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Mandating Nursing Faculty Disability Training: Learn To See The Ability In All Your Students

Rebekkah Stanko

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MANDATING NURSING FACULTY DISABILITY TRAINING:
LEARN TO SEE THE ABILITY IN ALL YOUR STUDENTS

An Evidence-based Practice Capstone Project
Submitted to the Faculty of the
Graduate Program in Nursing
In Partial Fulfillment
of the Requirements for the Post-master's Certificate
Certificate of Advanced Graduate Studies (CAGS) in Nursing Education

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Messiah University

December, 2020

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Nursing students with disabilities are an under recognized, and under supported, minority student population. Though the exact statistics for nursing students with disabilities is unknown, the presence of these students within nursing programs across the United States has been increasing significantly over the past decade. As the profession of nursing continues to strive to educate and grow a diverse professional workforce, nursing faculty will need to develop a working knowledge and understanding of disability and disability law to maintain compliance with federal law and best meet the educational needs and requirements of nursing students with disabilities. However, nursing programs have historically not been welcoming to nursing students with disabilities, and institutions of higher education are not mandated to provide disability training to faculty. An exhaustive review of the literature concluded that current practices for faculty disability training leave faculty lacking the experience, knowledge, understanding, expertise, and self-efficacy necessary to meet and support the obligations of students with disabilities. An intrinsic preference for able-bodied individuals, and an overall knowledge deficit related to disability, and disability law, has resulted in nursing faculty having low-self efficacy related to teaching nursing students with disabilities, and discriminating against nursing students with disabilities. While further longitudinal research is needed, a transition to mandating faculty development activities related to disability education would better prepare

nursing faculty to teach students with disabilities and support these students in their quest to become successful professional nurses.

Keywords: Americans with Disabilities Act, disability awareness training, disability education, disability law, disability-related faculty development, nurse educator, nursing faculty, nursing program admission, nursing program completion, nursing student, social model of disability, student with disability, undergraduate nursing program,

DEDICATION

I dedicate this project to my undergraduate nursing professor, Ms. Mary Ann Murtha, who took the time to encourage me to register with this office of disabilities as a nursing student. Had Mrs. Murtha not chosen to believe in me, and not encouraged me that a student with a disability could succeed in nursing school and be a competent RN, I would have never made it to the point of pursuing my master's degree.

I dedicate this project to my parents, Scott A. Stanko, Sr. and Lisa A. Stanko, and my fiancé and better half, Dante D. Cordelli who supported me through this process, and believed in me, and encouraged me to go back to school and complete my CAGS.

Finally, I dedicate this project to my youngest sister, Ivanna M. Stanko, who was the inspiration for my PICO question, and who completely embraces the social model of disability. Ivanna, you always say that having a disability doesn't mean you can't do something, it just means you learn differently. May you continue to be an inspiration to everyone who crosses your path.

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CHAPTER I

INTRODUCTION

Nursing students with disabilities are an under recognized, and under supported, minority presence in nursing schools across the United States (Dupler et al., 2012; L'Ecuyer, 2019).

According to the National Center for Educational Statistics (2019), the most recent statistical data for the percentage distribution of students with disabilities, taken from 2015-2016 academic year, indicated that 19.4% of undergraduate students, and 11.9% of post baccalaureate students, identified as having a disability. While there is no data to indicate the percentage of nursing students that identify as having a disability, the presence of students with disabilities has been reported to be significantly increasing within nursing education (Dupler et al., 2012; Horkey, 2019; LaSala et al., 2020; Luckowski, 2016; Matt et al., 2015). For students with disabilities to achieve success in nursing education, faculty should have a current working knowledge and understanding of disability law, accommodating disabilities, and disability education, which could be achieved through the implementation of mandated disability awareness faculty development training (Dupler et al., 2012; Horkey, 2019; Lyon & Houser, 2018; May, 2014).

Background and Need

Nursing programs have historically not been welcoming to nursing students with disabilities; many nursing programs have denied students admission to nursing schools, or discriminated against students within a nursing program, on the basis of having a disability (Aaberg, 2012; Horkey, 2019; Murray et al., 2014; Neal-Boylan & Miller, 2017). Consequently, nursing faculty tend to lack experience teaching students with disabilities, which has resulted in preconceived notions and intrinsic attitudes on the behalf of nursing faculty that have created barriers for nursing students, and potential nursing students, with disabilities. Furthermore,

institutions of higher education are not mandated to provide disability training to faculty, which has resulted in nursing faculty also lacking the knowledge, understanding, expertise, and self-efficacy required to support students with disabilities (May, 2014; Murray et al., 2014; Neal-Boylan & Miller, 2017; Wynants & Dennis, 2017). For students with disabilities to achieve success in nursing education, faculty should have a current working knowledge and understanding of disability law, accommodating disabilities, and disability education, which could be achieved through the implementation of mandated disability awareness faculty development training (Dupler et al., 2012; Horkey, 2019; Lyon & Houser, 2018; May, 2014).

Statement of Problem

The United States Department of Labor (n.d.) and the National League for Nursing [NLN] (2016) have both classified disability as a natural sector of diversity. Additionally, there exists a strong, inseparable, connection between a culturally diverse nursing working force and the ability to provide safe, effective, competent, and high-quality patient care (NLN, 2016). Furthermore, nursing student with disabilities who are able to meet technical standards, the eligibility criteria for entrance into a nursing program, with or without accommodations, are protected under the Americans with Disabilities Act [ADA] (Matt et al., 2015). Despite these sanctions and regulations, nursing students with disabilities continue to face discrimination, misunderstanding, and barriers as consequences of identifying as having a disability (Aaberg, 2012; Horkey, 2019; Neal-Boylan & Miller, 2017). Often, these barriers are the result of faculty having inadequate education, and misconceptions, related to disability awareness and disability law (Lyon & Houser, 2018; Neal-Boylan & Miller, 2017; Wynants & Dennis, 2017).

Statistically significant disparities exist between the percentage of adults with disabilities who have taken at least some undergraduate post-secondary classes, about 33%, and the

percentage of adults with disabilities who have successfully completed a bachelor's degree, about six percent (Wynants & Dennis, 2017). Furthermore, almost 30 years after the implementation of the ADA, inconsistencies continue to exist between how nursing students with disabilities are treated, and how the ADA is interpreted (Neal-Boylan & Miller, 2017). However, when faculty have received disability education, are comfortable employing accommodations, and understand the mandates of the ADA, their self-efficacy fosters a more positive intrinsic attitude toward students with disabilities, and creates a supportive educational environment in which learning is enhanced (Aaberg, 2012; Lively, 2014; May, 2014; Murray et al., 2014; Neal-Boylan & Miller, 2017; Suplee et al., 2014; Wynants & Dennis, 2017). Mandatory faculty development related to disability education should be investigated as means through which to provide nursing educators with the disability awareness, knowledge, and understanding necessary to create and foster such a constructive learning environment.

Intrinsic attitudes toward disability

In 2005, the Surgeon General issued a Call to Action to Improve the Health and Wellness of Persons with Disabilities in an effort to improve health care provider education related to individuals with disabilities through adopting evidence-based training curricula to improve attitudes toward individuals with disabilities, as well as identify better ways to work professionally with individuals who identified as having a disability (Lyon & Houser, 2018). However, for health care professionals, including nurses, negative attitudes, inadequate education and training related to disability, and disability misconceptions continue to remain as barriers when interacting with individuals who identify as having a disability.

According to Wasserman et al. (2016), as long as man has populated the earth, there have existed humans who lacked physical or sensory abilities. However, disability, or impairment, did

not develop into a concept to attend to until 19th century scientific thinking began classifying human function and form into categories of abnormal and deviant. Specifically, the need and desire to classify and clarify the relationship between the lack of ability and an individual's limitations resulted in the two primary approaches for conceptualizing disability: the medical model, and the social model. Traditionally, health care professions, including nursing, have conceptualized their understanding and definition of disability through the medical model (Boyles et al., 2008; Hogan, 2019). The perspective of the medical model of disability is that the root cause of a disability is a functionally limiting medical condition that resides within the individual, and requires adaptation, on the part of the individual, in the form of medical treatment or cure (Boyles et al., 2008; Goering, 2015). The medical model of disability has underestimated and overlooked the contributions of social and environmental factors on the limitations experienced by individuals with disabilities (Wasserman et al., 2016). Furthermore, through an integrated review of nursing and health care literature, Boyles et al. (2008) concluded that application of the medical model of disability has predisposed disabled individuals to oppression and marginalization. Nursing instructors who view disability from the framework of the social model have reportedly used more inclusive teaching practices than those who viewed disability through the lens of the medical model (Wynants & Dennis, 2017).

