

**A Multidisciplinary Mentoring Approach to Improve the Equity of Nursing Education for  
the English Language Learner in an Undergraduate Nursing Program: A Mixed-Method  
Quality Improvement Project**

Laurie Bisila, DNP Student, MSN Ed, PHN, RN

The College of St. Scholastica

In Partial Fulfillment of the Requirements for the Doctor of Nursing Practice

DNP Project Chair: Dr. Lisa Starr

March 20, 2022

## Table of Contents

<b>ABSTRACT .....</b>	<b>4</b>
<b>A MULTIDISCIPLINARY MENTORING APPROACH TO IMPROVE THE EQUITY OF NURSING EDUCATION FOR THE ENGLISH LANGUAGE LEARNER IN AN UNDERGRADUATE NURSING PROGRAM: A MIXED-METHOD QUALITY IMPROVEMENT PROJECT.....</b>	<b>6</b>
<b>DEFINITIONS .....</b>	<b>7</b>
<b>PROBLEM IDENTIFICATION/AVAILABLE KNOWLEDGE.....</b>	<b>8</b>
BACKGROUND AND SIGNIFICANCE .....	8
SCOPE OF PROBLEM .....	8
CONSEQUENCES OF THE PROBLEM.....	9
KNOWLEDGE GAP AND PROPOSED SOLUTION .....	10
<b>SETTING .....</b>	<b>11</b>
<b>PARTICIPANTS.....</b>	<b>12</b>
<b>INCLUSION AND EXCLUSION CRITERIA.....</b>	<b>13</b>
<b>INTERPROFESSIONAL TEAM .....</b>	<b>13</b>
<b>STAKEHOLDERS .....</b>	<b>14</b>
<b>COLLEGE LEVEL INITIATIVES AND SUPPORTS .....</b>	<b>15</b>
CENTER FOR EQUAL ACCESS .....	15
ACADEMIC SUPPORT.....	16
SPECIALIZED SUPPORTS .....	16
OFFICE OF EQUITY, DIVERSITY, AND INCLUSION .....	17
<b>GAP ANALYSIS.....</b>	<b>17</b>
<b>INTRODUCTION TO THE LITERATURE REVIEW.....</b>	<b>17</b>
<i>Introduction.....</i>	<i>17</i>
<i>Narrative Description of Search Process.....</i>	<i>18</i>
<b>THEORETICAL FRAMEWORK .....</b>	<b>23</b>
PLAN-DO-STUDY-ACT (PDSA).....	23
NEED TO BELONG THEORY .....	23
CULTURAL COMPETEMILITY.....	24
PURNELL’S MODEL FOR CULTURAL COMPETENCY .....	24
<b>OVERALL GOAL/MISSION .....</b>	<b>27</b>
OVERALL GOAL.....	27
PROJECT MISSION STATEMENT .....	27
PROJECT SMART GOALS .....	27
<i>Objective 1.....</i>	<i>28</i>
<i>Objective 2.....</i>	<i>28</i>
<i>Objective 3.....</i>	<i>28</i>
<i>Objective 4.....</i>	<i>28</i>
OUTCOME MEASURE AND EVALUATION .....	29
<b>METHODOLOGY AND INFLUENCING FACTORS.....</b>	<b>29</b>
IRB APPROVAL .....	30

CODE OF ETHICS .....	30
PARTICIPANT PRIVACY.....	30
POLICY IMPLICATIONS .....	31
<b>WORK PLAN .....</b>	<b>31</b>
<b>DATA COLLECTION AND ANALYSIS .....</b>	<b>33</b>
PBN- ELL MENTEE SURVEY AND DNP MENTOR POST EVALUATION TOOL.....	34
RESULTS FOR THE PRE AND POST IAPCC-M.....	34
<b>POST-SURVEY DISCUSSION OF DATA/OUTCOME INTERPRETATION .....</b>	<b>35</b>
POST PBN MENTEE SURVEY .....	35
POST DNP MENTOR SURVEY .....	36
<b>DISSEMINATION.....</b>	<b>37</b>
<b>LIMITATIONS AND FUTURE IMPLICATIONS .....</b>	<b>37</b>
<b>SUSTAINABILITY .....</b>	<b>38</b>
<b>CONCLUSION.....</b>	<b>38</b>
<b>REFERENCES .....</b>	<b>40</b>
<b>APPENDIX A .....</b>	<b>49</b>
LITERATURE EVIDENCE TABLE .....	49
<b>APPENDIX B .....</b>	<b>66</b>
DATA ANALYSIS PLAN .....	66
<b>APPENDIX C .....</b>	<b>68</b>
GANTT CHART- DNP MENTORING PROGRAM FOR PBN ELL STUDENTS .....	68
<b>APPENDIX D .....</b>	<b>70</b>
PURNELL MODEL PERMISSION .....	70
<b>APPENDIX E.....</b>	<b>73</b>
WEEKLY MENTORING PLAN .....	73
<b>APPENDIX F.....</b>	<b>77</b>
FINAL SURVEY- MENTOR VERSION .....	77
<b>APPENDIX G .....</b>	<b>79</b>
FINAL SURVEY- MENTEE VERSION .....	79
<b>APPENDIX H .....</b>	<b>81</b>
RECOMMENDED WORK PLAN FOR MULTIDISCIPLINARY APPROACH TO MENTORING .....	81
<b>APPENDIX I .....</b>	<b>82</b>
MENTEE WORD CLOUD .....	82
<b>APPENDIX J .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
MENTOR WORD CLOUD.....	<b>ERROR! BOOKMARK NOT DEFINED.</b>

## Abstract

**Nature and scope of the project:** This quality improvement (QI) project is a multidisciplinary approach to mentoring, matching a doctorate of nurse practice (DNP) student in their final year and a second-semester post-baccalaureate (PBN) nursing English language learner (ELL) student who is enrolled in an accelerated nursing program in a small Midwest private college. This QI project seeks to answer two questions. First, will a DNP mentor who is trained in the principles of cultural Competemility improve the sense of belongingness for the ELL undergraduate nursing student through six weekly mentoring sessions using the 12 domains in Purnell's model as a guideline? Secondly, does training on principles of Cultural Competemility and applying the principles in six weekly mentoring sessions with an ELL diverse mentee improve the DNP student's perceived confidence level for future interactions with diverse populations in practice?

**Synthesis and analysis of supporting literature:** English language learner (ELL) nursing students have an attrition rate as high as 85% in English-speaking countries (James, 2018; Olson, 2012). Higher education has widely recognized and accepted that the educational experience is not equal for all students. However, The American Association of Colleges of Nursing [AACN] (2021) new Essentials have challenged this complacency and require that nursing programs provide an "equable and inclusive learning environment (that) will support the recruitment, retention, and graduation of nursing students from disadvantaged and diverse backgrounds" (p. 6). Compared to the general population, there is a disproportionately low number of ethnically and racially diverse health care providers in the United States workforce. The literature strongly suggests that belongingness can contribute to academic success.

**Project implementation:** Prior to mentoring, the prospective DNP mentors were trained on the principles of cultural competemility and needed to achieve a score of 29 or higher on the posttest indicating cultural competence to qualify to serve as a mentor. PBN ELL students

were then randomly matched with a DNP mentor to complete the six weekly sessions guided by the 12 domains in the Purnell Model.

**Evaluation criteria:** Qualtrics surveys were sent to each participant at the completion of the six weekly encounters.

**Outcomes:** The mixed method QI post surveys indicated that ELL participants believed that the mentoring program was helpful in supporting a sense of belongingness and improved their confidence for future encounters with working with healthcare providers. DNP mentors reported that they felt the training and mentoring experience improved confidence levels for future encounters with clients from diverse backgrounds and understanding of the principles of cultural competency.

**Recommendations:** Due to minimal resources necessary for this mentoring program, it is the author's belief that this is a sustainable intervention that both benefits the DNP students as they learn to integrate the principles of cultural competency into practice and supports the ELL student by fostering belongingness.

*Keywords:* Nursing Students, English Language Learner (ELL), Diversity, Mentoring, Belongingness

## **A Multidisciplinary Mentoring Approach to Improve the Equity of Nursing Education for the English Language Learner in an Undergraduate Nursing Program: A Mixed-Method Quality Improvement Project**

In the last two decades, there has been an increase in immigrant populations in Minnesota (MN), which has dramatically affected the healthcare arena. Currently, all healthcare providers use translators both live and virtually to communicate with their clients. However, because there are so many dialects and languages, meanings can often be lost in translation (Institute of Medicine [IOM], 2016). The IOM (2016) supports the need to increase diversity in healthcare providers to meet the needs of people who understand cultural differences that a translator may not understand or even question. Translators are typically focused on translating words. Even though literature supports that translators can improve care for those with limited English proficiency, they are not trained as healthcare providers. They, therefore, do not possess the knowledge to conduct a thorough healthcare interview.

Higher education has widely recognized and accepted that the education experience is not equal for all students. This is especially true for students who are English language learners (ELL) in the United States (U.S.). While all students in an accelerated baccalaureate nursing program are challenged with learning technical terminology, the ELL often faces additional challenges in learning the American healthcare system, norms, and infrastructure. The healthcare norms and infrastructure are often very different from their country of origin. Unfortunately, few supports for the ELL have proved sustainable in improving equity in nursing education. Sustainable supports must be identified and implemented.

## Definitions

- **ELL and English as a second language (ESL)** are terms that are frequently used interchangeably. However, the ELL learners may be able to speak several languages but have limited proficiency in the English language (ESLteacherEDU.org, 2021). Whereas ESL is a primary or secondary endorsement in public school settings. ESL teachers work with ELL students (ESLteacherEDU.org, 2021).
- “**Diversity** references a broad range of individual, population, and social characteristics; including but not limited to age, sex, race, ethnicity, sexual orientation, gender identity, family structures, geographic locations, national origin, immigrants and refugees, language, physical, functional, and learning abilities, religious beliefs, and socioeconomic status” (AACN, 2017, para. 3).
- “The term ‘**Equity**’ examines the fairness by which persons of diverse backgrounds are able to access information, higher education, and resources that help them advance and fully contribute to society” (Green, 2020, p. 280).
- “**Bridging**” is the process by which educators modify teaching and learning strategies to meet the needs of the student while allowing the student to maintain their cultural identity (Yoder, 2001).
- The term “**cultural competemility**” was coined by Campinha-Bacote and is defined as “the synergistic process between cultural humility and cultural competence in that cultural humility permeates the five components of cultural competence: cultural awareness, cultural knowledge, cultural skill, cultural desire, and cultural encounters (2020, p. 15).

### **Problem Identification/Available Knowledge**

There are two PICO questions for this quality improvement (QI) study. The first is will a six-week mentoring program increase the sense of belongingness and improve the equity of nursing education for the ELL student? Secondly, will training the doctorate of nurse practice (DNP) student in the principles of cultural competemility and allowing them to develop these skills as a mentor improve the student's ability to provide culturally sensitive care to diverse populations? This specific QI project is aimed at improving a meso level organizational problem but may impact macro and micro levels in the future as well.

### **Background and Significance**

Diversity includes many characteristics, including race, age, gender, religion, culture, language, sex, and socioeconomic class (AACN, 2017). Although not all people from diverse backgrounds are English language learners (ELL), it is frequently a large subset of this population. The Institute of Medicine (2016) report identifies the importance of increasing the diversity of the nursing workforce as a way of improving culturally "relevant care" (Altman et al., 2016, p. 1). It is further suggested that increasing diversity will reduce healthcare disparities and help achieve health equity (Philips & Malone, 2014). Yet racially and ethnically diverse minorities continue to be unrepresented in practice (Health Resources & Services Administration [HRSA]: Council on Graduate Medical Education, 2016).

### **Scope of Problem**

Compared to the general population's diversity levels, the disproportionate level of ethnically and racially diverse healthcare providers in the United States workforce has been well documented for several decades (Altman et al., 2016). In Minnesota, 91% of registered nurses

speak English-only in their practice, 4% Spanish, 1% French, 1% Swahili, 1% Hmong, and 3% other (Minnesota Department of Health, 2020).

It is estimated that 67.3 million people in the United States spoke another language in their homes in 2018 (Zeigler & Camarota, 2019). That same year in Minnesota alone, an estimated 641,880 people did not speak English in the home (Zeigler & Camarota, 2019). This is a 205% increase from 1980-to 2018 (Zeigler & Camarota, 2019). According to Colby and Ortman (2015), the United States Census Bureau projects that the non-white population will become the majority by 2044. Many of whom will not speak English as their primary language.

Although it is well substantiated that there are ways to increase the equity of nursing education, an extensive search through the literature and national college websites indicated few colleges are integrating the identified supports. Through personal communication with several stakeholders, it is speculated that the lack of financial resources to fund such programs is likely the key reason further progress has not been made. Although several agencies offer grants to improve equity, efforts are often not sustainable after the grant runs out.

### **Consequences of the Problem**

ELL nursing students have an attrition rate as high as 85% in English-speaking countries (James, 2017; Olson, 2012). "Several barriers to achieving a more diverse health workforce have been documented, including cost, academic preparation, unwelcoming campus climate, and the lack of social and emotional support" (HRSA: Council on Graduate Medical Education, 2016, p. 13).

