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Increasing Faculty Knowledge and Empathy Related to Nursing Students with Learning Disabilities

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Section I- Title and Executive Summary

Title

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Executive Summary

The purpose of this paper is to provide a project overview for the implementation of a disability training module and simulation experience offered to university school of nursing faculty to increase faculty knowledge and empathy related to nursing students with learning disabilities. The number of students with learning disabilities in the postsecondary education setting has tripled in the past decade (Orr & Hammig, 2009). This growing student population makes faculty preparation essential in order to effectively meet the needs of these students. The literature indicated that best practices include disability training, faculty support, student support, inclusive strategies such as Universal Design, and positive relationships. A Gap analysis indicated deficiencies related to best practices which supports the need for and benefit of disability training for faculty at project site university school of nursing. Offering faculty a disability training module and simulation experience provides faculty with the opportunity to increase knowledge related to the American Disabilities Act (ADA), required accommodations, learning disabilities, and Universal Design strategies. The simulation was designed to simulate the experience of a student with a learning disability. The Inclusive Teaching Strategies Inventory (Lombardi, Vukovic, & Sala-Bars, 2014) is a validated tool which was used to measure faculty knowledge, attitudes, and perceptions pre and post disability training. The Kiersma-Chen Empathy Scale (Chen, Kiersma, Yehle, & Plake, 2015) was used to measure empathy in the pre and post simulation experience.

Section II- Introduction

Problem Description

A learning disability is characterized by an impairment in the learning process despite cognitive ability (Sparks & Lovett, 2009). According to Betz, Smith, and Bui (2012) 14.8% of undergraduate students enrolled in health field degree programs report a disability. Students with learning disabilities comprise between 46-61% of all students reporting a disability in the college/ university setting. The number of students with learning disabilities enrolled in postsecondary education have tripled over the past decade (Orr & Hamming, 2009). According to Sniatecki, Perry, and Snell (2015) the National Center for Educational Statistics reported 18.5% of all reported students with disabilities as students identified with Attention Deficit Hyperactivity Disorder (ADHD) or specific learning disabilities. In 2007-2008 the number of students reported with ADHD or specific learning disabilities rose to 49%. The increase in numbers has also resulted in an increase in students with disabilities entering nursing programs (Kolanko, 2003).

Federal legislation through the Americans with Disabilities Act (ADA) of 1990 prohibits discrimination based upon disability. The ADA requires institutions to provide individuals with disabilities reasonable accommodations to meet their educational needs (US Dept. of Education, 1998). A learning disability is characterized by an impairment in the learning process despite cognitive ability (Sparks & Lovett, 2009). The most commonly identified learning disabilities in the postsecondary education setting are Attention Deficit Hyperactivity Disorder (ADHD) and dyslexia (Sparks & Lovett, 2009). The presence of this student population in postsecondary institutions challenges faculty and institutions to examine their policies and delivery methods in order to meet the needs of these students (Bradshaw, 2006).

Inclusive teaching strategies and universal design methods produce positive outcomes for students with learning disabilities; however, faculty are not always knowledgeable or comfortable using these strategies (Orr & Hamming, 2009). Implementation of disability training workshops provide faculty with the knowledge and tools to use inclusive and universal design strategies (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004).

Setting.

The selected setting was a private university in northern California with multiple branch campus sites. The selected school of nursing is comprised of undergraduate, graduate, and doctoral programs. The university has the main undergraduate nursing program at the main campus site, with another traditional undergraduate nursing program is located at one of the other branch campus locations. A master entry program is based out of an additional branch campus. The school of nursing has several other branch campuses that offer graduate degree programs. The doctoral programs are also offered at the main campus location. The university has approximately 69 full-time faculty and 862 undergraduate students and 868 graduate students in the school of nursing (usfca.edu, 2016).

Current Knowledge and Practice in the Setting.

Students in the postsecondary setting are required to self-identify and register their disability with the Student Disability Service Office at their university in order to receive support services and accommodations (U.S. Dept. of Education, 1998). Currently, there are 103 nursing students registered with Student Disability Services (SDS) at the university. There are 3 doctoral students, 19 graduate students, and 81 undergraduate students (C. B., personal communication, July 7, 2017). University faculty often seek out information about support services through SDS after a student has been identified. SDS does not currently have educational outreach programs

or services in place for faculty related to learning disabilities or teaching strategies to support this student population. Previous outreach efforts at university events have been unsuccessful related to lack of faculty interest (C. B., personal communication, October 28, 2016).

The Center for Instructional Design currently offers modules and links related to Universal Design strategies on their website. Faculty may request one on one services to support them in the use of Universal Design strategies (A. P., personal communication, May 5, 2017). The Center for Instructional Design currently shares space with the Information Technology Systems (ITS) help desk. The office is difficult to locate without specific directions. The Center for Instructional Design offers workshops on Universal Design strategies. Many faculty are unaware of the services and support offered by the Center for Instructional Design. (A. P., personal communication, May 5, 2017). Despite Universal Design strategy offerings at the university, there is not a resource such as disability training, which provides faculty with a localized source for information about learning disabilities, Universal Design strategies, and ADA laws. According to Sniatecki, Perry, and Snell (2015) approximately fifty percent of faculty report being unfamiliar with ADA laws and strategies for supporting students with disabilities. Disability training workshops increase faculty knowledge and improve attitudes and perceptions related to students with disabilities (Murray et al., 2009; Sowers & Smith, 2004; Sniatecki et al., 2015).

Available Knowledge

An integrative review and literature review was conducted to identify previous use and effectiveness of disability training and effective strategies for supporting postsecondary students with learning disabilities. The integrative review explored the definition and meaning of learning disabilities in education, psychology, and nursing. The themes identified were related to the

definition of a learning disability, the impact of perceptions and self-concept on student success, and the impact of institutional and faculty support on student success. A summary of the integrative review findings are located in Appendix C. The literature review examined best practices related to supporting students with learning disabilities and the use of disability training in the postsecondary setting. The databases used were CINHAL, ERIC, PsycINFO, PUBMED and Education Full Text.

Literature Review Methods.

The databases CINHAL, ERIC, PUBMED, and PsycINFO were searched for the literature review. The initial search conducted in June 2016, the search was updated in June 2017. All articles considered for inclusion were peer reviewed and in English. The keywords used in the search were: *learning disability/disabilities, faculty perceptions, faculty awareness, nursing students, college student, and teaching strategies.* The search did not yield many results related to nursing students or nursing faculty. Most of the results which met the inclusion criteria were related to college students and college/university faculty. Five articles were selected for review in this paper based upon their relevance to and support of the PICOT question. An evidence synthesis table is included in Appendix D.

PICOT Question.

In nursing faculty teaching students with learning disabilities such as, Attention Deficit Hyperactive Disorder or Dyslexia, how does participation in a workshop and simulation experience about effective teaching strategies and modalities compared with non-participation in the workshop and simulation affect faculty knowledge and empathy of the needs of students with learning disabilities in nursing programs upon completion of the workshop and simulation experience?

Literature Review of the Evidence.

Review and appraisal of the evidence was conducted through the use of the Johns Hopkins Evidence Based Practice Research (Dearholt & Dang, 2012). All five articles selected for the review were appraised as Level III A or B (see appendix D). Three are quantitative studies. One of the studies is qualitative with a phenomenological approach. The final study is a meta-analysis coupled with quantitative study based on the effect size results of the meta-analysis.

Faculty Perceptions and Disability Training

The review of the evidence clearly identified the effects of faculty perceptions and the effectiveness of disability training. The impact of faculty attitudes and perceptions was a theme that was consistently identified in all of the articles included in this review. Murray et al. (2009) and Sowers and Smith (2004) discussed the positive impact disability training had on faculty knowledge, attitudes and perceptions. Another recurring theme, worth noting, was the desire by faculty to be supported through disability training or workshops.

Sniatecki et al. (2015) conducted a quantitative study with ANOVA and post hoc analysis. The purpose of the study was to explore the perceptions, attitudes, and knowledge of faculty related to students with disabilities in the university setting. The study was conducted at a mid-sized public university in New York. A total of 123 surveys were completed and analyzed. Findings indicated faculty hold more favorable perceptions of individuals with physical disabilities than learning or mental health disabilities. Analysis of the surveys also indicated that 4.6% of faculty reported negative attitudes about the provision of accommodations. Faculty reported they believed the provision of accommodations compromises academic integrity and rigor (Sniatecki et al., 2015). Misconceptions and lack of knowledge about the services offered

through the university for students with disabilities was also noted in the survey. In addition, faculty expressed interest in professional development opportunities related to accommodations, services and teaching strategies (Sniatecki et al., 2015).

Murray et al. (2009) conducted a quantitative research study with a correlational non-experimental approach and MANOVA statistical analysis. The purpose of the study was to investigate the effect that prior disability-focused training has on faculty perceptions and attitudes towards students with learning disabilities (Murray et al., 2009).

A convenience sample was obtained at a large, urban private university in the Midwest. A total of 198 completed responses were included in the data analysis. Cronbach's alpha scores for the survey sections ranged from .64-.90 (Murray et al., 2009). P values indicated prior disability-focused training was significantly related to willingness to make accommodations in teaching and exam administration, fairness and sensitivity, general knowledge, willingness to invest and utilize resources, invitation of disclosure, and believability (Murray et al., 2009).

Sowers and Smith (2004) conducted the only study related to evaluating nursing faculty perceptions, knowledge, and attitudes about students with disabilities. The study used a quantitative non-experimental approach with two-tailed *t*-test statistical analysis. The purpose of the study was to evaluate the effectiveness of an in-service training on nursing faculty perceptions, knowledge, attitudes, and concerns of nursing students with disabilities. Training was provided to 112 faculty members in eight nursing programs. Questionnaires were administered prior to and post training. Questionnaire questions asked faculty to rate their perceptions of: a) whether or not students with specific disabilities are able to be successful in the program and profession, b) faculty concerns about faculty requirements, effects on academic standards and effects on patient care, c) the extent that their knowledge regarding student with

disabilities increased, and d) the extent that the training met their needs and they would use the information (Sowers & Smith, 2004).

The study included five categories of students with disabilities. Sowers and Smith (2004) indicated significant improvements in all areas post training, however, the largest improvement occurred with the perceptions related to students with learning disabilities. The training was found to be effective as all five disabilities demonstrated p values of .001. Overall the training demonstrated improved perceptions, attitudes and increased knowledge for students with disabilities (Sowers & Smith, 2004).

Student Achievement

Students with learning disabilities do not view themselves as disabled. They consider themselves learners who learn differently. Students with learning disabilities often prefer working harder, longer hours and earning lower grades instead of risking experiencing negative faculty attitudes (Denhart, 2008). Students with learning disabilities experience challenges in the academic setting related to their diagnosis, however, with appropriate support they are able to be successful (Sparks & Lovett, 2009).

Frazier, Youngstrom, Glutting and Watkins (2007) conducted a meta-analysis of the literature related to ADHD and achievement in children, adolescents, and adults. The purpose of the meta-analysis was to determine the impact ADHD has on achievement. Frazier et al. (2007) used the effect sizes from the meta-analysis to conduct a quantitative study on achievement and ADHD in college students. The findings of the meta-analysis indicated that overall individuals with ADHD obtained lower achievement scores. The largest disparities were noticed in the achievement domains and assessment methodology. The largest effect size for the achievement domain was reading followed by mathematics and spelling. Overall expected standard

achievement score is 89 for individuals with ADHD. The study supports that ADHD does have a significant impact on academic achievement and performance. The analysis indicated that the amount of academic impairment appears to decrease with age. This implies that individuals may learn to compensate for their disability.

The second study included in the meta-analysis by Frazier et al. (2007) indicated statistical significance related to positive inattentive ratings and academic probation status after one year. These students were identified as being at-risk. Significant similarities were noted in the participant and student reporting. The similarities are not noted in self-reporting of the other age groups (adolescents and children). A model of the five predicators compared to a constant only model provided statistically significant and was able to distinguish students on academic probation from those with average or above average achievement.

Teaching Strategies

Students with learning disabilities have the same desires to succeed as students without disabilities (Black, Weinberg, & Brodwin, 2015). Teaching strategies which are considered inclusive and involve content delivery through a variety of modalities have been cited as effective strategies for students with learning disabilities (Black et al., 2015; Orr &Hammig, 2009). Universal Design and Universal Learning are strategies which incorporate various delivery methods in order to address a variety of learning styles in the classroom. While these strategies address the needs of students with learning disabilities, faculty are not always knowledgeable about how to implement these strategies in the classroom (Black et al., 2015; Orr & Hammig, 2009.)

Black et al. (2015) conducted a qualitative research study with a phenomenological approach. The purpose of the study was to explore and evaluate the perspectives of university

students with learning disabilities to determine how their perspectives align with universal design for learning and instruction strategies (Black et al., 2015). The study was conducted at an urban southern California university. Twelve students with disabilities were recruited and 3 students without disabilities were recruited for comparison. Structured interviews were conducted in addition to surveys with qualitative and quantitative data. Interviews were coded and analyzed for themes (Black et al., 2015).

The study identified several themes that were consistent between students with and without disabilities. The following themes were identified in both populations: a desire for achievement, the importance of communication and feedback, ability to relate presented material to learning accomplished, equality issues related to access of materials, support and equality of student treatment in class, and reassurance that resources are available to support student achievement. Themes identified more by students with disabilities than students without were related to organizing the physical environment to make learning more conducive, equality issues, and faculty familiarity with working with students with disabilities and accommodations. Themes identified by students with disabilities were frustrations with accommodations and school policies, fear of stigma and stress. The results of the study support the use inclusive strategies (Black et al., 2015).

Integrative Review Methods.

A review of the literature was done using the *following* databases: *ERIC, Education Full Text, Education Source, CINHAL and PsycINFO.* The initial integrative review was conducted in spring 2014. The integrative review was updated in June 2017. The keywords *learning disabilities* and *nursing programs* were used in *CINHAL* to identify articles in nursing. Date parameters were not set in an effort to obtain the comprehensive search while taking the

historical context into account. The search only yielded 41 articles. After reviewing the article abstracts only nine were included for the purpose of the review. The other 32 articles were excluded as most of them related to nursing students teaching learning disabled patients or nursing students with physical disabilities. When theory was added as a search criteria to identify theoretical frameworks the search did not yield any results. A search for concept analysis, concept development or operational definitions relating to learning disabilities and nursing also did not yield any results.