Studies have documented the negative attitudes and perceptions held by faculty toward nursing students with disabilities, as well as the general concerns faculty hold toward students with disabilities regarding their ability to become successful professional nurses, as being a major impediment to the success of students with disabilities within higher education (Aaberg, 2012; L'Ecuyer, 2018; Lombardi et al., 2013; Wynants & Dennis, 2017). Furthermore, ample evidence exists to support the claim that students with disabilities have historically been denied

admission to nursing schools solely on the basis of identifying as having a disability (Aaberg, 2012). Faculty's lack of understanding and cooperation regarding educating students with disabilities has been identified as one of the most common institutional barriers these students encounter when pursuing higher education (Aaberg, 2012; Lombardi et al., 2013; Wynants & Dennis, 2017). Furthermore, the National League for Nursing (NLN) (2016) has suggested that the lack of diversity amongst the nursing student population has impeded the ability of the profession of nursing to achieve the goal of excellent care for all. Specifically, discrimination against nursing students with disabilities inflicts damage on the students, contradicts inclusivity, and threatens the integrity and health of the profession of nursing (Aaberg, 2012; Neal-Boylan & Miller, 2017; NLN, 2016). Despite this, some universities and colleges continue to fail to include students with disabilities in their promotional material, as well as fail to admit students with disabilities into their nursing programs (NLN, 2016). The general exclusion of students with disabilities from nursing programs is thought to be related to inappropriate use of admission standards, and a lack of accommodations resulting from the dearth of understanding of the needs of students with disabilities and an absence of the use of inclusive instructional strategies (Aaberg, 2012; Neal-Boylan & Miller, 2017; NLN, 2016; Wynants & Dennis, 2017).

Appropriate disability related faculty professional development that promotes disability awareness and provides knowledge about disabilities is one method to improve faculty attitude and inclusiveness of students with disabilities while simultaneously reducing the negative assumptions and stereotypes that lead to discrimination and detrimental practices (Lombardi et al., 2013; Lyon & Houser, 2018; NLN, 2016; Wynants & Dennis, 2017).

Knowledge related to disability and disability law

The Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973 have historically provided the legal guidance and framework for developing policies, procedures, and processes for faculty working with nursing students with disabilities (Dupler et al, 2012; Luckowski, 2016; Matt et al., 2015; Neal-Boylan & Miller, 2017). Specifically, under the ADA, an individual with a disability was defined as someone who has (1) a physical or mental impairment that limits major life activities, (2) has a record of this impairment, or (3) is regarded as having an impairment. In 2008, the Americans with Disabilities Act Amendment Act (ADAAA) was passed as an effort to further protect individuals with disabilities from discrimination; the amendment allowed for a broader interpretation of disability by including in the legal definition of ‘disability’ disabling conditions that were in remission or controlled through a form of therapy (US Equal Employment Opportunity Commission, 2008). The ADAAA has become known as one of America’s most comprehensive pieces of civil rights legislation through inhibiting all places of public accommodation, including non-religiously controlled colleges and universities, from discriminating against individuals with disabilities (Cortiella & Koloj, 2009).

Within nursing education, many institutions have applied the strict, rigorous, and narrowly focused technical standards of the 1996 validation study by the National Council of State Boards of Nursing to deny admission to potential students with disabilities (Hokey, 2019; Matt et al., 2015). However, to be compliant with the ADAAA, nursing programs must demonstrate that technical standards used as admission criteria directly correlate to program outcomes. Specifically, the passage of the ADAAA in 2008 has shifted the focus from whether or not the student was disabled to the institution’s response to a student’s request for

accommodation, and whether or not the institution's response to the request was discriminatory to the student, which has resulted in expanded access to nursing education for students with disabilities (Dupler et al., 2012; Horkey, 2019; Neal-Boylan & Miller, 2017). Therefore, nursing students may be protected under the ADAAA based on an actual or perceived impairment regardless of if the disability limits a major life activity.

For nursing faculty, because of the historic exclusion of students with disabilities from nursing education, working with a student who has a disability, as defined by the ADAAA, is often an unfamiliar situation that creates unnecessary barriers that can inhibit the student's ability to successfully complete a nursing program (Dupler et al., 2012; Horkey, 2019; Neal-Boylan & Miller, 2017). For this reason, nursing faculty must understand the legal requirements when working with students with disabilities, and be aware of the resources available to them. Ultimately, the ability of nursing faculty to effectively implement approved accommodations for a student with a disability can be essential to that student's successful completion of an undergraduate nursing program (Horkey, 2019). Nursing faculty are tasked with balancing the legal rights of students with disabilities while simultaneously ensuring the minimum academic and clinical competency of their program graduates (L'Ecuyer, 2018). However, studies have suggested that faculty in higher education have limited knowledge of disability law (Wynants & Dennis, 2017). Faculty education and training regarding students with disabilities has been shown to be an effective measure to ensure successful accommodation implementation (Horkey, 2019; Wynants & Dennis, 2017).

Education and self-efficacy

Based on the most recent statistical data, taken from the 2015-2016 academic year, at least 19.4% of undergraduate students, and 11.9% of post baccalaureate students identify as

having a disability (National Center for Educational Statistics, 2019). Furthermore, an estimated additional 15%, or more, of students struggle due to unidentified or unaddressed disabilities (L'Ecuyer, 2018). The extent to which disabilities impact students in nursing schools is difficult to predict, however since the passage of the ADA in 2008, nursing faculty have anecdotally reported significant increases in the number of students with disabilities applying to, and being admitted into, nursing programs (Horkey, 2019; L'Ecuyer, 2018; Luckwoski, 2016; Murray et al., 2014).

While the cause of low retention and graduation rates for students with disabilities is often explained as student-centered deficiencies, institutions of higher education should also consider the impact campus climate, and faculty education and self-efficacy can have on the success of students with disabilities (Murray et al., 2014; Wynants & Dennis, 2017). Specifically, faculty in higher education are rarely trained in the pedagogy of educating diverse student groups. Furthermore, faculty are not required to receive professional development on instructional strategies for educating students with disabilities. In general, most nursing faculty do not receive enough formal education and training to prepare them for their role as an educator, and even less training is directed toward teaching students with disabilities (Lombardi et al., 2013; Murray et al., 2014; Neal-Bolyan & Miller, 2017; Suplee, 2014). Preparation for clinical teaching in nursing can range from being an experienced clinical nurse who receives a brief orientation provided by the employing institution of higher education, to having completed continuing professional development related to education, to having completed a degree-granting program in nursing education (Suplee et al., 2014).

Study findings have demonstrated that nursing faculty lack the education and self-efficacy to effectively support students with disabilities (Lombardi et al., 2014; May, 2014).

Specifically, five primary ways have been identified through which college and university faculty affect the post-secondary education of students with disabilities: (1) through course design and delivery of instruction, (2) through their direct interactions with students related to accommodation requests, (3) through mentoring and relationships with students, (4) through their knowledge of the campus services and supports available to students with disabilities, and (5) through their influence on the disability climate of the institution (Lombardi et al., 2014). When faculty are able to participate in disability-related faculty development activities, the positive impact on their self-efficacy related to teaching students with disabilities is statistically significant (Lombardi et al., 2014; Suplee et al., 2014).

Purpose Statement

The purpose of this literature review project is to evaluate the literature for best practice regarding providing disability awareness training and education to nursing faculty, and determine if a transition from not mandating disability-related faculty development to mandating disability-related faculty development would improve faculty participation in addressing the needs of undergraduate nursing students with disabilities and therefore improve the program admission and completion rates for nursing students who identify as having a disability.

Evidence-based Practice Question

For undergraduate nursing students who identify as having a disability, would mandating faculty development activities related to disability education and law, compared to current practices for faculty disability training, improve program admission rates and successful program completion rates?

Significance to Nursing Education

The ADA (Americans with Disabilities Act) protects the rights of individuals with disabilities in programs and activities that receive federal financial assistance from the U.S. Department of Education, including institutions of higher education (Cortiella & Kaloi, 2009). Under the mandates of the ADA, institutions of higher education are required to provide qualified students with appropriate accommodations necessary to afford the student an equal opportunity to participate in an academic program provided these accommodations do not alter the fundamental integrity of the program, or impose an undue burden on the institution (Cortiella & Kaloi, 2009). In the U.S., at least one in five people are living with a disability, at least 19.4% of undergraduate students and 11.9% of post baccalaureate students identify as having a disability, and furthermore approximately 31% of disabilities are identified while a student is pursuing post-secondary education (L'Ecuyer, 2018; May, 2014; National Center for Educational Statistics, 2019).

Study results have demonstrated that nursing students with disabilities demonstrate achievements equal those of non-disabled students in both education and the workplace, however students with disabilities often require interventions or accommodations to achieve this equal level of success (Dupler et al., 2012; Horkey, 2019). While institutions of higher education are not required to provide training to faculty regarding disability education or implementation of accommodations, the institution is required to provide reasonable accommodations, and it is the responsibility of the faculty to implement the accommodation (May, 2014; Cortiella & Kaloi, 2009). Furthermore, the lack of faculty knowledge related to educating students with disabilities could have a negative impact on students seeking accommodations and place the institution of higher education at risk for Office of Civil Rights violations.

