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Heather Marie Van Housen
University of San Francisco, hmvanhousen@usfca.edu

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The Dedicated Education Unit: Increasing Capacity and Confidence

Heather Van Housen, MSN, RN, NEA-BC

University of San Francisco

Committee Chair: Elena Capella, EdD,

Committee Member: Nicholas Webb, DNP, ESQ

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The Dedicated Education Unit: Increasing Capacity and Self-Efficacy

Abstract

Background: In the American Association of Colleges of Nursing (AACN) 2020 annual survey, nursing schools turned away 66,274 entry-level applications to baccalaureate nursing programs in the United States due to a faculty shortage and clinical placement sites (AACN, 2021).

Local Problem: Hospitals need more qualified nurses to meet community needs. The need for clinical faculty and additional clinical placement sites disrupts the workforce pipeline through local nursing schools. A new approach to clinical education is needed to prepare more students for the growing complexities of independent nursing practice.

Methods: Dedicated Education Unit (DEU) implementation to expand pre-licensure nursing student clinical placement. Pre-and post-intervention survey instruments assessed students' and new clinical instructors' perceived self-efficacy and confidence.

Interventions: New clinical instructors were trained on the DEU model, emphasizing Quality and Safety Education for Nurses (QSEN) competencies and team processes. Following the training, students and clinical experience participated in a 14-week clinical experience in the DEU model.

Results: The post-intervention survey showed increased student-perceived self-efficacy and confidence in managing clinical quality, safety, and team processes related to their experience in the DEU.

Conclusion: The DEU model creates a cost-effective alternative to traditional clinical instruction.

Keywords: *dedicated education unit, nurse, nursing, nursing student, academic, self-efficacy, confidence, clinical instructor*

The Dedicated Education Unit: Increasing Capacity and Confidence

Background

In 2020, nursing schools turned away 66,274 entry-level applications to baccalaureate nursing programs in the United States due to a faculty shortage and clinical placement sites (American Association of Colleges of Nursing [AACN], 2021). While the interest in nursing education grew throughout the pandemic, 76,140 qualified entry-level baccalaureate applicants were turned away in 2021, a 15% increase over 2020 (AACN, 2022). In a recent research report, Spetz et al. (2021) assessed the supply and demand for registered nurses (RNs) in California to determine the effect of the COVID-19 pandemic on the current and future nursing workforce. The authors projected an acute shortage of nurses over the next five years, attributable to older RNs leaving or intending to leave the workforce, increased unemployment of younger nurses, and decreased undergraduate nursing education enrollment due to disruption from the COVID-19 pandemic. These changes have led to a reduced supply of RNs relative to previous projections. A shortage is anticipated until 2026, contingent on a projected increase in RN education enrollments beginning in the 2022-2023 academic year (Spetz et al., 2021).

The aging population and the growing number of persons with chronic diseases will exacerbate the need for nurses. Healthcare workforce development efforts will require intervention and innovation at every level of education and training, beginning with exposure to health-related occupations in junior high and high school. The future will require partnerships between schools of nursing and healthcare organizations to expand opportunities for nursing students to obtain clinical experience (National Academy of Medicine, 2021).

In an updated forecast of the nurse workforce in California, Spetz et al. (2022) estimated that the statewide gap in registered nurses is temporary as nursing school enrollments are

projected to outpace pre-pandemic levels. This increase over the next two years will mitigate the state's registered nursing shortage by 2029. However, there is a regional variation to the statewide nursing shortage, and some regions of California continue to be impacted by too few registered nurses. Central California has a longstanding nursing shortage, with an increasing need forecast for the coming years (Spetz et al., 2018). Analyzing data from a California Board of Registered Nurses (BRN) 2016 survey and the 2015-2016 BRN annual schools report, Spetz and colleagues, in the same 2018 report, forecast the RN workforce gap for California's Central Valley to be as high as 17.3% in 2035. Predictions were based on regional population growth, higher healthcare demands of an increase in insured persons following the 2010 Affordable Care Act, and the educational capacity of the area to produce new RN graduates (Spetz et al., 2018). The projected shortage represents an RN labor gap of 1000 to 5000 full-time equivalents.

