education*, *14*(6), 7–96. https://doi.org/10.1177/016146811301400601

Borge, M., Soto, J. A., Aldemir, T., & Mena, J. A. (2022). Building multicultural competence by fostering collaborative skills. *Teaching of Psychology, 49*(1), 85–92. https://doi.org/10.1177/0098628320977421

Bouchey, B., Castek, J., & Thygeson, J. (2021). *Innovative learning environments in STEM higher education* (J. Ryoo & K. Winkelmann, Eds.; pp. 35–54). Springer International Publishing. https://doi.org/10.1007/978-3-030-58948-6_3

Butler, L., Chen, A. M. H., Borja-Hart, N., Arif, S., Armbruster, A. L., Petry, N., & Riley, A. C. (2020). Assessment of a multi-institution integration of cultural competency activities. *Currents in Pharmacy Teaching and Learning*, *12*(5), 517–523. https://doi.org/10.1016/j.cptl.2020.01.007

Byrne, D. (2020). Evaluating cultural competence in undergraduate nursing students using standardized patients. *Teaching and Learning in Nursing*, *15*(1), 57–60. https://doi.org/10.1016/j.teln.2019.08.010

Campinha-Bacote, J. (2018). Cultural competemility: A paradigm shift in the cultural competence versus cultural humility debate – part I. *OJIN: The Online Journal of Issues in Nursing*, *24*(1). https://doi.org/10.3912/OJIN.Vol24No01PPT20

Chang, C. Y. (2020). Response to signature pedagogies: A framework for pedagogical foundations in counselor education: Through a multicultural and social justice competencies lens. *Teaching and Supervision in Counseling*, *2*(2). https://doi.org/10.7290/tsc020203

Charles, N., Ledornu, D., & Daerego, T. (2020). Influence of customs and traditions on the process of community development among rural communities in Enugu State, Nigeria. *Journal of Education and Practice*. https://doi.org/10.7176/JEP/11-32-08

Clark, R., Bell, S., Roccisana, J., Oien, K. A., & Sneddon, S. F. (2021). Creation of a novel simple heat mapping method for curriculum mapping, using pathology teaching as the exemplar. *BMC Medical Education*, *21*(1), 371. https://doi.org/10.1186/s12909-021-02808-3

Commission on Higher Education. (2017). *Policies, standards, and guidelines for the Bachelor of Science in Nutrition and Dietetics (BSND) program. (CMO, 2017)*. https://tinyurl.com/3zvn4by4

Creswell, J. W., & Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.

Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design* (4th ed.). SAGE Publications, Inc.

Cross, R., Bone, E., Ampt, P., Bell, T., Quinnell, R., & Gongora, J. (2020). Embedding cultural competence in science curricula. In J. Frawley, G. Russell, & J. Sherwood (Eds.), *Cultural Competence and the Higher Education Sector* (pp. 255–275). Springer Singapore. https://doi.org/10.1007/978-981-15-5362-2_14

Deardorff, D. K. (2009). *Implementing intercultural competence assessment* (pp. 477–491). SAGE Publications, Inc.

Domenech Rodríguez, M. M., Reveles, A. K., Litson, K., Patterson, C. A., & Vázquez, A. L. (2022). Development of the awareness, skills, knowledge: General (ASK-G) scale for measuring cultural competence in the general population. *PLOS ONE*, *17*(9), e0274505. https://doi.org/10.1371/journal.pone.0274505

Douglass, P., Kazaks, A., & Gordon, W. (2020). Assessing Registered Dietitian Nutritionists' knowledge regarding nutrition and health care for Transgender and Gender Non-Binary (TGGNB) individuals. *Journal of the Academy of Nutrition and Dietetics, 120*(9), A19. https://doi.org/10.1016/j.jand.2020.06.201

Dudovskiy, J. (2018). *The ultimate guide to writing a dissertation in business studies: A step-by-step assistance* (1st ed.). Research-Methodology.net. https://bit.ly/49Vx46T

Eden, N. C. A., Chisom, N. O. N., & Adeniyi, N. I. S. (2024). Cultural competence in education: Strategies for fostering inclusivity and diversity awareness. *International Journal of Applied Research in Social Sciences*, *6*(3), 383–392. https://doi.org/10.51594/ijarss.v6i3.895

Elliott, V. (2018). Thinking about the coding process in qualitative data analysis. *The Qualitative Report*. https://doi.org/10.46743/2160-3715/2018.3560

Ferrero, E. M., Yunker, A. G., Cuffe, S., Gautam, S., Mendoza, K., Bhupathiraju, S. N., & Mattei, J. (2023). Nutrition and health in the lesbian, gay, bisexual, transgender, queer/questioning community: A narrative review. *Advances in Nutrition*, *14*(6), 1297–1306. https://doi.org/10.1016/j.advnut.2023.07.009

Fortepiani, L. A., & Marsh, S. A. (2023). Innovative techniques for developing an inclusive teaching environment. *Advances in Physiology Education*, *47*(4), 904–907. https://doi.org/10.1152/advan.00014.2023

Freire, J. A., & Valdez, V. E. (2021). The holistic analysis of multicultural teaching framework: Capturing teachers' pauses and their hybrid and fluid multicultural practices. *International Journal of Multicultural Education*, *23*(2), 127–144. https://tinyurl.com/mr4c4ckx

Frost, J. (2024). *Cronbach's alpha: Definition, calculations & example*. https://statisticsbyjim.com/basics/cronbachs-alpha/

Gajdamaschko, N. (2011). Lev Semenovich Vygotsky 1896–1934: Psychologist Author of Cultural-Historical Theory of Human Development. In *Encyclopedia of Creativity* (pp. e95–e99). Elsevier.

George, R. E., Thornicroft, G., & Dogra, N. (2015). Exploration of cultural competency training in UK healthcare settings: A critical interpretive review of the literature. *Diversity & Equality in Health and Care*, *12*(3). https://tinyurl.com/3kuyfse3

Goode, T. D. (2001). Cultural enhancement module series. *Georgetown University Center for Child and Human Development*. https://nccc.georgetown.edu/curricula/modules.html

Gupta, K., Grove, B., & Mann, G. (2021). Impact of service learning on personal, social, and academic development of community nutrition students. *Journal of Community Engagement and Higher Education*, *13*. https://tinyurl.com/4r36kyru

Hack, R., Hekmat, S., & Ahmadi, L. (2015). Examining the cultural competence of third- and fourth-year nutrition students: A pilot study. *Canadian Journal of Dietetic Practice and Research*, *76*(4), 178–184. https://doi.org/10.3148/cjdpr-2015-018

Hamed Kandil, S. (2022). The role of food culture in developing the nutritional awareness and healthy behavior of students. *International Journal of Humanities and Language Research*, *5*(1), 49–60. https://doi.org/10.21608/ijhlr.2023.215929.1012

Harlen, W. (2005). Teachers' summative practices and assessment for learning – tensions and synergies. *The Curriculum Journal*, *16*(2), 207–223. https://doi.org/10.1080/09585170500136093

Harris. (2022). The efficacy of a service-learning experience in the New Orleans area in improving intercultural competence of nutrition and dietetics students. *University of North Florida.* https://digitalcommons.unf.edu/etd/1156

Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development*, *48*(3), 23–48. https://doi.org/10.1007/BF02319856

Hickson, S. V. (2022). Culturally competent healthcare. *Clinics in Integrated Care*, *15*, 100130. https://doi.org/10.1016/j.intcar.2022.100130

Huberman, A., & Miles, M. (2002). *The qualitative researcher's companion*. SAGE Publications, Inc. https://doi.org/10.4135/9781412986274

Huda, M., Mustafa, M. C., & Mohamed, A. K. (2021). Understanding of multicultural sustainability through mutual acceptance: Voices from intercultural teachers' previous early education. *Sustainability*, *13*(10), 5377. https://doi.org/10.3390/su13105377

Hulteng, J. (2022). *Analysis of the multicultural awareness, knowledge, skills survey – healthcare edition* [Doctoral dissertation]. https://commons.und.edu/theses/4265

Hunkins, P. F., & Hammill, P. A. (1994). *Beyond Tyler and Taba: Reconceptualizing the curriculum process.* Taylor & Francis. Ltd. http://www.jstor.org/stable/1492885

Ibeh, A. I. (2021). Curriculum theory by Ralph Tyler and its implications for 21st-century learning. *Unizik Journal of Educational Research and Policy Studies*, *4*(2). https://tinyurl.com/47n8wumw

Institute for Experiential Learning. (2024). *What is experiential learning?* https://tinyurl.com/4brx64ec

International Confederation of Dietetics Associations. (2016). *International competency standards for Dietitian-Nutritionists*. https://tinyurl.com/mrya5u94

Ivey, A., Ivey, M. B., & Zalaquett, C. (2017). *Intentional interviewing and counseling* (9th ed). Cengage US.

Jager, M., Den Boeft, A., Leij-Halfwerk, S., Van Der Sande, R., & Van Den Muijsenbergh, M. (2020). Cultural competency in dietetic diabetes care—A qualitative study of the dietician's perspective. *Health Expectations*, *23*(3), 540–548. https://doi.org/10.1111/hex.13019

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14–26. https://doi.org/10.3102/0013189X033007014

Joy, P., & Numer, M. (2018). Queering educational practices in dietetics training: A critical review of LGBTQ inclusion strategies. *Canadian Journal of Dietetic Practice and Research*, *79*(2), 80–85. https://doi.org/10.3148/cjdpr-2018-006

Kaihlanen, A.-M., Hietapakka, L., & Heponiemi, T. (2019). Increasing cultural awareness: Qualitative study of nurses' perceptions about cultural competence training. *BMC Nursing*, *18*(1), 38. https://doi.org/10.1186/s12912-019-0363-x

Kennedy, L. (2023). *What is multimodal learning? 35 strategies and examples to empower your teaching*. https://tinyurl.com/9hruuby5

Knoblock-Hahn, A. L., Scharff, D. P., & Elliott, M. (2010). Cultural competence in dietetics education: Where are we now and where do we need to go? *Topics in Clinical Nutrition*, *25*(4), 323–334. https://doi.org/10.1097/TIN.0b013e3181faba17

Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia - Social and Behavioral Sciences*, *31*, 486–490. https://doi.org/10.1016/j.sbspro.2011.12.091

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. The remix. *Harvard Educational Review*, *84*(1), 74–84. https://doi.org/10.17763/haer.84.1.p2rj131485484751

Leininger, M. M., & McFarland, M. R. (2013). *Transcultural nursing: Concepts, theories, research, and practice* (3. ed.). McGraw-Hill, Medical Pub. Division.