Nursing faculty play a critical, and direct, role in promoting, or inhibiting, the post-secondary experience of a student who identifies as having a disability (Dupler et al., 2012; Horkey, 2019; Lyon & Houser, 2018; Murray et al., 2014). Practicing nurses, including nursing instructors, are held to the standards of the American Nurses Association (ANA) Code of Ethics. The ANA Center for Ethics and Human Rights developed the Code of Ethics to promote ethical competency and human rights sensitivity of nurses in all practice settings; this document is a social contract between the profession of nursing and the public, and is intended to bind nurses together in support of each other so that all nurses can fulfill their professional obligations (American Nurses Association [ANA], 2018). The ANA's updated Code of Ethics (2015) outlined the current guiding principles and values of nursing. Specifically, these principles included the necessity to treat others fairly and with respect, promote professional growth and competence, and ensure an ethical and safe environment which fosters a culture of civility and kindness where colleagues, coworkers, employees, *students*, and others are treated with dignity and respect.

As the nursing student population continues to diversify, nursing faculty are at an increased likelihood of encountering students with disabilities in the classroom and clinical settings (L'Ecuyer, 2018; May, 2014; National Center for Educational Statistics, 2019). For these students, successful completion of a nursing program may be dependent upon the ability of faculty to properly implement necessary reasonable accommodations (Dupler et al., 2012; Horkey, 2019; L'Ecuyer, 2018; May, 2014). When nursing faculty are knowledgeable about students with disabilities, and the implementation of accommodations, they are better prepared to create a teaching environment in which the students feel comfortable, and learning is enhanced (May, 2014). Multiple studies and literature reviews have demonstrated that one of the most

effective methods to prepare nursing faculty to meet the needs of nursing students with disabilities is faculty development and training related to students with disabilities (Aaberg, 2012; Dupler et al., 2012; Horkey, 2019; L'Ecuyer, 2018; Lombardi et al., 2013; Lyon & Houser, 2018; May, 2014; Murray et al., 2014; Neal-Boylan & Miller, 2017; Suplee et al., 2014; Wynants & Dennis, 2017). Specifically, when nursing faculty participate in disability related faculty development and training, they are not only demonstrating commitment to their profession and practice, but they are gaining the knowledge and understanding that is essential to the overall success of nursing students with disabilities.

Significance to Nursing Practice

A common concern regarding students with disabilities in nursing education is whether or not these students can provide safe and effective care (Aaberg, 2012; Levey, 2014; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Yarbrough & Welch, 2020). Additionally, research and literature review have yielded that students with disabilities have faced barriers related to obtaining appropriate accommodations to be successful in school and had to combat the assumption that people with disabilities do not belong in nursing. However, changes in healthcare and advances in technology have placed an emphasis on critical thinking over technical skills and abilities, which lends to support the inclusion of students with disabilities within nursing programs. The evidence has demonstrated that students with disabilities can succeed in nursing programs when provided with reasonable and appropriate accommodations (Dupler et al., 2012; Marks & McCulloh, 2015; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Yarbrough & Welch, 2020). Discrimination against nursing students with disabilities often is the result of a lack of education of disability and disability law, and can potentially impact diversity, recruiting, and retention at

schools of nursing, but also can negatively impact the reputation of the nursing program, the institution of higher education, and the institution's relationship with clinical sites and employers (Neal-Boylan & Smith, 2016). Moreover, nursing students with disabilities have the potential to add diversity to the profession of nursing upon graduation and are a protected minority whose inclusion adds to the ethical value of multicultural competency in nursing practice.

Definition of Terms

Accommodations: adjustments that do not provide an advantage to the student with a disability, but rather minimize or eliminate the effect of the disability/impairment on a particular activity, and provide opportunity and access to programs, activities, and services for the student; accommodations include, but are not limited to, assistive and auxiliary aides or services (Matt et al., 2015).

Disability. A physical or mental impairment that substantially limits one or more major life activities of an individual, a record of such impairment, or being regarded as having such an impairment (Americans with Disabilities Act, 1990).

Disability education (*as related to nursing faculty*): having an awareness of the nature of students' disabilities; having a working knowledge of the law related to students with disabilities, and a comprehensive understanding of how to provide accommodations, and educational interventions, for nursing students with disabilities (Dupler et al., 2012; Horkey, 2019).

Faculty development activities (*as related to nursing faculty*): continuing professional education for nursing faculty that contributes to the growth and development of faculty in their academic roles and expands their capacity to advance their discipline and influence change; can be formal, informal, collaborative, self-managed, individual, or group-based; can include, but is

not limited to, workshops, courses, educational articles, and educational books (Iwasiw et al., 2020; Lombardi et al., 2013)

Faculty disability training (*as related to nursing faculty*): training that integrates disability education and knowledge into a nursing program's culture and curriculum so that students with disabilities can achieve success in nursing education; training that provides direct assistance and guidance to faculty to proactively support the learning needs of students with disabilities particularly in the areas of knowledge of disability-related laws and processes, and inclusive and accessible teaching practice (Dupler et al., 2012; LaSala et al., 2020; Lombardi et al., 2013; Lyon & Houser, 2018; Matt et al., 2015).

Institutions of higher education: a college or university

Medical Model of Disability: A model of disability based on the view that disability is caused by disease or trauma, and its resolution/solution is an intervention provided and controlled by professionals. Under this model, a disability is perceived as a deviation from normal, and the role of the individual with the disability is to accept the care determined by the professionals. Under this model, disability is considered to reside within the individual (Smeltzer, 2007).

Needs of students with disabilities: the educational accommodations and interventions necessary for students with disabilities to achieve the same level of success within an educational program as students without disabilities (Horkey, 2019).

Reasonable accommodations: Making existing facilities used by employees readily accessible to and usable by individuals with disabilities. This includes but is not limited to: job restructuring, part-time or modified work schedules, reassignment to a vacant position, acquisition or modification of equipment or devices, appropriate adjustment or modifications of

examinations, training materials or policies, the provision of qualified readers or interpreters, and other similar accommodations for individuals with disabilities (Stanko, 2019).

Regarded as having an impairment: Any instance where an individual establishes that he or she was subject to an action because of an actual or perceived physical or mental impairment whether or not the impairment limits or is perceived to limit major life activity (Americans with Disabilities Act of 1990, As Amended, 2009).

Social Model of Disability: A model of disability based on the view that that disability is socially constructed, and shaped by environmental factors and social behaviors. Under this model, people with disabilities may be seen as a minority group, and their limitations are more so based on a discriminatory environment than on their impairments (Scotch, 2000).

Undue hardship: Any action requiring significant difficulty or expense to the health care organization, and is determined at the discretion of the health care organization. Factors that are considered include, but are not limited to: the nature and cost of an accommodation, the impact of an accommodation on the operation of the overall facility, financial resources of the employer, type of operations of the company (Americans with Disabilities Act of 1990, As Amended, 2009).

Unreasonable accommodation requests: Any accommodation request that is not required by the ADA, or causes an undue hardship for the institution of higher education.

Chapter Summary

In this chapter, background information on faculty development related to nursing students with disabilities and how it relates to the program admission and completion rates of students with disabilities was provided. A thorough statement of the problem, which identified the three themes of intrinsic attitudes toward disabilities, knowledge related to disability and

disability law, and education and self-efficacy was also provided. A purpose statement, evidence-based practice question, the significance to nursing education were also indicated. Lastly, a list of definitions specific to this capstone project was also included within the chapter.

CHAPTER II

METHODS

While the exact number of nursing students with disabilities is unknown, this student sub-population has a presence throughout undergraduate nursing programs (Dupler et al., 2012; Horkey, 2019; LaSala et al., 2020; L'Ecuyer, 2019; Luckowski, 2016; Matt et al., 2015). Furthermore, the inclusion of students with disabilities within nursing programs supports the continued development and creation of a diverse nursing workforce. To adequately and effectively support undergraduate nursing students with disabilities, nursing faculty must have a foundational knowledge and understanding of disability awareness, disability law, and providing accommodations (Dupler et al., 2012; Horkey, 2019; Lyon & Houser, 2018; May, 2014; Murray et al., 2014). This review of the literature serves to investigate if a transition from current practices for faculty disability training to mandating faculty development activities related to disability education and law would better prepare nursing faculty to address the needs of undergraduate nursing students with disabilities.

Explanation of Data Collection of Evidence Procedure

Setting

Databases used for this capstone project included: Google Scholar, CINAHL Complete, PubMed, ERIC, and psycINFO. Search terms used to obtain sources included various combinations of multiple forms of the following terms: disability awareness training, disability education, nurse educator, nursing faculty, disability-related faculty development, nursing student, student with disability, nursing program admission, nursing program completion, disability law, disability education, undergraduate nursing program, Americans with Disabilities Act. Boolean operators and symbols were used with the search terms to further refine the data.

Additional sources were obtained through evaluation of the reference sections of the sources that were identified via the above search methods. Due to the lack of evidence on the topic, an initial five-year old limitation on publication date was increased to include searches of all evidence dated after the enactment of Americans with Disabilities Act Amendment Act of 2008.