It is widely accepted that people from diverse backgrounds disproportionately experience healthcare disparities. One way to reduce these disparities is by educating nurses from diverse backgrounds (ELL) who fully understand the cultural intricacies and shared common values of

diverse populations represented in the community (AACN, 2017; Carter, 2020; Sanderson, 2021; Thornton & Persaud, 2018). Although cultural competency training supports bridging this gap and improving patient safety, training is not the same as the lived phenomenological experience that takes into account the understanding of the subtle nuances within a specific culture that the ELL could offer (Agency for Healthcare Research and Quality [AHRQ], 2019).

It is further suggested that minority students frequently return to underserved communities, bridge cultural and linguistic gaps, and help others develop a cultural perspective that may otherwise be lost (Carter, 2020). “There’s a potential \$135 billion per year if racial disparities in health are eliminated, including \$93 billion in excess medical care costs and \$42 billion in untapped productivity” (Turner, 2018, para. 3). However, for these savings to be actualized, we need to increase diversity in healthcare by improving equity in nursing education.

### **Knowledge Gap and Proposed Solution**

Literature suggests that mentoring is a viable and successful intervention that will help bridge the ELL learner gap (AACN, 2017; Johnson-Hunter and Anderson, 2019; Iorden et al., 2020, NLN, 2016; Onovo, 2019). Mentors cited in the literature are often trained peers in equal or higher-level semesters in the nursing program or faculty members in the nursing program. However, one possible population of people who may be qualified to mentor ELL students are DNP students. It is a requirement in the DNP program that students complete a minimum of 1000 post-baccalaureate practice hours, divided among the ten domains, as part of the program (AACN, 2021). The AACN (2021) states that nursing programs must provide an “equable and inclusive learning environment (that) will support the recruitment, retention, and graduation of nursing students from disadvantaged and diverse backgrounds” (p. 6).

The specific AACN domains which apply directly to this project are domains two, three, six, seven, and nine. Domain two highlights the importance of communicating effectively with diverse audiences (AACN, 2021). While domain three supports the need for nurses at both levels to manage population health by collaborating with clients and stakeholders in the implementation of socio-cultural and linguistically responsive plans through policy change, relationship building, ethical decision making, and leadership (AACN, 2021). Domain six highlights the importance of improving interprofessional relationships to strengthen outcomes by integrating diversity, equity, and inclusion into team practice AACN, 2021). This suggests a reciprocal benefit for both the ELL learner and the DNP student, each meeting a need for the other by setting the stage to support positive interdisciplinary relationships, which will likely continue into practice. Domain seven prescribes that system improvement must happen to reduce structural racism and discrimination in healthcare systems (AACN, 2021). Finally, domain nine discusses the importance of cultural humility and sensitivity when advocating and modeling respectful interactions with all team members and clients from diverse populations (AACN, 2021).

### **Setting**

The setting for this multidisciplinary approach to mentoring will take place at a small college in the Midwest. Currently, at this college, there are no supports specifically geared toward improving the equity of learning for the ELL student (M. Perry-Spears, personal communication, February 12, 2021; A. Bergstrom, personal communication, February 8, 2021). F. Farah, an ELL student, confirmed the barriers identified in Olson's (2012) findings. F. Farah explained that the ELL learner is often left to bridge the gap to understand the American healthcare system from their native healthcare system using non-technical platforms such as Google and YouTube (personal communication, December 22, 2020). She further explained that

the information obtained from these sites might not entirely or accurately depict the technical medical information necessary for success but are preferable since they are produced at a lower grade level, making them easier to understand (F. Farah, personal communication, December 22, 2020). These additional hurdles have led students to wonder if they truly belong in the program and whether they can succeed as nurses in practice.

The sense of belongingness can be defined as “a feeling of connectedness, that one is important and matters to others” (Strayhorn, 2018, p. 2). “When students do not feel that they belong, they may feel a ‘sense of alienation,’ ejection, social isolation, loneliness, or “marginality,” which has been linked to negative proximal and long-term outcomes such as dissatisfaction, low self-esteem, depression, substance abuse, and suicide” (Strayhorn, 2018, p. 2). These students rarely complete college and often have lower outcomes than their peers (Strayhorn, 2018). Strayhorn (2018) further states that the students’ sense of belongingness is ever greater when the student is socialized with people from diverse backgrounds.

### **Participants**

This Q.I. project will focus on two populations. The first is the PBN student who spoke a language other than English in the home until they entered full-time school. In addition, this student has returned to school after completing a bachelor's degree in some other field and has decided to pursue an additional bachelor's degree in nursing. Their first degree may or may not have been taught in English.

The second population is the DNP student in the final year of their doctoral program at the same college. These students all hold an active registered nurse license but may or may not be actively practicing at the time of the Q.I. project. It is also important to note that most of these

students will be clinical nurse practitioners upon graduation and successfully passing the national licensure exam necessary to practice or a general non-clinical DNP.

### **Inclusion and Exclusion Criteria**

Inclusion criteria for this Q.I. project will include PBN students in the second semester of their nursing program. They may or may not be foreign-born, but they primarily spoke a language other than English in their homes until they entered school. In addition, they all have completed a bachelor's degree in some other field of study, which may or may not have been taught in English. Exclusion criteria include non-ELL students and undergraduate students in the traditional BSN program.

All DNP students are in their final year of training and speak English as a native language. Literature supports that matching the ELL to a native speaker forces the ELL to build their English language skills (Olson, 2012). However, matching the ELL student with a DNP student who speaks the same native language will be less helpful as they resort to their native language (Olson, 2012). Exclusion criteria will include those who feel they cannot apply the principles of "cultural competemility" as provided in the training modules or commit to the time necessary to complete the Q.I. project. To help determine this, each prospective mentor will take a pre and post-survey to determine if they have achieved the level of being "culturally competent" or higher as defined by the Inventory for Assessing the Process of Cultural Competence in Mentoring (IAPCC-M) by Camphina-Bacote (2008). To be matched with a mentee, they must achieve a post score of 29, which indicates a level of cultural competence. This is a validated 9 question tool used to assess the level of cultural competence of the mentor. This tool is copyrighted.

### **Interprofessional Team**

Interprofessional or multidisciplinary teamwork ensures better healthcare outcomes (Hughes, 2021). However, team members must have mutual respect and trust (Hughes, 2021). Mayo and Woolley (2016) identify the three most important team competencies to maximize collaboration include collective intelligence, inclusive collaboration, and open communication. This Q.I. project will be an interprofessional approach to mentoring designed to support mutual respect and promote a trusting relationship with one another by bridging cultural differences. The multidisciplinary team will include the PBN student and the DNP student, who will be a future nurse practitioner and healthcare provider. The ability for the DNP to conduct a culturally sensitive interview will be critical to the success of the DNP in practice. Additionally, both the PBN student and the DNP student's ability to identify and understand the common practices in cultures other than their own is crucial for providing patient-centered care to future clients.

### **Stakeholders**

The key stakeholders in the Q.I. project are the DNP project lead, both as a DNP student and an assistant professor at the college in the PBN program. The PBN ELL students, the DNP students, the school of nursing, the college administration, the college board, and the Center of Equal Access are additional stakeholders. If this multidisciplinary approach to mentoring is successful, the program could be used as support that may encourage more ELL students to enter the PBN program. Additionally, this program may offer a gateway for increased interdisciplinary work in the future.

### **Organizational Needs Assessment/SWOT**

The author was individually approached about the lack of available academic support by three current PBN students who are ELL. They each identified that they frequently struggle with many concepts and terms specific to nursing. They further explained that they often spend hours

working to find definitions that they can understand in simple language due to cultural differences and the lack of Western medicine in their native countries. They concluded that a mentoring program would be "extremely helpful." One member stated that "just knowing someone recognizes and understands that I will have more struggles than most gives me the sense that someone cares." Another member said, "it would be an honor to have a mentor that I could trust to discuss the differences in care and help me understand the medical culture more clearly." These conversations identified a need at CSS in the PBN program (M. Perry-Spears, personal communication, February 12, 2021; A. Bergstrom, personal communication, February 8, 2021).

The student body comprises 3712 students as of Fall 2020, divided into 2,344 undergraduate students and 1468 graduate students (CSS, 2020b.). These students come from 49 states, two U.S. territories, and 27 countries (CSS, 2020b). 73% are female and 27% are male (CSS, 2020b). An estimated 82.1% are Caucasian, with 17.9% from diverse backgrounds (CSS, 2020b). The college has more than 24,000 alumni. Although it has descended from Catholic origins, the college has no required Catholic affiliation and does not discriminate against anyone from other faith or non-faith-based traditions.

### **College Level Initiatives and Supports**

#### **Center for Equal Access**

At CSS, some accommodations may be granted for students who have a qualifying disability. A disability, as defined by the Americans with Disabilities Amendments Act of 2008, is "a mental or physical impairment that substantially limits one or more major life activities, having a record of such impairment, or being regarded as having such impairment" (as cited by CSS, 2019, p. 1).

## **Academic Support**

CSS offers tutoring for all students through the Center for Academic Access, also known as the Tutoring Center. The tutors are frequently peers in the undergraduate program who have completed a specific course (CSS, 2021). CSS also offers supplemental Instruction and Collaborative Learning Groups to assist students in particular science courses, including chemistry, anatomy and physiology, biology, and physics. These groups are led by an upperclassman who has completed the course and is recommended and supported by a faculty member. While this support is advertised to all students, the online learner's needs are rarely met. This is because there are currently no tutors in the tutoring center who specialize in nursing. The ELL nursing student is advised to consult with their professors for further clarification.

CSS provides general academic coaching and effective study habit resources that can be viewed online or by appointment with the Academic Access and Support Center located on the main campus. The Writing and Critical Thinking Center support offers feedback on written assignments, including professional formatting questions. Students can submit their assignments for review and suggestions. However, there is a 48–72-hour turnaround time. The library at CSS offers many resources for students, including assistance in researching, lib guides, citation resources, and accessing scholarly material. Additionally, the librarian is available to meet with individual faculty or students by appointment.

## **Specialized Supports**

At CSS, there are specialized supports for Veterans, first-generation students (TRIO), and international students attending the college through exchange programs (CSS, 2019b). However, there are no supports specific to meeting the ELL learner's needs at the college level. Additionally, there are no supports for the ELL learner in the school of nursing. The school of

nursing does have a student nursing association and a peer mentoring program for the traditional student population but does not include the online non-traditional PBN student.

### **Office of Equity, Diversity, and Inclusion**

A college-wide initiative for the calendar year 2020-2021 was introduced to purposefully improve the presence of diverse populations in all college sectors, mitigate potential biases, and enhance the culturally diverse learner's equity (CSS, 2020). Training and educational opportunities for employees, faculty, and students were provided to accomplish these goals. However, the lack of support specific to improving the educational experience's equity for the ELL learner has yet to be identified at the college level.

### **Gap Analysis**

CSS's website has been reviewed for current resources as previously listed. The lack of resources to improve educational equity for the ELL student has been verified with M. Perry-Spears, Dean of Students, A. Bergstrom, Chief Diversity Officer, and J. Knuth, PBN Department Chair. The DNP project lead has composed a list of ELL students for the last five years and determined that they had lower grade averages and more trips to the retention and progression committee than their English-speaking peers. Further steps are needed to fully assess education equity for the ELL PBN hybrid student at CSS.

### **Introduction to the Literature Review**

#### ***Introduction***

The population shift in Minnesota has greatly affected the healthcare arena. Currently, all healthcare providers use translators both live and virtually to communicate with their clients. However, because there are so many dialects and languages, meanings can often be lost in translation (Institute of Medicine [IOM], 2016). The IOM (2016) supports the

need to increase diversity in healthcare to meet these needs by people who understand cultural differences that a translator may not understand or even question. Translators are typically focused on translating words. Even though literature supports that interpreters can improve care for those with limited English proficiency, they are not trained as healthcare providers. They, therefore, do not possess the knowledge to conduct a thorough healthcare interview.

Higher education has widely recognized and accepted that the education experience is not equal for all students. This is especially true for students who are English language learners (ELL) in the United States. While all students in an accelerated baccalaureate nursing program are challenged with learning technical terminology, often, the ELL faces additional challenges in learning the American healthcare system and its norms and infrastructure. These healthcare norms and infrastructure are often very different from their country of origin. Unfortunately, few supports for the ELL have proved sustainable in improving equity in nursing education. It is imperative that sustainable supports are identified and implemented.

### ***Narrative Description of Search Process***

#### **Search Terms**

The search terms used to identify current and past initiatives to improve equity in nursing higher education include *English-as-a-second-language (ESL)*, *English language learner (ELL)*, *nursing*, *nursing student*, *healthcare*, *healthcare disparities*, *diversity*, *culture*, *United States*, *limited English proficiency*. The

Boolean phrase “and” was frequently used to link the terms.