Nursing program enrollment is based on several factors, including the number of clinical placement sites and the availability of qualified clinical faculty. In recent years, bedside RN wages have outpaced nursing faculty wage increases. This compensation gap may hinder the number of nurses leaving bedside practice to become clinical faculty. As a result, nursing program enrollment dependent on clinical faculty coverage is capped, deepening the nursing shortage (Spetz et al., 2018).

Problem Description

The current clinical experience for pre-licensure nursing students across the United States uses a longstanding clinical placement model. The clinical faculty of local nursing schools oversee up to ten nursing students each during a clinical day. The designated clinical faculty is responsible for providing student feedback and evaluating each student throughout their clinical experience. Each nursing student is assigned to an available staff nurse for a day of clinical

instruction; sequential assignments are made with staff nurses in different units throughout the hospital. The student may be paired with a new nurse each clinical day. A systematic review of the literature by Leighton et al. (2021) produced 118 articles for full-text review. A review of the studies produced insufficient evidence to support traditional clinical learning.

In the current clinical placement model, the staff nurses allow the students to participate in patient care within the limitations of the student role. In some instances, student nurses are viewed by the clinical team as an "extra set of hands" to complete tasks, as the assigned staff nurse may be unaware of the student's clinical learning objectives. With daily rotation through assignments and no continuity in student nurse and staff nurse assignments, disconnects arise between student-planned clinical goals and daily experience. The perceived randomness of assignments and variability of experience inhibits the development of a mentoring relationship conducive to oversight and meaningful feedback (Leighton et al., 2021).

The sponsoring organization for this DNP project is in one of the geographic regions in California with the most acute need for RNs. In November 2021, the organization's three hospitals had 195 open RN positions out of 700. These vacancies were filled with contracted travel and agency staff, resulting in a monthly payroll increase of $6 million. After a year of aggressive recruitment and retention efforts in 2022, the three hospitals had 101 open RN positions filled with contract labor as of February 2023. Regional development and innovation to prepare an adequate nursing workforce to serve the needs of the Central Valley region are critical to the local community's healthcare services and economic stability.

Setting

The project setting is a network of three faith-based community hospitals of various sizes and services in Central California. The largest is a 254-bed general acute care facility, a tertiary care referral center for the other two hospitals. The second hospital is a 150-bed community hospital, with 50 beds serving as a long-term care unit. The third hospital is a 25-bed critical access hospital affiliated with several rural health clinics. The hospitals are non-union, non-teaching facilities that operate within a multi-state health system.

The organization's mission is to be an integral component in the well-being of its community. This commitment manifests in deep community partnerships that extend beyond healthcare provision. As a large employer in the community, the organization also acknowledges its economic and social responsibility to its employees and families. The organization's strategic support for education at all levels (early childhood, technical, vocational, and advanced degrees) is one element of an expansive view of community well-being.

The organization benefits from strong academic partnerships with local nursing schools. Through a combined Advisory Council, the nursing schools and the local healthcare agencies collaborate to reduce redundancy for students progressing along healthcare career paths. Transparency in grant funding applications and intentionality in using funds elevates clinical learning and benefits all sites. For example, recent funding awarded to the local state university will be used for a shared simulation center.

In the past, academic-industry partnerships increased local nursing school enrollment. One such collaboration provided funding to support adding one clinical faculty in the local hospitals, enabling ten more students to be enrolled for clinical experience. The new Healthcare Workforce Development Steering Committee, a community collaboration to increase the pipeline

of entry-level healthcare workers, started in January 2022 to address the growing need for qualified healthcare professionals. Healthcare industry leaders such as hospital CEOs and college presidents serve on the Steering Committee. Exploration of new academic-industry collaborations is one of the committee's stated objectives.