Participants

Each individual database search yielded between three and greater than 1,000 potential pieces of evidence. Evidence for inclusion in both the introduction chapter, and the review of literature was selected based on strict inclusion and exclusion criteria. Inclusion criteria for sources included in the literature review was limited to the year span from 2008-present. This choice was made based on the date of the implementation of ADA Policy of 2008. The scope of this capstone project was limited to undergraduate nursing programs, therefore inclusion criteria included a specific reference undergraduate level nursing education. Sources focused on primary education (K-12), or graduate level education were excluded. Because of the nature of this project, and its direct correlation to the ADA Policy, a U.S. Federal mandate, sources were also limited to only include those with the United States as the country of origin. The search of the literature was restricted to sources that were originally printed in English, so not to lose meaning through translation of the material. Due to the nature of this topic, sources included academic journals, scholarly works, official government or professional documents, as well as expert opinion pieces. Excluded from the review of the literature were any sources not specific to the profession of nursing, however these sources were not necessarily excluded from the introduction chapter so as to develop a broader conceptualization of disability education at the collegial undergraduate level.

Procedure (narrative description)

With guidance from professional and academic mentors, the student researcher developed and refined an evidence-based practice (EBP) question. The initial project was focused on the impact that mandating faculty development activities related to disability education and law would have on faculty participation in addressing the needs of students with disabilities within undergraduate nursing programs. With this original topic as a guide, the student researcher conducted a non-exhaustive internal and external search for research and non-research evidence sources. Investigation began with a broad database search of Google Scholar to identify relevant resources and appropriately narrow search fields. This search provided a deeper understanding of the project topic, as well as identified experts in the field of study, and confirmed the overarching lack of evidence on the topic. Subsequent database searches were conducted within CINAHL Complete, PubMed, psycINFO, and ERIC. CINAHL Complete and PubMed were used to obtain nursing specific sources. PsychINFO was used to obtain nursing specific sources, as well as sources related to the perceptions of students with disabilities. ERIC was used to obtain sources focused on the educator components of the project. Review of the available evidence, and mentor input, lead to the conclusion that improvement in faculty participation in addressing the needs of students with disabilities within undergraduate nursing programs would be a challenging outcome to quantify and measure. Therefore, the student researcher amended the PICO question to focus on the relationship between mandating faculty development activities related to disability education and law, and program admission rates and successful program completion rates. Using program admission rates and successful program completion rates as outcomes should provide measurable, comparable, and quantifiable raw data from which clear and accurate conclusions can be drawn. Following this update, the search criterion of program admission rates

and successful program completion rates were added to the search terms. Sources that were specific to only faculty participation in disability training/education, and did not include direct or indirect reference to program admission or completion rates were then excluded from use in this project. Sources that specifically and directly discussed program admission and/or completion were acquired via database searches for consideration in the literature review. Sources that indirectly discussed the topics of program admission and/or completion rates were also considered. Indirect discussion of program admission and/or completion were defined by the student researcher, for this project, as reference to barriers to program acceptance or program completion, intrinsic attitudes of faculty toward students with disabilities, and student perceptions of faculty knowledge and education related to disability and disability law.

To organize sources, the student researcher used various color pens and highlighters to identify topics of interest. Three themes were identified: intrinsic attitudes toward disability, knowledge related to disability and disability law, and education and self-efficacy. The student researcher labeled sources by which topic(s) they addressed. The student researcher evaluated the reference section of all evidence sources and traced relevant citations back to the seminal articles. Where possible, seminal articles were retrieved for consideration in the literature review.

The review of the evidence yielded multiple opinion pieces, and some sources where the citations could not be located within the referenced seminal article. Opinion pieces were considered for inclusion in the literature review, and future analysis and critique, if the author was determined to be an expert in the field based on review of his or her credentials. Sources where citations did not align with the cited reference article were excluded from consideration for the literature review related to the student researcher's concerns for credibility of the information provided. Once all inclusion and exclusion criteria were met, the student researcher

was left with 18 possible pieces of evidence for the literature review. The student researcher reviewed these sources for data saturation and overall relevance to the specific EBP topic. Sources that vaguely or briefly mentioned the project topic were excluded based on data saturation criteria if other sources that more explicitly and thoroughly discussed the same topic were available. Secondary sources that discussed findings from a seminal piece of evidence were excluded if the seminal piece of evidence was available to the student researcher. The student researcher used the interlibrary loan system to obtain some of the seminal sources. The final review of the literature included 11 sources (Figure 1).

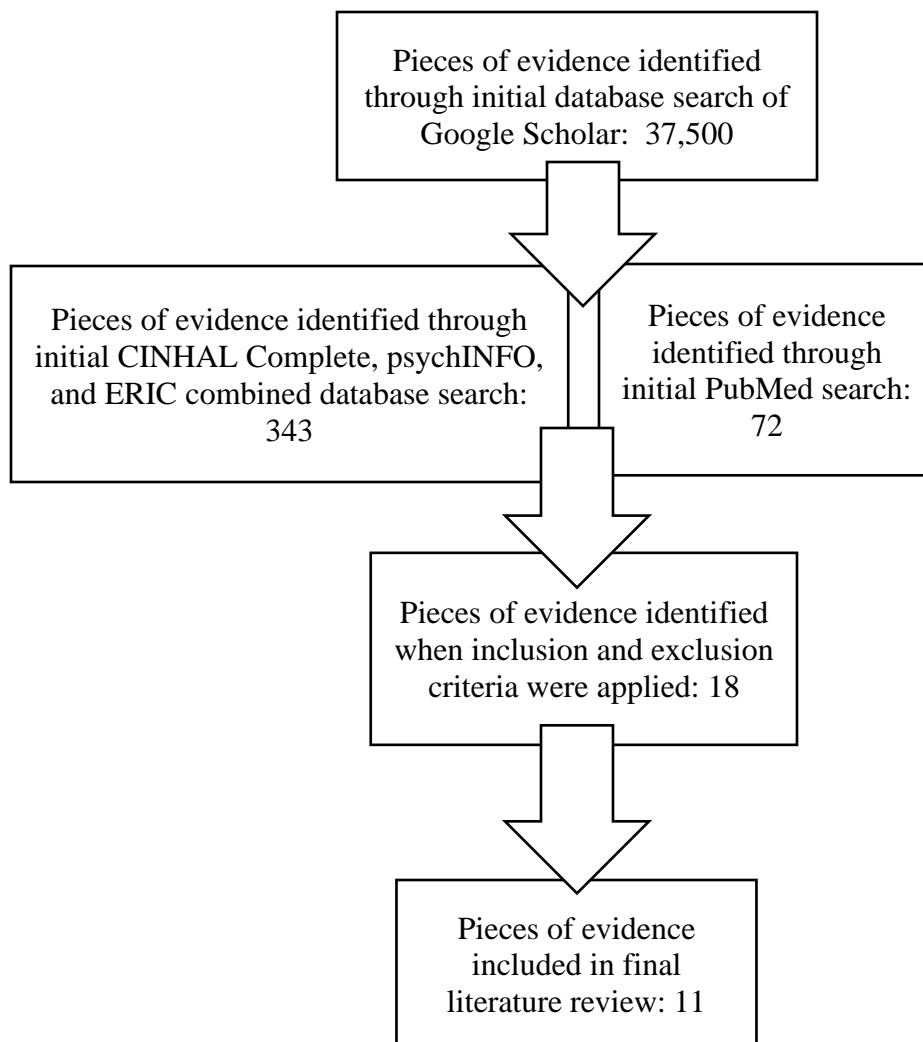
Explanation of Evidence-based Practice Model

The search of the literature for this project demonstrated that good evidence exists on the topic of the impact of disability related faculty training and education and undergraduate nursing school program admission and successful completion rates. However, the evidence that exists is varied and not well synthesized, and the best evidence is not readily available or easily accessible to health care providers. For these reasons, this project was conducted as an evidence synthesizing project as defined by Bonnel and Smith (2014).

Relevant evidence was synthesized using the Johns Hopkins Nursing Evidence-based Practice (JHNEPB) Model and Guidelines, which structured evidence based practice around a three part process of Practice question, Evidence, and Translation (PET), were used as the EBP model for this capstone project (Dang & Dearholt, 2018). Specifically, the purpose of this project was to conduct a systematic review and critique of the evidence to determine if a practice change from not mandating disability related training and education for undergraduate nursing faculty to mandating such training would positively impact the program admission and successful program

Figure 1

Flowchart Diagram of the Process of Evidence Selection for the Literature Review



completion rates of nursing student with disabilities.

Critical Appraisal of the Evidence

The student researcher used the JHNEBP Research Evidence Appraisal Tool, and the JHNEBP Non-Research Evidence Appraisal Tool to analyze and appraise all sources of evidence for both level and quality. The level of evidence was ranked I through V, and the quality was rated as high, good, or low-major flaws based on the appraisal tool criterion (Dang & Dearholt,

2018). Any source with a quality rating of low-major flaws was be discarded and not used for the project.