Liang, H. Y., Tang, F. I., Wang, T. F., & Yu, S. (2021). Evaluation of nurse practitioners' professional competence and comparison of assessments using multiple methods: Self-assessment, peer assessment, and supervisor assessment. *Asian Nursing Research*, *15*(1), 30–36. https://doi.org/10.1016/j.anr.2020.10.004

Lie, D., Boker, J., Crandall, S., DeGannes, C., Elliott, D., Henderson, P., Kodjo, C., & Seng, L. (2009). A revised curriculum tool for assessing cultural competency training (TACCT) in health professions education. *MedEdPORTAL*, 3185. https://doi.org/10.15766/mep_2374-8265.3185

Lindgreen, A., Koenig-Lewis, N., Kitchener, M., Brewer, J. D., Moore, M. H., & Meynhardt, T. (Eds.). (2019). *Public value: Deepening, enriching, and broadening the theory and practice*. Routledge.

Liu, J., Miles, K., & Li, S. (2022). Cultural competence education for undergraduate medical students: An ethnographic study. *Frontiers in Education*, *7*, 980633. https://doi.org/10.3389/feduc.2022.980633

Mahajan, M., & Singh, M. K. S. (2017). Importance and benefits of learning outcomes. *IOSR Journal of Humanities and Social Science*, *22*(03), 65–67. https://doi.org/10.9790/0837-2203056567

Mahdi, O. R., Nassar, I. A., & Almuslamani, H. A. (2020). The role of using case studies method in improving students' critical thinking skills in higher education. *International Journal of Higher Education*, *9*(2), 297. https://doi.org/10.5430/ijhe.v9n2p297

Maheshwari, V. K. (2015). Ralph W. Tyler (1902–1994)- curriculum development model. *WordPress*. http://www.vkmaheshwari.com

Martin, R. L., & Bryant, J. A. (2025). Collaboration. In *StatPearls*. StatPearls Publishing. https://tinyurl.com/mrfcbssw

McArthur, L. H., Greathouse, K. R., Smith, E. R., & Holbert, D. (2011). A quantitative assessment of the cultural knowledge, attitudes, and experiences of junior and senior dietetics students. *Journal of Nutrition Education and Behavior*, *43*(6), 464–472. https://doi.org/10.1016/j.jneb.2010.11.005

McCabe, C. F., O'Brien-Combs, A., & Anderson, O. S. (2020). Cultural competency training and evaluation methods across dietetics education: A narrative review. *Journal of the Academy of Nutrition and Dietetics*, *120*(7), 1198–1209. https://doi.org/10.1016/j.jand.2020.01.014

Michigan Department of Education. (2017). Curriculum integration research: Re-examining outcomes and possibilities for the 21st-century classroom. *Michigan Department of Education, 91014*. https://tinyurl.com/5c59xtav

Mickan, S., Hilder, J., Wenke, R., & Thomas, R. (2019). The impact of a small-group educational intervention for allied health professionals to enhance evidence-based

practice: Mixed methods evaluation. *BMC Medical Education*, *19*(1), 131. https://doi.org/10.1186/s12909-019-1567-1

Moore, Mc. K. (2023). *The exceptional European experience: An analysis of education abroad's impact on college students and the field of nutrition and dietetics. Eastern Kentucky University.* https://encompass.eku.edu/honors_theses/954

Moustakas, C. (1994). *Phenomenological research methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412995658

National Privacy Commission. (2012). *Republic Act 10173, Data Privacy Act of 2012*. https://privacy.gov.ph/data-privacy-act

Naz, F. L., Afzal, A., & Khan, M. H. N. (2023). Challenges and benefits of multicultural education for promoting equality in diverse classrooms. *Journal of Social Sciences Review*, *3*(2), 511–522. https://tinyurl.com/49cmtnjj

Nemec, K. (2020). Cultural awareness of eating patterns in the health care setting. *Clinical Liver Disease*, *16*(5), 204–207. https://doi.org/10.1002/cld.1019

Nieto, S. (2017). *Affirming diversity: The sociopolitical context of multicultural education* (7th ed.). Pearson.

O'Donovan, S., Palermo, C., & Ryan, L. (2022). Competency-based assessment in nutrition education: A systematic literature review. *Journal of Human Nutrition and Dietetics*, *35*(1), 102–111. https://doi.org/10.1111/jhn.12946

Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, *12*(2), 282–316. https://tinyurl.com/hvytaz7h

Owen, O. (2023). *What is Wheeler's model of curriculum planning?* Uncommon Learning Standard. https://tinyurl.com/4dh8s9cy

Papakitsos, E. C. (2016). The application of systems methodology to curriculum development in higher education. *Higher Education Research, 1*(1). https://tinyurl.com/j9wdx9um

Partnership for Dietetic Education and Practice. (2013). *The integrated competencies for dietetic education and practice (ICDEP)*. https://tinyurl.com/545maa52

Patton, M. Q. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications, Inc.

Philippine Statistics Authority. (2023). *Ethnicity in the Philippines 2020 census of population and housing*. https://psa.gov.ph/content

Presseau, C., Luu, L. P., Inman, A. G., & DeBlaere, C. (2019). Trainee social justice advocacy: Investigating the roles of training factors and multicultural competence. *Counselling Psychology Quarterly*, *32*(2), 260–274. https://doi.org/10.1080/09515070.2018.1476837

Prihantoro, C. R. (2021). Examining the use of the Wheeler-model-based curriculum development in a learning management system for a vocational study program. *International Journal of Education and Practice*, *9*(3), 507–519. https://doi.org/10.18488/journal.61.2021.93.507.519

Reddy, S., & Anitha, M. (2015). Culture and its influence on nutrition and oral health. *Biomedical and Pharmacology Journal*, *8*(October Special Edition), 613–620. https://doi.org/10.13005/bpj/757

Romo, N. C. V. (2019). *Curriculum development*. Unlimited Books Library Services & Publishing Inc.

Sankey, M., & Gardiner, M. (2010). Engaging students through multimodal learning environments: The journey continues. In proceedings of ASCILITE. *Australasian Society for Computers in Learning in Tertiary Education*. https://www.learntechlib.org/p/45485/

Santiago, B., & Silveira, C. (2024). Providing culturally responsive nutrition education and food supports: A case study of WIC. *Journal of Nutrition Education and Behavior*, *56*(8), S32–S33. https://doi.org/10.1016/j.jneb.2024.05.079

Sargent, S. E., Sedlak, C. A., & Martsolf, D. S. (2005). Cultural competence among nursing students and faculty. *Nurse Education Today*, *25*(3), 214–221. https://doi.org/10.1016/j.nedt.2004.12.005

Schim, S. M., Doorenbos, A. Z., & Borse, N. N. (2005). Cultural competence among Ontario and Michigan healthcare providers. *Journal of Nursing Scholarship*, *37*(4), 354–360. https://doi.org/10.1111/j.1547-5069.2005.00061.x

Schiro, M. (2008). *Curriculum theory: Conflicting visions and enduring concerns*. SAGE Publications.

Sengupta, E., Blessinger, P., Hoffman, J., & Makhanya, M. (2019). Introduction to strategies for fostering inclusive classrooms in higher education. In *Innovations in Higher Education Teaching and Learning* (Vol. 16, pp. 3–16). Emerald Publishing Limited. https://doi.org/10.1108/S2055-364120190000016005

Shi, Q., & Carey, J. (2021). School counselor multicultural counseling competence assessed by state school counselor licensure examinations. *Journal of School-Based Counseling Policy & Evaluation*, *3*(2), 79–90. https://doi.org/10.25774/P54C-J855

Sodowsky, G. R., Taffe, R. C., Gutkin, T. B., & Wise, S. L. (1994). Development of the multicultural counseling inventory: A self-report measure of multicultural competencies. *Journal of Counseling Psychology*, *41*(2), 137–148. https://doi.org/10.1037/0022-0167.41.2.137

Steffe, L. P., & Gale, J. E. (1995). *Constructivism in education*. Lawrence Erlbaum.

Strahley, M. (2020). *Student evaluation of cultural competence instruction in dietetics education* [Doctoral dissertation]. https://tinyurl.com/2n5szw5n

Stubbe, D. E. (2020). Practicing cultural competence and cultural humility in the care of diverse patients. *FOCUS*, *18*(1), 49–51. https://doi.org/10.1176/appi.focus.20190041

Sue, D. W. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, *29*(6), 790–821. https://doi.org/10.1177/0011000001296002

Sue, D. W., Bernier, J. E., Durran, A., Feinberg, L., Pedersen, P., Smith, E. J., & Vasquez-Nuttall, E. (1982). Position paper: Cross-cultural counseling competencies. *The Counseling Psychologist*, *10*(2), 45–52. https://doi.org/10.1177/0011000082102008

Supsiloani, Badaruddin, Ismail, R., & Aisyah, D. (2021). *Integrating multicultural education in school curriculum:* Proceedings of the Tenth International

Conference on Languages and Arts (ICLA 2021), Padang, Indonesia. https://doi.org/10.2991/assehr.k.211129.032

Tan, N., & Li, S. (2016). Multiculturalism in healthcare: A review of current research into diversity found in the healthcare professional population and the patient population. *International Journal of Medical Students*, *4*(3), 112–119. https://doi.org/10.5195/ijms.2016.163

Taylor, S. (2020). *Examining the relationship between multicultural efficacy and culturally responsive classroom management self-efficacy among K-12 teachers* [Unpublished doctoral dissertation, Liberty University]. https://tinyurl.com/26czx5p3

The importance of continuous learning for innovation, progression, and survival. (2018). *Business Information Review*, *35*(1), 6–8. https://doi.org/10.1177/0266382118762967

Tulman, L., & Watts, R. J. (2008). Development and testing of the blueprint for integration of cultural competence in the curriculum questionnaire. *Journal of Professional Nursing*, *24*(3), 161–166. https://doi.org/10.1016/j.profnurs.2008.01.006

Tunnell, M. O., James, J. S., Young, T. A., & Bryan, G. (2012). *Children's literature, briefly* (5th ed.). Pearson Education.