Even with these strengths, the healthcare workforce in the Central Valley region was heavily impacted by the COVID-19 pandemic. The county used its Coronavirus Aid, Relief, and Economic Security (CARES) Act dollars for nearly a year to fund staffing the acute care hospitals with RN travelers trained in critical care. Emergency funding for these and similar resources are no longer available, destabilizing the RN workforce. This instability in the clinical workforce puts the organization's safety designations at risk, including Leapfrog Top Hospital, American Heart Association designations, disease-specific accreditations from The Joint Commission, and the California Awards for Performance Excellence distinction.

The Leapfrog Group, a nonprofit self-described "watchdog organization" for patient safety, quality, and transparency, gives healthcare purchasers and consumers data to make informed healthcare decisions (Leapfrog Group, 2022). A ten-time recipient of the Leapfrog Grade A designation, the organization is considered the community choice for healthcare. This consistently high rating year over year demonstrates the organization's commitment to patient safety. However, instability in the organization's nurse workforce puts this reputation at risk. Nurse leaders are forced to staff units with temporary contracted nurses who are not invested in the hospital's strategic vision or community well-being.

The current clinical faculty-to-student-nurse ratio is one clinical faculty to ten students. Ninety students and nine faculty members rotate through the largest of the three hospitals and other local healthcare facilities. Before this project, no students or clinical faculty were placed in

a clinical experience at the two smaller hospitals. The local community college school of nursing depends on community support for additional clinical faculty to add capacity and expand opportunities for student nurse clinical experience.

The project intended to expand nursing student clinical placement across the three hospitals. In the DEU model project, current hospital-employed staff nurses are trained to support two students each in a clinical experience rotation. This enables all three sites to expand clinical instructor oversight and increase nursing student clinical placement. Historically, the 25-bed critical access hospital did not have the patient volume to support a full-time clinical faculty placement in the traditional model; however, developing existing staff into clinical instructors made it practical to conduct nursing student clinical experience in that small hospital.

Specific Aim (Purpose)

The project aimed to train staff nurses as clinical instructors in Quality and Safety Education for Nurses (QSEN) competencies and team processes to expand clinical placements of student nurses. The project employed the DEU model to achieve two specific aims. The first aim was to increase instructor confidence in providing clinical learning-related quality, safety, and team processes by 10%. The second aim was to increase students' perceived self-efficacy and confidence in managing clinical quality, safety, and team processes by 10%. The target date to achieve both aims is within four months of implementation, ending December 2022.

Available Knowledge

PICO(T) Question

In prelicensure nursing programs (P), how would implementing training on quality, safety, and team processes for staff nurses to become clinical instructors for a Dedicated Education Unit (I), compared with the traditional clinical education model (C), improve student and staff nurse self-efficacy and confidence in the clinical learning experience related to patient safety, quality, and team process (O) by December 2022 (T)?

Search Methodology

The initial search of three electronic databases, CINAHL, PubMed, and SCOPUS, using the keywords *dedicated education unit* and *nurs**, and limited to publications from 2016-2021, produced 843 results. A subsequent search added the Boolean operator AND, the search term *academic*, and the filters *peer-reviewed research articles*, *final publication*, and *English*. These modifiers refined the results to 97 studies. The results were downloaded into a Microsoft Excel spreadsheet. After removing 28 duplicates, the titles and abstracts of the remaining 69 studies were reviewed for relevance to this project's inclusion criteria: acute care setting, prelicensure nursing students, self-efficacy, competency, and confidence. Thirteen of the 69 studies met the inclusion criteria and were selected for appraisal. During project implementation, three newly published studies were identified using the same search methodology that met the inclusion criteria and were added to the review. Evidence was evaluated using the Johns Hopkins Nursing Evidence-Based Practice Model (JHNEBP) and tools (Dang & Dearholt, 2018). The quality of evidence related to this practice change consisted of six Level II quasi-experimental studies, seven Level III nonexperimental studies, and three Level V quality improvement projects (see Appendix A for the Evidence Evaluation Table).