The keywords *learning disabilities* and *undergraduate students* were used in *Education Full Text, Education Source and ERIC*. The search yielded 145 articles. The keywords learning disability and operational definition and/or theory were used and this search yielded 58 articles. Nine articles were selected based on the purpose of the literature review. An initial search of the term learning disability from 2012-2017 yielded a significant number of results however out of 7,941 only 262 discussed learning disabilities in college students.

The search in *PsycINFO* yielded the largest number of results for the search using the keywords *learning disability* and *undergraduate student*. The search yielded 45 articles, six articles were selected after duplicates were eliminated. The search using the keywords *learning disability* and *operational definition and/or theory* yielded 34 articles with two of those being selected for inclusion. The literature review also made it obvious that learning disabilities is a concept that requires further development and exploration.

Evaluation of Integrative Review Data.

Evaluation of the articles occurred through the use of the Whittemore and Kirkevold Methods. The Whittemore and Kirkevold evaluation tools are designed specifically to evaluate literature and evidence for inclusion in an integrative review (Kirkevold, 1997; Whittemore &

Knafl, 2005). The integrative review included quantitative studies, qualitative studies, mixed studies and literature review studies. The majority of the articles were evaluated using the Whittemore method. The articles that were included in the review from psychology, education and nursing that did not reference or link learning disabilities to a theory were evaluated using the Whittemore method. The articles were examined with one point being awarded for each of the following criteria: (a) the purpose is well defined and reviewed; (b) explicit identification of the review method; (c) investigators with expertise in the research area and methodology; (d) review protocol is clearly defined; (e) comprehensive literature review; (f) unbiased and reproducible data extraction; (g) study quality considered in analysis; (h) data analysis is systematic; (i) evidence from primary sources is included; (j) conclusions are based upon evidence and clinical relevance and limitations are defined. The maximum quality score via the Whittemore method is 11/11. The score range for the articles was 7-9 with most article receiving scores of 8 or 9. Articles often lacked a clear description of the review process and review of the review protocol. The articles included 6 literature reviews, 5 quantitative studies, 4 qualitative, and 7 descriptive or mixed studies.

The articles that were linked to theory and identified in psychology and education were evaluated using the Kirkevold method. The Kirkevold method involves the awarding of one point per the following four criteria: (a) authenticity; (b) methodological quality; (c) informational value, and (d) representation of the primary sources. The maximum score is 4/4. The six articles that were identified as directly linked to theory scored either a 3 or 4. Articles usually missed a perfect quality score by lacking representation of primary sources.

Data Analysis and Interpretation of Results.

The integrative review consisted of 23 articles which encompassed qualitative, quantitative, mixed methods and literature reviews. A complete review of the articles is in the attached tables (See Appendix C). The articles were obtained from the disciplines of nursing, psychology and education. Self-regulation, self- efficacy, self-motivation, disability and cognitive learning theories were used to explore the experiences of college students with learning disabilities. The meaning of what it means to be a college student with a learning disability was apparent in the literature however the literature did not use theory to define the concept of learning disabilities. Across the disciplines, the American Disabilities Act definition of a learning disability is widely accepted even though it has remained relatively unchanged since the 1970's. The definition of a learning disability that is frequently used was set forth in 1981 by the National Joint Committee on Learning Disabilities and is as follows:

> Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction (Stage & Milne, 1996, p. 427).

The vagueness of the description has led to inconsistencies in the diagnosis and identification process for college students. Several of the quantitative studies indicated that clinicians are often unaware of the legal diagnostic criteria for the identification and diagnosis of a learning disability. As previously stated the literature search did not reveal any articles relating to concept analysis or concept development relating to learning disabilities.

Themes in the Literature.

Definition of a Disability

The literature did reveal themes across the disciplines. The three disciplines accepted that a student diagnosed with a learning disability possesses certain characteristics. Difficulty with processing, reading, organization and/or mathematical skills are the accepted characteristics for the diagnosis of a learning disability (Sparks & Lovett, 2009). Education and psychology emphasize the fact that the students often have normal or above average IQ scores and the discrepancy exists between intelligence and ability. Nursing does not acknowledge the discrepancy between intelligence and ability. There appears to be consensus regarding the need for an updated definition of learning disabilities and specific diagnostic criteria. The vagueness of the current definition and criteria contributes to the lack of knowledge and inconsistencies in supporting students with learning disabilities (Sparks & Lovett, 2013).

Perceptions and Self-Concept

The second theme that emerged across the disciplines was the importance of self-concept and perception. Students diagnosed with a learning disability consistently reported in the qualitative and mixed studies that faculty perceptions, peer perceptions, and strategies that empowered them rather than instructing them on what to do affected their self-efficacy, motivation and ability to self-regulate. Students who had positive perceptions and positive support were more successful than students who held negative perceptions and received less support from the faculty and organization. These findings align with the use of theories pertaining to self-regulation, motivation and self-efficacy.

Denhart (2008) indicated that college students with learning disabilities often feel their voice is "silenced, misunderstood and misrepresented by others"(p. 483). These feelings create

barriers that contribute to the difficulties these students already face. Students are often reluctant to request accommodations or seek out supports for fear of being judged by peers or faculty. Commonalities associated with an individual diagnosed with learning disabilities which were described across the disciples are a sense of insecurity or low self-esteem, a desire for goal attainment, a desire for accountability and self-management and the need for support (Denhart, 2008; Orr & Hammig, 2009)

According to Ancil et al. (2008) self-determination in students with learning disabilities is dependent upon four behaviors. The four behaviors are persistence, competence, career decision making, and self-realization. The presence and strength of these behaviors determine the level of success of a student with a learning disability. In order to develop a strong sense of self-determination individuals must possess a strong desire to succeed and have the ability to reframe the learning disability experience. Students must be able to identify their strengths and weakness while viewing their learning disability as a different way of learning. A social support network is also essential (Ancil et al., 2008).

Findings, such as the ones indicated by Ancil et al. (2008) and Denhart (2008) illustrates the impact self-perceptions and faculty perceptions can have on the success of students with learning disabilities. Positive perceptions on the part of faculty make them more approachable to students. Students are more likely to identify when they perceive a sense of acceptance. Faculty and peer acceptance had a profound effect on their perception of self-concept and perceived ability to succeed (Cole & Cawthon, 2015; Denhart, 2008; Howlin et al. 2014; Orr & Hammig, 2009; Troiano, 2003).

Support and Student Success

The third theme that emerged from the literature was that students that are supported by faculty, peers and the college or institutional system are more successful in their pursuit of education. (Orr & Hammig, 2009). Specifically in nursing programs students tend to be more successful when faculty are actively involved, engaged and receptive to strength based teaching. The use of strength-based teaching uses the strengths of the students to enhance and facilitate the learning process (Ijiri & Kudzma, 2000). The development of effective coping and management skills are contingent upon external structures and environments. The perceptions and actions of faculty have a direct effect on the development of motivational factors demonstrated by the student.

Students with learning disabilities demonstrate a strong desire for accountability, self-management, and self-determination. Strategic learning courses and executive functioning coaching courses are effective methods for aiding students with learning disabilities in the development of self-management skills. These types of programs allow students to learn about learning, metacognition, organization and time management skills (Butler, 1998; Burchard & Swerdzewski, 2009; Parker & Boutelle, 2009). Providing students with this type of knowledge allows them to take control over their situation and view their disability or learning situation differently. Strategic learning and executive functioning coaching courses foster accountability, self-determination, self-management, and increased self-efficacy, all trait which have been linked to increased success in students with learning disabilities (Butler, 1998; Burchard & Swerdzewski, 2009; Parker & Boutelle, 2009).

Universal Design and Instruction was one of the major inclusive strategies recommended for students with learning disabilities. The three major tenets of Universal Design are providing

content in multiple means of representation, providing multiple means of expression, and multiple means of engagement (Orr & Hammig, 2009). Universal Design is often likened to designing universally accessible architecture. Designing a building that is accessible to everyone is much more efficient and cost effective than having to retro-fit the building with ADA compliant accommodations (Orr & Hammig, 2009). Inclusive strategies which use various teaching modalities in the classroom are more likely to create successful learning environments for students with learning disabilities (Ijiri & Kudzma, 2000; Orr & Hammig, 2009). Universal Design and Instruction incorporates various methods of communicating information and content, while also, creating multiple opportunities to demonstrate understanding and acquisition of the information through application (Orr & Hammig, 2009). Universal Design and Instruction methods can include podcasts, interactive activities, simulation, alternate methods of assessment and evaluation. The use of these strategies increase opportunities for all learners. Orr and Hammig (2009) likened the use of inclusive strategies to "casting a net instead of dropping a line from a single pole" (p. 193). The use of multiple strategies creates an inclusive environment for students with learning disabilities by presenting them with information in ways that they are able to process and apply in the classroom setting (Ijiri & Kudzma, 2000; Orr & Hammig, 2009).

Rationale

A conceptual framework was selected to support the project. The first portion of the framework is Bandura's self-efficacy theory. Bandura's self-efficacy theory states that individuals are more likely to engage in behaviors if they have confidence in their ability to perform the task (Bandura, 1989). This portion of the framework was applied to the faculty receiving the training and is also applicable to the students of the faculty that have implemented the learned strategies. Faculty that have received the training will be potentially more confident

in their ability to work with students with learning disabilities through implementation of learned strategies. Faculty that are more confident will in turn improve self-efficacy in students which will make them more successful in their academic endeavors (Robb, 2012).

The second portion of the conceptual framework was Kolb's theory of experiential learning. According to Kolb learning happens through a dynamic and transformative process. The process includes the experience, reflecting on the experience, conceptualizing the experience, and finally experimenting with the new knowledge (Kolb et al, 2014). This portion of the framework was applied primarily to faculty participating in the module and simulation experience. Faculty had the opportunity to learn new knowledge, reflect on the new knowledge and their current practices and apply the new knowledge. The use of Bandura's self-efficacy theory in conjunction with Kolb's experiential learning theory form a conceptual framework which supports the rationale for the disability training module and also the delivery method.

Specific Aims

By December 2017 develop, implement and evaluate a disability training and simulation experience for faculty related to students with learning disabilities. Faculty who attend will demonstrate increased knowledge in one or more of the following areas related to ADA laws, accommodations, teaching strategies, improved attitudes, and empathy related to students with learning disabilities post-disability training. Knowledge of ADA laws, accommodations, and teaching strategies will be evaluated pre and post module.

Objectives.

1. By December 2017 75% of the school of nursing faculty at the selected branch campus will have participated in a Disability Training module and simulation experience.

2. Increase faculty knowledge, improve attitudes, and empathy related to students with learning disabilities as evidenced by increased scores in the post Disability training administration of the Inclusive Teaching Strategies Inventory (Lombardi, Vukovic, & Sala-Bars, 2014).
3. Increase faculty intent to use knowledge and strategies learned from the Disability training workshop/module as evidenced by increased scores in the post Disability training administration of the Inclusive Teaching Strategies Inventory (Lombardi, Vukovic, & Sala-Bars, 2014) and faculty participant feedback.

Section III-Methods

Context

The primary stakeholders for the project were the school of nursing faculty, SDS, the university, and the students. Students are considered stakeholders because they will benefit from the knowledge faculty will acquire from the disability training. Students were not directly included in the planning or implantation process as they are considered a vulnerable population. Faculty included those preparing the module and those involved in the development of the modules. Faculty from the Department of Education as well as staff from Student Disability Services (SDS) contributed to the development of the modules. Additional stakeholders were identified as the delivery format of the module become solidified. Additional stakeholders included CTE and Professional Development. The inclusion of these stakeholders supports the sustainability of the project and the implementation on a university-wide level.

Proposed Interventions

Gap Analysis.

The analysis indicated that while the university Student Disability Services (SDS) was aware of many of the best practices as indicated by the literature, there was a lack of implementation of those best practices. One of the major barriers identified by SDS was the level of faculty commitment to this student population. SDS reported that outreach efforts have been met with minimal interest and participation by faculty (C. B., personal communication, October 28, 2016). A lack in faculty commitment presents a distinct challenge as the literature clearly identifies faculty attitudes as significant factors which influence student success. SDS also reports that faculty tend to be more reactive rather than proactive in supporting students with learning disabilities. Faculty tend to seek out advice after a student identifies themselves rather than incorporating teaching strategies that facilitate learning for all types of learners (C. B., personal communication, October 28, 2016). A gap analysis is provided is Appendix E.

GANTT Overview.

Phase one of the project was the planning and development stage. This stage lasted from June 2016- August 2017. The second stage was the implementation and evaluation phase. This stage will last from August 2017- December 2017. Phase one has been completed. An integrative review and review of the evidence were conducted to identify themes and best practices. A gap analysis and SWOT analysis provided information related to institutional practices at the university. Relationships were developed with identified stakeholders. Meetings have occurred to identify the most appropriate resources. Lesson plans have been outlined and developed. The module/simulation was created and placed in a Canvas module from June 2017- August 2017.

The second phase or implementation phase began in August 2017. Modules were deployed to faculty between August and September 2017. The module was available for completion by faculty through September 2017. Collection and analysis of information occurred during September – beginning of October. Interpretation and translation of the results occurred during the beginning of October. Implementation of the project through the online platform of Canvas also allows for sustainability and potential translation to the school of nursing main campus and university-wide use distribution. A GANTT chart overviewing the project is included in Appendix F.

Time, Cost, and Performance Constraints.

The majority of the research, curriculum development, and implementation was conducted by the faculty DNP student which minimized time and cost constraints. There were no performance and time constraint challenges posed to the project implementation related to the conversion of the curriculum into an online module format for Canvas. The online formatting of the curriculum required collaboration with other departments to ensure use of Universal Design strategies in the delivery modalities of the content. Progress and implementation was not affected by the availability of collaborative partners.

SWOT Analysis.

A SWOT analysis was conducted to identify best practices and current practices at the university related to students with learning disabilities. The SWOT analysis is provided in Appendix I. The project was a disability training online module and simulation experience for nursing faculty. Disability training workshops increase faculty knowledge related to ADA laws, accommodations, inclusive teaching strategies, and improve faculty attitudes and perceptions

(Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004). The SWOT analysis identified current implementation of best practices, opportunities for improvement, and potential barriers.