The student researcher used the JHNEBP Synthesis and Recommendations Tool (Appendix B) to organize all relevant findings based on level. The student researcher then analyzed the overall quality for each level of evidence. This process allowed the student researcher to synthesize not only the level and quality of the evidence, but also the quantity, consistency, and applicability of the findings (Dang & Dearholt, 2018). These findings were then applied to analyze the impact that transitioning from not requiring undergraduate nursing faculty to receive to faculty development and education related to disability to manding disability related faculty development and education for undergraduate nursing faculty could have on nursing student program acceptance and completion rates.

Chapter Summary

In this chapter, the methods used for the project were presented. The data collection process, including the inclusion and exclusion criteria that were applied to this project, was explained. The JHNEBP Model was identified as the method used to critically appraise, critique, and rank the evidence on both level and quality. How the evidence was organized and critically appraised through data analysis and synthesis was also explained. This chapter explained the rigorous methods used to ensure that recommendations for practice change would be grounded in solid evidence.

CHAPTER III

LITERATURE REVIEW AND ANALYSIS

Approximately one in four people in the United States have a disability, and of those individuals, about 81% have at least a high school diploma (Neal-Boylan & Miller, 2020). Furthermore, almost 20% of undergraduate students identify as having a disability (National Center for Education Statistics, 2019). While the exact numbers of nursing students, and prospective nursing students who have applied to nursing programs, with disabilities is unknown, empirical evidence suggests these students are a growing minority group within undergraduate education (Dupler et al., 2012; Horkey, 2019; LaSala et al., 2020; L'Ecuyer, 2019; Luckowski, 2016; Matt et al., 2015). The success of these students in nursing programs, from program admission through successful program completion, is heavily influenced by nursing faculty's attitudes toward students with disabilities, self-efficacy related to teaching students with disabilities, and knowledge of disability and disability related law (Dupler et al., 2012; Lively, 2014; Lyon & Houser, 2018; Marks & McCulloh, 2015; May, 2014; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Yarbrough & Welch, 2020). This capstone project, and review of the literature, was conducted in an effort to determine if best nursing practice for improving program admission rates and successful program completion rates for nursing students with disabilities should include mandating faculty development activities related to disability and disability law.

Presentation of evidence reviewed with critical appraisal-level and quality

The final review and critical appraisal of the literature for level and quality included a total of 11 sources. A comprehensive evidence summary matrix is provided in appendix A.

Summary of literature review section

Each of the sources used for the literature review of this evidence-based practice capstone project were identified, reviewed, critiqued and analyzed based on the level of evidence and quality ratings using the JHEBP Model. Three themes emerged, and the 11 pieces of evidence were sorted and organized under which one of the three themes they most closely were associated with. Many articles addressed two or all three themes; for these articles, they were classified under the theme that was discussed in greatest detail, or with the most emphasis.

CHAPTER IV

RESULTS AND SYNTHESIS

According to a national survey, approximately 30% of disabilities are identified during post-secondary education (May, 2014). Therefore, as the number of students participating in higher education, and seeking college degrees, continues to grow, it is likely that the number of students who identify as having a disability and require academic accommodations will increase as well. While institutions of higher education are required to provide reasonable accommodations to students with disabilities, they are not mandated to provide disability related training to the faculty, whose responsibility it is to employ these accommodations (Lombardi et al., 2013; Murray et al., 2014; Neal-Boylan & Miller, 2017; Suplee, 2014; Wynants & Dennis, 2017). Nursing faculty specifically have expressed concerns regarding teaching and providing accommodations to students with disabilities because of the unique nature of nursing education and not knowing how to integrate accommodations into nursing education (Dupler et al., 2012; May, 2014; Neal-Boylan & Smith, 2016; Suplee et al., 2014; Yarbrough & Welch, 2020). However, for many nursing students with disabilities, appropriate accommodations directly impacts their successful completion of an undergraduate nursing program (Dupler et al., 2012; Lively, 2014; Lyon & Houser, 2018; Marks & McCulloh, 2015; May, 2014; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Yarbrough & Welch, 2020).

Nursing faculty are seeing greater numbers of students with disabilities applying to, and being accepted into nursing programs (Dupler et al., 2012; Suplee et al., 2014; Yarbrough & Welch, 2020). For these students to successfully complete a nursing program, nursing faculty must be knowledgeable about students with disabilities, and the use of accommodations in both

the classroom and clinical settings (Marks & McCulloh, 2015; May, 2014; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Suplee et al., 2014).

This capstone project, as a review of the literature, has identified, reviewed, and analyzed current evidence to determine if best practice for improving program admission rates and successful program completion rates for nursing students with disabilities should include mandating faculty development activities related to disability and disability law.

Results

A comprehensive literature review was conducted to identify what evidence currently existed regarding the impact of faculty development activities related to disability education and law on the admission of nursing students with disabilities to nursing programs, and the successful completion of nursing programs by nursing students with disabilities. The final literature review was composed of 11 articles published between the years of 2012 and 2020. A comprehensive evidence summary matrix is provided in Appendix A. A summary of the article level and quality can be found in Table 1. Of the 11 articles, six of them were level III evidence, and five were level V evidence. Six of the articles received a quality rating of A, and five received a quality rating of B.

The literature review addressed three areas related to the impact of faculty development activities related to disability education and law on the admission and program completion rates of undergraduate nursing students with disabilities. The three areas were: knowledge related to disability and disability law, education and self-efficacy, and intrinsic attitudes toward disability. Four articles were classified under the theme knowledge related to disability and disability law. Two articles were research, and two were non-research. The research articles included both a quantitative study and a qualitative study. The non-research articles were both expert opinion

Table 1*Number of Articles by Level and Quality for Project*

Quality Rating	Evidence Level		Total
	III	V	
A	2	4	6
B	4	1	5
Total	6	5	11

Note. Level and quality grading as per the *Johns Hopkins Nursing Evidence-Based Practice: Models and Guidelines* (Dang & Dearholt, 2018).

pieces. The two research articles were level III, quality B evidence, and the two non-research articles were level V, quality A evidence. A summary of the article level and quality for this theme can be found in Table 2.

The second theme was evidence related to nursing faculty's education and self-efficacy when working with students with disabilities. Four articles were classified under this theme. Three of these articles were research, and one was non-research. The research articles included two quantitative studies, and one qualitative study. The non-research article was an expert opinion piece. Two of the research articles were level III, quality A evidence, and the other research article was level III, quality B evidence. The non-research article was level V, quality A evidence. A summary of the article level and quality for this theme can be found in Table 3.

The third theme was evidence related to nursing faculty's intrinsic attitudes toward disability. Three articles were classified under this theme. One of the articles was research evidence, and the other two were non-research evidence. The research article was a mixed methods study, but the researchers chose to only include the quantitative results in the article. The non-research articles included an expert opinion article and an integrative literature review.

Table 2

Number of Articles by Level and Quality for theme: Knowledge related to disability and disability law

Quality Rating	Evidence Level		Total
	III	V	
A	0	2	2
B	2	0	2
Total	2	2	4

Note. Level and quality grading as per the *Johns Hopkins Nursing Evidence-Based Practice: Models and Guidelines* (Dang & Dearholt, 2018).

The research article was level III, quality B evidence, and the non-research evidence were both level V, with one article being quality A and the other being quality B. A summary of the article level and quality for this theme can be found in table 4.

Synthesis of Results

A total of six pieces of evidence from the literature review were classified as level III evidence. Two of these pieces of evidence were quality A, and four were quality B. A total of five pieces of evidence from the literature review were classified as level V evidence. Four of these pieces were quality A and one was quality B evidence. Further synthesis of the results can be found in the Synthesis and Recommendations Tool provided in Appendix B.

Chapter Summary

In this chapter, the results and findings from the literature review were identified and discussed. The articles in this literature review were all classified as level III, or level V evidence. First the number of articles at each level, and the quality rating of articles at each level were identified. Next, the number of articles for each section of the literature review, as well as the level and quality of the articles were stated; common themes for each section of the literature

Table 3

Number of Articles by Level and Quality for theme: Education and Self-efficacy

Quality Rating	Evidence Level		Total
	III	V	
A	2	1	3
B	1	0	1
Total	3	1	4

Note. Level and quality grading as per the *Johns Hopkins Nursing Evidence-Based Practice: Models and Guidelines* (Dang & Dearholt, 2018).

Table 4

Number of Articles by Level and Quality for theme: Intrinsic Attitudes

Quality Rating	Evidence Level		Total
	III	V	
A	0	1	1
B	1	1	2
Total	1	2	3

Note. Level and quality grading as per the *Johns Hopkins Nursing Evidence-Based Practice: Models and Guidelines* (Dang & Dearholt, 2018).

review were also identified in the matrix provided in Appendix B. Finally, in the synthesis of results, the common themes within each level of articles were identified and discussed in the matrix provided in Appendix B.