#### **Databases**

Databases that were used to conduct the search were: Cumulative Index of Nursing and Allied Health Literature (CINAHL), OVID, ProQuest, PubMed, Searching Online Library Academic Resources (SOLAR), Google Scholar, Google, and through cross-referencing references in pertinent articles.

### **Inclusion/Exclusion Criteria**

- a. Inclusion criteria: English language, peer-reviewed, scholarly journals within the past five years, and the full article was available.
- b. Exclusion criteria: any article that was not available in its entirety, any greater than five years old, unless it was of historical value as in the case of Maslow's Hierarchy, blogs, and other non-scholarly resources.

### **Literature Review/Synthesis**

#### ***Problem, Significance, and Consequences***

- a. According to Colby and Ortman (2015), the United States Census Bureau published the population projections for 2020 to 2060. It is anticipated that by 2045 non-Hispanic white people will no longer be the majority. Further, it is estimated that by the year 2060, the foreign-born population in the United States will increase by 58%.
- b. National Academy of Medicine (2020) The future of nursing 2020-2030. Identified the need to improve the equitability of healthcare. System barriers need to be reduced to improve the workforce diversity, including gender, race, and ethnicity, across all levels of nursing education. Improve healthcare curriculum to encourage people to work outside of acute care.

- c. AACN Positions Statement (2017) Diversity, Inclusion, & Equity in Academic Nursing – “Promotes a diverse population of nurses who intentionally embrace differences, not merely tolerate them. Unconscious and conscious biases should be identified, recognized, and improved upon. By 2060 it is expected that 1:5 people will be foreign born in the U.S” (AACN, 2017, Para 3)
- d. Zeigler & Camarota (2019) “67.3 million people in the United States spoke a foreign language in the home in 2018. This number has tripled since 1980. MN is amongst the top states which had the largest increase in the U.S. up 23% since 2010” (Zeigler & Camarota, 2019, p. 1)
- e. AACN “According to a [2017 survey](#) conducted by the National Council of State Boards of Nursing (NCSBN) and The Forum of State Nursing Workforce Centers, nurses from minority backgrounds represent 19.2% of the registered nurse (RN) workforce. [Nursing shortage reports](#), including those produced by the American Hospital Association, the Robert Wood Johnson Foundation (RWJF), the Joint Commission, and the Association of Academic Health Centers, point to minority student recruitment as a necessary step to addressing the nursing shortage. Besides adding new clinicians to the RN workforce, a diverse nursing workforce will be better equipped to serve a diverse patient population. According to a [2013 report by the National Advisory Council on Nurse Education](#)

[and Practice](#), a diverse nursing workforce is essential for progress towards achieving health equity in the United States. A

groundbreaking report, titled [Missing Persons: Minorities in the Health Professions](#), which was released by the Sullivan Commission on

Diversity in the Healthcare Workforce in September 2004, stated:

“The fact that the nation’s health professions have not kept pace with changing demographics may be an even greater cause of disparities in health access and outcomes than the persistent lack of health insurance for tens of millions of Americans” (AACN, 2017).

- f. Thorton & Persaud (2018) identify the importance of including social determinants of health in the nursing curriculum. Identify that preparing a diverse workforce at all levels is a precursor to reducing healthcare disparities.
- g. Carter (2020) Support for diversity improves inequities in healthcare. Upon graduation, racial and ethnic minorities are most likely to return to underserved communities and can bridge cultural and linguistic gaps in patient education. Further, they can address and nurture mindsets from traditions that may hinder healthcare outcomes. Identify resources to support the ELL to be successful in nursing school, including tutoring, language resources, cultural guides (peer guides), faculty advisors, social, emotional, and financial supports.
- h. Clement & Welch (2018) identify the benefits of virtual mentoring.

English as a second language (ESL) students are almost twice as likely to be off track due to poor reading comprehension.

- i. Minnesota Department of Health (2020) RN workforce 91% white. Language spoken in practice 91% English.
- j. James (2018) Attrition rate in nursing as high as 50% for ethnically diverse students. The study includes U.S., Australia, and Great Britain.

### ***Theoretical Framework***

- k. Maslow (1943) Hierarchy of Needs - Love and Belonging 3<sup>rd</sup> level
- l. Baumeister & Leary (1995) - Need to Belong Theory (NBT) human beings are motivated when they feel a sense of belonging
- m. Walton & Cohen (2011) Social-belonging intervention in higher education. The study proved increase in GPA, self-reported health and well-being, and belongingness.
- n. Yoder (1996) 5 response patterns were identified among nurse educators. Generic, mainstreaming, culturally non-tolerant, struggling, and bridging.
- o. Verschelden (2017) states that students who feel a sense of belonging have increased academic success (location 948).
- p. Campinha-Bacote (2020)- The process of cultural competemility in the delivery of healthcare service.

### ***Implementation***

The Model for Improvement (MFI) was developed by Associates in Process Improvement, and its use is supported by the Institute for Healthcare

Improvement (IHI) (IHI, 2021). The Plan-Do-Study-Act (PDSA) cycle is a tool that can be combined with other change models or used alone. It boasts of the ability to accelerate improvement (IHI, 2021). Key factors in applying this process are identifying “what are we trying to improve?” “How will we know that a change is an improvement?” and “What change can we make that will result in improvement?” (IHI, 2021, para. 1).

### **Theoretical Framework**

#### **Plan-Do-Study-Act (PDSA)**

The PDSA tool will be used to guide this QI project due to its ease of use and its ability to use in small-scale projects.

#### **Need to Belong Theory**

According to Olson (2012), one of the key things that ELL students struggle with is the sense of isolation. In his Hierarchy of Needs, Maslow was one of the first pioneers who is credited with identifying the need to belong. Maslow (1943) determined that belongingness improved the individual’s motivation, and they “will strive with great intensity to achieve his goal” (p. 1). This belief was further built on by Baumeister and Leary in 1995 with the *Need to Belong Theory* (NTB). The foundational premise of this theory is that human beings are motivated when they feel a sense of belonging. This is further supported by Verkuyten et al. (2019), who found that academic disengagement occurred when students' social identity was compromised by a lack of belongingness. Fuller and Mott-Smith (2017) identified that the diverse student lack of relationships in the academic setting was a more significant hindrance than the language barrier. Literature supports that mentorship can improve the sense of belonging (Mentor Collective, 2020; Moeller et al., 2020).

## **Cultural Competemility**

According to Campinha-Bacote (2020), the origin of cultural competency was founded in the 1960s and 1970s by the civil rights movement. However, the term “cultural competency” was first used by Cross et al. (1989). Cultural competence was defined as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals and enable that system, agency or those professionals to work effectively in cross-cultural situations” (Cross et al., 1989, p. 13). Tervalon & Murray-García (1998) were the first to identify the importance of cultural humility. That is “cultural humility incorporates a lifelong commitment to self-evaluation and self-critique, to redressing the power imbalances in the patient-physician dynamic, and to developing mutually beneficial and nonpaternalistic clinical and advocacy partnerships with communities on behalf of individuals and defined populations” (p. 117).

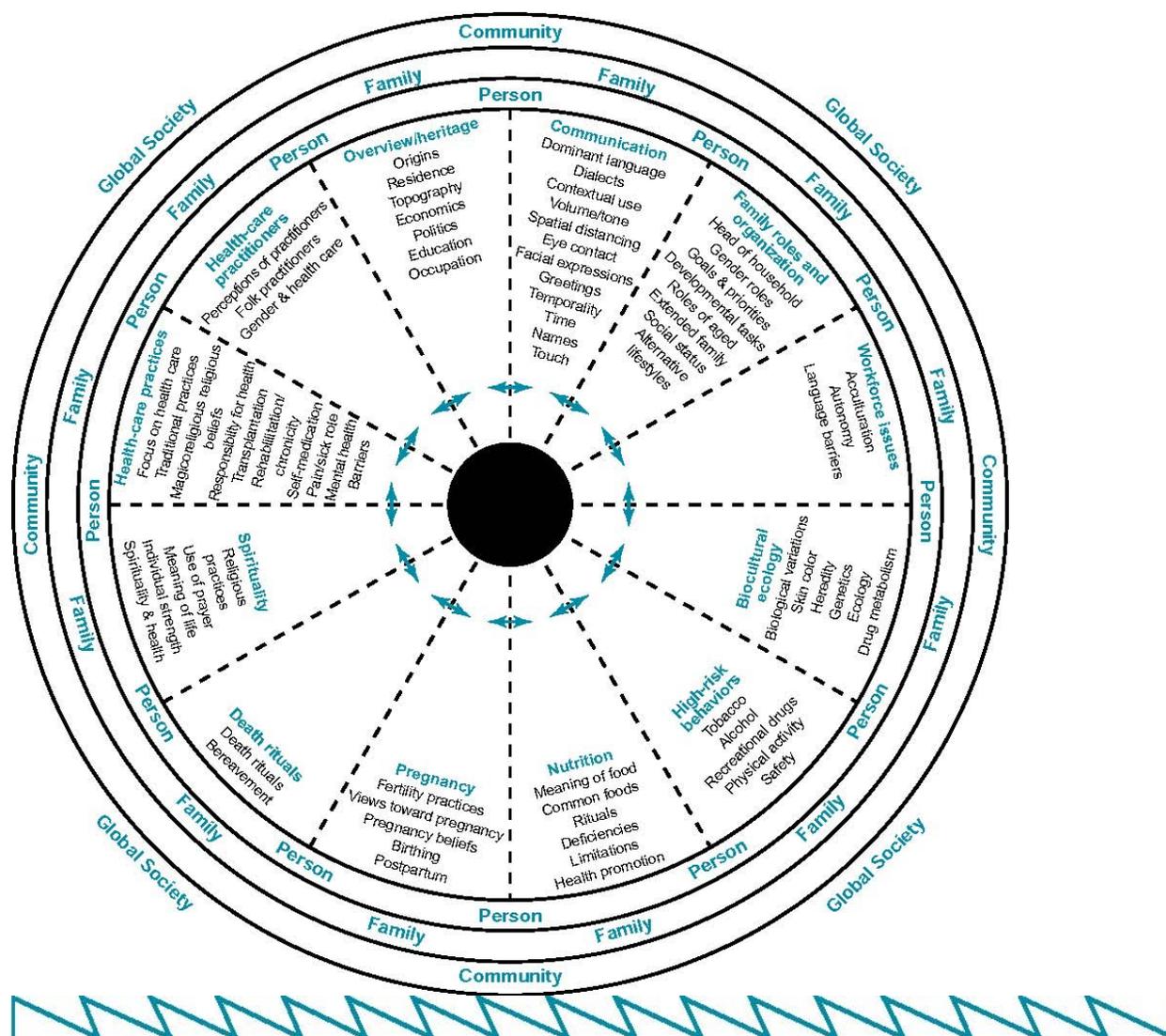
In 1991, Campinha-Bacote created the Culturally Competent Model of Care which incorporated cultural awareness, cultural knowledge, cultural skill, and cultural encounters into becoming culturally competent. Then in 1998, a fifth construct was added to include cultural desire (Campinha-Bacote, 2020). In 2010, Campinha-Bacote further revised the model to identify the need for several encounters which could build on cultural awareness, cultural knowledge, cultural skill, and cultural encounters, increasingly encouraging the process of becoming a culturally competent provider. The final version incorporated the inclusion of cultural humility, the change in terms to “cultural competemility,” and a change in the model’s name to “The Process of Cultural Competemility in the Delivery of Healthcare Services” (Campinha-Bacote, 2020).

## **Purnell’s Model for Cultural Competency**

Purnell's Model of Cultural Competence was first introduced in 1991. It has been described as both a conceptual framework and a grand theory. It was designed as a holistic framework to assess the cultural values that could be used by various disciplines (Purnell, 2005). The model itself is a circle with the outermost rim representing global society, the second rim representing the community, the third rim family, and the next rim the person (see figure 2). The next circle is divided into 12 pie-shaped wedges depicting cultural domains and their concepts. The dark center of the circle represents the unknown phenomena. The jagged line on the bottom of the model represents the nonlinear representation of the concept of cultural consciousness (Purnell, 2002). The 12 cultural domains include Overview/Heritage, Communications, Family roles and Organization, Workforce Issues, Bicultural Ecology, High-risk Behaviors, Nutrition, Pregnancy and Childbearing, Death Rituals, Spirituality, Health Care Practices, and Health Care Practitioners (Purnell, 2002). Each of these headings is further broken down to list the inclusive topics within each domain.

**Figure 1**

*The Purnell Model for Cultural Competence*



Unconsciously Incompetent - Consciously incompetent- Consciously competent - Unconsciously competent

**Variante cultural characteristics:** age, generation, nationality, race, color, gender, religion, educational status, socioeconomic status, occupation, military status, political beliefs, urban versus rural residence, enclave identity, marital status, parental status, physical characteristics, sexual orientation, gender issues, and reason for migration (sojourner, immigrant, undocumented status)

**Unconsciously incompetent:** not being aware that one is lacking knowledge about another culture

**Consciously incompetent:** being aware that one is lacking knowledge about another culture

**Consciously competent:** learning about the client's culture, verifying generalizations about the client's culture, and providing culturally specific interventions

**Unconsciously competent:** automatically providing culturally congruent care to clients of diverse cultures

Note: The Purnell Model of Cultural Competence. Reprinted from “The Purnell Model of Cultural Competence,” by L. Purnell, 2002, *Journal of Transcultural Nursing*, 13(3), 194.