Turkelson, C., Cooper, D., Creech, C., Schellenberg, K., & Behnke, L. (2021). Using simulation to enhance nurse practitioner students' cultural sensitivity,

communication, and empathy with vulnerable populations. *Clinical Simulation in Nursing, 56*, 108–116. https://doi.org/10.1016/j.ecns.2021.04.011

Uzunboylu, H., & Altay, O. (2021). State of affairs in multicultural education research: A content analysis. *Compare: A Journal of Comparative and International Education, 51*(2), 278–297. https://doi.org/10.1080/03057925.2019.1622408

Verzella, M. (2019). Virtual exchange between cross-cultural teams: A sustainable path to the internationalization of college courses. *Transformative Dialogues: Teaching and Learning Journal*, *11*(3). https://doi.org/10.59236/td2018vol11iss3137

Vincze, L., Barnes, K., Somerville, M., Littlewood, R., Atkins, H., Rogany, A., & Williams, L. T. (2021). Cultural adaptation of health interventions including a nutrition component in Indigenous peoples: A systematic scoping review. *International Journal for Equity in Health*, *20*(1), 125. https://doi.org/10.1186/s12939-021-01462-x

Vygotsky, L. S. (1980). *Mind in society: Development of higher psychological processes* (M. Cole, V. Jolm-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press. https://doi.org/10.2307/j.ctvjf9vz4

Zamawe, F. (2015). The implication of using NVivo software in qualitative data analysis: Evidence-based reflections. *Malawi Medical Journal, 27*(1), 13. https://doi.org/10.4314/mmj.v27i1.4

Zeydani, A., Atashzadeh-Shoorideh, F., Abdi, F., Hosseini, M., Zohari-Anboohi, S., & Skerrett, V. (2021). Effect of community-based education on undergraduate

nursing students' skills: A systematic review. *BMC Nursing*, *20*(1), 233. https://doi.org/10.1186/s12912-021-00755-4

Appendix A

Interview Questionnaire of the Study

Questions
RQ 1. "How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum?".
1. How would you define multicultural competency in your own words?
2. As an RND, what were your first experiences when you worked in multicultural settings?
3. What multicultural competencies do you think students need to learn when dealing with a diverse society?
4. What are your thoughts about the multicultural competency content of the present BSND curriculum?
5. How do you teach multicultural competencies to the students?
5.1 What strategies and instructional materials do you use in teaching multicultural competency?
5.2 What are your insights into teaching multicultural content inside the classroom?
6. What are your thoughts about having guidelines for integrating multicultural competency into the BSND program?

Appendix B

Matrix in Aligning the Context of the Adapted Assessment Tool in the BS Nutrition and Dietetics Program Outcome.

Program Outcomes (CMO 14s, 2017)	Awareness	Knowledge	Skills
Promote the importance of dietetics and nutrition for people's health by educating them about their needs, resources, and capabilities as individuals, groups, and families.	One's values, cultures, and beliefs. The difficulties associated with cross-cultural communication	Definition of a multicultural society. Multicultural society's views (culture, ethnicity, race, gender, and sociodemographic). Important/traditional foods during events or celebrations. Name of regional foods and dishes. Laws Protecting Health Disparity Republic Act no. 11223 or the "Universal Health Care Act (UHC) of 2019 Republic Act No. 11036, The Mental Health Act Republic Act No. 7277, Magna Carta for Disabled Persons Anti-Discrimination Act 2017	Practice critical thinking skills when interpreting points of view from other cultures.
Practice extensive nutritional care for	Techniques in reducing	Health beliefs and practices	Practice openness to one's opinion

Program Outcomes (CMO 14s, 2017)	Awareness	Knowledge	Skills
people's overall wellness in a multidisciplinary and multicultural environment.	Prejudice and stereotyping of others. Health disparities in healthcare	Religious dietary restrictions (Buddhism, Christianity, Hinduism, Jainism, Judaism, Mormonism, Islam, etc.	and avoid criticism.
Incorporate nutrition issues into regional and nationwide development initiatives.		Nutritional health issues of each culture	Communication skills in a multicultural society.
Organize nutrition programs for groups and individuals, as well as institutions.		Verbal & Non-verbal communication	Create nutrition education programs, interventions, and instructional materials for a diverse society.
Oversee hospital food service or other settings.		Selecting, preparing, and storing foods in a cultural setting.	Plan and prepare foods according to a multicultural setting.
Implement a financially viable nutrition or dietetics-related activity.		Availability and accessibility of foods in the region or community.	
Design and /or carry out specific studies on diet, food, and related subjects.		Food patterns, habits & preferences.	Conduct research on ethnic or cultural groups about nutritional issues, eating practices, and beliefs.
Uphold the profession’s ethical norms.			Demonstrate respect for cultural

Program Outcomes (CMO 14s, 2017)	Awareness	Knowledge	Skills
			beliefs during nutrition counseling practice.
Take part in activities that promote lifelong learning.			Facilitate collaboration in the community.

Appendix C

Themes and Subthemes

Theme	Sub-Theme	Quotes
Theme 1: Multicultural competencies towards nutrition care.	Multicultural awareness	"Multicultural competency is awareness of the differences of various cultures." (P1)
		"We have different cultures, and we should not argue with the beliefs of one another. That is why we should be aware of other cultures. " (P2)
		"Providing an introduction to each culture and the origins of each belief. It is about awareness of the multi-cultural dimension in the Philippines." (P7)
		"Multicultural competency is about awareness not only of their own culture but others as well." (P12)
	Multicultural knowledge	"Multicultural competency is knowing the differences between various cultures, such as the strong background of food preferences, habits, and patterns." (P1)
		"Multicultural competency is about knowledge and understanding of various multicultural aspects to prevent stereotyping. … so that students can understand the reality of each culture." (P2)
		"Knowledge about food habits and food preferences of other cultures is an important multicultural competency." (P5)

Theme	Sub-Theme	Quotes
		"Multicultural competency is about knowledge of religious and dietary practices of different cultures." (P6)
	Multicultural skills	"They should be open-minded because the real world is very different from what they have learned in class." (P2)
		"First and foremost, we should be open-minded and humanitarian because we have similarities even though we have different cultural beliefs and practices. Because more than just the curriculum, we also tell them to become better people. It is important to learn how to get along with or socialize with other cultures." (P3)
		"Communication skills are important because you may know what to say but not how to say it…….sometimes simple gestures have meaning in other cultures." (P4)
		"Multicultural competency is about respecting other cultures' food, customs, and religions.
		"Willing to listen to the opinions of others." (P5)
		"Respecting their beliefs and traditions during nutrition counseling is important so that they will adhere to the intervention given." (P6)

Theme	Sub-Theme	Quotes
		"Having the ability to comprehend and keep up with different cultures through a broad understanding and deep thoughts on the importance of each culture that each one has." (P7)
		"Students need to learn how to collaborate skills with community and government agencies, as well as develop their critical thinking skills, and research skills." (P10)
		*"*Open to change and adapt quickly." (P12)
Theme 2: Curriculum integration	Inconsistent integration	"In my experience during my college years, multicultural competencies were not integrated, even into my master's degree. But now, I try to incorporate them into my teaching." (P1)
		"It is present in particular subjects, but evidence of multicultural competencies at each level is only top-down." (P2)
		"Because the BSND program's outcome is to build multicultural competence, the competencies should not just be inserted through examples, so it does not look like an add-on. There are some competencies integrated, but in particular subjects only." (P3)
		"There are, but in particular subjects only, and sometimes multicultural topics are inserted through examples." (P4)
		"Not particular in all levels." (P5)

Theme	Sub-Theme	Quotes
		"Not everything is present; it was embedded in particular subjects only." (P6)
		"Teachers integrate multicultural content into the examples during the discussions." (P8)
		"There is no clear representation of multicultural topics at each program level; instead, it is embedded in particular subjects or courses. It is much better if we integrate the topics per level because the scope of multicultural competencies is wide." (P9)
	Challenges in integration	"Challenges are the resources, especially books." (P6)
		"The challenges I encountered in integrating multicultural competencies into my teaching are the following: platform use, modalities, internet stability, access to the laboratory community, subject /teaching schedule, and University policy concerning community immersion." (P8)
		"My challenge in integrating multicultural competencies into my teaching of basic foods is the availability of the local foods of a specific region, because they are hard to find. It is much better if there are real food samples so that students can taste and describe their texture and cook appropriate dishes…Sometimes, PowerPoint and visual aids are not enough for teaching." (P10)

Theme	Sub-Theme	Quotes
		"The student has limited cultural exposure." (P12)
Theme 3: Learning approaches		"Mostly, I use case analysis and provide examples based on theories. I also conduct laboratory activities and analysis under specific conditions or situations that align with the intervention." (P1)
		"Visual aids are essential since students prefer to see what you're saying. Also, my experience is perhaps one of the most valuable assets I can contribute to my teaching." (P2)
		"I used case studies and reading literature, and I encouraged my students to think in a broader sense." (P3)
		"I used PowerPoint and videos, and before I used my instructional materials, I reviewed them many times, making sure that there was no wrong information that would offend other cultures." (P4)
		"I always asked my students for their insights, provided situational analysis, and incorporated the advent of technology, such as YouTube videos and TikTok, to express what they learned. (P5)
		"Teaching multicultural competencies is through readings and reporting about historical accounts of certain foods, role-playing, case studies, community visits, and field trips." (P7)

Theme	Sub-Theme	Quotes
		"I implement field trips or exposure trips, allowing students to experience and see how things are done on aspects of the subject matter because learning is not only in the classroom." (P9)
Theme 4: Culturally responsive nutrition care	Creating a diet suitable for the patient's needs	"A strong background of food preferences, habits, and patterns so that we can prescribe the diet available in the community that is also suitable for their culture." (P1)
		"Understand regional or cultural beliefs to create a diet that suits the patient's needs." P7)
		"Knowledge of cultural foods is important to create a diet suitable for patients with different cultural backgrounds." (P12)
	Fostering inclusivity and reducing biases	"Not to be biased in one sector only, but instead in the whole sector." (P2)
		"It's about acceptance and a wide understanding of multicultural dimensions." (P9)
		"RNDs should be sensitive to the needs of their patients and open to change." (P12)
	Engaging in continuous learning and innovation	"I need to study and read cultural books that can be incorporated into the teaching, and also learn how to integrate the ideas of multiculturalism, maybe because what I am telling my students is inaccurate or untrue." (P1)

Theme	Sub-Theme	Quotes
		"Continuous learning is needed to deal with various cultures." (P5)
		"Training in cultural competencies is also needed."
		"Understanding culture is important to be able to research well, and also it provides an opportunity to meet different kinds of people who can teach us new things." (P7)
		" More innovation in learning, the society will benefit from continuous learning." (P9)
	Promote nutrition care	"The current curriculum needs improvement to address the promotion of nutrition care in a diverse society." (P6)
		"The BSND curriculum prepared students to promote nutrition care in a diverse society by including multicultural content in teaching."
		"Acknowledges multicultural content in the curriculum."
		"Integrating multicultural content at all levels of the BSND program, ensuring that graduates of the program can promote nutrition care in a diverse community." (P11)

Appendix D

Summary of Themes and Subthemes

Theme	Sub-Theme	Frequency of Interview (N=12)
Theme 1: Multicultural competencies towards nutrition care.	Multicultural awareness	4
	Multicultural knowledge	4
	Multicultural skills	8
Theme 2: Curriculum integration	Inconsistent integration	8
	Challenges in integration	4
Theme 3: Learning approaches		7
Theme 4: Culturally responsive nutrition care	Create a diet suitable for the patient's needs.	3
	Foster Inclusivity & Reduce Biases	3
	Engage in continuous Learning and Innovation	5
	Promote Nutrition Care	3