Strengths

Three specific items were identified as strengths during the SWOT analysis that aligned with best practices. Students with learning disabilities benefit from academic support services which enable them to develop self-regulation and management strategies (Butler, 1998; Burchard & Swerdzewski, 2009; Parker & Boutelle, 2009). The university currently has academic success coaches available for students. Academic success coaches provide additional support and workshops to support academic success. The second practice identified is the provision of educational resources via links and videos related to learning disabilities and universal design by Student Disability Services (SDS). The use of universal design supports the learning needs of students with learning disabilities (Ijiri & Kudzma, 2000; Orr & Hammig, 2009). The third strength was the presence of knowledgeable and supportive staff in SDS.

Weaknesses

Several weaknesses were identified during the SWOT analysis. Currently, there is no faculty disability training available. SDS does not use a proactive approach in educating faculty about strategies that support students with learning disabilities. The current practice is to wait for faculty to seek out support services from SDS. Universal Design strategies are not actively promoted by SDS. Staff in SDS also report the perception that faculty hold negative perceptions of students with learning disabilities (C. B., personal communication, October 28, 2016). Faculty perceptions have been directly linked to students' perceived ability to succeed (Cole & Cawthon, 2015; Denhart, 2008; Howlin et al. 2014; Orr & Hammig, 2009; Troiano, 2003).

Opportunities

The SWOT analysis identified opportunities which could be met through the implementation of a disability training online module and simulation experience. The disability training online module would provide the opportunity for faculty and educational institutions to increase knowledge related to learning disabilities, ADA laws, and inclusive teaching strategies. The implementation of the online module would provide a sustainable and accessible resource to promote the use of Universal Design strategies. Participation in disability training workshops increase the likelihood that faculty will implement supportive, inclusive strategies in the classroom and increase their sense of approachability by students (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004). Increased implementation of universal design strategies by faculty increases the likelihood of student success and matriculation (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004) while decreasing the risk of ADA violation lawsuits for educational institutions.

Threats

The major threats identified are related to proposed changes in educational laws and mandates under the current administration. Changes in the laws may affect federal funding and resources which are currently available to support students with disabilities (Benner & Ulrich, 2017). General faculty perceptions and lack of faculty perceiving the training as important is also a potential threat. The most common misconception by faculty about students with learning disabilities is that they are the least able to be successful out of all groups of students with disabilities (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004). Universities and colleges may not be open to investing in faculty development if they are unable to perceive the value of the student.

Resource Requirements.

The physical resources required for the project were minimal and incur little to no cost. Canvas was used as the online delivery format for the module. Qualtrics was used to conduct and collect survey information from the Inclusive Teaching Survey Instrument (ITSI) and modified Kiersma-Chen Empathy Scale (KCES). Permission to use the ITSI for the project was granted by the authors of the tool (Lombardi & Murray, 2011). Permission to modify and use the KCES tool was granted from the authors of the tool (Chen, Kiersma, Yehle, & Plake, 2015). The university has subscriptions to Qualtrics and Canvas, therefore, no cost was incurred for using the systems for the project implementation and evaluation. DocuCare was used for the simulation experience with existing faculty access. The pre and post-simulation surveys were also collected through Qualtrics.

Faculty and staff hours, knowledge and expertise comprise the remaining required resources. Faculty hours were spent researching best practices, developing and designing curriculum. Staff hours were spent providing feedback, identifying resources, and aiding in the construction of the online module. Additional faculty hours would be required to sustain the project and implement the project across the university if the module is adopted by the university.

Budget.

The majority of the expenses were incurred during the development phase of the project. The development phase of the project includes research of best practices, meetings with stakeholders, curriculum development, and module/simulation design. The cost of this portion of the project was $16,700. The breakdown is 325 hours at $50 an hour for the research, meetings with stakeholders, curriculum development and design of the module/simulation for a total of

$16, 250. Stakeholder time for meetings was calculated also using the $50 an hour rate. At a rate of $50 an hour for six meetings the total comes to $450. Minimal cost is incurred during the implementation phase of the project. There is no cost incurred to upload the module and house it on Canvas for faculty access.

Faculty hours were required to monitor progress of the module/simulation and evaluate the surveys. Faculty enrollment, monitoring, and survey evaluations would likely require an additional 5-10 hours of faculty time per semester on an ongoing basis if the module was included in new faculty orientation. At a rate of $50 an hour the cost of sustaining and monitoring the modules would be $500 a semester. The cost per faculty to complete the four hour module would be $200. A budget is included in Appendix J.

Cost Benefit/ ROI.

The cost benefit of the project is related to cost avoidance associated with lost tuition revenue. The average cost of tuition for a four year BSN student is approximately $176, 160. This breaks down to approximately $44,040 a year or $22,020 a semester. When a nursing student fails to matriculate in the school of nursing, the student is not replaced. The practice of not replacing non-matriculating students results in lost tuition and revenue for the university and school of nursing. The amount of lost tuition and revenue depends on when the student falls out of the nursing program. If a nursing student does not matriculate past the end of their sophomore year that equates to $88,080 in lost tuition revenue.

The cost benefit and cost avoidance was calculated using information from the university school of nursing CCNE 2015 Self-Study Report. The school of nursing CCNE Self-Study Report provides specific information about matriculation rates. While, there are 103 nursing students currently registered with Student Disability Services, FERPA (family educational rights

and privacy act) protect student privacy and the number of nursing students with learning disabilities is not available. Students with learning disabilities often struggle to matriculate through college more so than students without disabilities. The rigorous structure of nursing programs put this student population at a higher risk for failure (Ijiri & Kudzma, 2000), therefore the decision was made to perform the cost benefit/ cost avoidance based on overall attrition rates.

The school of nursing currently admits approximately 240 students a year to the BSN program or 120 students per semester. The BSN program also administers a sophomore progression HESI in the second semester of the program. If students do not score an 850 on the HESI exam they are unable to progress in the program. According to the school of nursing CCNE Report (2015) in the academic year 2012-2013 the attrition rate at this sophomore point was 5% and in the academic year 2013-2014 the rate was 3%. In the academic year 2015 4% of admitted students did not matriculate and graduate (USF CCNE 2015 Self-Study Report). The average attrition rate is 4%. For the current enrollment of students that equates to approximately 10 students, which is $880,800 in lost tuition if the students fall to matriculate past the second sophomore semester.

Break Even Analysis.

Implementation of the project, however, costs less than tuition for one semester. The cost of the project can be recouped through the success of one student remaining in the nursing program for one additional semester. Implementation of Universal Design strategies benefit all learners in the classroom, therefore the project has the potential to increase retention and matriculation for all students in the school of nursing (Black et al, 2015; Ijiri & Kudzma, 2000; Orr & Hammig, 2009). Long-term effectiveness of the program would be measured through matriculation and attrition rates. The proposed target goal would be to decrease the attrition rate

by 1% by the second year. The 1% decrease would equate to approximately 3 students and a potential cost benefit of $264,240. A cost benefit analysis and break-even analysis are located in Appendix E and F.

The proposed project also serves as a method for risk reduction for lawsuits related to ADA violation lawsuits. When individual's rights to accommodations are violated, the educational institution is at risk for legal action .The suits can result in monetary awards and federal mandates requiring the institution to make the necessary institutional changes to become ADA compliant. The results of a lawsuit can have significant financial implications for the educational institution (U.S. Dept. of Justice and Civil Cases, n.d).

Communication Plan.

During the research and development stage of the project meetings occurred with stakeholders and content experts. Meetings and follow-up communication with SDS facilitated the gap analysis and SWOT analysis process. Meetings and follow-up with content experts facilitated the design and incorporation of information into the module. Meetings provided information related to curriculum development and currently available resources. Communication with Instructional Design and Canvas support were implemented and continued as needed through the launch of the module.

Communication with Canvas support facilitated the creation of the Canvas shell for the online content of the disability training. The design of the simulation portion of the training was decided upon after communication with staff and faculty associated with DocuCare and VSim resources at the main and branch campuses. Communication with IT staff and simulation center staff at the branch campus ensured availability of required equipment and resources. Regularly

scheduled meetings with the committee chair have also occurred on a bi-monthly to weekly basis since summer of 2016. The detailed communication plan is included in the Appendix H.

Study of the Intervention

The project was evaluated for an increase in faculty knowledge related to ADA laws, Universal Design strategies, and improved attitudes and perceptions. Knowledge, attitudes and perceptions were measured through the use of the Inclusive Teaching Strategies Inventory (ITSI). The survey was administered pre and post the module to measure any improvements related to knowledge and attitudes gained from participation in the disability training. Empathy for students with learning disabilities was measured pre and post the simulation experience. The Kiersma-Chen Empathy Scale (KCES) was administered to faculty via Qualtrics and used to measure cognitive empathy pre and post the simulation experience.

Measures

The ITSI is a tool that was developed by Lombardi and Murray (2011) for the measurement of faculty knowledge, attitudes, and perceptions related to disability training in the postsecondary setting. The tool has been validated and used in multiple studies related to disability training workshops for faculty. Cronbach's alpha scores for the ITSI tool range from .70-.87 for the seven subsets with four of the subsets achieving scores greater than .80 (Lombardi, Murray, & Dallas, 2013). The ITSI tool measures attitudes and actions for the subsets with the stems, "I believe it is important to" and "I do". Responses for the "I believe it is important to" are scaled from 1 (strongly disagree) to 6 (strongly agree). The action or "I do" responses are scaled from 1(never) to 4 (always) (Lombardi et al., 2013). The ITSI tool is located in Appendix M.

The Kiersma-Chen Empathy Scale (Chen, Kiersma, Yehle, & Plake, 2015) is an empathy measurement tool designed to measure empathy in healthcare providers or nursing students' pre and post a simulation experience. It has been validated by pharmacy and nursing students. The KCES is originally a 15 item Likert scale survey. Items are scored from 1= strongly disagree to 7= strongly agree. The tool measures cognitive and affective qualities of empathy. A higher score is indicative of a higher level of empathy (Chen et al., 2015). The tool was adapted for use with faculty. Descriptors were changed from patient to student and from healthcare provider to faculty. Two questions that were healthcare specific were removed from the survey. The final survey used for the project included 13 questions in the pre-simulation survey and 15 questions in the post-simulation survey. Two qualitative narrative format questions were added to the post-simulation survey. The modified KCES is included in Appendix N.

Methods

Data collected from the surveys was entered into SPSS for statistical analysis. The Likert scale format of the ITSI tool collects data in a quantitative form. The quantitative data collected pre and post-disability training was analyzed using a *t*-test for two paired samples approach. The sample mean difference scores were calculated for each of the seven subsets on the pre and post surveys. A *t*-test for two population means was calculated to answer the following question. When faculty are measured twice, once before participation in the disability training module and once after participation in the disability module, does the population mean difference score show increased knowledge and improved perceptions and attitudes related to students with learning disabilities?

Results

A convenience sample of 8 faculty was obtained at the selected branch Campus. This sample included 100% of the school of nursing faculty at the selected branch campus. Faculty voluntarily participated in the training. Implied consent was obtained through participation in the module and simulation exercise. The sample consisted of two faculty members with more than five years of didactic teaching experience in academia while the other six had less than five years of experience. The *t*-test for two paired samples results indicated increases in the mean scores of all seven subset areas on the ITSI tool. Four of the subsets indicated statistical significance with p values ranging between 0.010-0.036. The subset areas which demonstrated statistically significant increases were accessible course materials, course modifications, inclusive assessment, and disability laws and concepts. The subset scores and *t*-test results are located in Appendix O. Aggregate scores for the seven subsets were calculated and are depicted in the charts below. Figure 1.0 depicts a comparison of the pre and post scores in relation to the max score for that particular subset. Figure 1.1 depicts the aggregate scores in percentage score format to illustrate the percentage of change in each subset category. The overall percentage of change for all areas was 9.5%. A table with the aggregate scores is included in Appendix O.