Copyright 2002 by L. Purnell. Reprinted with permission.

### **Overall Goal/Mission**

#### **Overall Goal**

This Q.I. project aims to *increase the PBN ELL students' sense of belongingness through a DNP mentoring program and improve the cultural competence of the DNP student.* This Q.I. project was developed as the result of an extensive literature review and personal communication that suggested that a mentoring program would likely support the ELL student. While it may not solve the equity problem, it will likely contribute to the ELL learner's academic success and the DNP's interaction with culturally diverse clients and colleagues. This initiative aligns with the college-level mission, vision, values, and the school of nursing's mission and vision. The Office of Equity and Diversity further supports it. It aligns with the college-wide Inclusive Excellence 2025 Strategic Plan to continue to nurture the growth in the presence and success of culturally diverse populations (CSS, 2020).

#### **Project Mission Statement**

The mission statement for this project is as follows: *To improve the equity of nursing education in the PBN program by fostering a sense of belongingness through a mentoring program with a DNP student while improving the DNP student's ability to become culturally competent and culturally humble through the synergistic process described as "cultural competemility."*

#### **Project SMART Goals**

***Objective 1***

By the end of October 2021, 100% of DNP and PBN participants will be recruited. By November 3, 2021, 100% of the DNP students will be trained and achieve a minimum score of 29, indicating a level of being "Culturally Competent." The final number of DNP students in their final year of DNP education will be selected based on the number of PBN ELL participants. Each PBN will be matched randomly at a 1:1 ratio.

***Objective 2***

By November 1, 2021, 100% of DNP mentors will be fully trained in the principles of cultural competency, as evidenced by the ability to achieve a post score on the IAPCC-M of 29 or higher, indicating a level of being "Culturally Competent." The final number of DNP students in their final year of DNP education will be selected based on the number of PBN ELL participants. Each PBN will be matched randomly at a 1:1 ratio.

***Objective 3***

By December 31, 2021, 75% of the PBN/DNP pairs will complete six mentoring 30–60-minute sessions.

***Objective 4***

By December 31, 2021, each DNP and PBN participant will complete the Qualtrics post survey.

***Objective 5***

By the end of February 2022, the Qualtrics survey results will be reviewed by the DNP student project lead, and a concise report will be created.

## **Outcome Measure and Evaluation**

After the Q.I. project, the DNP Student Project Lead will send out a Qualtrics survey to the PBN ELL students to determine if they feel that the mentoring program supported the fostering of belongingness and to what degree they found the mentoring program to be helpful (see Appendix E). This survey will contain two questions using a five-point Likert scale. At that time, they will also be invited to offer qualitative comments about the mentoring program. The DNP students will also receive a Qualtrics survey to provide qualitative comments on the mentoring program (see Appendix F). The summative data will be compiled and evaluated by the DNP Student Project Lead to identify the main themes from the feedback to determine if the intervention was a success and if any adjustments need to be made if the program continues to be offered.

## **Methodology and Influencing Factors**

This QI mentoring project will include two student populations, final year DNP students and second-semester PBN students. All human rights principles and ethical standards will be protected through confidential gathering and storage of information. After the QI project, the information will be summarized and disseminated. All raw data will be deleted, by the DNP Student Project Lead, to ensure the individual files will not be accessed.

One potential ethical issue that may arise is if PBN ELL students identify themselves or other vulnerable persons in danger. The DNP students will disclose that they are obligated reporters. This information will also be addressed in the program description when recruiting. The second ethical consideration is that these discussions may remind PBN ELL students of turmoil in their pasts that may be associated with negative feelings. For this reason, the students will be given the phone number for the Saints Assistance Program and Student Health Services.

## **IRB Approval**

The institutional IRB is responsible for ensuring the agencies policies and the rights of the participants are protected. This Q.I. project qualifies for an expedited review through the IRB as explained in 45 Code of Federal Regulation (CFR) 46. It poses minimal risk to the participants (U.S. Department of Health and Human Services Office of Human Research Protections, 2018). IRB approval will be sought through the IRB at CSS. The IRB application will be completed and submitted by the DNP Student Project Lead in addition to a copy of all surveys, consent forms, recruitment emails, and training materials that will be used in the QI Project. Recruitment and training will not begin until the institutional IRB grants approval.

## **Code of Ethics**

**This QI project focuses on identifying and honoring each participant's commonalities and differences.** The American Nurses Association (ANA) Code of Ethics Provision One identifies the need for nurses to “practice with compassion and respect for the inherent dignity, worth and unique attributes of every person” (2015, para, 1). This QI project aligns with Provision Eight, which states, “the nurse collaborates with other health professionals and the public to protect human rights, promote health diplomacy, and reduce health disparities” (ANA, 2015, para. 8). The multidisciplinary approach to mentoring allows the DNP students to practice and model the principles of "cultural competemility" as they interact with the PBN ELL students.

## **Participant Privacy**

The demographic information gathering on the PBN ELL students will include their name, native language, country of origin, and which primary language was spoken at the institution where they received their first degree through a confidential survey using Google

forms. This information is collected and stored on a password-protected computers using Google forms and Qualtrics, which require an additional password to access the data stored on each site. Google forms are password protected to ensure confidentiality. Each survey will be submitted anonymously. The final surveys will be conducted privately through Qualtrics, and the DNP Student Project Lead will only access summative reports.

### **Policy Implications**

Currently, there are no supports specific to improving the equity of learning for the ELL student at CSS. If successful, this mentoring program may be sustainable. This is due to the low cost associated with the program and the associated benefits to both populations. The DNP student mentor benefits by learning and practicing the skills associated with “cultural competency” through the interviewing process and interaction with students from ethnically and culturally different backgrounds. The PBN ELL student may benefit from the program as they compare the similarities and differences commonly found in the healthcare culture in America as they prepare to be baccalaureate trained nurses. Additionally, both the DNP and the PBN students will potentially benefit from interacting with the multidisciplinary team.

### **Work Plan**

In April-May 2021, the DNP Student Project Lead conducted the literature search for suitable models to train the mentors to interact with the ELL student culturally sensitively. Campinha-Bacote was contacted by phone to discuss her model further, and the DNP Student Project Lead determined that the model was suitable and aligned with the DNP Student Project Lead’s beliefs. Permission was then sought to utilize the IAPCC-M tool in this QI project to measure the level of cultural competence. Additionally, the DNP Student Project Lead contacted

Purnell for the appropriate permissions to utilize the Purnell Model to guide the weekly mentoring sessions.

This QI program will occur over three semesters (see Appendix G). The development of the educational outline and workflow documents will be completed by the end of July 2021. During August 2021, the DNP Student Project Lead will develop the educational model for the DNP students on the process of “Cultural Competemility,” the Purnell Model, and the Six Week Mentoring Plan. The DNP Student Project Lead will also seek written approval from the author of the IAPCC-M to use the tool in the Q.I. project to measure the level of cultural competence of the DNP student before and after the training session.

In September, the DNP Student Project Lead will complete the project proposal and submit it to the IRB at the college. In October, the DNP Student Project Lead will meet with the IRB to seek final approval to conduct the Q.I. project. If approval is denied, the modifications will be made followed by resubmission to the IRB. Upon receiving approval from the IRB, the DNP Student Project Lead will recruit DNP students to serve as mentors via email. This email will include an explanation of the QI project, the time commitment, and a Google form to complete if they wish to be a part of the Q.I. project. A meeting will be set up between the DNP Student Project Lead and possible DNP mentors to describe the Q.I. project further and answer any prospective participants' questions. After this session, access to the educational module will be granted to those who meet the inclusion criteria and agree to serve as mentors. The DNP mentors will have two weeks to complete the training and begin mentoring.

In October, during the same period, the DNP mentors are recruited. The DNP Student Project Lead will send an email to all second-semester students in the PBN program on both the Duluth and St. Cloud campuses. This email will include an explanation of the QI project, the

time commitment, and a Google form to complete if they wish to be a part of the Q.I. project. A meeting will be set up between the DNP Student Project Lead and potential PBN ELL students to describe the Q.I. project further and answer any questions that prospective participants may have. The six-week mentoring program is set to begin by approximately the first-second week of November after the mentoring pairs are randomly matched and notified of who their partner will be.

All mentoring will be completed by the end of December. Ideally, before the college winter break. Upon completion of the six mentoring sessions, the DNP Student Project Lead will be notified, and the post Qualtrics survey (see Appendix E and F) will be distributed accordingly to both the DNP mentors and PBN ELL students. The data will be evaluated using Qualtrics functions. This data will be analyzed in January and February 2022. The final project manuscript will be completed during February and March 2022, and a presentation, in the assigned format, will be prepared to present to the stakeholders in March and at the CSS DNP presentation day in April.

### **Data Collection and Analysis**

There will be three tools used to collect data to determine the success of the QI project. The Inventory for Assessing the Process of Cultural Competence (IAPCC-M) will be used as a pre and post-test. This tool will be used when training the mentors to determine if they understand how to deliver healthcare employing the knowledge of the principles of cultural competency in interviewing techniques. A score of 29 or higher must be achieved, which would indicate they understand the principles of the theory. This validated tool is copyrighted, and the author has not granted the doctorate of nurse practice (DNP) primary investigator the

right to share it in its entirety with anyone outside of my QI project except for the Internal Review Board (IRB).

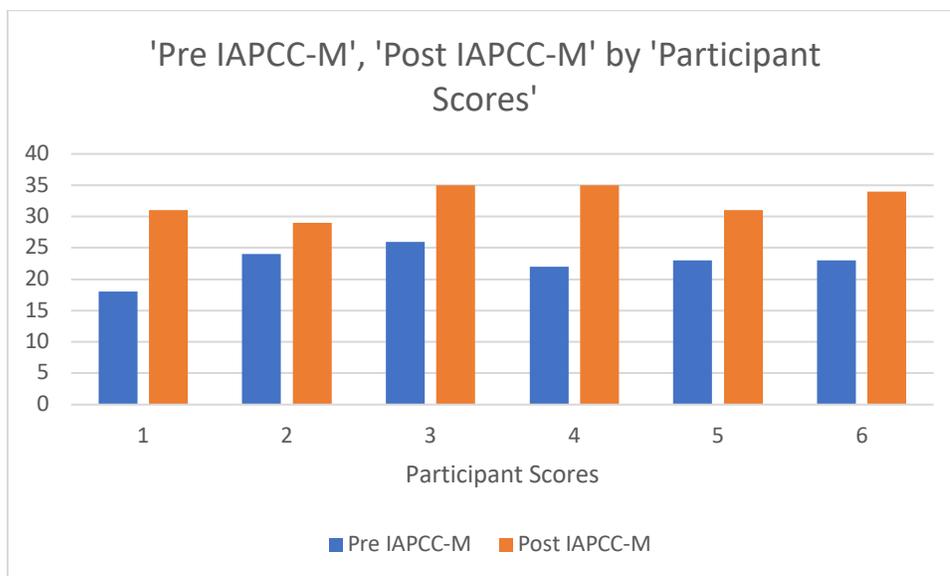
The IAPCC-M is a self-assessment tool consisting of 9 items that measure the five cultural constructs of cultural desire, cultural awareness, cultural knowledge, cultural skill, and cultural encounters related to the mentoring process. The IAPCC-M uses a 4-point Likert scale reflecting the response categories of strongly agree, agree, disagree, and strongly disagree (Campinha-Bacote, 2020, para. 2). Scores range from 9 – 36 and indicate whether a faculty mentor is operating at a level of cultural proficiency, cultural competence, cultural awareness, or cultural incompetence in their mentoring relationships. Higher scores depict a higher level of cultural competence in mentoring.

#### **PBN- ELL Mentee Survey and DNP Mentor Post Evaluation Tool**

After the six weekly mentoring sessions, the DNP mentor and the post-baccalaureate nursing student (PBN) English language learner (ELL) student mentee will complete a brief Qualtrics survey according to their role as represented in Figure 1 and Figure 2. Once the surveys are completed, the author will statistically evaluate the qualitative and quantitative data using Qualtrics.

#### **Results for the Pre and Post DNP Training IAPCC-M Results**

The IAPCC-M combined pre-survey mean score was 22.67. This indicated that the DNP mentors did not initially achieve a score indicative of understanding the process of delivering healthcare by employing the knowledge of the principles of cultural competency in interviewing techniques. After the training, the cumulative post scores rose to 32.5, which indicated a score greater than the minimum qualifying score of 29 to participate as a mentor in the QI project. Individual scores rose 10.5 points on average.