Appendix E

Multicultural Awareness Assessment

One's Beliefs, Values, and Prejudices

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	8	6	11	32.0	24.0	44.0	Quite Often Integrated
Basic Foods 2	9	5	11	36.0	20.0	44.0	Quite Often Integrated
Basic Nutrition	5	9	11	20.0	36.0	44.0	Quite Often Integrated
Meal Management	8	6	11	32.0	24.0	44.0	Quite Often Integrated
Nutrition Assessment	5	12	8	20.0	48.0	32.0	Sometimes Integrated
Nut. in the Life Stages 1	7	11	7	28.0	44.0	28.0	Sometimes Integrated
Nut. in the Life Stages 2	7	11	7	28.0	44.0	28.0	Sometimes Integrated
Nutrition Care Process	9	8	8	36.0	32.0	32.0	Never Integrated
Fundamentals of Food Technology	15	4	6	60.0	16.0	24.0	Never Integrated
Food Service System 1	13	6	6	52.0	24.0	24.0	Never Integrated
Nutrition Therapy 1	6	13	6	24.0	52.0	24.0	Sometimes Integrated
Public Health Nutrition	5	12	8	20.0	48.0	32.0	Sometimes Integrated
Food Service System 2	13	12	0	52.0	48.0	0	Never Integrated
Nutrition Education	5	9	11	20.0	36.0	44.0	Quite Often Integrated
Nutrition Therapy 2	6	10	9	24.0	40.0	36.0	Sometimes Integrated
Total	121	134	120				

Multicultural Awareness Assessment

Techniques for Reducing Prejudice and Stereotyping of Others

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	18	7	0	72.0	28.0	0.0	Never Integrated
Basic Foods 2	20	4	1	80.0	16.0	4.0	Never Integrated
Basic Nutrition	17	7	1	68.0	28.0	4.0	Never Integrated
Meal Management	16	7	2	64.0	28.0	8.0	Never Integrated
Nutrition Assessment	16	8	1	64.0	32.0	4.0	Never Integrated
Nut. in the Life Stages 1	13	12	0	52.0	48.0	0.0	Never Integrated
Nut. in the Life Stages 2	13	12	0	52.0	48.0	0.0	Never Integrated
Nutrition Care Process	14	11	0	56.0	44.0	0.0	Never Integrated
Fundamentals of Food Technology	22	3	0	88.0	12.0	0.0	Never Integrated
Food Service System 1	22	3	0	88.0	12.0	0.0	Never Integrated
Nutrition Therapy 1	13	12	0	52.0	48.0	0.0	Never Integrated
Public Health Nutrition	14	11	0	56.0	44.0	0.0	Never Integrated
Food Service System 2	22	3	0	88.0	12.0	0.0	Never Integrated
Nutrition Education	12	11	2	48.0	44.0	8.0	Never Integrated
Nutrition Therapy 2	15	10	0	60.0	40.0	0.0	Never Integrated
Total	247	121	7				

Multicultural Awareness Assessment

Awareness of the Difficulties Associated with Cross-Cultural Communication

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	10	9	6	40.0	36.0	24.0	Never Integrated
Basic Foods 2	1	7	8	40.0	28.0	32.0	Never Integrated
Basic Nutrition	16	4	5	64.0	16.0	20.0	Never Integrated
Meal Management	8	8	9	32.0	32.0	36.0	Quite Often Integrated
Nutrition Assessment	8	13	4	32.0	52.0	16.0	Sometimes Integrated
Nut. in the Life Stages 1	7	10	8	28.0	40.0	32.0	Sometimes Integrated
Nut. in the Life Stages 2	7	10	8	28.0	40.0	32.0	Sometimes Integrated
Nutrition Care Process	10	9	6	40.0	36.0	24.0	Never Integrated
Fundamentals of Food Technology	12	8	5	48.0	32.0	20.0	Sometimes Integrated
Food Service System 1	16	5	4	64.0	20.0	16.0	Never Integrated
Nutrition Therapy 1	9	6	10	36.0	24.0	40.0	Quite Often Integrated
Public Health Nutrition	1	13	11	4.0	52.0	44.0	Sometimes Integrated
Food Service System 2	16	4	5	64.0	16.0	20.0	Never Integrated
Nutrition Education	4	10	11	16.0	40.0	44.0	Quite Often Integrated
Nutrition Therapy 2	9	5	11	36.0	20.0	44.0	Quite Often Integrated
Total	143	121	111				

Multicultural Awareness Assessment

Health Disparities in Healthcare

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	2	5	0	80.0	20.0	0.0	Never Integrated
Basic Foods 2	22	3	0	88.0	12.0	0.0	Never Integrated
Basic Nutrition	19	3	3	76.0	12.0	12.0	Never Integrated
Meal Management	20	2	3	80.0	8.0	12.0	Never Integrated
Nutrition Assessment	13	5	7	52.0	20.0	28.0	Never Integrated
Nut. in the Life Stages 1	13	4	8	52.0	16.0	32.0	Never Integrated
Nut. in the Life Stages 2	14	6	5	56.0	24.0	20.0	Never Integrated
Nutrition Care Process	10	4	11	40.0	16.0	44.0	Never Integrated
Fundamentals of Food Technology	22	1	2	88.0	20.0	8.0	Never Integrated
Food Service System 1	20	5	0	80.0	20.0	0.0	Never Integrated
Nutrition Therapy 1	18	3	4	72.0	12.0	16.0	Never Integrated
Public Health Nutrition	4	13	8	16.0	52.0	32.0	Sometimes Integrated
Food Service System 2	20	5	0	80.0	20.0	0.0	Never Integrated
Nutrition Education	8	7	10	32.0	28.0	40.0	Quite Often Integrated
Nutrition Therapy 2	18	2	5	72.0	8.0	20.0	Never Integrated
Total	241	68	66				

Appendix F

Multicultural Knowledge

Definition of Multicultural Society

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	17	6	2	68.0	24.0	8.0	Never Integrated
Basic Foods 2	18	6	1	72.0	24.0	4.0	Never Integrated
Basic Nutrition	20	4	1	80.0	16.0	4.0	Never Integrated
Meal Management	11	12	2	44.0	48.0	8.0	Never Integrated
Nutrition Assessment	17	4	4	52.0	20.0	28.0	Never Integrated
Nut. in the Life Stages 1	14	7	4	56.0	28.0	16.0	Never Integrated
Nut. in the Life Stages 2	14	7	4	56.0	28.0	16.0	Never Integrated
Nutrition Care Process	10	11	40	40.0	44.0	16.0	Sometimes Integrated
Fundamentals of Food Technology	17	7	1	68.0	28.0	4.0	Never Integrated
Food Service System 1	15	9	1	60.0	36.0	4.0	Never Integrated
Nutrition Therapy 1	13	8	4	52.0	32.0	16.0	Never Integrated
Public Health Nutrition	1	9	15	4.0	36.0	60.0	Quite Often Integrated
Food Service System 2	15	9	1	60.0	36.0	4.0	Never Integrated
Nutrition Education	9	9	7	36.0	36.0	28.0	Never Integrated/Sometimes Integrated
Nutrition Therapy 2	10	13	2	40.0	52.0	8.0	Sometimes Integrated
Total	201	121	53				

Multicultural Knowledge

Multicultural Society's Views (Culture, Ethnicity, Race, Gender, And Sociodemographic)

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	12	7	6	48.0	28.0	24.0	Never Integrated
Basic Foods 2	14	5	6	56.0	20.0	24.0	Never Integrated
Basic Nutrition	13	5	7	52.0	20.0	28.0	Never Integrated
Meal Management	15	2	7	60.0	8.0	28.0	Never Integrated
Nutrition Assessment	6	14	5	24.0	56.0	20.0	Quite Often Integrated
Nut. in the Life Stages 1	8	11	6	32.0	44.0	24.0	Quite Often Integrated
Nut. in the Life Stages 2	8	11	6	32.0	44.0	24.0	Quite Often Integrated
Nutrition Care Process	9	11	5	36.0	44.0	20.0	Quite Often Integrated
Fundamentals of Food Technology	19	6	0	76.0	24.0	0.0	Never Integrated
Food Service System 1	17	7	1	68.0	28.0	4.0	Never Integrated
Nutrition Therapy 1	13	8	4	52.0	32.0	16.0	Never Integrated
Public Health Nutrition	11	5	9	44.0	20.0	36.0	Never Integrated
Food Service System 2	18	6	1	72.0	24.0	4.0	Never Integrated
Nutrition Education	6	7	12	24.0	28.0	48.0	Quite Often Integrated
Nutrition Therapy 2	9	5	11	36.0	20.0	44.0	Quite Often Integrated
Total	178	110	86				

Multicultural Knowledge

Religious Dietary Restrictions (Buddhism, Christianity, Hinduism, Jainism, Judaism, Mormonism, Islam, etc.)

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	3	10	12	12.0	40.0	48.0	Quite Often Integrated
Basic Foods 2	8	5	12	32.0	20.0	48.0	Quite Often Integrated
Basic Nutrition	8	6	11	32.0	24.0	44.0	Quite Often Integrated
Meal Management	2	9	14	8.0	36.0	56.0	Quite Often Integrated
Nutrition Assessment	10	8	7	40.0	32.0	28.0	Never Integrated
Nut. in the Life Stages 1	6	7	12	24.0	28.0	48.0	Quite Often Integrated
Nut. in the Life Stages 2	6	7	12	24.0	28.0	48.0	Quite Often Integrated
Nutrition Care Process	9	11	5	46.0	44.0	20.0	Sometimes Integrated
Fundamentals of Food Technology	12	8	5	48.0	32.0	20.0	Never Integrated
Food Service System 1	13	6	6	52.0	24.0	24.0	Never Integrated
Nutrition Therapy 1	9	8	8	36.0	32.0	32.0	Never Integrated
Public Health Nutrition	4	11	10	16.0	44.0	40.0	Sometimes Integrated
Food Service System 2	13	9	3	52.0	36.0	12.0	Never Integrated
Nutrition Education	8	11	6	32.0	44.0	24.0	Sometimes Integrated
Nutrition Therapy 2	7	10	8	28.0	40.0	32.0	Sometimes Integrated
Total	118	126	131				