Figure 1.0

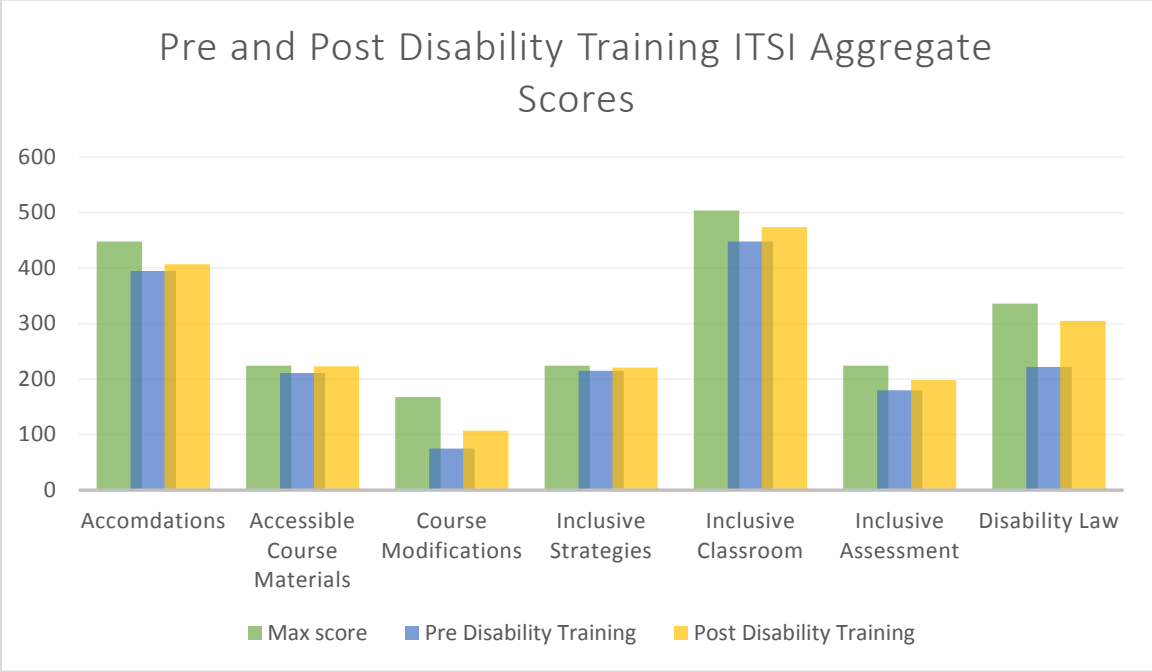
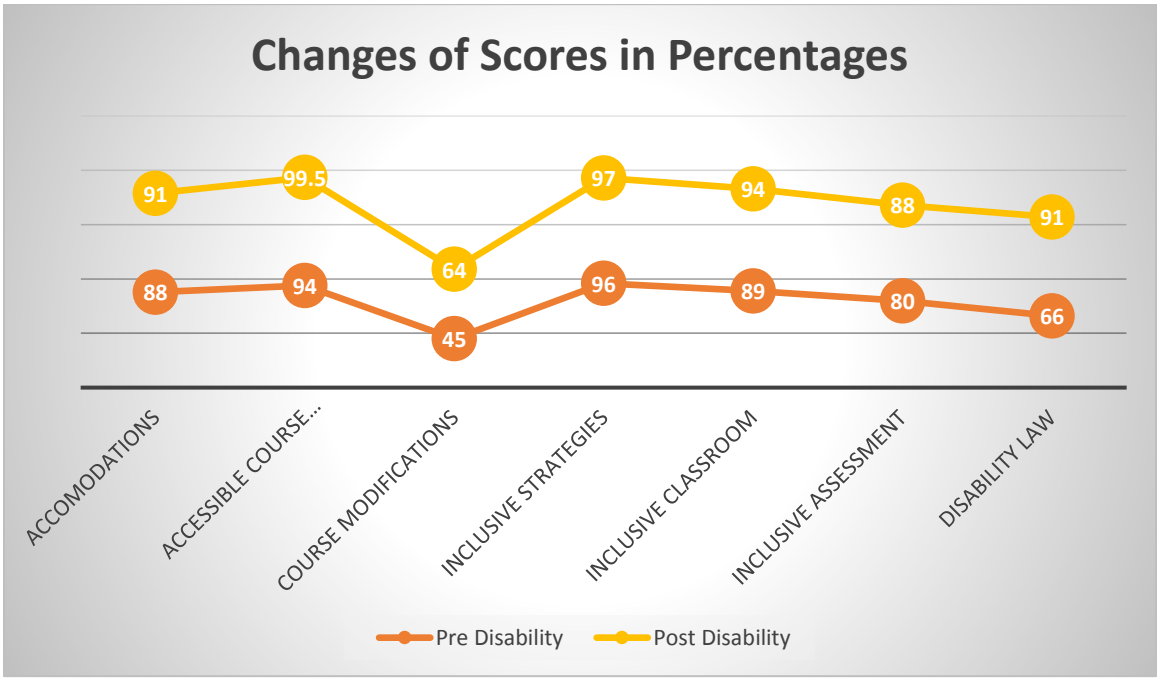


Figure 1.1



A *t*-test for two paired samples was also performed for the data collected from the Kiersma-Chen Empathy Scale. The results of the simulation exercise also indicated an increase in mean empathy scores. The mean increased from 78.25 to 81.75. The increase, however, was not noted to be statistically significant. The results of *t*-test for two paired samples was $t(7) = -1.670$, $p>0.05$. While the statistical analysis did not prove to be significant, the qualitative data collected during debriefing and at the end of the post-simulation survey provided significant feedback and insight. The small sample size was a limitation of the study design and may have had an effect on the statistical analysis. A larger sample size may have yielded more significant or stronger results. The ITSI tool included information about current faculty practices as delineated in the actions category. Information in the actions category was collected in the pre-Disability Training survey. However, it was not collected in the post-Disability Training survey. Most faculty completed the online module in one to two days, which does not allow time for a change in practice to occur. Expected changes in practice would be faculty report of increased use of Universal Design strategies in their classrooms and use of strategies to increase perceived approachability by students. The information collected from the actions portion of the pre-Disability Training survey provides baseline information for current practices and an opportunity to follow-up with an evaluation of sustained changes in practices several months post participation in the Disability Training: Learning Disabilities module. The data from the ITSI tool and the MKCES tool can be found in Appendix O with the other data analysis documents.

During debriefing after the simulation experience faculty used the words *frustrated, stupid, inadequate, and overwhelmed* related to their first medication administration experience in DocuCare. After receiving instructions in various formats and an opportunity to practice faculty used the words *more relaxed, effective, efficient, confident, and successful* to describe

their second medication administration experience. During the post-simulation debriefing faculty quickly acknowledged the effectiveness of content and directions delivered in a variety of formats. An outline of the simulation experience is located in Appendix P.

In the post-simulation survey faculty were asked the two following questions: 1) As a result of participating in the Disability Training: Learning Disabilities simulation experience and modules how has your understanding, awareness, or perception of individuals with learning disabilities changed? 2) As a result of participating in the Disability Training: Learning Disabilities what changes or strategies do you plan on implementing with your students? Faculty responses to the first question indicated that faculty had developed an increased understanding of the needs of students with learning disabilities and the impact for all students of using Universal Design Strategies in the classroom. Some of the faculty responses to question 1 were:

"*I saw how frustration with a task not presented to my learning can negatively affect my self-worth. However, I saw the value of using multiple training techniques to improve my mastery and self-assessment of myself when faced with a task. The simulation helped me to internalize the student's point of view."*

"*More aware of the need to teach in a multi-dynamic fashion using verbal, kinesthetic teaching modalities."*

"Following the coursework and simulation training, I have a better understanding of the challenges that students with learning disabilities face in the classroom setting. I am particularly enlightened that we as faculty have the power and means to provide a richer and more comfortable learning environment that is inclusive of those with learning disabilities."

Faculty responses from question 2 indicated intent to use Universal Design Strategies in the classroom and included:

"I will think first of how can this be designed to better fit the learning styles of all students versus only providing alternatives when the student is stuck. I think it is my job to provide a menu of learning options upfront."

"Patience, understanding, a direction for curriculum development in the future."

"Universal strategies to aid in capturing the different learning styles."

Overall the results indicated that participation in the Disability Training: Learning Disabilities does increase faculty knowledge, improve attitudes, and increase empathy related to students with learning disabilities. Faculty participants demonstrated significant increases in the knowledge and attitudes pertaining providing accessible course materials, providing course modifications, providing inclusive assessment options and familiarity with Disability laws and concepts.

Variance Control.

Project variance control was managed through evaluation of the survey results as well as solicited feedback regarding the delivery of the content. Adjustments to content and delivery can be made based upon feedback from participants. The content must be perceived by participants as valuable and delivery methods engaging in order for faculty to desire to carry learned strategies forward into their teaching practice. The intentional design of the module demonstrates and uses Universal Design strategies to illustrate to faculty the effectiveness and ease of implementation in content delivery. The use of a brief feedback survey ensures that faculty are obtaining the maximum effect and information from the module.

Ethical Considerations

The project was reviewed and determined to be non-research. The non-research determination form is included in the appendices. Ethical considerations have been addressed

through population selection and study design. The population are faculty and participation was completely voluntary. Participation in the module is not related to faculty position, status, or promotion in any way. The use of Qualtrics allows for anonymous data collection and participant confidentiality.

Increasing faculty knowledge and empathy related to nursing students with learning disabilities aligns with the Jesuit value of Cura Personalis and Provision One of the American Nurses' Association (ANA, 2015) Code of Ethics. The value of Cura Personalis is about caring for the whole person and viewing the individual in a holistic perspective. Provision One of the ANA Code of Ethics (2015) addresses the need for nurses to practice with compassion and respect the unique differences in individuals. Both values discuss the need to accept and support individuals with different needs and abilities. Students are the population that nursing faculty care for, therefore faculty should approach and care for them through the lens they would use to care for patients in the healthcare settings. Just as patients are unique with individual needs, students are also unique individuals with different needs. Increasing awareness of what learning disabilities are, how they affect student learning, and effective teaching strategies allow faculty to better care for this vulnerable student population.

Section IV-Discussion

Summary

The themes identified in the review of the evidence and integrative review support the use of disability-focused workshops or training to increase faculty knowledge and empathy for students with learning disabilities. Faculty are not always knowledgeable or comfortable making the required accommodations for students with disabilities. This lack of knowledge is often perceived as a lack of approachability by students (Orr & Hammig, 2009; Sniatecki et al.,

2015). Increasing faculty knowledge about the needs of students with learning disabilities improves faculty perceptions which provides the opportunity for more positive experiences for faculty and students (Black et al., 2015; Murray et al., 2009; Sowers & Smith, 2004).

According to Black et al. (2015) and Orr and Hammig (2009), the use of inclusive strategies are effective strategies for supporting students with learning disabilities. Faculty may not always be familiar with how to incorporate inclusive strategies into their classroom or content delivery. Training or workshops allow faculty to develop the necessary skill set to implement inclusive strategies in the classroom which meet the needs of the student with learning disabilities (Black et al., 2015; Orr & Hammig, 2009).

The increasing number of students with learning disabilities in the college/university setting demonstrates a need for faculty preparation in strategies that will ensure the success of this student population (Orr & Hamming, 2009). Students have repeatedly cited faculty knowledge, support, and empathy as key components of their perceived ability to succeed (Black et al., 2015). The implementation of disability training workshops for nursing faculty provides the additional knowledge and resources to decrease student barriers and improve academic success for this student population (Murray et al., 2009; Sniatecki et al., 2015). Empowering nursing faculty through disability training workshops provides faculty with the necessary knowledge and tools to facilitate the success of future nurses.

Interpretation

The implementation of a Disability Training: Learning Disabilities module and simulation experience at the selected branch campus produced positive results. The goal of the project was for faculty who attended to demonstrate increased knowledge in one or more of the following areas related to ADA laws, accommodations, teaching strategies, improved attitudes,

and empathy related to students with learning disabilities post-disability training. All of the full-time faculty at the selected branch campus participated in the disability training. Faculty participation exceeded the original goal of 75%. One hundred percent of the faculty demonstrated an increase in more than one score related to ADA laws, accommodations, teaching strategies, improved attitudes, and empathy related to students with learning disabilities.

The outcomes of the disability training at the selected branch campus align with the outcomes reported in the literature (Lombardi et al., 2014; Murray et al., 2009; Sniatecki et al., 2015). Disability training improves faculty knowledge, attitudes, and practices related to student with disabilities. The most significant increase in perceptions and attitudes often occurs with students with learning disabilities (Murray et al., 2009). According to Orr and Hammig (2009) at least 50% of faculty report being unfamiliar with ADA laws and accommodations. Faculty at the branch campus showed the most significant improvements in areas of providing accessible course materials, providing course modifications, providing inclusive assessment options and familiarity with ADA laws and concepts. These are four of the seven subsets included in the ITSI tool.

The conceptual framework for the project was based upon Bandura's self-efficacy theory and Kolb's experiential learning theory. The disability training module provided faculty with the knowledge and resources while the simulation provided them an experiential learning opportunity to reflect on the newly acquired knowledge and simulated experience. The results of the surveys and narrative responses indicated that faculty had developed an increased awareness of the needs of students with learning disabilities. In the narrative responses, faculty voiced awareness of the importance of using inclusive strategies in the classroom. Faculty use of inclusive strategies in the classroom will increase the likelihood of success for all learners (Black

et al., 2015; Orr & Hammig, 2009). Increasing the likelihood of success for students will increase the likelihood of student retention and matriculation.

Implementation of the disability training on a school of nursing wide or university level is recommended and would be a strategic investment. The retention of one student for one semester places the project at its break-even point. The retention of each additional student after that point represents a profit for the university. The more students that are retained and matriculate through their program the higher the tuition profit margin is for the university. Incorporating the disability training module into the orientation process for faculty and making the module available through CTE and Instructional Design would provide accessibility to the widest range of university faculty.

Limitations

The strategies identified to address potential barriers were education, collaboration, and the development of partnerships with Instructional Design, Center for Teaching Excellence (CTE) and SDS. Partnering with CTE, Instructional Design and SDS aided in creating a comprehensive disability training module that will be more widely received and valued related to multi-department involvement. Working in conjunction with CTE and Instructional Design also ensures that interactive strategies were used in the delivery of the module content.

Providing additional education about the importance of the topic and discussing perceived barriers to participation in the disability training with faculty allowed faculty to perceive the value in the training. Faculty are not always aware of the need for disability training. Making faculty aware of the need also brought to light whether or not they are aware of the available resources and supports. Participation in the disability training empowered faculty to support this student population in a way that also empowers the student.

Conclusion

The number of students with learning disabilities has tripled over the past decade (Orr & Hammig, 2009). This significant increase makes faculty preparation essential in order to meet the needs of this student population. Unfortunately, many faculty are unaware of how to best support this growing student population. Faculty often do not realize that some of the most impactful strategies for this student population are inclusive Universal Design and a sense of approachability (Denhart, 2008; Orr & Hammig, 2009). Implementation of a disability training workshop/module would provide faculty with the necessary knowledge and resources to decrease student barriers and improve academic success in students with learning disabilities (Murray et al., 2009; Sniatecki et al., 2015). Providing faculty with the knowledge and tools to support students with learning disabilities empowers faculty to be an integral part of the students' academic success.

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http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=eric&AN=EJ867496&site=ehost-live&scope=site.

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Stage, F. & Milne, N. (1996). Invisible scholars students with learning disabilities. *Journal of Higher Education*, *67*(4), 426-445. Retrieved from ERIC. http://0web.a.ebscohost.com.ignacio.usfca.edu/ehost/detail/detail?vid=29&sid=983fbd15-6047-48c6-aac90ed00e5f97cc%40sessionmgr4008&hid=4114&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=EJ527846&db=eric.

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Appendix A: Statement of Non-Research Determination Form

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

DNP Statement of Non-Research Determination Form

Student Name: Jodi Kushner

Title of Project:

Increasing Faculty Knowledge and Empathy Related to Nursing Students with Learning Disabilities

Brief Description of Project:

An online disability training module and simulation experience will be developed and offered to faculty. The disability training module will focus on ADA laws and accommodations, Universal Design strategies, and information about learning disabilities. The simulation experience will be designed to simulate the experience of a student with a learning disability. Faculty knowledge, attitudes, perceptions and empathy will be measured pre and post disability training by the Inclusive Strategies Survey Tool (Lombardi, Vukovic, & Sala-Bars, 2014). The goal of the disability training and simulation experience is to increase faculty knowledge related ADA laws, accommodations, learning disabilities and inclusive teaching strategies that will support this student population.