**Figure 2***Pre IAPCC\_M, Post IAPCC-M by Participant Scores***Post-Survey Discussion of Data/Outcome Interpretation****Post PBN Mentee Survey**

At the completion of the six-week mentoring program, the DNP mentors and the PBN mentees each completed a brief Qualtrics survey about their experience. Using a five-point Likert scale, the PBN Mentees believe that the QI mentoring program supported belongingness (4.8 mean), believed the program was helpful (4.75 mean), and felt that the mentoring experience improved their confidence level for future encounters in working with healthcare providers. In addition, the survey asked them to list three words that they would use to describe the mentoring experience. These words included: kind, patient, understanding, respected, valued, refreshing, eye-opening, informative, engaging, trusting, and empowering. (See Appendix H for Word Cloud illustration.)

**Figure 3***Post PBN Mentee Survey Results*

#	Field	Minimum	Maximum	Mean	Std Deviation
1	I feel this mentoring program improved your sense of "belongingness" at the college. "Belongingness" can be defined as "a feeling of connectedness, that one is important and matters to others" (Strayhorn, 2018, p. 2).	4.00	5.00	4.80	0.40
3	I believe this mentoring program was helpful.	4.00	5.00	4.75	0.43
2	I feel this mentoring experience improved my confidence level for future encounters with working with healthcare providers?	4.00	5.00	4.75	0.43

### Post DNP Mentor Survey

The final mentor survey also used a five-point Likert scale which determined that the participants believed this mentoring program improved their understanding of cultural competency (4.83 mean) and increased their confidence level for future encounters with clients from diverse backgrounds (4.83 mean). In addition, the survey asked them to list three words that they would use to describe the mentoring experience. These words included: informative, humbling, eye-opening, helpful, engaging, enjoyable, insightful, fun, interesting, relationship, beneficial, enlightening, powerful, and impactful. (See Appendix I for Word Cloud illustration.)

### Figure 4

*Post DNP Mentor Survey Results*

#	Field	Minimum	Maximum	Mean	Std Deviation
1	I feel this mentoring program improved my understanding of cultural competemility	4.00	5.00	4.83	0.37
2	I feel this training and mentoring experience improved my confidence level for future encounters with clients from diverse backgrounds?	4.00	5.00	4.83	0.37

### **Dissemination**

This QI project will be presented at the academic institution as a poster and in a Three-minute thesis (3MT) format. Additionally, an abstract has been submitted and accepted for presentation at the 3<sup>rd</sup> Global Virtual Summit on Nursing Education/Nursing Diversity 2022 on May 9-11, 2022. Finally, upon approval from the project chair, the final transcript will be submitted to the Sigma Repository.

### **Limitations and Future Implications**

This QI project was conducted at a small Midwest college where the diverse population is estimated at 17.9% of the entire student body. The specific PBN cohort that the mentee participants were recruited from comprised 16% ELL diverse students and 84% Caucasian students. All mentors were Caucasian American-born English-speaking students. It is recommended that this QI project be repeated with a larger student population to determine if the results remain consistent. In addition, this QI project was conducted using second-semester nursing students due to the need to minimize variables related to a major curriculum change for incoming first-semester students. However, it is recommended that incoming first-semester

students be paired with a DNP mentor to maximize the benefit. Finally, DNP students should be in their final two years of schooling, so they have entry-level advanced knowledge of the practical and theoretical aspects of the American healthcare system to share with their mentees.

### **Sustainability**

This project is sustainable due to the limited financial implications. It would require one lead faculty member to recruit participants from both programs, train the DNP mentors, answer ongoing questions, mitigate any unanticipated issues, and collect ongoing data. Information about the mentoring program could be integrated into a current DNP course where students self-report and record DNP hours. The DNP student must complete a minimum of 1000 advanced practice hours spread over the AACN Essentials. The importance of improving the equity of the educational experience for the diverse learner is emphasized in the current Essentials (AACN 2021). However, Domains two, four, six, nine, and ten outline the importance of communicating effectively with diverse populations, promoting principles of social justice, diversity, equity, and inclusion, including making decisions to protect diverse populations, serving as a role model, modeling respect for diversity, equity, and inclusion within teams and team practices, and mentoring self and others fostering personal, professional, and leadership development. The PBN student could be recruited during orientation which occurs approximately one to two weeks before the beginning of the first semester. Anyone who self-identified as meeting the inclusion criteria and is interested in hearing additional information. The pair could then be matched. The estimated time to sustain the program is five to ten hours per semester, depending on the number of participants.

### **Conclusion**

The AACN Essentials (2021) are very clear about the responsibility to improve the equity of education and the need to train culturally sensitive practitioners. Further, with the shift in population in the United States and specifically in MN, ELL students must be prepared for nursing practice. It is well substantiated that the college currently does not offer an equitable educational experience in the PBN program for the ELL, resulting in many ELL students being referred to the Retention and Progression Committee because they missed meeting the minimum standards of 75% by less than a few percent. This multidisciplinary mentoring approach has the potential to improve the ELL students' educational experience by offering a "safe" person who can explain various cultural concepts and foster a sense of belongingness while improving the DNP student's ability to make inquiries in a culturally sensitive manner.

## References

- Agency for Healthcare Research and Quality. (2019). *Cultural competence and patient safety*.  
<https://psnet.ahrq.gov/perspective/cultural-competence-and-patient-safety>
- Ali, P., & Watson, R. (2018). Language barriers and their impact on provision of care to patients with limited English proficiency: Nurses' perspectives. *Journal of Clinical Nursing*, 27(5-6), e1152–e1160. <https://doi.org/10.1111/jocn.14204>
- Al Shamsi, H., Almutairi, A. G., Al Mashrafi, S., & Al Kalbani, T. (2020). Implications of language barriers for healthcare: A systematic review. *Oman Medical Journal*, 35(2), e122–e122. <https://doi.org/10.5001/omj.2020.40>
- Altman, K. W. (2018). Avoiding the pitfalls of “mission drift” in modern healthcare. *Becker’s Hospital Review*. <https://www.beckershospitalreview.com/hospital-physician-relationships/avoiding-the-pitfalls-of-mission-drift-in-modern-healthcare.html>
- Altman, S. H., Butler, A., & Shern, L. (Eds.). (2016). *Assessing progress on the Institute of Medicine report the future of nursing*. National Academies Press.  
<https://doi.org/10.17226/21838>
- Amaro, D. J., Abriam-Yago, K., & Yoder, M. (2006). Perceived barriers for ethnically diverse students in nursing programs. *Journal of Nursing Education*, 45(7), 247–254.  
<https://doi.org/10.3928/01484834-20060701-03>
- American Association of Colleges of Nursing. (2017). *Position statement on diversity, inclusion, & equity in academic nursing*. <https://www.aacnursing.org/News-Information/Position-Statements-White-Papers/Diversity>
- American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. <https://www.aacnursing.org/DNP/DNP-Essentials>

- American Association of Colleges of Nursing & American Association of Colleges of Nursing. (2021). *The essentials: Core competencies for professional nursing education*.  
<https://www.aacnnursing.org/AACN-Essentials>
- American Association of Colleges of Nursing. (2019). *Enhancing diversity*.  
<https://www.aacnnursing.org/news-information/fact-sheets/enhancing-diversity>
- American Nurses Association. (2015). *Code of ethics with interpretative statements*.  
<http://www.nursingworld.org/MainMenuCategories/EthicsStandards/CodeofEthicsforNurses/Code-of-Ethics-For-Nurses.html>
- Arias-Murcia, S. E., & Lopez-Diaz, L. (2013). *Cultural Brokering as a form of caring* [PDF].  
<http://www.scielo.org.co/pdf/iee/v31n3/v31n3a09.pdf>
- Baumeister, R. F. (2012). Need-to-belong theory. In *Handbook of theories of social psychology* (pp. 121–140). SAGE Publications Ltd. <https://doi.org/10.4135/9781446249222.n32>
- Blozen, B. B. (2017). *Mentoring the culturally diverse nursing student*.  
<https://sti.confex.com/stti/congrs17/webprogram/Paper84782.html>
- Campinha-Bacote, J. (2008). *Inventory for assessing the process of cultural competence in mentoring (IAPCC-M)*. Transcultural C.A.R.E. Associates.
- Campinha-Bacote, J. (2010). A culturally conscious model of mentoring. *Nurse Educator*, 35(3), 130–135. <https://doi.org/10.1097/nne.0b013e3181d950bf>
- Campinha-Bacote, J. (2020). *The process of cultural competemility in the delivery of healthcare services: Unremitting encounters* (6th ed.). Braugher Books.
- Carter, B. (2020). Achieving diversity, inclusion and equity in the nursing workforce. *Revista Latino-Americana de Enfermagem*, 28. <https://doi.org/10.1590/1518-8345.0000-3254>

- Chaundry, A., Jackson, A., & Glied, S. A. (2019). *Did the affordable care act reduce racial and ethnic disparities in health insurance coverage?*  
<https://www.commonwealthfund.org/publications/issue-briefs/2019/aug/did-ACA-reduce-racial-ethnic-disparities-coverage>
- Clement, S., & Welch, S. (2017). Virtual mentoring in nursing education: A scoping review of the literature. *Journal of Nursing Education and Practice*, 8(3), 137.  
<https://doi.org/10.5430/jnep.v8n3p137>
- Colby, S. L., & Ortman, J. M. (2015). *Projections of the size and composition of the U.S. population: 2014 to 2060* (Current Population Reports P25-1143). U.S.Census Bureau
- Fuller, B. L., & Mott-Smith, J. A. (2017). Issues influencing success: Comparing the perspectives of nurse educators and diverse nursing students. *Journal of Nursing Education*, 56(7), 389–396. <https://doi.org/10.3928/01484834-20170619-02>
- Figuroa, J., & Rodriguez, G. M. (2015). Critical mentoring practices to support diverse students in higher education: Chicana/Latina faculty perspectives. *New Directions for Higher Education*, 2015(171), 23–32. <https://doi.org/10.1002/he.20139>
- Green, C. (2020). Equity and diversity in nursing education. *Teaching and Learning in Nursing*, 15(4), 280–283. <https://doi.org/10.1016/j.teln.2020.07.004>
- Guhde, J. (2003). English-as-a-second language (ESL) nursing students: Strategies for building verbal and written language skills. *Journal of Cultural Diversity*, 10(4), 113–117.  
<https://eds-a-ebshost-com.akin.css.edu/eds/detail/detail?vid=8&sid=e22b8a57-bdb4-46c1-aebd-e2ed4ed1debd%40sessionmgr4008&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=12164307&db=keh>

Health Resources & Services Administration: Council on Graduate Medical Education. (2016).

*Supporting diversity in the health professions* [Resource Paper].

<https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/resource-papers/May2016.pdf>

Hughes, C. (2021). *Multidisciplinary teamwork ensures better healthcare outcomes*.

<https://www.td.org/insights/multidisciplinary-teamwork-ensures-better-healthcare-outcomes>

Hunt, P. (2019). The mentoring relationship: Advantages for both. *Nursing Management*, 50(10),

5–6. <https://doi.org/10.1097/01.numa.0000580616.68498.67>

Institute of Medicine. (2016). *The future of nursing: Leading change, advancing health*

*recommendations related to diversity*. <https://campaignforaction.org/resource/iom-future-of-nursing-report-highlights-on-diversity/>

Institute of Healthcare Improvement. (2021). How to improve

<http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>

Jordan, D., Roth, G., & Vivona, B. (2020). Becoming a nursing program graduate: Transitions and adaptations by eastern European immigrant students of a Midwest community college. *Teaching and Learning in Nursing*, 15(1), 72–76.

<https://doi.org/10.1016/j.teln.2019.10.001>

James, N. (2018). Using narrative inquiry to explore the experience of one ethnically diverse ESL nursing student. *Teaching and Learning in Nursing*, 13(1), 35–40.