CHAPTER V

DISCUSSION AND CONCLUSION

With the passage of the ADA and the ADAAA, federal legislation has increased access to higher education for many students with disabilities, including nursing students (Aaberg, 2012; Hrokey, 2019; Matt et al., 2015; Neal-Boylan & Miller, 2017; Yarbrough & Welch, 2020). Therefore, it is imperative that nursing faculty promote inclusive nursing education environments for these students. However, because disability biases remain so deeply rooted within the pedagogy of nursing care, nursing faculty tend to deny admission to schools of nursing to students with disabilities, and end up discriminating against current nursing students based on misplaced assumptions and understandings related to disability and disability law (Aaberg, 2012; Marks & McCulloh, 2015; Neal-Boylan & Miller, 2015; Neal-Boylan & Miller, 2017; Neal-Boylan & Smith, 2020; Yarbrough & Welch, 2020). The historic exclusion of students with disabilities from nursing programs has impacted faculty's clarity, knowledge, and expertise with regard to educating students with disabilities, and providing accommodations in the clinical and classroom environments (Yarbrough & Welch, 2020). Research has demonstrated that nursing faculty can directly impact the admission of potential students with disabilities into undergraduate nursing programs, as well as the successful completion of nursing programs for students with disabilities (Dupler et al., 2012; Lively, 2014; Lyon & Houser, 2018; Marks & McCulloh, 2015; May, 2014; Neal-Boylan & Miller, 2017; Neal-Boylan & Miller, 2020; Neal-Boylan & Smith, 2016; Yarbrough & Welch, 2020).

Undergraduate nursing faculty are often not educated on teaching students with disabilities, nor are they trained in how to incorporate appropriate accommodations into the classroom and clinical settings (Marks & McCulloh, 2012; Suplee et al., 2014; Yarbrough &

Welch, 2020). This lack of knowledge, training, and expertise on the part of nursing faculty regarding disability education and law has resulted in students with disabilities facing barriers from program acceptance, to misconceptions of their ability to succeed as nursing students, to difficulty obtaining provision of accommodations (Aaberg, 2012; Marks & McCulloh, 2015; Neal-Boylan & Miller, 2015; Neal-Boylan & Miller, 2017; Neal-Boylan & Smith, 2020; Yarbrough & Welch, 2020). This capstone project, and review of the literature, was conducted to assess if a transition, by the profession of nursing, from not mandating faculty development activities related to disability education and law, to mandating such faculty development activities would positively impact the program admission and program completion rates of nursing students with disabilities.

Discussion of Findings

The review of the literature identified both the common barriers, and facilitators for the admission of students with disabilities into undergraduate nursing programs as well as the successful completion of undergraduate nursing programs for students with disabilities. Faculty development activities related to disability education and law played a role in impacting barriers, as well as facilitators for students with disabilities being accepted into, and successfully completing undergraduate nursing programs. Disability biases have been deeply rooted within the pedagogy of nursing education (Marks & McCulloh, 2016). Nursing faculty have historically been trained to view disability through the medical model, which implies the disability is a problem within, or limitation of, the student. Viewing disability through this model has contributed to nurse educators demonstrating a general preference for able-bodied students over students with disabilities, resulting in a failure to accept students with disabilities into undergraduate nursing programs, and misplaced biases being held against students with

disabilities (Aaberg, 2012). Research has suggested that best practice in nursing education requires a fundamental shift from the medical model of disability to the social model of disability (Marks & McCulloh, 2016; Neal-Boylan & Miller, 2017). When faculty view disability through the social model of disability, the cause of the disability becomes the environment, which can be compensated for with accommodations, as opposed to a deficit with the individual, resulting in a more inclusive and positive perception of students with disabilities, and their potential ability to succeed in an undergraduate nursing program (Levey, 2016; Marks & McCulloh, 2016).

Nursing faculty in general lack knowledge and understanding of the federal mandates of the ADA and the ADAAA (Neal-Boylan & Miller, 2017). Similarly, these faculty lack a knowledge and understanding of provisions of accommodations for students with disabilities. Most clinical nursing faculty do not receive adequate training for their nurse educator role; teaching students with disabilities is not routinely covered in graduate nurse educator programs, or in faculty continuing education trainings, leaving faculty lacking self-efficacy and feeling professionally unprepared to work with students with disabilities (Dupler et al, 2012; Suplee et al., 2014). This knowledge deficit, and lack of training, related to disability education and disability law creates barriers for nursing students with disabilities, and has been shown to lead to discrimination against students with disabilities, as well as oppressive behaviors toward students with disabilities, as a result of misconceptions about the ability of a person with a disability to safely provide nursing care (Levely, 2016; Lyon & Houser, 2018; Neal-Boylan & Smith, 2016). Not only does discrimination impact nursing diversity, and the recruitment and retention of students with disabilities in nursing programs, but it can also have financial and legal consequences for institutions of higher education, and the faculty members themselves.

A fundamental knowledge of disability law and legislation is essential for nursing faculty to understand what constitutes reasonable accommodations and how to access disability resources at their college or university (May, 2014). Specifically, institutions of higher education are required to provide reasonable accommodations to students with disabilities, but they are not required to provide faculty members training on how to implement accommodations. The process of creating, or selecting, appropriate accommodations for students with disabilities lies with the teaching faculty, who are often unprepared to address this student need (May, 2014; Neal-Boylan & Miller, 2017; Suplee et al., 2014). Because research has demonstrated that the success of students with disabilities is highly dependent on the availability of reasonable accommodations, faculty need to be prepared to provide these students with the accommodations necessary for them to reach their full potential (Marks & McCulloh, 2016). When faculty do receive disability training, they have an increased level of self-efficacy related to working with students with disabilities, and more positive intrinsic attitudes toward students with disabilities (Levey, 2016; Suplee et al., 2014; Yarbrough & Welch, 2020). Therefore, faculty who have received faculty development related to disability education and law are better prepared to advocate for their students and are more likely to employ appropriate reasonable accommodations; which leads to enhanced student success in the nursing program. When faculty are knowledgeable about disability education and disability law, they are better equipped to implement appropriate accommodations and create an enhanced learning environment where students with disabilities feel comfortable and are supported.

Implications of Findings and Recommendations

Implications of the findings and subsequent recommendations as related to nursing research, nursing education, and nursing practice are provided in Appendix B.

Limitations for Consideration

The primary limitation of this capstone project and review of the literature would be the limited amount of evidence-based literature available on the topic. There are no statistical data available that documented the number, or prevalence, of undergraduate nursing students with disabilities. Nursing students with disabilities are often reluctant to disclose their disability status, making conducting studies on this sub-population of undergraduate students extremely complicated. Therefore, all but one of the studies included in this capstone project relied on convenience sampling. Furthermore, this project included an exhaustive review of the literature since the onset of the ADAAA in 2008, and still only yielded 11 sources. A further limitation would be that of these 11 sources, three of them were written by the same primary author who is one of the two primary subject matter experts.

The student author would also like to disclose her own personal biases as a possible limitation to this capstone project. The student author, while not registered as a student with a disability at the graduate level, was registered as a student with a disability at the undergraduate level while obtaining her bachelor's degree in nursing. Furthermore, the student author also has an immediate family member who has a permanent disability.

Identified Gaps in Findings and Recommendations

A significant gap in the findings from this capstone project and review of the literature would be the overall lack of research-based data available to answer the PICO question. The literature review yielded 11 sources. Of those sources, there were only four were quantitative studies, and two were qualitative studies. Four of the 11 pieces of evidence were expert opinion pieces. Furthermore, no Level I or Level II evidence existed for this PICO question. As demonstrated through the Synthesis and Recommendations Tool provided in Appendix B, the

evidence that was obtained and analyzed through this capstone project and review of the literature was good and consistent evidence. Based on these findings, further investigation through the use of quantitative research studies, quasi-experimental studies, and longitudinal studies should be conducted. If these further studies continue to yield promising results, pilot testing would be recommended before the profession of nursing makes a practice change to mandate faculty development activities related to disability education and law.

Chapter Summary

This chapter discussed the conclusions drawn from the evidenced based practice capstone project and review of the literature based on how the evidence answered the PICO question. The chapter began with a discussion of the student author's findings and perspectives as a subject matter expert. Next, implications of the findings for both nursing educators and nursing practice were discussed. Limitations of the project were identified and addressed. Gaps in the current literature were also identified. Finally, recommendations for future research and practice change were suggested.

Project Summary

This evidence-based practice capstone project and review of the literature was comprised of five chapters. Chapter 1 was the introduction. This chapter included a statement of the problem, identified the background and need, presented the evidence-based practice PICO question, identified the purpose of the project, and concluded with the list of relevant definitions. Chapter 2 was the methods chapter. This chapter identified the time span for the selection of evidence, the databases used, the search terms, and inclusion and exclusion criteria; provided a table of how evidence was selected; and included a summary of how the data would be analyzed. Chapter 3 was the literature review and analysis. This chapter summarized and critiqued each of

the 11 pieces of evidence as they related to the PICO question. Chapter 4 was the results and synthesis of the findings. This chapter identified the number and quality of articles at each level, included a synthesis of the evidence at each level, and provided summarizing tables. Finally, Chapter 5 was the discussion and conclusion of the project. This chapter included the student author's discussion of findings; identified limitations, implications for nursing education and nursing practice, and gaps in the literature; and concluded with recommendations for future research and pilot study.