A) Aim Statement:

By May 2018 develop, implement, and evaluate a disability training and a simulation experience related to students with learning disabilities. Faculty who participate will demonstrate increased knowledge in one or more of the following areas related to ADA laws, accommodations, teaching strategies, improved attitudes, and empathy related to students with learning disabilities post disability training. Knowledge of ADA laws, accommodations, and teaching strategies will be evaluated pre and post workshop/module.

B) Description of Intervention:

Online module/ workshop will include the following topics and last 3-4 hours

1. Pre Survey

2. Overview of ADA laws and accommodations

3. Overview of most commonly identified learning disabilities in postsecondary education- ADHD and Dyslexia.

4. Introduction, discussion and application of Universal Design strategies

5. Discussion about available resources i.e. SDS, Academic Success Coach, Instructional Design.

6. Simulation Experience

7. Post Survey

C) How will this intervention change practice?

Increased student success has been directly linked to positive perceptions and experiences with faculty and institutions. Students perceive a greater ability to experience academic success when they feel supported by their institution and faculty. Negative faculty perceptions and attitudes are cited as one of the largest barriers for students with learning disabilities. Faculty are often unaware of ADA laws, accommodations, institution resources, and teaching strategies that support this student population (Black et al.: Denhart, 2008; Orr & Hamming, 2009). Providing faculty with the online module/workshop will increase their knowledge regarding laws and strategies to support students with learning disabilities. Faculty who are knowledgeable are more approachable to students and more likely to incorporate inclusive strategies in their classrooms (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004; Sniatecki et al., 2015). Faculty who are better equipped to meet the needs of this student population will directly affect their ability to matriculate through their degree program and graduate.

Black, R., Weinberg, L., & Brodwin, M. (2015). Universal design for learning and instruction: Perspectives of students with disabilities in higher education. *Exceptionality Education International, 25*(2), 1-26. Retrieved from ERIC. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=eric&AN=EJ1065166&site=ehost-live&scope=site.

Denhart, H. (2008). Deconstructing barriers perceptions of students labeled with learning disabilities in higher education. *Journal of Learning Disabilities*, *41*(6), 483-497. http://0-dx.doi.org.ignacio.usfca.edu/10.1177/0022219408321151.

Murray, C., Lombardi, A. & Dallas, B. (2013). University faculty attitudes towards disability and inclusive instruction: comparing two institutions. *Journal of Postsecondary education and disability, 26*(3), 221-232. Retrieved from Education Source. http://0-eds.b.ebscohost.com.ignacio.usfca.edu/eds/pdfviewer/pdfviewer?sid=a52e3666-9b36-4a97-bad2-4d016c82f044%40sessionmgr104&vid=2&hid=122.

Murray, C., Lombardi, A., Wren, C., & Keys, C. (2009). Associations between prior disability focused training and disability-related attitudes and perceptions among university faculty. *Learning Disability Quarterly, 32*, 87-100. Retrieved from ERIC. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=eric&AN=EJ867496&site=ehost-live&scope=site.

Orr, A. & Hammig, S. (2009). Inclusive postsecondary strategies for teaching students with learning disabilities: a review of the literature. *Learning Disability Quarterly*, *32*, 181- 196. Retrieved from CINHAL. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=105428249&site=ehost-live&scope=site main.pdf?_tid=c57931ba-5f56-11e6-a6b8-00000aacb361&acdnat=1470873876_192d96f554c44868028e62426eec4e66.

Sniatecki, J., Perry, H., & Snell, L. (2015). Faculty attitudes and knowledge regarding college students with disabilities. *Journal of Postsecondary Education and Disability, 28*(3), 259-275. Retrieved from ERIC. http://files.eric.ed.gov/fulltext/EJ1083837.pdf.

Sowers, J. & Smith, M. (2004). Evaluation of the effects of an inservice training program on nursing faculty members' perceptions, knowledge, and concerns about students with disabilities. *Journal of Nursing Education, 43*(6), 248-252. Retrieved from CINHAL. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=106754496&site=ehost-live&scope=site.

D) Outcome measurements:

1. Upon completion of the disability training 85% of faculty will demonstrate an increase in knowledge in one or more of the following areas: ADA laws and accommodations, attitudes, and empathy related to students with learning disabilities.
2. Upon completion of the disability training 80% of faculty will demonstrate an increase in intent to use strategies learned from the Disability Training workshop/module.

   Measurements will be collected pre and post disability training using the Inclusive Teaching Strategies Survey (Lombardi, Vukovic, & Sala-Bars, 2014)

Lombardi, A., Vukovic, B., and Sala-Bars, I. (2014). International comparisons of inclusive instruction among college faculty in Spain, Canada, and the United States. *Journal of Postsecondary Education and Disability*, *28*(4), 447-460.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (http://answers.hhs.gov/ohrp/categories/1569)

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	**YES**	**NO**
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.		
The specific aim is to improve performance on a specific service or program and **is a part of usual care**. ALL participants will receive standard of care.		
The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does **NOT** follow a protocol that overrides clinical decision-making.		
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **NOT** develop paradigms or untested methods or new untested standards.		
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **NOT** seek to test an intervention that is beyond current science and experience.		
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.		
The project has **NO** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.		
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., **not** a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.		

If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: *"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."*		

ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print):

Jodi Kushner

Signature of Student:

_____DATE_____

SUPERVISING FACULTY MEMBER (CHAIR) NAME (Please print):

_____

Signature of Supervising Faculty Member (Chair):

_____DATE_____

Appendix B: Letter of Support

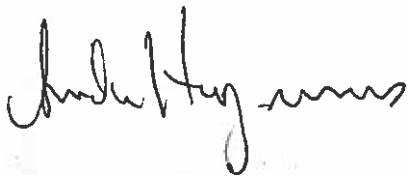
UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

August 4, 2017

To Whom It May Concern:

I have reviewed and discussed the DNP project *Increasing Faculty Knowledge and Empathy Related to Students with Learning Disabilities* with Jodi Kushner. As Co-director of the VANAP program at the Sacramento Branch Campus, I, Linda Hargreaves support the implementation of this project at the Sacramento campus with the VANAP faculty. I will support the implementation of the project through physical resources, technical site support, and aiding in advertising the workshop/module to faculty.

Sincerely,



Linda Hargreaves, DNP, MSN, MSL, RN, CNS

Assistant Professor
Program (Co-) Director VANAP: VA Northern California-USF Partnership
School of Nursing and Health Professions
University of San Francisco
lhargreaves@usfca.edu

Appendix C: Integrative Review: Coding

Discipline	1= Nursing 2=Psychology 3=Education
Source	1=Journal 2=Dissertation 3=Other
Study Design	1=Qualitative 2=Quantitative 3=Descriptive Study 4=Meta Cognitive Approach/ Literature Review 5=Other
Setting and Sources	Settings 1=Nursing Programs 2=Undergraduate Programs Sources 1=students 2=educators
Quality Criteria 1=Whittemore	One point is provided for each of the following 1. Well-defined problem& review purpose 2. Explicit identification of review method 3. Investigators w/expertise in content and methodology 4. Clear specification of review process and protocol 5. Comprehensive and explicit literature review 6. Explicit, unbiased & reproducible data extraction for content and quality 7. Primary study quality considered in analysis 8. Data Analysis is systematic and variability of findings is addressed 9. Evidence included from primary studies 10. Conclusions based on evidence & capture complexity of clinical problem 11. Methodological limitations identified
Quality Criteria 2=Kirkevold	One point is provided for each of the following: 1. Authenticity 2. Methodological Quality 3. Informational Value 4. Represents primary sources

Appendix C: Integrative Review Table 1- Learning Disabilities Nursing

Author/Title	Discipline/ Source	Study Design	Sample Type and Size	Setting	Results	Quality Criteria
Ijiri & Kudzma(2000) Supporting Nursing Students with Learning Disabilities: A Met cognitive Approach	1-Nursing 1-Journal	4- Meta-cognitive Approach	N/A	2-Nursing Programs	Learning Disabilities were defined by standard definition used by post-secondary education. Classroom, clinical and NCLEX modifications coupled with increased understanding improves student outcomes	Whittemore-8
Betz, Smith & Bui(2012) A Survey of California Nursing Programs: Admission and Accommodation Policies for Students with Disabilities	1-Nursing 1-Journal	2-Qualitative	65 nursing programs	2-Nursing Programs	Learning disabilities are the most common disabilities identified in nursing programs. Few clinical accommodations are made and the most common didactic accommodation is extended time on tests. The lack of use of accommodations may be related to lack of faculty awareness.	Whittemore-9
Colon, E. (1997) Identification, Accommodation and Success of Students with Learning Disabilities in Nursing Education Programs	1-Nursing 1-Journal	3-Descriptive Study	45 nursing programs in NC 35-Associate Degree 10- BSN	2-Nursing Programs	Learning disabilities are not clearly defined in nursing education. The need for further research was indicated. Leininger's theory of culture was linked to need to provide for the specific needs of this student population	Whittemore-8
Letizia, M. (1995) Issues in the Postsecondary Education of	1-Nursing 1-Journal	5- Other	N/A	Undergraduate programs	Learning disabled students commonly have difficulties in reading; written; oral; auditory; social and study skills.	Whittemore-8

Learning-Disabled Nursing Students						
Magilvy, J. & Mitchell, A.(1995) Education of Nursing Students with Special Needs	1-Nursing 1-Journal	3 Descriptive study	86 Associate Degree/BSN programs across the US	2- Nursing Programs	Nursing faculty often lack the awareness or knowledge required to accommodate learning disabled students. Increasing awareness will help students and facility facilitate the learning process.	Whittemore-8
Orr, A. & Hammig(2009) Inclusive Postsecondary Strategies For Teaching Students With Learning Disabilities: A Review Of The Literature	1-Nursing 1-Journal	4- Literature Review	38 articles	Undergraduate Programs	Universal design is an effective framework for assisting students with learning disabilities. The proactive approach reduces barriers and reduces the need for retroactive accommodations. Faculty awareness and willingness are key components of student success and facilitation of the learning	Whittemore-10
Watson, P.(1995) Nursing Students With Disabilities: A Survey of Baccalaureate Nursing Programs	1-Nursing 1-Journal	3-Descriptive Study	247 BSN programs	2-Nursing Programs	The most frequently occurring learning disability in nursing students is dyslexia. Faculty are legally obligated to make reasonable accommodations to qualified students with disabilities	Whittemore-8
Howlin, F., Halligan, P. & O'Toole, S. (2014) Evaluation of a clinical needs assessment and	1-Nursing 1-Journal	1-Qualitative Study	4 –Nursing students	Clinical Setting	The study indicated that students varied in their willingness to disclose about their disabilities/ accommodations. Students reported both positive and negative	Whittemore-8

exploration of the associated supports for students with a disability in clinical practice: part 2					experiences related to their supports in the clinical setting.	

Appendix C: Integrative Review Table 2- Learning Disabilities Psychology

Author/Title	Discipline/ Source	Study Design	Sample Type and Size	Setting	Results	Quality Criteria
Anctil, T. & Scott, A. (2008) Academic Identity Development Through Self-Determination Successful College Students with Learning Disabilities	2-Psychology 1-Journal	3-Mixed Method Study	104 Students	1-Undergraduate Programs	A positive correlation exists between academic success of college students with learning disabilities and the four following traits: persistence, competence, career decision making and self-realization. Internal decisions related to success were: desire to succeed; goal orientation and reframing of learning disability experience	Whittemore-8
Harrison, A., Lovett, B. & Gordon, M.(2013) Documenting Disabilities in Postsecondary Settings: Diagnosticians' Understanding of Legal Regulations and Diagnostic Standards	2-Psychology 1-Journal	2-Qualitative	103 Psychologists	Private practice providers for undergraduate students	None of the clinicians scored higher than an 85% on the survey and the average score was 69%. Clinicians are not sufficiently educated regarding legal criteria and accommodations in the postsecondary setting which can validate claims that learning disabilities are over diagnosed.	Whittemore-9
Lovett, B. & Sparks, R. (2009) Exploring the Diagnosis of "Gifted/LD": Characterizing Postsecondary Students With Learning Disability Diagnosis at	2-Psychology 1-Journal	2-Qualitative Study	357 undergraduate students	1-Undergraduate Programs	Students identified as LD often have average scores on achievement testing. Most of the previously identified G/LD students failed to meet the criteria for diagnosis of LD. The authors concluded that the discrepancy method of identification of LD is	Whittemore-9

Different IQ Levels					likely to result in over identification	
Parker, D. & Boutelle, K.(2009) Executive Function Coaching For College Students with Learning Disabilities and ADHD: A New Approach For Fostering Self-Determination	2- Psychology 1-Journal	3- Mixed Methods Study	54 undergraduate students	1- Undergraduate programs	Four themes which were identified as reasons why students chose executive function coaching. The themes were as follows: the focus of coaching was the improvement of executive functioning skills; allows the student to develop essential competencies which allow them to experience goal attainment; coaching allowed students to better manage negative emotions and helped students to improve discrete beliefs and skills that they needed to be successful in the academic setting	Whittemore-9

Appendix C: Integrative Review Table 3- Learning Disabilities- Education

Author/Title	Discipline/ Source	Study Design	Sample Type and Size	Setting	Results	Quality Criteria
Kavale, K., Spaulding, L. & Beam, A. (2009) A Time To Define: Making Specific Learning Disability Definition Prescribe Specific learning Disability	3- Education 1-Journal	4-Literature Review	N/A	N/A	The article indicated that the current operational definition of SLD was accepted in 1977 and is based upon discrepancy criteria. The accepted definition is that there is a severe discrepancy between ability and achievement and intellectual ability in one or more areas relating to communication and mathematics. The proposed change for the operational definition of SLD is: A lack of progress in school performance that remains below expected for chronological or mental age despite high-quality instruction...deficits can be in cognitive, linguistic, neuropsychological processes or any combination. SLD is characterized by average or above average cognitive ability with a scattering of strengths and weaknesses.	Kirkevold-4
Sparks, R. & Lovett, B. (2009) College Students With Learning Disability Diagnoses Who	3- Education 1-Journal	4- Literature Review	384 articles	1- Undergraduate Programs	Aptitude-discrepancy continues to be the primary method through which Learning disabilities are operational zed. In the postsecondary	Whittemore-9