<https://doi.org/10.1016/j.teln.2017.08.002>

- Jezewski, M. A. (1995). Evolution of a grounded theory: Conflict resolution through culture brokering. *Advance Nursing Science*, 17(3), 14–30. <https://doi.org/10.1097/00012272-199503000-00004>
- Johnson-Hunter, P., & Anderson, M. (2019). *Increasing minority nursing student academic success through faculty mentorship*. <https://www.nursing.umaryland.edu/media/son/academics/professional-education/mdac-2019/Poster-9---Increasing-Minority-Nursing-Student-Academic-Success-Through-Faculty-Mentorship.pdf>
- Mayo, A. T. & Wooley, A. W. (2016). Teamwork in health care: Maximizing collective intelligence via inclusive collaboration and open communication. *AMA Journal of Ethics*, 18(9), 933–940. <https://doi.org/10.1001/journalofethics.2016.18.9.stas2-1609>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Minnesota Department of Health. (2020). *Minnesota’s registered nurse (RN) workforce*. <https://www.health.state.mn.us/data/workforce/nurse/docs/2020rn.pdf>
- Minnesota State Demographic Center Department of Administration. (2018). *Age, race, & ethnicity*. <https://mn.gov/admin/demography/data-by-topic/age-race-ethnicity/>
- Moeller, R. W., Seehuus, M., & Peisch, V. (2020). Emotional intelligence, belongingness, and mental health in college students. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.00093>
- National Academy of Medicine. (2020). *The future of nursing 2020-2030 - national academy of medicine*. <https://nam.edu/publications/the-future-of-nursing-2020-2030/>

- National Association of School Nurses. (2013). *Purnell model for cultural competence by Larry Purnell*. <https://www.nasn.org/nasn-resources/practice-topics/cultural-competency/cultural-competency-purnell-model>
- National League for Nursing. (2016). *Achieving diversity and meaningful inclusion in nursing education*. <http://www.nln.org/docs/default-source/about/vision-statement-achieving-diversity.pdf?sfvrsn=2>
- Office of Disease Prevention and Health Promotion. (2021). *Health literacy: Healthy people 2020*. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/health-literacy>
- Olson, M. A. (2012). English-as-a-second language (ESL) nursing student success: A critical review of the literature. *Journal of Cultural Diversity*, 19(1), 26–32. <https://eds-b-ebcohost-com.akin.css.edu/eds/pdfviewer/pdfviewer?vid=3&sid=f547fbf3-488e-4680-9862-33a99589ae17%40pdc-v-sessmgr03>
- Omenka, O. I., Watson, D. P., & Hendrie, H. C. (2020). Understanding the healthcare experiences and needs of African immigrants in the United States: A scoping review. *BMC Public Health*, 20(1). <https://doi.org/10.1186/s12889-019-8127-9>
- Onovo, G. N. (2019). Fundamentals of nursing practice and the culturally diverse ESL nursing students: The students' perspectives for teaching and learning in nursing. *Teaching and Learning in Nursing*, 14(4), 238–245. <https://doi.org/10.1016/j.teln.2019.03.003>
- Phillips, J. M., & Malone, B. (2014). Increasing racial/ethnic diversity in nursing to reduce health disparities and achieve health equity. *Public Health Reports*, 129(1\_suppl2), 45–50. <https://doi.org/10.1177/00333549141291s209>

- Purnell, L. (2002). The Purnell model for cultural competence. *Journal of Transcultural Nursing*, 13(3), 193–196. <https://doi.org/10.1177/10459602013003006>
- Purnell, L. (2005). Purnell model for cultural competence. *The Journal of Multicultural Nursing & Health*, 11(2), 7–15.  
[https://files.midwestclinicians.org/sharedchcpolicies/Policies\\_Forms/Cultural%20Competency/PURNELL%27S%20MODEL.pdf](https://files.midwestclinicians.org/sharedchcpolicies/Policies_Forms/Cultural%20Competency/PURNELL%27S%20MODEL.pdf)
- Sanderson, C. D. (2021). The future of nursing: Creating a culture of equity. *Journal of Christian Nursing*, 38(1), 24–27. <https://doi.org/10.1097/cnj.0000000000000789>
- Strayhorn, T. L. (2018). *College students' sense of belonging*. Routledge.  
<https://doi.org/10.4324/9781315297293>
- Teamwork in health care: Maximizing collective intelligence via inclusive collaboration and open communication. (2016). *AMA Journal of Ethics*, 18(9), 933–940.  
<https://doi.org/10.1001/journalofethics.2016.18.9.stas2-1609>
- The College of St. Scholastica. (2020). *Inclusive excellence strategy plan*.  
<http://www.css.edu/about/office-of-equity-diversity-and-inclusion/inclusive-excellence-strategy-plan-.html>
- The College of St. Scholastica. (2019). *Mission and vision*. <http://www.css.edu/about/mission-and-vision.html>
- The College of St. Scholastica. (n.d.a). *Mission statement of the school of nursing*.  
<http://www.css.edu/academics/school-of-nursing/about/mission-statement.html>
- The College of St. Scholastica. (n.d.b.). *Values from the Benedictine heritage*.  
<http://www.css.edu/about/mission-integration/benedictine-values.html>

Thornton, M., & Persaud, S. (2018). *Preparing today as nurses: Social determinants of health and nursing education*.

<https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-23-2018/No3-Sept-2018/Social-Determinants-of-Health-Nursing-Education.html>

Turner, A. (2018). *The business case for racial equity: A strategy for growth*.

<https://altarum.org/RacialEquity2018>

U.S. Department of Health and Human Services and Office of Disease Prevention and Health Promotion. (2020). *Health literacy in healthy people 2030*. <https://health.gov/our-work/healthy-people/healthy-people-2030/health-literacy-healthy-people-2030>

U.S. Department of Health and Human Services Office of Human Research Protections. (2018). *45 cfr 46 The Belmont report: Ethical principles and guidelines for the protection of human subjects in research*. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/index.html>

Verschelden, C. (2017). *Bandwidth recovery: Helping students reclaim cognitive resources lost to poverty, racism, and social marginalization* [eBook edition]. Stylus Publishing.

Verkuyten, M., Thijs, J., & Gharaei, N. (2019). Discrimination and academic (dis)engagement of ethnic-racial minority students: A social identity threat perspective. *Social Psychology of Education*, 22(2), 267–290. <https://doi.org/10.1007/s11218-018-09476-0>

Vespa, J., Medina, L., & Armstrong, D. M. (2020). *Demographic turning points for the United States: Population projections for 2020 to 2060*.

<https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf>

- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science*, *331*(6023), 1447–1451.  
<https://doi.org/10.1126/science.1198364>
- Weinstein, J. N., Geller, A., Negussie, Y., & Baciu, A. (Eds.). (2017). *Communities in action*. National Academies Press. <https://doi.org/10.17226/24624>
- Yoder, M. K. (1996). Instructional responses to ethnically diverse students. *Journal of Nursing Education*, *35*(7), 315–321. <https://pubmed.ncbi.nlm.nih.gov/8892119/>
- Yoder, M. K. (2001). The bridging approach: Effective strategies for teaching ethnically diverse nursing students. *Journal of Transcultural Nursing*, *12*(4), 319–325.  
<https://doi.org/10.1177/104365960101200407>
- Zeigler, K., & Camarota, S. A. (2019). *67.3 million in the United States spoke a foreign language at home in 2018* [PDF]. [https://cis.org/sites/default/files/2019-10/camarota-language-19\\_0.pdf](https://cis.org/sites/default/files/2019-10/camarota-language-19_0.pdf)

## Appendix A

## Literature Evidence Table

Literature pertaining to problem, significance and consequences						
Reference	Purpose/Question	Design	Sample	Intervention	Results	Notes
National League for Nursing. (2016). <i>Achieving diversity and meaningful inclusion in nursing education.</i>  Level VII						Supports the need for improved diversity in nursing and nursing education
Vespa, J., Medina, L., & Armstrong, D. M. (2020). <i>Demographic turning points for the United States: Population projections for 2020 to 2060</i>  Level VII.						U.S. Census published the population projections for 2020 to 2060. It is anticipated that by 2045 non-Hispanic white people will no longer be the majority. Further it is estimated that by year 2060 foreign born population will increase in the United States by 58%
National Academy of Medicine (2020). <i>The future of nursing 2020-2030 - National Academy of Medicine.</i>  Level VII						Identified the need to improve the equability of healthcare. System barriers need to be reduced to improve the workforce diversity including gender, race, and ethnicity, across all levels of nursing

						education. Improve healthcare curriculum to encourage people to work outside of acute care
AACN Positions Statement (2017) <i>Position statement on diversity, inclusion, &amp; equity in academic nursing.</i>  Level VII						<a href="#">2017 survey</a> conducted by the National Council of State Boards of Nursing (NCSBN) and The Forum of State Nursing Workforce Centers, nurses from minority backgrounds represent 19.2% of the registered nurse (RN) workforce. <a href="#">Nursing shortage reports</a> , including those produced by the American Hospital Association, the Robert Wood Johnson Foundation (RWJF), the Joint Commission, and the Association of Academic Health Centers, point to minority student recruitment as a necessary step to addressing the nursing shortage. Besides adding new clinicians to the RN workforce, a diverse nursing workforce will be better equipped to serve a diverse patient population.

						<p>According to a <a href="#">2013 report by the National Advisory Council on Nurse Education and Practice</a>, a diverse nursing workforce is essential for progress towards achieving health equity in the United States. A groundbreaking report, titled <a href="#">Missing Persons: Minorities in the Health Professions</a>, which was released by the Sullivan Commission on Diversity in the Healthcare Workforce in September 2004 stated: “The fact that the nation’s health professions have not kept pace with changing demographics may be an even greater cause of disparities in health access and outcomes than the persistent lack of health insurance for tens of millions of Americans.</p>
<p>Thorton &amp; Persaud (2018) <i>Preparing today as nurses: Social determinants of health and nursing education.</i></p> <p>Level VII</p>						<p>Increasing racially/ethnic diversity linked with reduce disparities and improved health equity</p>

<p>Carter (2020). Achieving diversity, inclusion and equity in the nursing workforce. <i>Revista Latino-Americana de Enfermagem</i>, 28.</p> <p>Level VII</p>					<p>Support for diversity improves inequities in healthcare. Upon graduation, racial and ethnic minorities are most likely to return to underserved communities and can bridge cultural and linguistic gaps in patient education. Further, they can address and nurture mindsets from traditions that may hinder healthcare outcomes. Identify resources to support the ELL to be successful in nursing school, including tutoring, language resources, cultural guides (peer guides), faculty advisors, social, emotional, and financial supports</p>
<p>Minnesota Department of Health. (2020). <i>Minnesota's registered nurse (RN) workforce</i>.</p> <p>Level VII</p>					<p>Identifies the demographics of the RN workforce in MN</p>
<p>James (2018). Using narrative inquiry to explore the experience of one ethnically diverse ESL nursing student. <i>Teaching and Learning in Nursing</i>, 13(1), 35–40.</p>					<p>The attrition rate in nursing is as high as 50% for ethnically diverse students. The study includes the</p>

Level VII						U.S., Australia, and Great Britain.
National League for Nursing. (2016). <i>Achieving diversity and meaningful inclusion in nursing education.</i>						Increasing racially/ethnic diversity is linked with reducing disparities and improved health equity.
Agency for Healthcare Research and Quality. (2019). <i>Cultural competence and patient safety.</i>  Level VII						An individual's cultural affiliations can affect where and how they seek care, describe symptoms, select treatment options, and whether they follow care recommendations and reduce harm.
Zeigler, K., & Camarota, S. A. (2019). <i>67.3 million in the United States spoke a foreign language at home in 2018</i>  Level VII						One in four residents speaks a language other than English at home. This number has tripled since 1980. MN is amongst the top states with the most significant increase in the U.S., up 23% since 2010.
Minnesota State Demographic Center Department of Administration. (2018). <i>Age, race, &amp; ethnicity</i>  Level VII						Between 2010 and 2018, the fastest-growing racial group in Minnesota was the Black or African American population, which grew by 36%, adding more than 96,500 people. The second fastest was the Asian population, which grew by 32%, adding 69,800

						people, followed by the Hispanic or Latin(x) population, which grew by 24%, adding 59,000 people.
--	--	--	--	--	--	---

<b>Literature pertaining to theoretical framework</b>						
<b>Reference</b>	<b>Purpose/Question</b>	<b>Design</b>	<b>Sample</b>	<b>Intervention</b>	<b>Results</b>	<b>Notes</b>
Maslow, A. H. (1943). A theory of human motivation. <i>Psychological Review</i> , 50(4), 370–396.  Level VII						Hierarchy of Needs - Love and Belonging 3 <sup>rd</sup> level
Baumeister, R. F. (2012). Need-to-belong theory. In <i>Handbook of theories of social psychology</i> (pp. 121–140). SAGE Publications Ltd.  Level VII						Need to Belong Theory (NBT) human beings are motivated when they feel a sense of belonging
Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students	Improve social belonging in freshman	Randomized trial	N=92 over 3-year period African American and European American students		Raised GPA and lowered academic gap by half in minority students  Reduced doctor visits	Walton & Cohen (2011) Social-belonging intervention in higher ed. The study proved increase in GPA, self-reported health and well-

Level II					and improved self-reported health and well-being of participants	being, and belongingness.
Moeller, R. W., Seehuus, M., & Peisch, V. (2020). Emotional intelligence, belongingness, and mental health in college students. <i>Frontiers in Psychology, 11</i> .  Level IV	Hypothesis Belongingness partially mediates the effects of emotional intelligence on psychological well-being.	Survey/Likert Scale	N= 2.094 undergraduates	Survey DASS-21 scale (depression, anxiety, and stress). General belongingness scale (GBS). Trait Meta Mood Scale (TMMS)		The hypothesis was supported by the study
Campinha-Bacote, J. (2010). A culturally conscious model of mentoring. <i>Nurse Educator, 35</i> (3), 130–135  Level IV	Designed a theoretical mentoring model Inventory for Assessing the Process of Cultural Competence in Mentoring (IAPCC-M)  Reliability of tool has not been established.	2 phases Introduction to Mentoring and The Process of Culturally Competent Mentoring	Design only-Faculty Mentors and Student pairs			A- Awareness S- Skill K- Knowledge E- Encounter D- Desire
Yoder, M. K. (2001). The bridging approach: Effective strategies for teaching						Bridging

ethnically diverse nursing students. <i>Journal of Transcultural Nursing</i> , 12(4), 319–325.						
Level VII						
Yoder, M. K. (1996). Instructional responses to ethnically diverse students. <i>Journal of Nursing Education</i> , 35(7), 315–321.	Determine how nurse educators respond to ethnically diverse students	Interviews Grounded theory methodology Qualitative	26 nurse educators teaching in a nursing program in CA and 17 ethnically minority nurses		Five response patterns were identified among nurse educators. Generic, mainstreaming, culturally non-tolerant, struggling, and bridging.	
Level VI						