Multicultural Knowledge

Important Foods During Events or Celebrations

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	6	8	11	24.0	32.0	44.0	Quite Often Integrated
Basic Foods 2	3	10	12	12.0	40.0	48.0	Quite Often Integrated
Basic Nutrition	5	9	11	20.0	36.0	44.0	Quite Often Integrated
Meal Management	3	9	13	12.0	36.0	52.0	Quite Often Integrated
Nutrition Assessment	17	5	3	68.0	20.0	12.0	Never Integrated
Nut. in the Life Stages 1	13	9	3	52.0	36.0	12.0	Never Integrated
Nut. in the Life Stages 2	13	9	3	52.0	36.0	12.0	Never Integrated
Nutrition Care Process	14	8	3	56.0	32.0	12.0	Never Integrated
Fundamentals of Food Technology	9	10	6	36.0	40.0	24.0	Sometimes Integrated
Food Service System 1	10	9	6	40.0	36.0	24.0	Never Integrated
Nutrition Therapy 1	17	5	3	68.0	20.0	12.0	Never Integrated
Public Health Nutrition	14	6	5	56.0	24.0	20.0	Never Integrated
Food Service System 2	10	10	5	40.0	40.0	20.0	Never Integrated/Sometimes Integrated
Nutrition Education	11	10	4	44.0	40.0	16.0	Never Integrated
Nutrition Therapy 2	11	9	5	44.0	36.0	20.0	Never Integrated
Total	156	126	93				

Multicultural Knowledge

Food Patterns, Habits, and Preferences

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	8	13	4	32.0	52.0	16.0	Sometimes Integrated
Basic Foods 2	14	7	4	56.0	28.0	16.0	Never Integrated
Basic Nutrition	9	10	6	36.0	40.0	24.0	Sometimes Integrated
Meal Management	7	11	7	28.0	44.0	28.0	Sometimes Integrated
Nutrition Assessment	12	10	3	48.0	40.0	12.0	Never Integrated
Nut. in the Life Stages 1	9	10	6	36.0	40.0	24.0	Sometimes Integrated
Nut. in the Life Stages 2	9	10	6	36.0	40.0	24.0	Sometimes Integrated
Nutrition Care Process	11	9	5	44.0	36.0	20.0	Never Integrated
Fundamentals of Food Technology	12	9	4	48.0	36.0	16.0	Never Integrated
Food Service System 1	9	14	2	36.0	56.0	8.00	Sometimes Integrated
Nutrition Therapy 1	16	4	5	64.0	16.0	20.0	Never Integrated
Public Health Nutrition	13	7	5	52.0	28.0	20.0	Never Integrated
Food Service System 2	9	14	2	36.0	56.0	8.00	Sometimes Integrated
Nutrition Education	11	12	1	44.0	48.00	4.00	Sometimes Integrated
Nutrition Therapy 2	6	12	7	24.0	48.00	28.00	Sometimes Integrated
Total	155	152	67				

Multicultural Knowledge

Names of Regional Foods and Dishes

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	3	14	8	12.0	56.0	32.0	Sometimes Integrated
Basic Foods 2	3	13	9	12.0	52.0	36.0	Sometimes Integrated
Basic Nutrition	13	6	6	52.0	24.0	24.0	Never Integrated
Meal Management	2	15	8	8.0	60.0	32.0	Sometimes Integrated
Nutrition Assessment	12	11	2	48.0	44.0	8.0	Never Integrated
Nut. in the Life Stages 1	19	6	0	76.0	24.0	0.0	Never Integrated
Nut. in the Life Stages 2	19	6	0	76.0	24.0	0.0	Never Integrated
Nutrition Care Process	14	11	0	56.0	44.0	0.0	Never Integrated
Fundamentals of Food Technology	5	13	7	20.0	52.0	28.0	Sometimes Integrated
Food Service System 1	6	14	5	24.0	56.0	20.0	Sometimes Integrated
Nutrition Therapy 1	19	6	0	76.0	24.0	0.0	Never Integrated
Public Health Nutrition	18	7	0	72.0	28.0	0.0	Never Integrated
Food Service System 2	6	15	4	24.0	60.0	16.0	Sometimes Integrated
Nutrition Education	13	7	5	52.0	28.0	20.0	Never Integrated
Nutrition Therapy 2	18	7	0	72.0	28.0	0.0	Never Integrated
Total	170	151	54				

Multicultural Knowledge

Availability and Accessibility of Foods in The Region or Community

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	6	10	9	24.0	40.0	36.0	Sometimes Integrated
Basic Foods 2	11	9	5	44.0	36.0	20.0	Never Integrated
Basic Nutrition	8	11	6	32.0	44.0	24.0	Sometimes Integrated
Meal Management	7	12	6	28.0	48.0	24.0	Sometimes Integrated
Nutrition Assessment	19	4	2	76.0	16.0	8.0	Never Integrated
Nut. in the Life Stages 1	18	6	1	72.0	24.0	4.0	Never Integrated
Nut. in the Life Stages 2	18	6	1	72.0	24.0	4.0	Never Integrated
Nutrition Care Process	17	7	1	68.0	28.0	4.0	Never Integrated
Fundamentals of Food Technology	7	16	2	28.0	64.0	8.0	Sometimes Integrated
Food Service System 1	9	14	2	36.0	56.0	8.0	Sometimes Integrated
Nutrition Therapy 1	15	10	0	60.0	40.0	0.0	Never Integrated
Public Health Nutrition	12	11	2	48.0	44.0	8.0	Never Integrated
Food Service System 2	9	14	2	36.0	56.0	8.0	Sometimes Integrated
Nutrition Education	15	10	0	60.0	40.0	0.0	Never Integrated
Nutrition Therapy 2	16	8	1	64.0	32.0	4.0	Never Integrated
Total	187	148	40				

Multicultural Knowledge

Selecting, Preparing, and Storing Foods in a Cultural Setting

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	8	8	9	32.0	32.0	36.0	Quite Often Integrated
Basic Foods 2	3	11	11	12.0	44.0	44.0	Sometimes/Quite Often Integrated
Basic Nutrition	6	14	5	24.0	56.0	20.0	Sometimes Integrated
Meal Management	4	10	11	16.0	40.0	44.0	Quite Often Integrated
Nutrition Assessment	18	4	3	72.0	16.0	12.0	Never Integrated
Nut. in the Life Stages 1	13	10	2	52.0	40.0	8.0	Never Integrated
Nut. in the Life Stages 2	13	10	2	52.0	40.0	8.0	Never Integrated
Nutrition Care Process	15	8	2	60.0	32.0	8.0	Never Integrated
Fundamentals of Food Technology	4	6	15	16.0	24.0	60.0	Quite Often Integrated
Food Service System 1	9	13	3	36.0	52.0	12.0	Sometimes Integrated
Nutrition Therapy 1	18	4	3	72.0	16.0	12.0	Never Integrated
Public Health Nutrition	20	4	1	80.0	16.0	4.0	Never Integrated
Food Service System 2	10	12	3	40.0	48.0	12.0	Sometimes Integrated
Nutrition Education	11	13	1	44.0	52.0	4.0	Sometimes Integrated
Nutrition Therapy 2	13	10	2	52.0	40.0	8.0	Never Integrated
Total	165	137	73				

Multicultural Knowledge

Health Beliefs and Practices

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	10	9	6	40.0	36.0	24.0	Never Integrated
Basic Foods 2	14	5	6	56.0	20.0	24.0	Never Integrated
Basic Nutrition	14	7	4	56.0	28.0	16.0	Never Integrated
Meal Management	5	11	9	20.0	44.0	36.0	Sometimes Integrated
Nutrition Assessment	7	13	5	28.0	52.0	20.0	Sometimes Integrated
Nut. in the Life Stages 1	6	10	9	24.0	40.0	36.0	Sometimes Integrated
Nut. in the Life Stages 2	6	10	9	24.0	40.0	36.0	Sometimes Integrated
Nutrition Care Process	11	2	12	44.0	8.0	48.0	Quite Often Integrated
Fundamentals of Food Technology	18	4	3	72.0	16.0	12.0	Never Integrated
Food Service System 1	20	2	3	80.0	8.0	12.0	Never Integrated
Nutrition Therapy 1	8	3	14	32.0	12.0	56.0	Quite Often Integrated
Public Health Nutrition	7	8	10	28.0	32.0	40.0	Quite Often Integrated
Food Service System 2	20	1	4	80.0	4.00	16.0	Never Integrated
Nutrition Education	9	12	4	36.0	48.0	16.0	Sometimes Integrated
Nutrition Therapy 2	9	10	6	36.0	40.0	24.0	Sometimes Integrated
Total	164	107	104				

Multicultural Knowledge

Verbal and Non-Verbal Communication

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	21	4	0	84.0	16.0	0.0	Never Integrated
Basic Foods 2	22	2	1	88.0	8.0	4.0	Never Integrated
Basic Nutrition	21	2	2	84.0	8.0	8.0	Never Integrated
Meal Management	15	5	5	60.0	20.0	20.0	Never Integrated
Nutrition Assessment	11	5	9	44.0	20.0	36.0	Never Integrated
Nut. in the Life Stages 1	13	8	4	52.0	32.0	16.0	Never Integrated
Nut. in the Life Stages 2	13	8	4	52.0	32.0	16.0	Never Integrated
Nutrition Care Process	9	8	8	36.0	32.0	32.0	Never Integrated
Fundamentals of Food Technology	23	1	1	92.0	4.0	4.00	Never Integrated
Food Service System 1	19	4	2	76.0	16.0	8.00	Never Integrated
Nutrition Therapy 1	6	10	9	24.0	40.0	36.0	Sometimes Integrated
Public Health Nutrition	13	5	7	52.0	20.0	28.0	Never Integrated
Food Service System 2	18	4	3	72.0	16.0	12.0	Never Integrated
Nutrition Education	9	13	3	36.0	52.0	12.0	Sometimes Integrated
Nutrition Therapy 2	11	10	4	44.0	40.0	16.0	Never Integrated
Total	224	89	62				

Multicultural Knowledge

Nutritional Health Issues of Each Culture

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	17	5	3	68.0	20.0	12.0	Never Integrated
Basic Foods 2	18	6	1	72.0	24.0	4.0	Never Integrated
Basic Nutrition	14	9	2	56.0	36.0	8.0	Never Integrated
Meal Management	21	1	3	84.0	4.0	12.0	Never Integrated
Nutrition Assessment	10	8	7	40.0	32.0	28.0	Never Integrated
Nut. in the Life Stages 1	10	12	3	40.0	48.0	12.0	Never Integrated
Nut. in the Life Stages 2	10	12	3	40.0	48.0	12.0	Never Integrated
Nutrition Care Process	7	12	6	28.0	48.0	24.0	Sometimes Integrated
Fundamentals of Food Technology	20	3	2	80.0	12.0	8.00	Never Integrated
Food Service System 1	23	1	1	92.0	4.00	4.00	Never Integrated
Nutrition Therapy 1	15	7	3	60.0	28.0	12.0	Never Integrated
Public Health Nutrition	10	7	8	40.0	28.0	32.0	Never Integrated
Food Service System 2	22	2	1	88.0	8.00	4.00	Never Integrated
Nutrition Education	11	12	2	44.0	48.0	8.00	Never Integrated
Nutrition Therapy 2	11	8	6	44.0	32.0	24.0	Never Integrated
Total	219	105	51				