Are They and How Do They Perform					setting there is a lack of consistency in how these students are identified. Antecedents- discrepancy btwn intellectual ability and academic achievement; achievement test scores below student's IQ ability. Attributes: deficits in reading rate and comprehension, mathematical skills, most severely affected are writing skills. Student's cognitive abilities were comparable to non-disabled peers. Consequences: There was no significant academic impairment noted for students with learning disabilities.	
Sparks, R. & Lovett, B. (2013) Applying Objective Diagnostic Criteria in a College Support Program for Learning Disabilities	3-Education 1-Journal	2-Quantitative Study	336 undergraduate students	1-Undergraduate Programs	42% of the sample which was identified as learning disabled failed to meet the criteria used in this study based off of five different models. The lack of consistency in diagnostic criteria in the college settings makes it more difficult for both faculty and students and indicates a clear need for a consistent method of inclusion and diagnosis.	Whittemore-10
Stage, F. & Milne, N.(1996) Invisible Scholars Students with Learning Disabilities	3-Education 1-Journal	1-Ethnography Qualitative	8 undergraduate students	1-Undergraduate programs	The study showed that the students had both positive and negative experiences regarding their learning disability. Whether or not their experience was positive or negative was	Whittemore-10

					often determined by the attitudes and perceptions of fellow students and faculty. Most students developed effective coping strategies to help them maintain their grades and achieve their goals. These strategies often require more effort and time than a non-disabled student is required to invest in order to achieve the same goal or grade	
Trainin, G. & Swanson, H. (2005) Cognition, Met cognition, and Achievement of College Students With Learning Disabilities	3-Education 1-Journal	2-Quanitative study	40 undergraduate students	1-Undergraduate Programs	In three out of the four tests LD students performed equally well as their non-disabled peers. They have difficulty in the area of reading and processing. The results support previous research which indicates that students with a childhood diagnosis of dyslexia continue to have difficulties in phonological awareness	Whittemore-9
Troiano, P. (2003). College Students and Learning Disability: Elements of Self-Style	3-Education 1-Journal	1-Grounded Theory Qualitative	9 undergraduate students	1-Undergraduate Programs	The study showed that there are factors that which affect an individual's ability to cope and manage their educational needs. The four factor are time of diagnosis; perceived support; level of stigmatization and personality attributes. These factors coupled with a willingness to disclose; ability to self-	Whittemore-10

					advocate and level of self-determination lead to the ability to Self-Style and the Emergent Theory.	
Cole, E. & Cawthon, S., 2015. Self-disclosure decisions of university students with learning disabilities. *Journal of Postsecondary Education and Disability, 28* (2), 163-179.	3-Education 1-Journal	3-Mixed Methods Study	31 under-graduate students with learning disabilities at a large public Research One University	1 Undergraduate Programs	Students with a higher self-determination level are more likely to disclose their need for accommodations to faculty. Students are also greatly influenced about whether or not to disclose based upon perceptions of peers, faculty and past experiences	Whittemore-8

Appendix C: Integrative Review Table 4- Learning Disabilities Theory

Author/Title	Discipline/ Source	Study Design	Sample Type and Size	Setting	Results	Quality Criteria
Burchard, M & Swerdzewski (2009) Learning Effectiveness of a Strategic learning Course	3- Education 1-Journal	2- Quanitative	78 undergraduate students	1- Undergraduate Program	The study indicated that a course combining the use of theory and practical application skills improved the met cognition of student with learning disabilities Theories- learning theory, meta-cognition theory	Kirkevold- 4
Butler, D. (1998) The Strategic Content Learning Approach to promoting Self- Regulated learning: A report of Three Studies	2- Psychology 1-Journal	3- Descriptive Study	30 undergraduate students	1- Undergraduate Programs	The study replicated results from a previous study. The results support the use of the SCL approach promote self-efficacy and self-regulation Theories- self-efficacy, self-regulation	Kirkevold- 4
Costello, C. & Stone, S. (2012). Positive Psychology and Self-Efficacy: Potential Benefits for College Students with Attention Deficit Hyperactivity Disorder and Learning Disabilities	3- Education 1-Journal	4- Literature Review	N/A	1- Undergraduate Programs	Positive psychology shows to promote learning while having positive effects and promoting self-efficacy Theories- positive psychology theory, self-efficacy	Kirkevold- 3
Denhart, H. (2008). Deconstructing Barriers Perceptions of	2- Psychology 1-Journal	1- Qualitative	11 undergraduate students	1- Undergraduate programs	Disability theory states that perceptions of a disability are based on social constructs and the	Kirkevold- 3

Students Labeled with Learning Disabilities in Higher Education					study confirmed that student perceptions and success are influenced by social construct Theories- disability theory	

Appendix D: Literature Review- Synthesis of Evidence Table

	Design	Sample	Outcome	Quality Appraisal
Studies				**Johns Hopkins Nursing EBP Research Evidence Appraisal Tool**
Black, R., Weinberg, L., & Brodwin, M. (2015). Universal design for learning and instruction: perspectives of students with disabilities in higher education. *Exceptionality Education International, 25* (2), 1-26.	Qualitative Phenomenological approach	Urban Southern California University n= 15 12 students with learning disabilities 3 students without learning disabilities for comparison	Themes were identified which were supportive of inclusive strategies such as Universal Design Learning and Instruction	**Level III B**
Frazier, T., Youngstrom, E., Glutting, J., & Watkins, M. (2007). ADHD and achievement: meta-analysis of the child, adolescent, and adult literatures and a concomitant study with college students. Journal of Learning Disabilities, 40(1), 49-65.	Meta-analysis & Quantitative Correlational	Meta-analysis- 72 articles Quantitative correlational study 380 dyads(student/ parent)	ADHD has an effect on academic performance and achievement. Adults and teenagers appear to develop coping strategies. There is a noted correlation between inattentiveness and academic probation	**Level III A**
Murray, C., Lombardi, A., Wren, C., &	Quantitative Correlational non-experimental study	n= 198 faculty responses	Study indicated a positive correlation between positive	**Level III B**

Keys, C. (2009). Associations between prior disability-focused training and disability-related attitudes and perceptions among university faculty. ***Learning Disability Quarterly, 32,*** **87-100.**		Large urban private university	faculty perceptions and prior disability-focused training	
Sniatecki, J., Perry, H., & Snell, L. (2015). Faculty attitudes and knowledge regarding college students with disabilities. ***Journal of Postsecondary Education and Disability, 28*****(3), 259-275.**	Quantitative Non-Experimental	n=123 medium sized public university in New York	Study indicated faculty perceptions are affected by specific disability type. Faculty often lack sufficient knowledge about accommodations and university services. Faculty are interested in professional development opportunities related to teaching strategies and accommodation requirements	**Level III B**
Sowers, J., & Smith, M. (2004). Evaluation of the effects of an in-service training program on nursing faculty members' perceptions,	Quantitative Non-experimental	n= 112 8 undergraduate nursing programs	Study indicated improved perceptions, knowledge, and concerns post disability training. Most significant improvement was noted with students with	**Level III B**

knowledge, and concerns about students with disabilities. *Journal of Nursing Education, 43*(6), 248-252.			learning disabilities	

Appendix E: Gap Analysis

CURRENT PRACTICE	BEST PRACTICES	DEFICENCIES	RECOMMENDED ACTIONS
Academic Success Coach available to students and provides periodic workshops for students on study tips and test taking strategies for nursing students- Charlene Lobo.	Strategic learning courses and executive functioning coaching courses are effective methods for aiding students with learning disabilities in the development of self-management skills. These types of programs allow students to learn about learning, metacognition, organization and time management skills. (Butler, 1998; Burchard & Swerdzewski, 2009; Parker & Boutelle, 2009).	Students and faculty are not always aware of the available resources to support their academic needs and success.	Increase communication with faculty and students to increase awareness about resources and supports available. Encourage faculty to share information about workshops and resources in the classroom to encourage student participation.
Universal Design Strategies links on Student Disability Services website. SDS encourages faculty to offer all students time and half for testing in the classroom so students do not have to come to the SDS office to take their tests.	Inclusive strategies which use various teaching modalities in the classroom are more likely to create successful learning environments for students with learning disabilities. (Ijiri & Kudzma, 2000; Orr & Hammig, 2009). Universal Design and Instruction incorporates various methods of communicating information and content, while also, creating multiple opportunities to demonstrate understanding and acquisition of the information through application. (Orr & Hammig, 2009).	Faculty may or may not implement Universal Design Strategies in the classroom. Faculty may or may not be aware of the available resources related to Universal Design strategies.	Create opportunities (disability training workshop, workshops, canvas modules, and links) for faculty to learn about Universal Design Strategies and make them aware of the resources available. Encourage faculty to practice Universal Design strategies such as - Backward design - Multiple means of presentation - Inclusive teaching strategies - Inclusive assessments

	Universal Design and Instruction methods can include podcasts, interactive activities, simulation, alternate methods of assessment and evaluation. The use of these strategies increase opportunities for all learners. (Orr & Hammig, 2009).		
SDS staff report a perceived perception that university faculty in general do not value the student with a learning disability. They have not received much interest when they have participated in university outreach events- which is why they no longer do them.	Students diagnosed with a learning disability consistently reported in the qualitative and mixed studies that faculty perceptions, peer perceptions and strategies that empowered them rather than instructing them on what to do affected their self-efficacy, motivation and ability to self-regulate. (Cole & Cawthon, 2015; Denhart, 2008; Howlin et al. 2014; Orr & Hammig, 2009; Troiano, 2003). Students who had positive perceptions and positive support were more successful. This aligns with the use of theories pertaining to self-regulation, motivation and self-efficacy. (Cole & Cawthon, 2015; Denhart, 2008; Howlin et al. 2014; Orr & Hammig, 2009; Troiano, 2003).	There are currently no opportunities designed for faculty to increase empathy or understanding of the needs of students with disabilities.	Provide opportunities for faculty to understand the needs and value of students with learning disabilities through education and empathy building exercises (simulation experience).

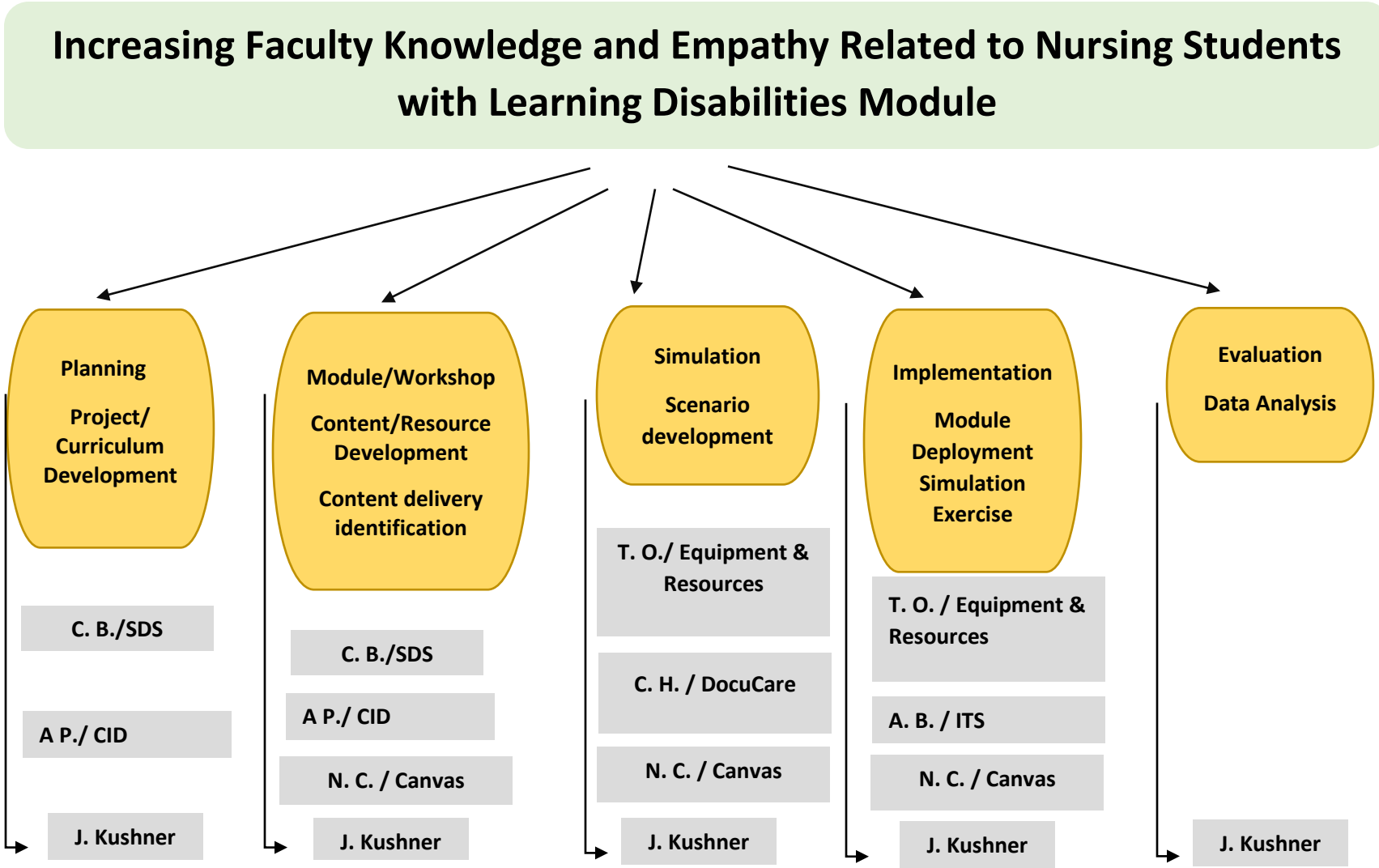
	Faculty and peer acceptance has a profound effect on their perception of self-concept and perceived ability to succeed. (Cole & Cawthon, 2015; Denhart, 2008; Howlin et al. 2014; Orr & Hammig, 2009; Troiano, 2003).		
SDS provides education and resources to faculty when they seek out assistance from the SDS office and staff.	Implementation of disability training workshops provide faculty with the knowledge and tools to use inclusive and universal design strategies. (Murray, Lombardi, Wren, & Key, 2009; Sowers & Smith, 2004).	There is no disability training currently offered to the faculty by the university.	Provide a disability training workshop or online module. Consider incorporating into new faculty orientation.