Integrated Review of the Literature

Three themes informing the project emerged from the evidence reviewed: self-efficacy, clinical learning and competency, and transition to professional practice.

Self-Efficacy

In a quantitative, quasi-experimental study by George et al. (2017), 193 baccalaureate nursing students participated in clinical experiences at one of three clinical sites. One site was modeled on a DEU, while the other two followed the traditional clinical experience model. This Level II-A study compared self-efficacy ratings of the students' pre- and post-clinical experiences. Students completed a pre-and-post clinical experience survey with content adapted from the Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995).

They used an independent *t*-test to analyze the composite self-efficacy scores of both student groups before clinical placement, allowing the researchers to determine the equality of the groups concerning self-efficacy before clinical experience. Results immediately following clinical experience showed that students who participated in the DEU had higher composite mean self-efficacy scores that were statistically different (t=2.93, DF=189, p=0.004) than participants in the traditional clinical experience. While the post-clinical self-efficacy scores increased for all students regardless of clinical placement, the DEU student group had a greater effect size than the students in the traditional clinical setting. The DEU student group increased self-efficacy scores with an effect size exceeding 0.60, considered medium. The traditional clinical experience group’s self-efficacy score increased with a small effect size of 0.38. This finding represents a significant difference between the two groups' self-efficacy ratings following the clinical experience. The DEU results in a more substantial increase in student self-efficacy scores.

The study design used a pre-and post-clinical survey to assess students' self-reported self-efficacy, providing support for using a pre-and post-survey design to evaluate the impact of the intervention in the proposed DNP project. This study's Adapted Generalized Self-Efficacy scale is a validated, widely used tool to assess self-efficacy across many study settings. The DNP project uses this scale to assess participating clinical instructors and students.

In exploring the impact of different clinical education models, Plemmons et al. (2018) studied 272 entry-level baccalaureate nursing students. Using Albert Bandura's Social Learning Theory as a conceptual framework, this quasi-experimental approach explored students' perceived clinical self-efficacy and attitudes toward the team process before and after the clinical experience. The Generalized Self-Efficacy Scale and the TeamSTEPPS© T-TAQ, both valid and reliable tools, were used in this study. Participants in the DEU model units reported higher self-efficacy toward team processes than students in the traditional clinical education model. The use of Bandura's Social Learning Theory and the deployment of the Generalized Self-Efficacy scale align with this DNP project's proposed intervention. While the DNP project will not measure student or instructor attitudes, the findings of this study about team processes will be used to inform the design of the project's planned clinical instructor training.

In a Level V-B longitudinal study, Vnenchak et al. (2019) observed statistically significant findings for 17 senior baccalaureate nursing students in a DEU on critical thinking scores, anxiety levels, self-efficacy, and self-confidence in clinical decisions, as compared to baccalaureate nursing students in the traditional clinical model. As determined by Cronbach alpha, four validated instruments with high internal reliability were used to measure student perception of self-efficacy, critical thinking, confidence, and anxiety. These tools were the Generalized Self-Efficacy Scale, the Health Education System Inc. (HESI) Critical Thinking

Exam, the Casey-Fink Graduate Nurse Experience Survey, and the Nurse Anxiety and Self Confidence with Clinical Decision-Making Scale (NASC-CDM). The assessments were repeated with the same students at set intervals (baseline, graduation, six months post-graduation, and 12 months post-graduation). Pairwise time comparisons from the Nurse Anxiety and Self-Confidence with Clinical Decision-Making (NASC-CDM) indicated a statistically significant difference in anxiety from baseline to 12 months post-graduation ($p<.05$). Self-confidence results from pairwise comparison showed a substantial increase between baseline and graduation ($p<.001$) for DEU clinical participants. Finally, students' self-efficacy, as measured by the Generalized Self-Efficacy Scale, improved from baseline to 12 months after graduation. This improvement reached statistical significance in the timeframe from baseline to graduation. These findings support using the Generalized Self-Efficacy Scale to assess nursing students' self-efficacy in the DNP project DEU education model.