Multicultural Knowledge

Laws Protecting Disparity

Republic Act No. 11223, or The "Universal Health Care Act (UHC) Of 2019

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Foods 2	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Nutrition	23	1	1	92.0	4.0	4.0	Never Integrated
Meal Management	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Assessment	22	2	1	88.0	8.0	4.0	Never Integrated
Nut. in the Life Stages 1	21	3	1	84.0	12.0	4.0	Never Integrated
Nut. in the Life Stages 2	21	3	1	84.0	12.0	4.0	Never Integrated
Nutrition Care Process	17	6	2	68.0	24.0	8.0	Never Integrated
Fundamentals of Food Technology	25	0	0	100.0	0.0	0.0	Never Integrated
Food Service System 1	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Therapy 1	12	4	9	48.0	16.0	36.0	Never Integrated
Public Health Nutrition	9	15	1	36.0	60.0	4.0	Sometimes Integrated
Food Service System 2	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Education	19	6	0	76.0	24.0	0.0	Never Integrated
Nutrition Therapy 2	18	5	2	72.0	20.0	8.0	Never Integrated
Total	312	45	18				

Multicultural Knowledge

Laws Protecting Disparity

Republic Act No. 11036, The Mental Health Act

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Foods 2	24	1	0	96.0	4.0	0.0	Never Integrated
Basic Nutrition	23	1	1	92.0	4.0	4.0	Never Integrated
Meal Management	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Assessment	24	1	0	96.0	4.0	0.0	Never Integrated
Nut. in the Life Stages 1	22	3	0	88.0	12.0	0.0	Never Integrated
Nut. in the Life Stages 2	22	3	0	88.0	12.0	0.0	Never Integrated
Nutrition Care Process	18	7	0	72.0	28.0	0.0	Never Integrated
Fundamentals of Food Technology	25	0	0	100.0	0.0	0.0	Never Integrated
Food Service System 1	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Therapy 1	20	5	0	80.0	20.0	0.0	Never Integrated
Public Health Nutrition	16	8	1	64.0	32.0	4.0	Never Integrated
Food Service System 2	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Education	17	8	0	68.0	32.0	0.0	Never Integrated
Nutrition Therapy 2	19	6	0	76.0	24.0	0.0	Never Integrated
Total	330	43	2				

Multicultural Knowledge

Laws Protecting Disparity

Republic Act No. 8371: The Indigenous People's Rights

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Foods 2	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Nutrition	25	0	0	100.0	0.0	0.0	Never Integrated
Meal Management	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Assessment	25	0	0	100.0	0.0	0.0	Never Integrated
Nut. in the Life Stages 1	24	1	0	96.0	4.0	0.0	Never Integrated
Nut. in the Life Stages 2	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Care Process	23	2	0	92.0	8.0	0.0	Never Integrated
Fundamentals of Food Technology	25	0	0	100.0	0.0	0.0	Never Integrated
Food Service System 1	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Therapy 1	24	1	0	96.0	4.0	0.0	Never Integrated
Public Health Nutrition	18	7	0	72.0	28.0	0.0	Never Integrated
Food Service System 2	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Education	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Therapy 2	25	0	0	100.0	0.0	0.0	Never Integrated
Total	359	16	0				

Multicultural Knowledge

Laws Protecting Disparity

Republic Act No. 7277, Magna Carta for Disabled Persons

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	24	1	0	96.0	4.0	0.0	Never Integrated
Basic Foods 2	25	0	0	100.0	0.0	0.0	Never Integrated
Basic Nutrition	23	1	1	92.0	4.0	4.0	Never Integrated
Meal Management	25	0	0	100.0	0.0	0.0	Never Integrated
Nutrition Assessment	21	3	1	84.0	12.0	4.0	Never Integrated
Nut. in the Life Stages 1	21	3	1	84.0	12.0	4.0	Never Integrated
Nut. in the Life Stages 2	21	3	1	84.0	12.0	4.0	Never Integrated
Nutrition Care Process	23	2	0	92.0	8.0	0.0	Never Integrated
Fundamentals of Food Technology	25	0	0	100.0	0.0	0.0	Never Integrated
Food Service System 1	23	1	1	92.0	4.0	4.0	Never Integrated
Nutrition Therapy 1	16	2	7	64.0	8.0	28.0	Never Integrated
Public Health Nutrition	21	4	0	84.0	16.0	0.0	Never Integrated
Food Service System 2	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Education	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Therapy 2	24	1	0	96.0	4.0	0.0	Never Integrated
Total	340	23	12				

Multicultural Knowledge

Laws Protecting Disparity

Anti-Discrimination Act 2017

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	24	1	0	96.0	4.0	0.0	Never Integrated
Basic Foods 2	24	1	0	96.0	4.0	0.0	Never Integrated
Basic Nutrition	23	1	1	92.0	4.0	4.0	Never Integrated
Meal Management	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Assessment	22	2	1	88.0	8.0	4.0	Never Integrated
Nut. in the Life Stages 1	22	2	1	88.0	8.0	4.0	Never Integrated
Nut. in the Life Stages 2	22	2	1	88.0	8.0	4.0	Never Integrated
Nutrition Care Process	23	1	1	92.0	4.0	4.0	Never Integrated
Fundamentals of Food Technology	24	1	0	96.0	4.0	0.0	Never Integrated
Food Service System 1	23	1	1	92.0	4.0	4.0	Never Integrated
Nutrition Therapy 1	16	1	8	64.0	4.0	32.0	Never Integrated
Public Health Nutrition	22	3	0	88.0	12.0	0.0	Never Integrated
Food Service System 2	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Education	24	1	0	96.0	4.0	0.0	Never Integrated
Nutrition Therapy 2	24	1	0	96.0	4.0	0.0	Never Integrated
Total	341	20	14				

Appendix G

Multicultural Skills

Facilitate Collaboration in the Community

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	16	6	2	68.0	24.0	8.0	Never Integrated
Basic Foods 2	18	5	2	72.0	20.0	8.0	Never Integrated
Basic Nutrition	15	8	2	60.0	32.0	8.0	Never Integrated
Meal Management	17	4	4	68.0	16.0	16.0	Never Integrated
Nutrition Assessment	7	16	2	28.0	64.0	8.0	Quite Often Integrated
Nut. in the Life Stages 1	11	10	4	44.0	40.0	16.0	Never Integrated
Nut. in the Life Stages 2	11	10	4	44.0	40.0	16.0	Never Integrated
Nutrition Care Process	5	11	9	20.0	44.0	36.0	Sometimes Integrated
Fundamentals of Food Technology	19	3	3	76.0	12.0	12.0	Never Integrated
Food Service System 1	14	3	8	56.0	12.0	32.0	Never Integrated
Nutrition Therapy 1	17	5	3	68.0	20.0	12.0	Never Integrated
Public Health Nutrition	5	6	14	20.0	24.0	56.0	Quite Often Integrated
Food Service System 2	16	3	6	64.0	12.0	24.0	Never Integrated
Nutrition Education	2	12	11	8.0	48.0	44.0	Sometimes Integrated
Nutrition Therapy 2	15	2	8	60.	8.0	32.0	Never Integrated
Total	188	104	82				

Multicultural Skills

Demonstrate Respect for Cultural Beliefs During Nutrition Counseling Practice

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	14	5	6	56.0	20.0	24.0	Never Integrated
Basic Foods 2	18	5	4	72.0	12.0	16.0	Never Integrated
Basic Nutrition	12	7	6	48.0	28.0	24.0	Never Integrated
Meal Management	18	3	4	72.0	12.0	16.0	Never Integrated
Nutrition Assessment	8	9	8	32.0	36.0	32.0	Sometimes Integrated
Nut. in the Life Stages 1	12	7	6	48.0	28.0	24.0	Never Integrated
Nut. in the Life Stages 2	12	70	6	48.0	28.0	24.0	Never Integrated
Nutrition Care Process	9	4	12	36.0	16.0	48.0	Quite Often Integrated
Fundamentals of Food Technology	19	1	5	76.0	4.0	20.0	Never Integrated
Food Service System 1	15	2	8	60.0	8.0	32.0	Never Integrated
Nutrition Therapy 1	8	4	13	32.0	16.0	52.0	Quite Often Integrated
Public Health Nutrition	9	5	11	36.0	20.0	44.0	Quite Often Integrated
Food Service System 2	15	2	8	60.0	8.0	32.0	Never Integrated
Nutrition Education	8	8	9	32.0	32.0	36.0	Quite Often Integrated
Nutrition Therapy 2	16	3	6	64.	12.0	24.0	Never Integrated
Total	193	70	112				

Multicultural Skills

Practice Critical Thinking Skills When Interpreting Points of View From Other Cultures

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	12	3	10	48.0	12.0	40.0	Never Integrated
Basic Foods 2	16	3	6	64.0	12.0	24.0	Never Integrated
Basic Nutrition	13	4	8	52.0	16.0	32.0	Never Integrated
Meal Management	14	5	6	56.0	20.0	24.0	Never Integrated
Nutrition Assessment	3	12	10	12.0	48.0	40.0	Sometimes Integrated
Nut. in the Life Stages 1	11	5	9	44.0	20.0	36.0	Never Integrated
Nut. in the Life Stages 2	11	5	9	44.0	20.0	36.0	Never Integrated
Nutrition Care Process	2	3	20	8.0	12.0	80.0	Quite Often Integrated
Fundamentals of Food Technology	13	4	8	52.0	16.0	32.0	Never Integrated
Food Service System 1	13	5	7	52.0	20.0	28.0	Never Integrated
Nutrition Therapy 1	12	5	8	48.0	20.0	32.0	Never Integrated
Public Health Nutrition	6	7	12	24.0	28.0	48.0	Quite Often Integrated
Food Service System 2	15	4	6	60.0	16.0	24.0	Never Integrated
Nutrition Education	2	10	13	8.0	40.0	52.0	Quite Often Integrated
Nutrition Therapy 2	6	9	10	24.0	36.0	40.0	Quite Often Integrated
Total	149	84	142				

Multicultural Skills

Practice Openness to One's Opinion and Avoid Criticism

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	16	2	7	64.0	8.0	28.0	Never Integrated
Basic Foods 2	19	2	4	76.0	80.0	16.0	Never Integrated
Basic Nutrition	15	5	5	60.0	20.0	20.0	Never Integrated
Meal Management	17	3	5	68.0	12.0	20.0	Never Integrated
Nutrition Assessment	5	4	16	20.0	16.0	64.0	Quite Often Integrated
Nut. in the Life Stages 1	14	5	6	56.0	20.0	24.0	Never Integrated
Nut. in the Life Stages 2	14	5	6	56.0	20.0	24.0	Never Integrated
Nutrition Care Process	8	7	10	32.0	28.0	40.0	Quite Often Integrated
Fundamentals of Food Technology	18	1	6	72.0	4.0	24.0	Never Integrated
Food Service System 1	22	1	2	88.0	4.0	8.0	Never Integrated
Nutrition Therapy 1	7	7	11	28.0	28.0	44.0	Quite Often Integrated
Public Health Nutrition	8	9	8	32.0	36.0	32.0	Sometimes Integrated
Food Service System 2	17	4	4	68.0	16.0	16.0	Never Integrated
Nutrition Education	3	15	7	12.0	60.0	28.0	Sometimes Integrated
Nutrition Therapy 2	10	11	4	40.0	44.0	16.0	Never Integrated
Total	193	81	101				

Multicultural Skills

Create Nutrition Education Programs, Interventions, and Instructional Materials for a Diverse Society.