Literature pertaining to implementation						
Reference	Purpose/Question	Design	Sample	Intervention	Results	Notes
Institute of Healthcare Improvement. (2021). How to improve  Level VII						Associates in Process Improvement developed the Model for Improvement (MFI), and its use is supported by the Institute for Healthcare Improvement (IHI) (IHI, 2021). The Plan-Do-Study-Act (PDSA) cycle is a tool that can be combined with other change models or used

						alone. It boasts of the ability to accelerate improvement (IHI, 2021). Key factors in applying this process are identifying “what are we trying to improve?” “How will we know that a change is an improvement?” and What change can we make that will result in the improvement?” (IHI, 2021, para. 1).
Jezewski, M. A. (1995). Evolution of a grounded theory: Conflict resolution through culture brokering. <i>Advance Nursing Science</i> , 17(3), 14–30	Development of Middle range theory of culture brokering					
Level VII						

<b>Literature Pertaining to Interventions</b>						
<b>Reference</b>	<b>Purpose/Question</b>	<b>Design</b>	<b>Sample</b>	<b>Intervention</b>	<b>Results</b>	<b>Notes</b>
Olson, M. A. (2012). English-as-a-second language (ESL) nursing student success: A	Identify bridges and barriers to success.	Yoder’s (1993) model. ESL needs to adapt to Language, culture, academic, and personal.	25 articles with sample sizes from 1-895 participants.	Academic and personal bridges and Barriers to success were identified	Reading speed and comprehension related to need to translate from English to	Attrition is as high as 85%. Difficulty passing NCLEX 21% lower than

<p>critical review of the literature. <i>Journal of Cultural Diversity, 19(1), 26–32.</i></p> <p>Level V</p>		<p>Five patterns of educator response: generic, culturally non-tolerant, mainstreaming, struggling, and bridging.</p>	<p>LPN-BSN programs included</p>		<p>the native tongue and back again. Technical vocabulary, grammar, syntax, and nursing documents. Fear of speaking in front of peers-isolation. Fear of making errors, communication with staff, and clients due to poor language skills.</p>	<p>native speakers. Increase in culturally and linguistically diverse clients</p>
<p>Green, C. (2020). Equity and diversity in nursing education. <i>Teaching and Learning in Nursing, 15(4), 280–283.</i></p> <p>Level V</p>	<p>Examined how inequities in nursing education can contribute to attrition</p>					<p>Racism Implicit and explicit racism social biases, stereotyping</p>

<p>Guhde, J. (2003). English-as-a-second language (ESL) nursing students: Strategies for building verbal and written language skills. <i>Journal of Cultural Diversity, 10</i>(4), 113–117.</p> <p>Level V</p>	<p>Improving verbal and written skills for ESL nursing students</p>	<p>Cummin’s Model for Language acquisition Basic interpersonal communication (BICS) and cognitive academic language proficiency (CALP)</p>	<p>One Chinese student</p>	<p>Tutoring template designed</p> <p>Used nurse tutors</p>	<p>Improved English language. Students joined more study groups.</p>	<p>Identified tutoring model may be successful with small groups of students</p>
<p>Hunt, P. (2019). The mentoring relationship: Advantages for both. <i>Nursing Management, 50</i>(10), 5–6</p> <p>Level VII</p>						<p>Mentoring relationship supports the mentor and the mentee</p>
<p>Figueroa, J., &amp; Rodriguez, G. M. (2015). Critical mentoring practices to support diverse students in higher education:</p>						<p>Live experiences matter</p>

Chicana/Latina faculty perspectives. <i>New Directions for Higher Education</i> , 2015(171), 23–32						
Level VII						
Clement, S., & Welch, S. (2017). Virtual mentoring in nursing education: A scoping review of the literature. <i>Journal of Nursing Education and Practice</i> , 8(3), 137.				Virtual Mentoring		Estimates 3.2 million nurses in the workforce by 2024. Current literature does not support the efficacy of virtual mentoring for DNP students. More studies needed.
Level VII						
Blozen, B. B. (2017). <i>Mentoring the culturally diverse nursing student</i> . Level IV	This research study looked to determine how mentoring support for the culturally diverse Associate Degree Graduate Nurse impacted	This cohort group was provided with mentoring, personal and social counseling, academic support services, scholarships, and	The 14 participants were diverse; seven were Hispanic/Latino, one of whom was male and seven were	This cohort group was provided with mentoring, personal and social counseling, academic support services, scholarships, and	The five constructs rated the highest were communication, trust, role modeling, networking,	The mentoring program supported students and culminated in all 14 Associate

	their journey through completion of their bachelor's degree in nursing.	stipends, to ensure the successful completion of their bachelor's degree	African American. A	stipends, to ensure the successful completion of their bachelor's degree by each of the participants from disadvantaged backgrounds, including racial and ethnic minorities. The students attended monthly mentoring meetings.	and enhancing professional development, all of which had a mean of 5.43 or higher. Baseline data were collected on ethnic identity, social support, and GPA's.	Degree Graduate Nurses graduating with their baccalaureate degree and securing employment. All graduates have gone back to their communities to present to their neighborhood schools about the program and mentorship received.
Johnson-Hunter, P., & Anderson, M. (2019). <i>Increasing minority nursing student academic success through faculty mentorship.</i>  Level IV	Schools of nursing that have a high population of minority students often have challenges in maintaining the passing level set by NCSBN		Minority nursing students.	Morgan State University (MSU) hired an NCLEX Tutor/Mentor/Coach to engage and improve the overall success for students in the program	Since the inception of a mentor/coach MSU's nursing program has increased undergraduate NCLEX RN® pass rates and alumni support.	2018 first-time NCLEX pass rate for non-minority students was 90.5%, the first-time pass rate for black graduates was (76.7%),

						and the first-time pass rates for Hispanics were the lowest at 60.0%
Onovo, G. N. (2019). Fundamentals of nursing practice and the culturally diverse ESL nursing students: The students' perspectives for teaching and learning in nursing. <i>Teaching and Learning in Nursing, 14</i> (4), 238–245.  Level VI	The purpose was to identify what helped ESL students succeed in Fundamentals of Nursing Practice. What challenges do ESL nursing students experience when taking the fundamental course.	A qualitative descriptive phenomenological approach	6 ESL students 25 or older	Interviews	Balance of work and school. Reading, comprehension, communication, lack of faculty support and mentorship contributed to attrition	
National Center for Cultural Competence Georgetown University Center for Child and Human Development.	Improve culturally competent care through bridging with a cultural broker					

<p>(2004). <i>Bridging the cultural divide in healthcare settings: The essential role of cultural broker programs.</i></p> <p>Level VII</p>						
<p>The Equitable Parent-School Collaboration Research Project. (2015). <i>Building Relationships bridging cultures: Cultural brokering in family engagement</i> [PDF].</p> <p>Level VII</p>	<p>Cultural broker in school systems K-12</p>					
<p>Arias-Murcia, S. E., &amp; Lopez-Diaz, L. (2013). <i>Cultural Brokering as a</i></p>	<p>Reviewed 32 articles</p>				<p>Determined cultural brokering is a form of caring in community</p>	

<i>form of caring</i> [PDF].					and hospital environments	
Level V						

<b>Literature Healthcare- Effects of ELL/student/nurse</b>						
<b>Reference</b>	<b>Purpose/Question</b>	<b>Design</b>	<b>Sample</b>	<b>Intervention</b>	<b>Results</b>	<b>Notes</b>
Omenka, O. I., Watson, D. P., & Hendrie, H. C. (2020). Understanding the healthcare experiences and needs of African immigrants in the united states: A scoping review. <i>BMC Public Health</i> , 20(1).  Level V	Review to examine the African immigrant health in the U.S.	Inductive approach to literature to identify themes.	Reviewed literature from 1980-2016		Available knowledge about African immigrant health in the U.S.	Culture, religion, and spirituality for the African immigrants. Lack of culturally competent healthcare, distrust, complexity of the U.S. healthcare system, and cost of care were major barriers to care.
Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority	Explore nurses' perspective of language barriers on care for patients with diverse	Qualitative descriptive study	59 nurses in England		Language barriers can negatively impact provisions of appropriate,	Three themes- Multi-ethnicities and language barriers, the impact of

students. <i>Science</i> , 331(6023), 1447–1451.  Level V	linguistic backgrounds				timely, safe, and effective care to meet the patients' needs.	language barriers, and communicating via an interpreter.
Iheduru-Anderson, K., Akanegbu, C., & Inungu, J. (2020). Outsiders in nursing – voices of black African born nurses & students in the US: An integrative review. <i>The Open Nursing Journal</i> , 14(1), 120–134.  Level V	The purpose of this integrative review was to describe the experience of being outsiders in nursing as defined by Black African Born Nurses and Student Nurses (BABN&SN)	Integrative review approach, according to Whittemore and Knafl	Reviewed literature 2008-2019		Black African Born Nurses and Student Nurses (BABN&SN) socialization into nursing is vital to developing targeted support, especially when entering the clinical practice environment.	Major findings include collegial/peer isolation and loneliness; racism and discrimination, unwelcoming environment, silencing of voices, personal resilience, and sense of belonging

<b>Literature Benefits for the DNP Mentor</b>						
<b>Reference</b>	<b>Purpose/Question</b>	<b>Design</b>	<b>Sample</b>	<b>Intervention</b>	<b>Results</b>	<b>Notes</b>
American Association of Colleges of Nursing. (2018). <i>The essentials of doctoral education for advanced nursing practice</i> [PDF].						Essential VIII-Guide, mentor, and support other nurses to achieve excellence in nursing practice.

Level VII						
-----------	--	--	--	--	--	--

### Appendix B

#### *Data Analysis Plan*

Objective	Indicators or Evidence	Timing of Data Collection	Data Collection				Data Analysis Plan		
			Source	Method	Sample	Instrument	Range of Values	Level of Measurement	Statistical Analysis
1. Recruit DNP and PBN ELL participants	Send out emails with pertinent information and return notification of Google form completion will automatically be received by the DNP student	October (after IRB approval received)	Self-reported	Google forms to recruit DNP and PBN students	Survey to be sent to DNP students in their final year of training and PBN students in their second semester	Email and Survey	Quantitative	None	None
2. Educate DNP students.	Provide a link to DNP participants for pre and post-Qualtrics survey to determine level of cultural competence in mentoring.	Once participants are identified.	Self-reported	Qualtrics Survey for pre and post-IAPCC-M	Educational PowerPoint	IAPCC-M	Score 9-36  Must achieve a minimum score of 29 to qualify to participate in the study	Ordinal	Qualtrics

3. 75% of the DNP/PBN ELL pairs will begin and complete six weekly 30–60-minute mentoring sessions	75% of Qualtrics surveys completed	End of December 2021	Self-reported	Qualitative Qualtrics Survey	75% of the DNP/PBN ELL pairs	Qualtrics survey	Qualitative portion measuring belongingness and if they believe the mentoring program was helpful. (five-point Likert scale) Score 1-5	Ordinal (1-5) Nominal	Qualtrics Qualtrics Narrative/Word Cloud
--	------------------------------------	----------------------	---------------	------------------------------	------------------------------	------------------	--	--------------------------	---

### Appendix C

*Gantt Chart- DNP Mentoring Program for PBN ELL Students*

Objective	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10
	July	August	September	October	November	December	January	February	March	April
	2021	2021	2021	2021	2021	2021	2022	2022	2022	2022
Develop Education Outline										
Develop Workflow										
Create DNP Educational Module “Cultural Competemility,” the Purnell Model, and Six Week Mentoring Plan and seek written approval from the author of the IAPCC-M to use it in the study.										
Write Project Proposal and Submit to IRB										
IRB Approval										
Recruit DNP Students to Serve as Mentors and Recruit ELL PBN Students										



## Appendix D

### *Purnell Model Permission*



**Bisila, Laurie** <lbisila@css.edu>

---

### **Purnell Model- Permission**

8 messages

**Bisila, Laurie** <lbisila@css.edu>

Sat, Feb 13, 2021 at 4:36 PM

To: lpurnell@udel.edu

Hello Dr. Purnell,

My name is Laurie Bisila and I am currently a faculty member and DNP student at the College of St. Scholastica. I am conducting research on improving equity in the post-baccalaureate nursing program for our English Language Learner (ELL) students. Specifically, I am designing a mentoring program for the ELL learner. The mentor will be DNP students who will also benefit because they may need mentoring hours as one way of satisfying the AACN Essential VIII. I would like to request permission to use your model as a guide for my research. Specifically, it will be used as a guide for discussion questions between the mentor and mentee during their weekly one hour sessions.