Appendix F: GANTT Chart

	Summer 2016	Fall 2016	Jan 2017	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Conduct Integrative Review	X													
Conduct Gap Analysis		X												
Conduct SWOT Analysis		X												
Develop relationship with SDS		X												
Identify workshop evaluation tool		X												
Develop relationship with education/instruction-al design department for development of Universal Design Content							X							
Develop relationship with CTE for workshop delivery method						X	X							
Obtain permission to use evaluation tool for workshop/ modify tool as needed					X									

	Summer 2016	Fall 2016	Jan 2017	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Develop outline for lesson plans					X									
Determine delivery method and upload content						X	X	X	X					
Deliver workshop/simulation to target audience										X	X			
Collect/analyze data												X		
Write Comprehensive Project Report												X	X	
Presentation													X	X

Appendix G: Work Breakdown Structure



Appendix H: Responsibility/Communication Matrix

	Deliverable	Description	Delivery Method	Frequency	Owner	Audience
Planning Meetings						
	Gap Analysis/ SWOT	meeting	In-person Email follow-up communication	Initial meeting with as needed follow-up	J. Kushner	C. B. SDS
	Gap Analysis/ SWOT	meeting	In-person Email follow-up communication	Initial meeting with as needed follow-up	J. Kushner	A. P. / Center for Instructional Design
	DNP Project Prospectus	meeting	In-person & Zoom meetings	Bi-monthly with progression to weekly	J. M.	J. Kushner
	Canvas module	meeting	In-person, Zoom & email follow-up communication	Initial meeting with as needed follow-up	J. Kushner	N. C. A. P.
	Simulation module	meeting	Zoom & email communication	Initial meeting with as needed follow-up	J. Kushner	G. C. C. H.
Implementation Process						
	Canvas & Simulation module deployment	meeting	In-person, Zoom & email follow-up communication	Initial meeting with as needed follow-up	J. Kushner	N. C. A. P.
	DNP Project	meeting	In-person & Zoom meetings	weekly	J. M.	J. Kushner

Appendix I: SWOT

Appendix J: Budget

Resource	Time/ Rate	Cost
Faculty hours for workshop development, implementation, and evaluation	325 hrs. x $50/hr.	$16,250
Meetings with stakeholders during development	1.5 hrs. x @ $50/hr. 5-6 meetings during the project	$450
Housing the Disability Workshop Module on Canvas	N/A	No cost- university already has subscription to canvas
Qualtrics Survey	N/A	No cost- university already has subscription to Qualtrics
Faculty hours for enrollment, monitoring, and evaluation of module/simulation and surveys	5-10 hrs. x $50/hr.	$500 a semester
Cost to complete module per faculty	4 hrs. X $50/hr	$200 per faculty participant/$1600 (8 faculty participated)
		Total cost $18,800

- Cost of BSN Undergraduate Tuition- $176,160/ 4 years

  $ 44,040/ 1 year

  $ 22,020/ per semester

Appendix K: ROI- Cost Avoidance

	Project Cost	**Lost Tuition (based on 4% attrition rate at SO2 progression point**	**Total Lost Tuition based on 4 %attrition rate 230/240**	**Cost Benefit Savings Based upon 1% decrease in attrition rate- retaining 3/10 students**
Year One	$18,800	$88,080 per student	$880,880	+$245,440
Year Two	$1,000 (cost for monitoring and tracking modules for 1 year)	$88,080 per student	$880,880	+$263,240
Year Three	$ 1,000 (cost for monitoring and tracking modules for 1 year)	$88,080 per student	$880,880	+$263,240
TOTAL	$20,700		$2,642,640	+$791,920

Appendix L: Break-Even Analysis

	Project Cost Implementation, Monitoring & Training for 23 faculty	Lost Tuition Based on 4% Attrition Rate 230/240	Break Even Point Student retention/ Semester tuition	Net Gain
Year One	$21,400	$880,080	1 student/ 1 semester tuition $22,020	+$620 1st student- 1st semester +$ 88,080 per additional student +$258,640 for decreasing attrition by 1% (3/10)
Year Two	$5,600	$880.080	1 student/ 1 semester tuition $22,020	+16,420 1st student- 1st semester +$88,080 per additional student +$258,640 for decreasing attrition by 1% (3/10)
Year Three	$5,600	$880,080	1 student/ 1 semester tuition $22,020	+16,420 1st student- 1st semester +$88,080 per additional student +$258,640 for decreasing attrition by 1% (3/10)
TOTAL	$32,600	$2,642,640		+$33,460- 3 students being retained one additional semester +$760,120 for decreasing attrition rate by 1% (9/30)

Appendix M: Evaluation Tool- Inclusive Teaching Strategies Inventory

The Attitudes response options range from 1 (strongly disagree) to 6 (strongly agree). Each item begins with the stem "I believe it's important to."

The Actions response options range from 1 (never) to 4 (always) with a no opportunity option. Each item begins with the stem "I do this."

Inclusive Teaching Strategies Inventory (ITSI) subscales, items, and response stems

Response Stem Attitudes: I believe it's important to…

Actions: I do…

Subscale	**Item**
Accommodations	allow students with documented disabilities to use technology (e.g. laptop, calculator, spell checker) to complete tests even when such technologies are not permitted for use by students without disabilities
	provide copies of my lecture notes or outlines to students with documented disabilities
	provide copies of my overhead and/or PowerPoint presentations to students with documented disabilities
	allow flexible response options on exams (e.g. change from written to oral) for students with documented disabilities
	allow students with documented disabilities to digitally record (audio or visual) class sessions
	make individual accommodations for students who have disclosed their disability to me
	arrange extended time on exams for students who have documented disabilities
	extend the due dates of assignments to accommodate the needs of students with documented disabilities
Accessible Course Materials	use a course website (e.g. Canvas or faculty web page)
	put my lecture notes online for ALL students (on Blackboard or another website)
	post electronic versions of course handouts
	allow students flexibility in submitting assignments electronically (e.g. mail attachment, digital drop box)
Course Modifications	allow a student with a documented disability to complete extra credit assignments
	reduce the overall course reading load for a student with a documented disability even when I would not allow a reduced reading load for another student
	reduce the course reading load for ANY student who expresses a need allow ANY student to complete extra credit assignments in my course(s)
Inclusive Lecture Strategies	repeat the question back to the class before answering when a question is asked during a class session

	begin each class session with an outline/agenda of the topics that will be covered
	summarize key points throughout each class session
	connect key points with larger course objectives during class sessions
Inclusive Classroom	use technology so that my course material can be available in a variety of formats (e.g., podcast of lecture available for download, course readings available as mp3 files)
	use interactive technology to facilitate class communication and participation (e.g., Discussion Board)
	present course information in multiple formats (e.g., lecture, text, graphics, audio, video, hands-on exercises)
	create multiple opportunities for engagement
	survey my classroom in advance to anticipate any physical barriers
	include a statement in my syllabus inviting students with disabilities to discuss their needs with me
	make a verbal statement in class inviting students with disabilities to discuss their needs with me
	use a variety of instructional formats in addition to lecture, such as small groups, peer assisted learning, and hands on activities
	supplement class sessions and reading assignments with visual aids (e.g., photographs, videos, diagrams, interactive simulations)
Inclusive Assessment	allow students to demonstrate the knowledge and skills in ways other than traditional tests and exams (e.g., written essays, portfolios, journals)
	allow students to express comprehension in multiple ways
	be flexible with assignment deadlines in my course(s) for ANY student who expresses a need
	allow flexible response options on exams (e.g., change from written to oral) for ANY student who expresses a need
Response Stem	*I am confident in*
Disability Law & Concepts	my understanding of the Americans with Disabilities Act (1990)
	my responsibilities as an instructor to provide or facilitate disability related accommodations
	my knowledge to make adequate accommodations for students with disabilities in my course(s)
	my understanding of section 504 of the Rehabilitation Act of 1973
	my understanding of Universal Design
	my understanding of the legal definition of disability

Lombardi, A., Vukovic, B., & Sala-Bars, I. (2014).

Appendix M: Evaluation Tool- Inclusive Teaching Strategies Inventory

Communication Giving Permission to Use ITSI

cjmurray <cjmurray@uoregon.edu> Mar 28

to **Allison**, me

Hi Jodi, Yes you have our permission. I assume you have a copy of the measure items from an article but please let me or Allison know if you don't. Also, Allison has another measure related to the same topic that she'll send you too. We wish you the best with your work!

Chris

Christopher Murray

541-221-1256

Appendix N: Modified Kiersma-Chen Empathy Scale

The Kiersma-Chen Empathy Scale

The following questions pertain to your attitudes and feelings toward [insert patient group here]. Please mark the number on the scale below that indicated your level of agreement or disagreement with each statement, where 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neutral, 5=somewhat agree, 6=agree, and 7=strongly agree.

1. It is necessary for a faculty to be able to comprehend someone else's experiences.
2. I am able to express my understanding of someone's feelings.
3. I am able to comprehend someone else's experiences.
4. It is necessary for faculty to be able to express an understanding of someone's feelings.
5. It is necessary for faculty to be able to value someone else's point of view.
6. I believe that caring is essential to building a strong relationship with students.
7. I am able to view the world from another person's perspective.
8. Considering someone's feelings is not necessary to provide student-centered learning.
9. I am able to value someone else's point of view.
10. I have difficulty identifying with someone else's feelings.
11. To build a strong relationship with students, it is essential for faculty to be caring.
12. It is necessary for faculty to be able to identify with someone else's feelings.
13. It is necessary for faculty to be able to view the world from another person's perspective.

(Kiersma & Chen, 2015)

Narrative Questions added to post-simulation modified KCES:

1. As a result of participating in the Disability Training: Learning Disabilities simulation experience and modules how has your understanding, awareness, or perception of individuals with learning disabilities changed?

2. As a result of participating in the Disability Training: Learning Disabilities what changes or strategies do you anticipate implementing with your students?

Appendix N: Modified Kiersma-Chen Empathy Scale

Communication Giving Permission to Use KCES

Chen, Aleda M <amchen@cedarville.edu> Sep 23

to **Mary**, me

Jodi,

This sounds like an interesting project!

We are happy to share the KCES with you. This email serves as your permission to use it. I have attached a copy of the KCES (modifiable so you can adjust as noted above) and scoring instructions.

We do ask that you share the KCES data (de-identified) for further scale validation (if possible) as well as cite us in any manuscript or publication.

Please let me know if you have any questions.

Thanks,
Aleda
--

Aleda M. H. Chen, PharmD, PhD
Assistant Dean, Associate Professor of Pharmacy Practice,
Community Pharmacy Practice Research Fellowship Director
School of Pharmacy
Cedarville University
o: 937-766-7454
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Appendix O: Disability Training Data Analysis

Disability Training Means

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PreAccomodations	49.3750	8	7.59582	2.68553
	PostAccomodations	50.8750	8	5.96268	2.10813
Pair 2	PreAccessibleCM	26.3750	8	1.50594	.53243
	PostAccessibleCM	27.8750	8	.35355	.12500
Pair 3	PreCMods	9.3750	8	4.50198	1.59169
	PostCMods	13.3750	8	6.58868	2.32945
Pair 4	PreInclusiveST	26.8750	8	1.55265	.54894
	PostInclusiceSt	27.6250	8	1.06066	.37500
Pair 5	PreInclusiveClass	56.0000	8	7.52140	2.65922
	PostInclusiceClass	59.2500	8	6.29626	2.22606
Pair 6	PreInclusiveAssessment	22.5000	8	5.01427	1.77281
	PostInclusiveAssessment	24.7500	8	4.68280	1.65562
Pair 7	PreDisabilityLaws	27.7500	8	8.46421	2.99255
	PostDisabilityLaws	38.1250	8	5.02671	1.77721

Simulation Experience Means

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Presimulation	78.2500	8	4.97853	1.76017
	Postsimulation	81.7500	8	9.37702	3.31528

Appendix O: Data Analysis

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PreAccomodations - PostAccomodations	-1.50000	2.39046	.84515	-3.49847	.49847	-1.775	7	.119
Pair 2	PreAccessibleCM - PostAccessibleCM	-1.50000	1.41421	.50000	-2.68231	-.31769	-3.000	7	.020
Pair 3	PreCMods - PostCMods	-4.00000	4.37526	1.54689	-7.65780	-.34220	-2.586	7	.036
Pair 4	PreInclusiveST - PostInclusiceSt	-.75000	1.90863	.67480	-2.34565	.84565	-1.111	7	.303
Pair 5	PreInclusiveClass - PostInclusiceClass	-3.25000	5.87367	2.07666	-8.16051	1.66051	-1.565	7	.162
Pair 6	PreInclusiveAssessment - PostInclusiveAssessment	-2.25000	1.83225	.64780	-3.78180	-.71820	-3.473	7	.010
Pair 7	PreDisabilityLaws - PostDisabilityLaws	-10.37500	8.60129	3.04101	-17.56586	-3.18414	-3.412	7	.011

Appendix O: Data Analysis

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Presimulation - Postsimulation	-3.50000	5.92814	2.09591	-8.45605	1.45605	-1.670	7	.139

Appendix O: Data Analysis- Pre and Post Disability Training Data Scores

ITSI Subset Categories	Pre-Disability Training	Post-Disability Training	Percentage Score	Average	Mean	Total Score
Accommodations	Disagree 2	407	91%	50.87	56	448
Accessible Course Materials	Strongly agree 7	223	99.5%	27.87	28	224
Course Modifications	Agree 6	107	63.6%	13.37	14	168
Inclusive Strategies	Agree 6	221	98.6%	27.62	28	224
Inclusive Classroom	Strongly Agree 7	474	94%	59.25	63	504
Inclusive Assessment	Strongly Agree 7	198	88.39%	24.75	28	224
Disability Laws and Concepts	Strongly Agree 7	305	91%	38.12	42	336

Pre-Disability Training Survey Data- Actions

IITSI Subset Categories	Pre-Disability Training	Percentage Score	Average	Mean	Total Score
Accommodations	266	83.12%	33.25	37	320
Accessible Course Materials	152	95%	19	19	160
Course Modifications	48	40%	6	7	120
Inclusive Strategies	139	86.87%	17.37	16	160
Inclusive Classroom	298	82.77%	37.25	40	360
Inclusive Assessment	95	59.37%	11.87	15	160

Appendix P: Simulation Experience Scenario

SECTION I: SCENARIO OVERVIEW

Scenario Title:	Disability Training: Learning Disabilities Medication Administration for Faculty using DocuCare					
Original Scenario Developer(s):	Jodi Kushner MSN, RN, CHSE (George Jones patient adopted from USF Repository-original developer Janice Mark DNP, RN)					
Date - original scenario	9/26/17					
Validation date: 9/26/17 & 9/28/17		Draft	X	Pilot	X	Approved
Revision Dates:						

Estimated Scenario Time: 30 minutes

Debriefing time: 30-45 minutes

Target group: Faculty

Core case – George Jones- USF SO2 Simulation Set 1 patient

Brief Summary of Case: Faculty are given access to patient George Jones in DocuCare. Faculty are shown where Mar and orders are located and then are given 4 minutes to administer the 9am medications. Faculty are briefly debriefed and provided with a demonstration and instructions on how to use and navigate DocuCare. They are allowed to practice and ask questions. Faculty are then instructed to administer the nighttime medications in 4 minutes.