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	17	5	3	68.0	20.0	12.0	Never Integrated
Basic Foods 2	21	3	1	84.0	12.0	4.0	Never Integrated
Basic Nutrition	15	7	3	60.0	28.0	12.0	Never Integrated
Meal Management	20	3	2	80.0	12.0	8.0	Never Integrated
Nutrition Assessment	8	12	5	32.0	48.0	20.0	Sometimes Integrated
Nut. in the Life Stages 1	13	9	3	52.0	36.0	12.0	Never Integrated
Nut. in the Life Stages 2	8	9	8	32.0	36.0	12.0	Never Integrated
Nutrition Care Process	21	3	1	84.0	12.0	32.0	Sometimes Integrated
Fundamentals of Food Technology	15	7	3	60.0	28.0	4.0	Never Integrated
Food Service System 1	3	14	8	12.0	56.0	4.0	Never Integrated
Nutrition Therapy 1	21	3	1	84.0	12.0	12.0	Never Integrated
Public Health Nutrition	3	14	8	12.0	56.0	32.0	Sometimes Integrated
Food Service System 2	21	3	1	84.0	12.0	4.0	Never Integrated
Nutrition Education	2	16	7	8.0	64.0	28.0	Sometimes Integrated
Nutrition Therapy 2	12	10	3	48.0	40.0	12.0	Never Integrated
Total	210	113	52				

Multicultural Skills

Communication Skills in a Multicultural Society

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	17	4	4	68.0	16.0	16.0	Never Integrated
Basic Foods 2	20	3	2	80.0	12.0	8.0	Never Integrated
Basic Nutrition	12	9	4	48.0	36.0	16.0	Never Integrated
Meal Management	12	6	7	48.0	24.0	28.0	Never Integrated
Nutrition Assessment	9	11	5	36.0	44.0	20.0	Sometimes Integrated
Nut. in the Life Stages 1	14	8	3	56.0	32.0	12.0	Never Integrated
Nut. in the Life Stages 2	14	8	3	56.0	32.0	12.0	Never Integrated
Nutrition Care Process	6	11	8	24.0	44.0	32.0	Sometimes Integrated
Fundamentals of Food Technology	21	4	0	84.0	16.0	0.0	Never Integrated
Food Service System 1	19	3	3	76.0	12.0	12.0	Never Integrated
Nutrition Therapy 1	6	14	5	24.0	56.0	20.0	Sometimes Integrated
Public Health Nutrition	4	13	8	16.0	52.0	32.0	Sometimes Integrated
Food Service System 2	20	4	1	80.0	16.0	4.0	Never Integrated
Nutrition Education	3	19	3	12.0	76.0	12.0	Sometimes Integrated
Nutrition Therapy 2	10	11	4	40.0	44.0	16.0	Sometimes Integrated
Total	187	128	60				

Multicultural Skills

Plan and Prepare Food According to a Multicultural Setting

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	10	8	7	40.0	32.0	28.0	Never Integrated
Basic Foods 2	12	7	6	48.0	28.0	24.0	Never Integrated
Basic Nutrition	12	7	6	48.0	28.0	24.0	Never Integrated
Meal Management	8	6	11	32.0	24.0	44.0	Quite Often Integrated
Nutrition Assessment	9	12	4	36.0	48.0	16.0	Sometimes Integrated
Nut. in the Life Stages 1	13	9	3	52.0	36.0	12.0	Never Integrated
Nut. in the Life Stages 2	13	9	3	52.0	36.0	12.0	Never Integrated
Nutrition Care Process	10	9	6	40.0	36.0	24.0	Never Integrated
Fundamentals of Food Technology	9	14	2	36.0	56.0	8.0	Sometimes Integrated
Food Service System 1	15	3	7	60.0	12.0	28.0	Never Integrated
Nutrition Therapy 1	12	10	3	48.0	40.0	12.0	Never Integrated
Public Health Nutrition	4	14	7	16.0	56.0	28.0	Sometimes Integrated
Food Service System 2	13	5	7	52.0	20.0	28.0	Never Integrated
Nutrition Education	12	12	1	48.0	48.0	4.0	Never Integrated
Nutrition Therapy 2	13	10	2	52.0	40.0	8.0	Never Integrated
Total	165	135	75				

Multicultural Skills

Conduct Research on Ethnic or Cultural Groups About Nutritional Issues, Eating Practices, and Beliefs.

	Frequency N=25			Percent N=25			Interpretation
	NI	SI	QI	NI	SI	QI	
Basic Foods 1	16	8	1	64.0	32.0	4.0	Never Integrated
Basic Foods 2	18	4	3	72.0	16.0	12.0	Never Integrated
Basic Nutrition	15	8	2	60.0	32.0	8.0	Never Integrated
Meal Management	16	3	6	64.0	12.0	24.0	Never Integrated
Nutrition Assessment	13	11	1	52.0	44.0	4.0	Never Integrated
Nut. in the Life Stages 1	17	3	5	68.0	12.0	20.0	Never Integrated
Nut. in the Life Stages 2	17	3	5	68.0	12.0	20.0	Never Integrated
Nutrition Care Process	14	9	2	56.0	36.0	8.0	Never Integrated
Fundamentals of Food Technology	23	2	0	92.0	8.0	0.0	Never Integrated
Food Service System 1	20	3	2	80.0	12.0	8.0	Never Integrated
Nutrition Therapy 1	21	2	2	84.0	8.0	8.0	Never Integrated
Public Health Nutrition	12	11	2	48.0	44.0	8.0	Never Integrated
Food Service System 2	21	3	1	84.0	12.0	4.0	Never Integrated
Nutrition Education	13	12	0	52.0	48.0	0.0	Never Integrated
Nutrition Therapy 2	16	7	2	64.0	28.0	8.0	Never Integrated
Total	252	89	34				

Appendix H

Letter of Request Permission to Utilize the Instrument

Permission to use Blueprint for Integration of Cultural Competence in the Curriculum Questionnaire (BICCCQ) Inbox ×

CECILIA SIOCO <[redacted]> Wed, Dec 8, 2021, 5:09 PM

to tulman

My name is Ms. Cecilia A. Sioco, a Registered Nutritionist-Dietitian in the Philippines and a student from Philippine Normal University taking up PhD in Curriculum and Instruction.. I'm writing my dissertation titled "Integration of Multiculturalism in BS Nutrition and Dietetics Curriculum" . Ma'am, I would like to ask permission from you to please allow me to use your developed Blueprint for Integration of Cultural Competence in the Curriculum Questionnaire (BICCCQ) and also make some modifications for the said assessment tool suitable for the Nutrition program.

Hoping for your kind consideration. I strongly believe that your developed instrument will help greatly in my research. Thank you.

Respectfully yours,
Cecilia A. Sioco, RND
PhD. CIN Student, Philippine Normal University.

Tulman, Lorraine <[redacted]> Dec 8, 2021, 11:29 PM

to me

Dear Ms. Sioco,
You have my permission to use the BICCCQ in your work. Please keep in mind that the culture in the U.S. is different from that of the Philippines and therefore the concept of cultural competency may differ in our two countries.

Best of luck with your work!

Lorraine Tulman

Appendix I

Clearance to Proceed

PHILIPPINE NORMAL UNIVERSITY
The National Center for Teacher Education
Taft Ave. Cor. Ayala Blvd., Ermita, Manila 1000 Philippines
Trunkline: +63-2-317-1768 loc 750/751 ▲ eprdc@pnu.edu.ph ▲ www.pnu.edu.ph

EPR	CLEARANCE TO PROCEED	Index No.	PNU-MN-2016-EPR-FM-016
		Issue No.	01
		Rev. No.	01
		Date:	09-24-2018
		Page	1 of 1
		QAC No.	CC-09242018-023

BASIC INFORMATION

REC Code:	**07272023-233**
Research Proposal Title:	**Development of a Multicultural Education Framework in BS Nutrition and Dietetics Curriculum**
Researcher / Project Leader and Designation/Affiliation:	**Cecilia A. Sioco**

The following items [√] have been received and reviewed in connection with the above study to be conducted by the above researcher.

[✓] Research Proposal in prescribed format
[✓] Informed Consent Form/s /Assent Form
[✓] Data Collection Tools

and hereby approved:

[✓] To proceed to the validation of the data gathering tools
[✓] To proceed to data collection, organization and write-up

Date of Issuance: **July 27, 2023**

Dr. EDNA LUZ R. ABULON
Secretary
Research Ethics Committee

Dr. RENE R. BELECINA
Chair
Research Ethics Committee

Appendix J

Request Permission to Conduct a Study in An Institution

Date:_____

_____
_____
_____

Dear Sir/Ma'am,

Greetings of Peace!

The undersigned is currently working on a research study entitled **"Development Of A Multicultural Education Framework in the BS Nutrition And Dietetics Curriculum"** as a final requirement for my Doctoral degree in Curriculum and Instruction at the Philippine Normal University.

The general purpose of the study is to develop a multicultural education integrated framework that may guide RND educators in integrating multicultural competencies into their teaching and learning processes.

The study involves assessing the multicultural context of the present BS Nutrition and Dietetics curriculum. Participants may also be interviewed based on the central questions of the study: "*How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum?*". My estimated time for data gathering may take 15 minutes for assessing the curriculum and 40 to 60 minutes for the interview.

In lieu of this, I would like to ask permission from your good office to conduct this study with your RND faculty who have been teaching major subjects of nutrition part-time or full-time for five (5) years or more.

Rest assured that the gathered data from the participants will be used for research purposes only and will be treated with confidentiality. We hope for your kind response and consideration. Your support and contribution to the success of this research will be greatly appreciated. If you have questions or need clarification, you may contact me at [redacted] or by email at [redacted]

Respectfully yours,

[redacted]

Noted by

[redacted]

Appendix K

Letter of Invitation to Participate

Development Of a Multicultural Education Framework in BS Nutrition and Dietetics Curriculum

Date: _____

Dear_____

Blessed day!