Please let me know if you have any questions or wish to discuss my research project further. Thank you.

Sincerely,

--

*Laurie Bisila, MSN, RN, PHN*

*St. Scholastica School of Nursing, Assistant Professor  
(320) 333-0286*

---

**Larry Purnell** <lpurnell@udel.edu>

Sat, Feb 13, 2021 at 5:01 PM

To: "Bisila, Laurie" <lbisila@css.edu>

Absolutely, you can use the model. Do you have a good picture of the model? I assume you are using the English model.

Larry PurnR.N.I, PhD, RN, FAAN  
Professor Emeritus, University of Delaware  
Adjunct Professor, Excelsior College  
PhD Program, University of Panama  
Transcultural Nursing Scholar  
Marquis Lifetime Achievement Award 2020

[Quoted text hidden]

[Quoted text hidden]

*Confidentiality Notice: The content of this message is the proprietary and confidential property of The College of St. Scholastica, and should be treated as such. If you are not a designated recipient, you are hereby notified that any dissemination, copying or distribution of this email or its contents is strictly prohibited. You may not review, copy or share this message; please delete this message from your system and notify me immediately by reply e-mail. Any unauthorized use or distribution of the content of this message is not*

*permitted and may be illegal.* Unless otherwise stated, opinions expressed in this email are those of the author and are not endorsed by The College.

---

**Bisila, Laurie** <lbisila@css.edu>  
To: Larry Purnell <lpurnell@udel.edu>

Sat, Feb 13, 2021 at 5:06 PM

Thank you for your fast response. I only have the pictures that I can print off of the internet. Would you happen to have a better one? Yes, I will be using the English model. Thank you, I truly appreciate your support!

Laurie

[Quoted text hidden]

---

**Larry Purnell** <lpurnell@udel.edu>  
To: "Bisila, Laurie" <lbisila@css.edu>

Sat, Feb 13, 2021 at 6:15 PM

One of these might be better? One is the word document that you can resize if needed and the other one is a PDF. I wish you success with your work.

R.N.rry Purnell, PhD, RN, FAAN  
Professor Emeritus, University of Delaware  
Adjunct Professor, Excelsior College  
PhD Program, University of Panama  
Transcultural Nursing Scholar  
Marquis Lifetime Achievement Award 2020

[Quoted text hidden]

## 2 attachments



**Purnell\_Model 2018.pdf**  
203K



**PurnellModel 8.8.2019.rtf**  
7041K

---

**Bisila, Laurie** <lbisila@css.edu>  
To: Larry Purnell <lpurnell@udel.edu>

Sat, Feb 13, 2021 at 6:20 PM

This is perfect, thank you!

Laurie

[Quoted text hidden]

---

**Bisila, Laurie** <lbisila@css.edu>  
To: Larry Purnell <lpurnell@udel.edu>

Sat, Feb 20, 2021 at 2:07 PM

Hello Dr. Purnell,

Thank you for granting me permission to use your tool in my research. It may be possible to publish my research in the future. May I have copyright permission to use your model in possible future publications? Thank you!

Respectfully,

Laurie Bisila, MSN, RN, PHN

[Quoted text hidden]

---

**Larry Purnell** <lpurnell@udel.edu>  
To: "Bisila, Laurie" <lbisila@css.edu>

Sat, Feb 20, 2021 at 2:29 PM

Yes, you have permission for whatever purpose you need it for. Best in your future!  
our future!

Larry Purnell, PhD, RN, FAAN  
Professor Emeritus, University of Delaware  
Adjunct Professor, Excelsior College  
PhD Program, University of Panama  
Transcultural Nursing Scholar  
Marquis Lifetime Achievement Award 2020

[Quoted text hidden]

---

**Bisila, Laurie** <lbisila@css.edu>  
To: Larry Purnell <lpurnell@udel.edu>

Sat, Feb 20, 2021 at 3:14 PM

Thank you so much! Blessings to you!

Laurie Bisila

[Quoted text hidden]

## Appendix E

### *Weekly Mentoring Plan*

#### **Week 1- Getting to know you**

1. What major is your previous bachelor's degree?
2. Where did you complete your first degree?
3. Why are you choosing to become a nurse?
4. Where were you born?
5. Where did you grow up?
6. When did you come to the United States?
7. How well do you feel you speak English?
8. Did your first degree or other experiences require you to speak, read, and/or write English at a technical level?
9. Other responsibilities such as work, family, significant other?
10. State one thing you want me to know about you.

#### **Week 2**

1. **Overview/heritage-** Concepts related to country of origin, current residence, the effects of the topography of the country of origin and current residence, economics, politics, reasons for emigration, educational status, and occupations.
2. **Communication-** Concepts related to the dominant language and dialects; contextual use of the language; paralanguage variations such as voice volume, tone, and intonations; and the willingness to share thoughts and feelings. Nonverbal communications such as the use of eye contact, facial expressions, touch, body language, spatial distancing practices,

and acceptable greetings; temporality in terms of past, present, or future worldview orientation; clock versus social time; and the use of names are important concepts.

3. **Family roles and organization-** Concepts related to the head of the household and gender roles; family roles, priorities, and developmental tasks of children and adolescents; child-rearing practices; and roles of the ages and extended family members. Social status and views toward alternative lifestyles such as single parenting, sexual orientation, child-less marriages, and divorce are also included in the domain.

### **Week 3**

1. **Workforce issues-** Concepts related to autonomy, acculturation, assimilation, gender roles, ethnic communication styles, individualism, and health care practices from the country of origin.
2. **Bicultural ecology-** Includes variations in ethnic and racial origins such as skin coloration and physical differences in body stature; genetic, heredity, endemic, and topographical diseases; and differences in how the body metabolizes drugs.
3. **High-risk behaviors-** Includes the use of tobacco, alcohol, and recreational drugs; lack of physical activity; nonuse of safety measures such as seatbelts and helmets; and high-risk sexual practices.

**Week 4 Nutrition-** Includes having adequate food; the meaning of food; food choices, rituals, and taboos; and how food and food substances are used during illness and for health promotion and wellness.

1. **Pregnancy and childbearing-** Includes fertility practices; methods for birth control; views towards pregnancy; and prescriptive, restrictive, and taboo practices related to pregnancy, birthing, and postpartum treatment.

2. **Death rituals-** Includes how the individual and the culture view death, rituals and behaviors to prepare for death, and burial practices. Bereavement behaviors are also included in this domain.

## Week 5

1. **Spirituality-** Includes religious practices and the use of prayer, behaviors that give meaning to life, and individual sources of strength.
2. **Health care practices-** Includes the focus of health care such as acute or preventive; traditional, magicoreligious, and biomedical beliefs; individual responsibility for health; self-medication practices; and views towards mental illness, chronicity, and organ donation and transplantation. Barriers to health care and one's response to pain and the sick role are included in this domain.
3. **Health care practitioner-** Concepts include the status, use, and perceptions of traditional, magicoreligious, and allopathic biomedical health care providers. In addition, the gender of the health care provider may have significance.

## Week 6- Clinical Experience

1. Discuss a clinical experience they had. Please remind them of HIPPA requirements. They should not include the name or other identifying information.
2. Was there anything that you noticed that would have been done differently in their country of origin? Discuss the differences.
3. Cultural differences
4. What specialty area of nursing are you interested in? If so, why?
5. Are there any specialty areas in nursing that you would like to avoid? If so, why?

6. Do you plan to further your degree in nursing after graduation i.e. MSN, DNP? If so, what?
7. Do you plan to return to your country of origin or primarily work with people who share their primary culture or beliefs?

## Appendix F

### *Final Survey- Mentor Version*

### **A Multidisciplinary Mentoring Approach to Improving the Equity of Nursing Education for the English Language Learner in an Undergraduate Nursing Program: A Mixed-Method Quality Improvement Project: DNP Mentor Version**

Q1 Please rate your experience in the mentoring program

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
<p>I feel this mentoring program improved my understanding of cultural competemility (1)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>I feel this training and mentoring experience improved my confidence level for future encounters with clients from diverse backgrounds? (2)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 List three words that describe your mentoring experience.

---

Q3 Do you have any feedback on how to improve this mentoring program?

---

---

## Appendix G

*Final Survey- Mentee Version*

**A Multidisciplinary Mentoring Approach to Improving the Equity of Nursing Education for the English Language Learner in an Undergraduate Nursing Program: A Mixed-Method Quality Improvement Project: Mentee Version**

1 Please rate your experience in the mentoring program

	Strongly Disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I feel this mentoring program improved your sense of "belongingness" at the college. "Belongingness" can be defined as "a feeling of connectedness, that one is important and matters to others" (Strayhorn, 2018, p. 2). (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel this mentoring experience improved my confidence level for future encounters with working with healthcare providers? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe this mentoring program was helpful. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

3. List three words that describe your mentoring experience.

---

---

4. Do you have any feedback on how to improve this mentoring program?

---

---

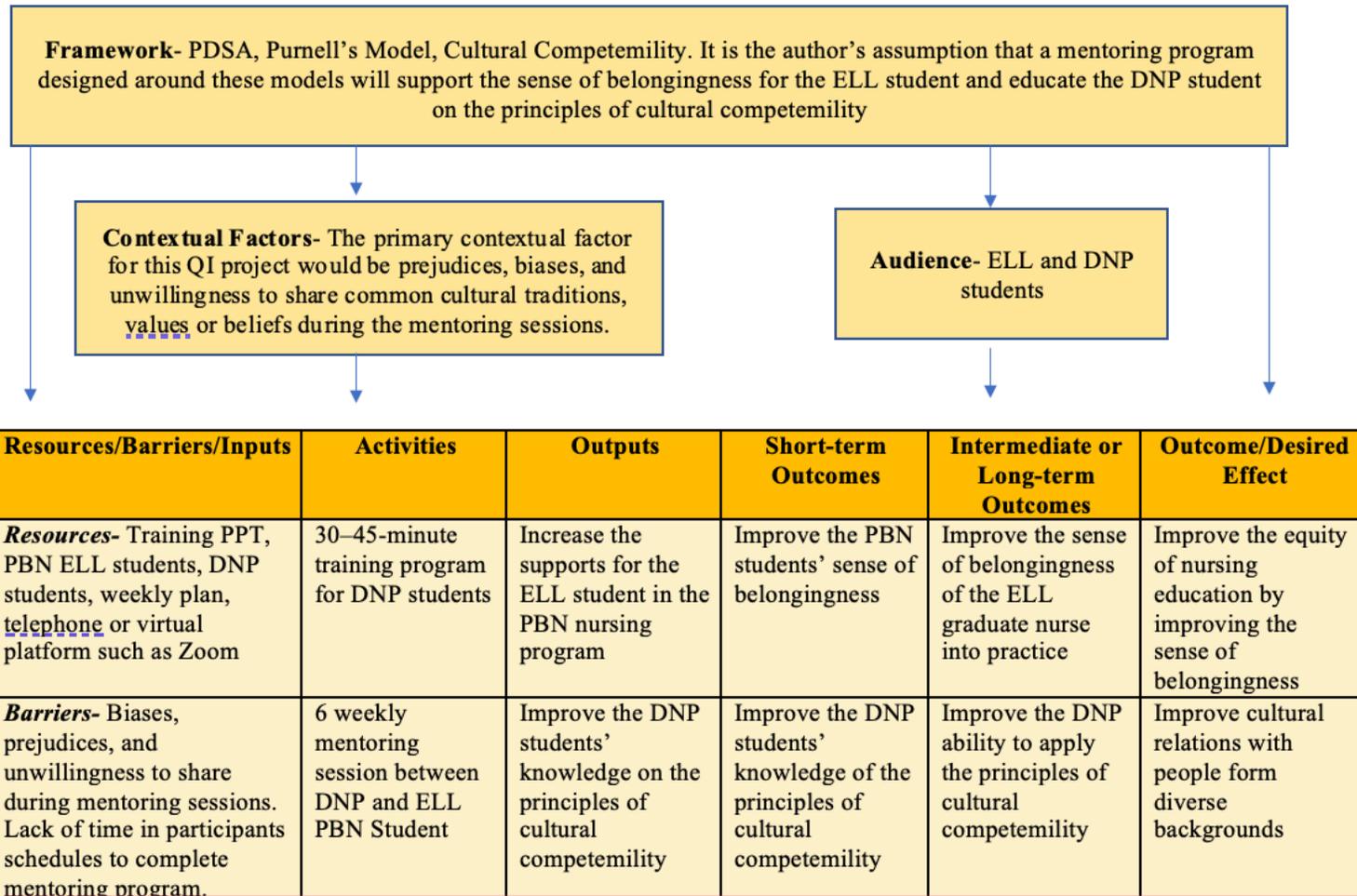
5. Mentoring sessions were to be 30-60 minutes. Do you feel this was enough time? If not, how much additional time would have been helpful?

---

---

## Appendix H

### *Recommended Work Plan for Multidisciplinary Approach to Mentoring*



Appendix I

Mentee Word Cloud