EVIDENCE BASE / REFERENCES *(List all references include complete citation, following APA guidelines)*
Bandura, A. (1989). Regulation of the cognitive process through perceived self-efficacy. Developmental Psychology, 25 (5), 729-735. Retrieved from Scopus.http://0-psycnet.apa.org.ignacio.usfca.edu/journals/dev/25/5/729.pdf&productCode=pa.
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Kolb, A., Kolb, D., Passarelli, A., & Sharma, G. (2014). On becoming an experiential educator: The educator role profile. *Simulation & Gaming, 45*(2) 204-234. Retrieved from FUSION. DOI: 10.1177/1046878114534383.
Murray, C., Lombardi, A., Wren, C., & Keys, C. (2009). Associations between prior disability focused training and disability-related attitudes and perceptions among university faculty. *Learning Disability Quarterly, 32*, 87-100. Retrieved from ERIC. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=eric&AN=EJ867496&site=ehost-live&scope=site.
Orr, A. & Hammig, S. (2009). Inclusive postsecondary strategies for teaching students with learning disabilities: a review of the literature. *Learning Disability Quarterly*, *32*, 181- 196. Retrieved from CINHAL. http://0search.ebscohost.com.ignacio.usfca.edu/login.aspx?direct=true&db=ccm&AN=105428249&site=ehost-live&scope=site main.pdf?_tid=c57931ba-5f56-11e6-a6b8-00000aacb361&acdnat=1470873876_192d96f554c44868028e62426eec4e66.
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Sniatecki, J., Perry, H., & Snell, L. (2015). Faculty attitudes and knowledge regarding college Students with disabilities. *Journal of Postsecondary Education and Disability, 28*(3), 259-275. Retrieved from ERIC. http://files.eric.ed.gov/fulltext/EJ1083837.pdf.

SECTION II: CURRICULUM INTEGRATION

A. SCENARIO LEARNING OBJECTIVES
1. Learning Outcomes (Global)
1. Demonstrate understanding of the unique challenges experienced by students with learning disabilities.
2. Demonstrate understanding of effects of Universal Design Strategies on student learning.
3. Identify strategies used in the simulation experience that were discussed in the Disability Training Module.
2. Specific Learning Objectives
1. Identify the use of Universal Design Strategies used during the simulation experience.
2. Identify barriers to learning and completing the assigned task.
3. Effectively administer medications within the prescribed amount of time.
4. Identify the emotional effects of the learning environment on learning
5. Identify ways to facilitate learning for all learners
3. Critical Elements (Key points to observe to determine if scenario objectives are met)
1. Medications are effectively administered in the second medication pass.
2. Participants identify barriers to learning and completing the task in debriefing.
3. Participants identify Universal Design Strategies used in the simulation experience during debriefing.

B. PRE-SCENARIO LEARNER ACTITIVIES	
Prerequisite Knowledge Required prior to participating in the scenario	
Psychomotor Competencies	Cognitive competencies:
❑ none	❑ completed Disability Training: Learning Disabilities Module
❑	❑

SECTION III: SCENARIO SCRIPT

A. Case summary
Faculty are given access to patient George Jones in DocuCare. Faculty are shown where Mar and orders are located and then are given 4 minutes to administer the 9am medications. The Facilitator leaves the room for 2.5-3 minutes. Upon return refuses to answer any questions or solicitations for help. Faculty are briefly debriefed and provided with a demonstration and instructions on how to use and navigate DocuCare. They are allowed to practice and ask questions. Faculty are then instructed to administer the nighttime medications in 4 minutes. The Facilitator remains in the room and available to help if needed during the second medication administration.

B. Key contextual details
Key Debriefing Points- 1. Ask participants to identify how medication administration experiences were different 2. Ask participants to identify the emotions associated with each experience. Discuss how those emotions are linked to the learning environment. Ask participants to identify with their emotions and imagine how a student with a learning disability must feel. 3. Ask participants to identify Universal Design Strategies used in the simulation experience and how these affected the learning process 4. Ask participants to identify "something not right" on the MAR referring to the Namenba spelling. Discuss the challenge with dyslexic students face is not matching items- because they appear identical to them regardless of the location, but rather identifying words that they have never heard and seen together before. This is due to difficulty with phonological awareness.

C. Scenario Cast		
Patient/ Client	❑ Human Patient Simulator (SimMan®, SimBaby®, ECS®, HPS®)	
	❑ Standardized Patient	
	❑ Low-mid fidelity manikin	
	❑ Hybrid (Blended simulator)	
	DocuCare patient chart- George Jones	
Role	Brief Descriptor (Optional)	Confederate (C) or Learner (L)
facilitator		

D. Patient/Client Profile				
Last name:	Jones	First name:	George	
Gender: m	Age: 86	Ht: 70 inches	Wt: 160.3 lbs	BMI:
Ethnicity: Caucasian		Religion: Catholic		Widowed
1. History of present illness				
Admitted for Cellulitis, Failure to thrive, and dehydration Hx: Parkinson's, MI				
Primary Medical Diagnosis	Cellulitis (MRSA) right thigh			

2. Review of Systems			
CNS			
Cardiovascular			
Pulmonary			
Renal/Hepatic			
Endocrine			
Heme/Coag			
Musculoskeletal			
Integument			
Developmental Hx			
Psych History			
Social History			
Alternative/ Complementary Medicine History			
Medication allergies:	PCN	Reaction:	Rash, difficulty breathing
Food/other allergies:		Reaction:	

3. Current medications	Drug	Dose	Route	Frequency
	acetaminophen	650 mg	po	Every 6 hours PRN Temp greater than 100.6 or headache
	aspirin	81 mg	po	Once daily in am 0900
	celecoxib	100 mg	po	BID 0900 and 2100
	D51/2 Normal Saline	75ml/hr	IV	cont.
	digoxin	0.125mcg	po	Once daily 1800
	docusate calcium	100 mg	po	Once daily HS 2100
	enoxaparin sodium	40 mg	sq	Once daily 0900
	furosemide	20 mg	po	BID 0900 2100
	levodopa-carbidopa	25/100mg	po	TID 0600 1400 2200
	Levothyroxine sodium	150 mcg	po	Once daily in am before breakfast 0700
	Lisinopril	20 mg	po	Once daily 0900 hold for sbp bp less than 110
	magnesium citrate	30mL	po	PRN for constipation
	namenba	10 mg	po	BID 0900 2100
	olanzapine	10 mg	po	Once daily HS
	oxycodone hydrochloride	5 mg	po	1 tab every 4 hours PRN pain 0-5/10, 2 tabs every 4 hours PRN 6-10/10
	Pantoprazole sodium	40 mg	po	Once daily in am before breakfast 0700
	simvastin	10 mg	po	Once daily HS 2100
	Vancomycin hydrochloride	1 gram	IVPB	Once daily 2200 pharmacy to adjust dosing per peak and trough results

4. Laboratory, Diagnostic Study Results Highlighted labs added at the suggestion of Maternal Child faculty template reviewer				
Na:135	K:5.0	Cl:108	HCO3:	BUN:34
Cr:1.7	BS:104	HgA1C:		
Hgb:9.9	Hct:30.3	Plt:268	WBC:17.1	
PT	PTT	INR	RBC: 3.5	
ABG-pH:	paO2:	paCO2:	HCO3/BE:	SaO2:
Ca:	Mg:	ABO Blood Type:		
LFTs:	Albumin:	SGOT:	SGPT:	AlkPhos:
VDRL:	GBS:	Herpes:	HIV:	Herpes:
CXR:		ECG:		
CT:		MRI:		

E. Baseline Patient/Client Simulator State This may vary from the baseline data provided to learners					
1. Manikin physical appearance - Mark X next to item and/or describe					
Gender:	Male				
Attire:	Hospital gown				
X	ID band present, accurate information		ID band present, inaccurate information		ID band absent or not applicable
	Allergy band present, accurate information		Allergy band present, inaccurate information		Allergy band absent or not applicable
Alterations in appearance (moulage):					

2. Initial Vital Signs Monitor display in simulation action room: (Should be appropriate for the scenario setting)							
	No monitor display		Monitor on, but no data displayed		Monitor on, standard display		
BP: 144/88	HR:98	RR:20	T:99.8	SpO2:95% RA			
CVP:	PAS:	PAD:	PCWP:	CO:			
AIRWAY:							
FHR:							

Lungs: Sounds/mechanics	Left:	Right:
Heart:	Sounds:	
	ECG rhythm:	
	Other:	
Bowel sounds:		Other:

3. Intravenous lines - INITIAL manikin set up									
	Saline lock #1	Site:							IV patent (Y/N)
	IV #1	Site:		Fluid type:		Initial rate:			IV patent (Y/N)
	Main								
	Piggyback								
	IV #2	Site:		Fluid type:		Initial rate:			IV patent (Y/N)
	Main								
	Piggyback								

4. Non-invasive monitors – INITIAL manikin set up					
	NIBP		ECG First lead:		ECG Second lead:
	Pulse oximeter		Temp monitor/type		

5. Hemodynamic monitors- INITIAL manikin set up					
	A-line Site:		Catheter/tubing Patency (Y/N)	CVP Site:	PAC Site:

6. Other monitors/devices						
	Foley catheter	Amount in drainage bag:		Appearance of urine:		
	Epidural catheter		Infusion pump Pump settings:			
	Fetal Heart rate monitor/tocometer		Internal		External	

7. Digital images of initial manikin appearance	
Insert digital photo of initial manikin appearance here	**Insert digital photo of initial manikin appearance here**

F. Environment, Equipment, Essential props Standardized set ups for equipment/supplies for each commonly simulated environment is recommended	
1. Scenario setting	
	Medical-Surgical Unit Patient Room
	Pediatric Unit Patient Room
	Perinatal Unit Room
	ICU Patient Room
	PICU Patient Room
	NICU Patient Room
	ED Bay
	Trauma Bay (ED)
	Labor & Delivery Room
	Labor & Delivery Operating Room
	Operating Room

	Home Health
	Out-patient clinic
	Pre-Hospital
X	Other: DocuCare- patient chart

2. Confederate placement - INITIAL scenario set up	
Role	▪ General instructions (Initial placement and disposition) ▪ Key actions to implement triggers for learner

4. Respiratory therapy equipment/devices							
	Nasal cannula		Face tent		Simple Face Mask		Non rebreather bask
	BVM/Ambu bag		Nebulizer treatment kit		Flowmeters (extra supply)		

5. Essential props/special effects

6. Documentation and Order Forms							
	H & P		Consult reports		Nurses notes		
	Admit Orders		Vital Sign record		Triage forms		
	Physician orders		ICU flowsheet		Code Record		
	Progress notes	X	Medication Administration Record		Anesthesia/ PACU record		
	Laboratory results		Graphic record		Standing (protocol) orders		
	Medication reconciliation		Activity forms				

	Transfer orders		Shift assessment		Prenatal record		
	Actual medical record binder, constructed per institutional guidelines				Other Describe:		

7. Medications (to be available in sim action room)							

CASE FLOW / TRIGGERS/ SCENARIO DEVELOPMENT STATES				
Initiation of Scenario: Participants are welcomed to the simulation experience and told the objectives of the experience. Place participants on computers with their patient chart pulled up in DocuCare. Instruct participants that they will be administering medications via DocuCare. Show participants where the MAR and orders are in DocuCare.				
STATE	**PATIENT STATUS**	**DESIRED LEARNER ACTIONS & TRIGGERS TO MOVE TO NEXT STATE**		
1. Baseline George Jones chart is open for each participant. "Administer 9am medications. You have 4 minutes." Is written on the white board- no further instructions are given.		**Learner Actions:** Opens MAR and administers medications using the printed medication barcode sheet to verify patient identification **Time limit- 4 minutes**	**Operator:** Facilitator leaves room for 2.5 -3 minutes **Triggers:** Refuses to help or answer any questions if asked	**Teaching Points:** Ask participants to write down the number of medications administered and how they felt during the process**.**
STATE	**PATIENT STATUS**	**DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE**		
2. George Jones chart remains open for each participant DocuCare is pulled up on the projector in the room. A DocuCare tutorial is provided related to medication administration. Participants are given		**Learner Actions:** Participants follow along with the tutorial	**Operator:** Inquires if participants are comfortable and ready to move on. Participants are instructed to administer a PRN medication for practice	**Teaching Points:**

step by step instructions for medication administration and the barcode sheets are explained.			**Triggers:** Facilitator answers questions and asks if there are any questions	
3. George Jones chart remains open. "Administer the nighttime medications to include the 9pm medications. You have 4 minutes" is written on the white board.		**Learner Actions:** Opens MAR and administers medications using the printed medication barcode sheet to verify patient identification **Time limit- 4 minutes**	**Operator:** Remains in room and available to help if needed **Triggers:**	**Teaching Points:** Participants are asked to write down how many medications they administered and how they felt during the experience
STATE	**PATIENT STATUS**	**DESIRED ACTIONS & TRIGGERS TO MOVE TO NEXT STATE**		
4.		**Learner Actions:**	**Operator:** **Triggers**	**Teaching Points**
SCENARIO END POINT: **COMPLETION OF THE SECOND MEDICATION ADMINISTRATION**				
SUGGESTIONS TO INCREASE OR DECREASE SCENARIO COMPLEXITY: **DECREASE OR INCREASE THE AMOUNT OF TIME AND MEDIATIONS REQUIRED TO BE ADMINISTERED**				