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Appendix A Evidence Summary Matrix*

Key:

- **Article #** - Assign a number to each piece of reviewed evidence. Provides an easy way to organize articles.
- **Author, Publication Source, and Date** – Indicate the last name of the first author, and the evidence source, date of publication.
- **Evidence Type** – Indicate the type of evidence reviewed. Examples: Original research study (quantitative or qualitative); Systematic review; Literature review; Clinical practice guidelines; Expert opinion article
- **Purpose** – State the purpose of the piece of evidence
- **Sample Type/Size/Setting** – Only applicable to Level I, II, III, and Level V quality improvement, financial or program evaluation evidence. Provides a quick view of the population, number of participants, and where the study took place.
- **Study Findings** – Indicate study findings – focus on those findings that are most pertinent to answering the PICO(T) question.
- **Limitations** – include a critical appraisal of the piece of evidence that may or may not have been indicated in the article. For example – for a quantitative study – note presence of threats to internal and external validity; for a qualitative study – note presence of trustworthiness, credibility, fittingness, auditability, and transferability. Refer to non-research appraisal tool in the JHEBP toolkit for non-research evidence.
- **Evidence Level and Quality** – Refer to the JHEBP Levels and Quality of Evidence tools in Dang and Dearholt (2018).

PICO(T) Question: For undergraduate nursing students who identify as having a disability, would mandating faculty development activities related to disability education and law, compared to current practices for faculty disability training, improve program admission rates and successful program completion rates?

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
1	May Nurse Educator 2014	Research: Non-experimental quantitative study Purpose: To examine undergraduate nursing faculty's knowledge of disability-related legislation and	Type: Convenience sample Size: 211 nursing faculty from baccalaureate programs Setting: Pennsylvania	<ul style="list-style-type: none"> • Majority of nursing faculty have previously worked with students who require accommodations • Knowledge deficit among faculty related to disability law • Knowledge deficit related to knowing 	<ul style="list-style-type: none"> • No information was provided in the article related to the timing, or duration, of the study period • Sample size was small with a 23% response rate • Threat to external 	III	B

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
		related training opportunities		<p>faculty member is responsible for obtaining accommodations; creates significant barrier for student success</p> <ul style="list-style-type: none"> • Knowledge deficit related to knowing faculty who fail to provide accommodations can be held personally liable • Lack of training from institutions about provision of accommodations • Faculty development on innovating teaching strategies can be used to improve outcomes of students with disabilities 	<p>validity-the small sample setting limited the generalizability of the findings and the applicability of the findings to other settings</p>		
2	Neal-Boylan Nurse Educator 2017	Research: explorative descriptive qualitative study	Type: Convenience sample; snowball method	<ul style="list-style-type: none"> • Nursing students with disabilities want to be treated like everyone else • Students 	<ul style="list-style-type: none"> • Transferability- the lack of diversity in the ethnicity and gender of the 	III	B

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
		Purpose: Explore the experiences of registered nurses who had disabilities while in nursing school	Size: 15 RNs with disabilities Setting: United States	<p>perceived nursing faculty to be concerned about whether students with disabilities could provide safe and effective care</p> <ul style="list-style-type: none"> • Students perception that faculty lacked knowledge and understanding of disabilities and accommodations • Nursing faculty lack education on legal responsibilities related to rights of students with disabilities under the ADA • Inconsistency among faculty regarding how students with disabilities are treated and how the ADA is interpreted • Faculty's inherent 	<p>sample limited the generalizability of the findings and the applicability of the findings to other settings</p> <ul style="list-style-type: none"> • The researchers did not document reflexivity • The researchers did not provide an audit trail • This piece of evidence lacked data triangulation 		

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
				biases are turning away prospective nurses <ul style="list-style-type: none"> • Faculty development programs can enhance compliance with the regulations of the ADA 			
3	Neal-Boylan Nurse Educator 2016	Non-Research: expert opinion Purpose: Describe the barriers and facilitators faced by nursing students with disabilities	NA	<ul style="list-style-type: none"> • Discrimination against students with disabilities can occur as a result of misconceptions held by nurse educators about how to uphold standards for safe patient care • Schools of nursing appear reluctant to admit and educate students with physical disabilities • Discrimination against students with disabilities impacts diversity, 	<ul style="list-style-type: none"> • No author biases were noted or discussed in the article 	V	A

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
				<p>recruitment, retention, and can have financial and professional legal consequences for faculty</p> <ul style="list-style-type: none"> • Faculty support in arranging student accommodations aid in retention • Nurse educators would benefit from further education on the social model of disability, discrimination, and academic accommodations 			
4	<p>Neal-Boylan</p> <p>Teaching and Learning in Nursing</p> <p>2020</p>	<p>Non-Research: expert-opinion</p> <p>Purpose: To suggest implications and practical strategies for greater inclusion of people with disabilities in nursing</p>	NA	<ul style="list-style-type: none"> • Faculty misconceptions about what students with disabilities can do safely is the primary barrier to admitting and retaining nursing students with disabilities • A lack of 	<ul style="list-style-type: none"> • No author biases were noted or discussed in the article 	V	A

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
				<p>awareness of the requirements of the ADA pervades nursing programs</p> <ul style="list-style-type: none"> • Fear that students will jeopardize patient safety prevents programs from admitting students with disabilities or providing accommodations • Nursing faculty generally view disability through the medical model • Inclusivity would be increased by faculty reviewing disability and disability law annually 			
5	<p>Suplee</p> <p>Journal of Nursing Education</p> <p>2014</p>	<p>Research: descriptive quantitative non-experimental study</p> <p>Purpose: Investigate the</p>	<p>Type: Convenience sample</p> <p>Size: 74 nursing faculty members who were engaged in</p>	<ul style="list-style-type: none"> • Clinical nursing faculty do not receive adequate training for their intended role • Faculty have sentiments of feeling 	<ul style="list-style-type: none"> • Threat to external validity-The small sample setting limited the generalizability of the findings 	III	B

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
		<p>preparation for clinical instruction received by faculty who teach pre-licensure nursing students, as well as identify the student-related challenges encountered by nursing faculty, faculty's comfort in managing these challenges, and the available mechanisms for professional development available to nursing faculty</p>	<p>clinical teaching or supervising clinical instructors</p> <p>Setting: Faculty development conference held in the northeastern United States</p>	<p>professionally unprepared to work with students with disabilities</p> <ul style="list-style-type: none"> • Disability related topics were not likely to have been addressed in faculty's graduate education or continuing education activities 	<p>and the applicability of the findings to other settings</p> <ul style="list-style-type: none"> • The researchers did not include any information addressing how the survey was administered • Study instrument internal consistency, reliability, and validity were not discussed in the article • Construct validity was a limitation of this study in that the respondents were aware of the purpose of the study, and therefore may have consciously or unconsciously 		

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
					provided desired responses		
6	Yarbrough Nursing Education Perspectives 2020	Research: qualitative constructivist grounded theory study Purpose: To explore the process nursing faculty use to make academic accommodations in the classroom setting	Type: Convenience sampling; adapted to purposeful and theoretical sampling as participants and concepts emerged Size: 26 nursing faculty members who served as primary facilitators of academic accommodations for students in a classroom setting Setting: Nationally accredited schools of nursing within	<ul style="list-style-type: none"> • Lack of faculty development regarding implementation of academic accommodations in the classroom setting • Faculty lack familiarity with disability resources and lack accommodation knowledge- unable to thoroughly and effectively support students with disabilities • Implementation of accommodations was hindered by the growing number of nursing students with accommodations • Being familiar with resources 	<ul style="list-style-type: none"> • Lack of transferability beyond the classroom setting environment • Data triangulation as present in the form of space and person, however time triangulation and method triangulation were not applied in the study • The researchers did not document reflexivity 	III	A

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
			the United States	<p>available eases the challenges of providing accommodations</p> <ul style="list-style-type: none"> • Learning the academic accommodations process aids faculty in being better advocates for students • Faculty development opportunities regarding accommodations are vital to effectively accommodating students with disabilities • To provide effective accommodations, faculty require knowledge about disability laws and federal legislation surrounding students with disabilities 			

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
7	Dupler Journal of Nursing Education 2012	Non-Research: expert-opinion Purpose: Address circumstances under which nursing faculty are required to provide reasonable accommodations, and strategies that facilitate successful program completion by students with disabilities.	NA	<ul style="list-style-type: none"> • Faculty may lack self-efficacy helping students with disabilities in the clinical setting • Faculty lack of familiarity with working with students with disabilities can result in unnecessary barriers to program completion • Faculty knowledge of legal requirements and available resources minimizes student barriers • Faculty disability training has a positive impact on student program completion 	<ul style="list-style-type: none"> • No author biases were noted or discussed in the article 	V	A
8	Lyon Nursing Education Perspectives	Research: cross-sectional, correlational,	Type: systematic sample	<ul style="list-style-type: none"> • Most faculty have prior experience with a person with a disability 	<ul style="list-style-type: none"> • The study did not mention what time of year the survey 	III	A