I am Cecilia A. Sioco, a Ph.D. CIN student from Philippine Normal University. I would like to invite you to participate in my research titled "**DEVELOPMENT OF A MULTICULTURAL EDUCATION FRAMEWORK IN BS NUTRITION AND DIETETICS CURRICULUM".**

The general purpose of the study is to develop a multicultural education integrated framework that may guide RND educators in integrating multicultural competencies into their teaching and learning processes.

The intention is to assess the multicultural competency of the RND practitioners and the extent of multicultural competency in the current BS Nutrition and Dietetics curriculum using the Multicultural Education Curriculum Assessment Tool for the BSND Program. You may also be asked to participate in an interview based on the central question of the study. "*How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum?".*

Data gathering may take 15 minutes to assess the curriculum, and the interview will last for 40 to 60 minutes.

With your permission, your personal experience will be recorded and transcribed. And to ensure anonymity, your identity will remain strictly unknown. The information you provide will be kept confidential.

Your participation in this study is entirely voluntary, and your decision not to participate for any reason will be respected. Please read the Informed Consent letter below if you are interested in taking part in the study. If you have questions or need clarification, you may contact me at 09284209518 or by email at cecilia.sioco@pnu.edu.ph.

Thank you for considering participating in this research study.

Cecilia A. Sioco, RND
Researcher, Philippine Normal University

Noted by
Dr. Ronald Allan S. Mabunga
Adviser, Philippine Normal University

Appendix L

Sample Participant's Invitation to Participate

INVITATION TO PARTICIPATE

Development Of a Multicultural Education Framework in BS Nutrition and Dietetics Curriculum

Date: September 27, 2023

Dear Mr. Belam,

Blessed day!

I am Cecilia A. Sioco, a Ph.D. CIN student from Philippine Normal University. I would like to invite you to participate in my research titled "**DEVELOPMENT OF A MULTICULTURAL EDUCATION FRAMEWORK IN BS NUTRITION AND DIETETICS CURRICULUM".**

The general purpose of the study is to develop a multicultural education integrated framework that may guide RND educators in integrating multicultural competencies into their teaching and learning processes.

The intention is to assess the multicultural competency of the RND practitioners and the extent of multicultural competency in the current BS Nutrition and Dietetics curriculum using the Multicultural Education Curriculum Assessment Tool for the BSND Program. You may also be asked to participate in an interview based on the central question of the study. "*How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum?*".

Data gathering may take 15 minutes to assess the curriculum, and the interview will last for 40 to 60 minutes.

With your permission, your personal experience will be recorded and transcribed. And to ensure anonymity, your identity will remain strictly unknown. The information you provide will be kept confidential.

Your participation in this study is entirely voluntary, and your decision not to participate for any reason will be respected. Please read the Informed Consent letter below if you are interested in taking part in the study. If you have questions or need clarification, you may contact me at 09284209518 or by email at cecilia.sioco@pnu.edu.ph.

Thank you for considering participating in this research study.

Cecilia A. Sioco, RND
Researcher, Philippine Normal University

Noted by
Dr. Ronald Allan S. Mabunga
Adviser, Philippine Normal University

Appendix M

Sample Request Permission To Conduct A Study In An Institution

REQUEST PERMISSION TO CONDUCT STUDY IN AN INSTITUTION

September 29, 2023

M
D
M

Dear Ma'am,

Greetings of Peace!

The undersigned is currently working on a research study entitled "**Development Of A Multicultural Education Framework in the BS Nutrition And Dietetics Curriculum**" as a final requirement for my Doctoral degree in Curriculum and Instruction at the Philippine Normal University.

The general purpose of the study is to develop a multicultural education integrated framework that may guide RND educators in integrating multicultural competencies into their teaching and learning processes.

The study involves assessing the multicultural context of the present BS Nutrition and Dietetics curriculum. Participants may also be interviewed based on the central questions of the study: "*How do RND educators perceive multicultural competency within the BS Nutrition and Dietetics curriculum?*". My estimated time for data gathering may take 15 minutes for assessing the curriculum and 40 to 60 minutes for the interview.

In lieu of this, I would like to ask permission from your good office to conduct this study with your RND faculty who have been teaching major subjects of nutrition part-time or full-time for five (5) years or more.

Rest assured that the gathered data from the participants will be used for research purposes only and will be treated with confidentiality. We hope for your kind response and consideration. Your support and contribution to the success of this research will be greatly appreciated. If you have questions or need clarification, you may contact me at 09284209518 or by email at cecilia.sioco@pnu.edu.ph.

Respectfully yours,

Cecilia A. Sioco, RND
Researcher

Noted by
Dr. Ronald Allan S. Mabunga
Adviser

Appendix N

Authenticity Result

PHILIPPINE NORMAL UNIVERSITY
The National Center for Teacher Education
PUBLICATION OFFICE
Taft Ave. cor. Ayala Blvd., Ermita, Manila | (+632) 5317 1768 loc. 530 | publications.office@pnu.edu.ph

AUTHENTICITY RESULT

Date of Release:	April 25, 2024
Result Code:	2024-1169
Submission ID:	2361092047
Title of Output:	Development of a Multicultural Education Framework In Bs Nutrition and Dietetics Curriculum
Author (s):	Cecilia A. Sioco

Authenticity Report:

Similarity Report: 5%

- *Interpretation*: A similarity of 5% means that 5% of the entire paper is similar to sources in Turnitin's (authenticity software) online repository. The colored bibliographical references denote the sources of similarity to previously published work which may be from internet sources (5%), publications (3%), and student papers (3%) for the remaining similarity percentage.

- *Highlighted text in the Manuscript:*

  - Red marks and highlights are set of texts directly or exactly copied from online sources.
  - Other color marks and highlights are set of text exactly copied from other sources (student papers and publications).

Marie Paz E. Morales, Ph.D.
Director

Appendix O

Certificate of Compliance

PHILIPPINE NORMAL UNIVERSITY The National Center for Teacher Education Taft Ave. Cor. Ayala Blvd., Ermita, Manila 1000 Philippines Trunkline: +63-2-317-1768 loc 750/751 ▲ eprdc@pnu.edu.ph ▲ www.pnu.edu.ph		Index No.	PNU-MN-2016-EPR-FM-020
		Issue No.	01
		Rev. No.	01
		Date:	09-24-2018
		Page	1 of 1
EPR	**CERTIFICATE OF COMPLIANCE**	QAC No.	CC-09242018-027

BASIC INFORMATION

REC Code:	**2024-118**
Title of the Research Project/Thesis/Dissertation:	**Development of A Multicultural Education Framework in BS Nutrition and Dietetics**
Researcher/Project Leader and Designation/Affiliation:	**Cecilia A. Sioco**

The following items [V] have been received and reviewed in connection with the above study conducted by the above researcher/principal investigator:

[ ] Thesis

[✓] Dissertation

[ ] Research Article in APA Format

And hereby certified that it has fully complied with the PNU Code of Research Ethics and Guidelines for Review as stipulated in the BOR Resolution No. U-2303 s. 2015.

Date of Issuance: **May 06, 2024**

Dr. EDNA LUZ R. ABULON
Secretary
Research Ethics Committee

Dr. RENE R. BELECINA
Chair
Research Ethics Committee

Appendix P

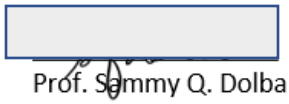
Certificate of Language Editing

May 14, 2024

Certificate of Language Editing

This is to certify that the paper titled "**DEVELOPMENT OF A MULTICULTURAL EDUCATION FRAMEWORK IN BS NUTRITION AND DIETETICS CURRICULUM**" authored by **Prof. CECILIA A. SIOCO** has been edited for English language, grammar, punctuation, and spelling by Prof. Sammy Q. Dolba.

Edited by:



Prof. Sammy Q. Dolba

Curriculum Vitae

CECILIA A. SIOCO, RND

PERSONAL DATA

Religion:	Catholic
Status:	Married
Birth date:	September 7, 1970
Place of Birth:	Caloocan
Age:	53 yrs. Old
Height/Weight:	5'0 ft. /60 kgs.

WORK EXPERIENCE

Philippine Christian University (PCU), Taft Ave. Manila
June 2012- present
Faculty

Rizal Technological University (RTU), Boni Ave. Mandaluyong City
June 2012- 2014
Part-time Instructor

Abu Dhabi International Private School, U.A.E
September 2008 – July 2009
Assistant Teacher

Agnitio Venture Inc., B12 L2 cor. Bangkok & East Ville Ave., Cainta, Rizal
February 1 - March 31, 2008
Nutritionist Dietitian

Transnational Products, Inc., Ninoy Aquino International Airport, Pasay City
Feb. 2000 – May 30, 2004
HR Assistant

EDUCATIONAL ATTAINMENT

Ph.D. in Curriculum and Instruction 2017- ongoing
Philippine Normal University, Manila

Master Of Arts in Industrial Education 2012- 2016
Major in Hotel & Restaurant Management
Eulogio "Amang" Rodriguez Institute of Science & Technology (EARIST)
Nagtahan Sampaloc, Manila

Professional Education 2011 – 2012
Eulogio "Amang" Rodriguez Institute of Science & Technology (EARIST)
Nagtahan Sampaloc, Manila

Bachelor of Science in Nutrition and Dietetics 1993 – 1997
Philippine Christian University (PCU) Taft Ave., Manila

CIVIL SERVICE ELIGIBILITY OR OTHER EXAMINATION (S) PASSED:

National TVET Trainer Certificate Level 1
Technical Education and Skills Development Authority (TESDA) January 15, 2018
Certificate No. NTTC- 1814130712000047

National Certificate II Cookery December 6, 2021
Certificate No. 16130802031525

Trainers Methodology Certificate 1
Technical Education and Skills Development Authority (TESDA) March 21, 2014
Certificate No. TMC-14131201000233

National Certificate NC II in Food and Beverage Services (F&B) June 8, 2011
Technical Education and Skills Development Authority (TESDA)
Certificate No. 1113060257566

Board Examination for Nutritionist-Dietitian, PRC Manila August 29, 1997
Licensed no. 0009567

TRAINING. CONVENTION &SEMINARS ATTENDED

Basic Life Support and Occupational First and Training Course (16 hours of Technical Training)	Dec. 6 &7, 2023	Science and Technology Building, PCU-Manila
Branding and Social Media Mastery, the seventh session of the Canva Natin 'To The 5th Canva Webinar-Workshop series.	Nov. 15, 2023	Zoom application
Canva 101: Canva Natin to the 5th Canva Webinar-Workshop series	Nov. 15, 2023	Zoom application
1st Joint Congress on General Medicine	Nov. 10, 2023	Zoom application
Micronutrient Forum 6th Global Conference go	October 20, 2023	Virtual/The Netherlands