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
	2018	<p>quantitative study</p> <p>Purpose: Assess nurse educators' attitudes toward people with disabilities</p>	<p>Size: 680 nurse educators teaching in baccalaureate nursing programs</p> <p>Setting: 11 states within the Southern Association of Colleges and Schools region and accredited by the Commission on Collegiate Nursing Education</p>	<ul style="list-style-type: none"> • Nurse educators generally have a positive attitude toward people with disabilities, yet view people with disabilities as objects of ridicule, exploitation, and irritation • Most educators reported no knowledge or training about disability models or teaching people with disabilities • Disability training can help reduce discrimination, improve attitudes toward people with disabilities, and improve health outcomes 	<p>was distributed</p> <ul style="list-style-type: none"> • Threat to external validity-regional focus of the study limits the generalizability of the findings 		
9	Levey Journal of Postsecondary Education and Disability	<p>Non-Research: integrative literature review</p> <p>Purpose: Evaluate the</p>	N/A	<ul style="list-style-type: none"> • Faculty prefer students to disclose a disability when applying to school and then can base 	<ul style="list-style-type: none"> • Study was published in 2014, but of the 9 articles used in the review, 6 of them were 	V	B

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
	2016	research on undergraduate nursing faculty attitudes toward students with disabilities		<p>acceptance on ability to provide accommodations-requiring self-identifying a disability on an admission application is a barrier for potential nursing students</p> <ul style="list-style-type: none"> • Nursing faculty generally prefer able-bodied students • Nursing faculty tend to view disability through the medical model as opposed to the social model of disability • Faculty perceive they lack knowledge to teach students with disabilities both in the classroom and clinical setting, often leading to 	<p>10 or more years old</p> <ul style="list-style-type: none"> • Concern for bias as the lead author self-identifies as having a disability • Authors did not disclose any limitations within the article 		

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
				<p>oppressive behaviors toward students with disabilities</p> <ul style="list-style-type: none"> • Faculty perceive they need more information on accommodations and legal obligations related to disability • Faculty training programs increase faculty attitudes toward students with disabilities • Retention of nursing students with disabilities is directly related to the accommodations provided 			
10	Marks Nurse Educator 2016	<p>Non-Research: expert opinion</p> <p>Purpose: To recommend best practices for removing barriers and</p>	NA	<ul style="list-style-type: none"> • Disability biases are deeply rooted within the pedagogy of nursing education • Best practices in nursing education require a 	<ul style="list-style-type: none"> • No author biases were noted or discussed in the article 	V	A

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
		supporting diversity and inclusion of nurses and nursing students with disabilities within the nursing profession		<p>fundamental shift from the medical model of disability to the social model</p> <ul style="list-style-type: none"> Students' success is highly dependent upon the availability of accommodations 			
11	Aaberg Journal of Nursing Education 2012	<p>Research: mixed-methods, however only the quantitative results were reported for the purposes of this article</p> <p>Purpose: Measures the implicit attitudes of nurse educators towards individuals with disabilities</p>	<p>Type: Convenience sample</p> <p>Size: 132 nurse educators who teach primarily in baccalaureate nursing programs</p> <p>Setting: United States</p>	<ul style="list-style-type: none"> Nurse educators demonstrated a preference for able-bodied individuals, possibly related to understanding disability through the medical model Nurse educators who fail to accept students with disabilities may benefit from further training on the ANA Standards of Professional Performance Significant biases held by nurse 	<ul style="list-style-type: none"> Potential study participants were excluded because they did not complete all study tools, no information on the rationale of why the entire study was not completed by these individuals Small sample size with only a 16.9% response rate While instrument reliability was 	III	B

Article #	Author, Publication Source, & Date of Publication	Evidence Type and Purpose	Sample Type, Size, Setting	Study Findings	Limitations	Evidence Level	Quality Rating
				educators against individuals with disabilities were noted <ul style="list-style-type: none"> • Training could lead to less discrimination against applications with disabilities • Training on accommodations will lead to greater inclusivity and integrity in nursing education 	discussed, instrument validity was not discussed in the article <ul style="list-style-type: none"> • Qualitative study findings were not discussed in the article, but qualitative questions were provided in a table in the article 		

* From: Dang, D., & Dearholt, S. L. (2018). *Johns Hopkins evidence-based practice: Model and guidelines* (3rd ed.). Indianapolis, IN: Sigma Theta Tau.

Appendix B

Synthesis Process and Recommendation Tool

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EBP Question (PICO-T): For undergraduate nursing students who identify as having a disability, would mandating faculty development activities related to disability education and law, compared to current practices for faculty disability training, improve program admission rates and successful program completion rates?

Category (Level Type)	Total Number of Sources/Level	Overall Quality Rating	Synthesis of Findings Evidence That Answers the EBP (PICO-T) Question
Level I <ul style="list-style-type: none"> • Experimental study • Randomized controlled trial (RCT) • Systematic review of RCTs with or without meta-analysis • Explanatory mixed method design that includes only a Level quantitative study 	0	n/a	
Level II <ul style="list-style-type: none"> • Quasi-experimental studies • Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis 	0	n/a	
Level III <ul style="list-style-type: none"> • Nonexperimental study • Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or nonexperimental studies only, with or without meta-analysis • Qualitative study or meta-synthesis • Exploratory, convergent, or multiphase mixed-methods studies • Explanatory mixed method design that includes only a level III quantitative study 	6	B	<ul style="list-style-type: none"> • Law: Nursing faculty lack knowledge and education related to their legal responsibilities and rights of students with disabilities under the ADA, which creates a barrier for admission and program completion for students with disabilities • Law & Education/Efficacy: Nursing faculty lack training from their institution on the provision of accommodations which creates barriers to students with disabilities receiving appropriate accommodations necessary for success in a nursing program • Education/Efficacy: Most nursing faculty have never received training on teaching students with disabilities and therefore feel professional unprepared to teach

Category (Level Type)	Total Number of Sources/Level	Overall Quality Rating	Synthesis of Findings Evidence That Answers the EBP (PICO-T) Question
			<p>these students, leading to an inability to effectively support students with disabilities in the classroom and clinical environments; faculty disability training has been shown to increase faculty self-efficacy and lead to students with disabilities receiving greater support and thus higher program completion rates</p> <ul style="list-style-type: none"> • Education/Efficacy & Attitudes: Because faculty lack education on disabilities and students with disabilities, faculty inappropriately hold the discriminatory attitude that students with disabilities cannot provide safe and effective nursing care; faculty disability training has been shown to decrease student barriers and improve faculty attitudes toward students with disabilities • Attitudes: Nursing faculty tend to view disability through the medical model of nursing which leads to intrinsic biases against students with disabilities and attitudes that foster discrimination against students with disabilities
<p>Level IV</p> <ul style="list-style-type: none"> • Opinions of respected authorities and/or reports of nationally recognized expert committees or consensus panels based on scientific evidence 	0	n/a	
<p>Level V</p> <ul style="list-style-type: none"> • Evidence obtained from literature or integrative reviews, quality improvement, program evaluation, financial evaluation, or case reports • Opinion of nationally recognized expert(s) based on experiential evidence 	5	A	<ul style="list-style-type: none"> • Law & Education/Efficacy: Faculty lack adequate training on the provision of accommodations and disability law, resulting in students with disabilities inappropriately being denied access to nursing programs or being denied appropriate accommodations • Education/Efficacy: Faculty are uneducated and unprepared to help students with disabilities succeed in the clinical setting with or without the implication of accommodations; when faculty support arranging student accommodation, program retention rates increase • Attitudes: Disability biases are deeply rooted within the pedagogy of nursing education; training on the social model of disability has been suggested as best

Category (Level Type)	Total Number of Sources/Level	Overall Quality Rating	Synthesis of Findings Evidence That Answers the EBP (PICO-T) Question
			practice to increase faculty attitudes toward students with disabilities and improve retention and program completion rates for these students
Based on your synthesis, which of the following four pathways to translation represents the overall strength of the evidence?			

Recommendations based on evidence synthesis and selected translation pathway

Recommendations for Nursing Research: Further research is needed to determine the impact of faculty development activities related to disability education and law on the program admission rates and successful program completion rates of nursing students with disabilities.

Recommendations for Nursing Education: Nurse educators should self-assess their own level of understanding of disability law and their own level of self-efficacy regarding teaching students with disabilities in the clinical and classroom environments, as well as their own intrinsic attitudes and biases related to students with disabilities within nursing programs. Nurse educators should seek out opportunities to participate in faculty development activities related to disability education and law even though such activities are not legally mandated.

Recommendations for Nursing Practice: Faculty development activities related to disability education and law has a direct impact on faculty's knowledge, self-efficacy, and attitudes related to students with disabilities, which in turn affects the success of students with disabilities in undergraduate nursing programs. Students with disabilities being accepted into nursing programs and ultimately successfully completing a program of nursing study will lead to greater inclusivity, diversity, and integrity within nursing education.

Overall Strength of the Evidence: Good and consistent evidence

Translation Pathway: Further investigation and pilot testing should be conducted before the profession of nursing makes a practice change to mandate faculty development activities related to disability education and law.