Williams et al. (2021) explored students’ and preceptors’ perceptions of their experiences with the DEU model in clinical education. The study was mixed methods, with an online survey and semi-structured focus group interviews. Two valid and reliable tools were used with permission of their author: the Student Clinical Learning Culture (SCLC) and the Support Instrument for Nurses Facilitating the Learning of Others (SINFLO). The SCLC is a 21-item Likert scale tool with four subscales: staff engagement, student motivation, student satisfaction, and student dissatisfaction. SINFLO is a 17-item Likert scale tool used to measure nurses' perceptions of support level when engaged in students' learning. Both instruments demonstrated high internal reliability by Cronbach alpha and independent *t*-test. Content analysis of focus group interviews consisted of audiotape transcription with repeated reading to identify themes.

Once data saturation was achieved, three themes emerged: (a) student attitudes toward learning, (b) preceptors' understanding of their role, and (c) improving the student experience.

The findings of this study informed the DNP project plan by quantifiably demonstrating a preceptor's needs for sufficient support, time to facilitate learning, and assistance with the workload when assigned to a student for clinical experience. The findings incorporated into the DNP project included the preparation of the clinical instructors through training to increase their knowledge, skill, and attitudes in providing clinical instruction. The second recommendation adopted from this study is to assign a lower number of patients to the clinical instructor during times of student instruction. Finally, the DNP project adopted the authors' recommendation to match clinical instructors with the same students for the duration of the semester for consistency in feedback and learning.

These four studies of students' perceived self-efficacy in the clinical experience (George et al., 2017; Plemmons et al., 2018; Vnenchak et al., 2019; Williams et al., 2021) demonstrate a positive relationship between the DEU experience and self-efficacy compared to the traditional clinical experience. The study findings were used to engage key stakeholders for their support of the DNP project. The studies support implementing the DEU model as a robust, evidence-based opportunity to improve student self-efficacy in parallel with increasing capacity and providing a positive experience for staff nurses in the clinical instructor role.

Clinical Learning and Competency

Through a systematic review of the literature, Pedregosa et al. (2020) examined the effectiveness of academic-practice partnerships related to student clinical learning and competency compared to the traditional model for clinical experience. The review assessed four randomized control trials and ten quasi-experimental studies published between 1999 and 2020.

An initial search of the PubMed, CINAHL, PsycINFO, and Cochrane Library databases returned 1,092 studies related to academic-practice partnerships. The systematic review was designed using relevant criteria from the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) checklist. The Joanna Briggs Institute critical appraisal tool was used to assess the quality of included studies. The combined analysis of the 14 studies comprised 1,990 students and 18 clinical faculty participants. Two experimental and seven quasi-experimental studies compared the Dedicated Education Unit (DEU), Dedicated Education Centre, and Clinical Education Unit (CEU) models with the traditional clinical experience model. One quasi-experimental study compared a modified DEU model with a hybrid and traditional supervision model. Two experimental studies assessed the collaborative teaching model. One pre/post study examined a university-hospital partnership and a traditional model. It was a quasi-experimental study with one post-test which compared a collaborative clinical practicum with a traditional clinical model.

Students' perception of clinical learning was the most common clinical outcome in the review, followed by students' clinical knowledge. Clinical skills and quality and safety competencies were the third most common outcomes measured. In a discussion of findings, the authors reported that DEU, CEU, and hybrid models improved the clinical learning environment, optimized the teaching-learning process, increased students' learning quality to maintain patient safety, and benefited clinical and faculty professionals.

A second finding of the systematic review is relevant to the DNP project. Differences in the duration of students’ clinical experience were found among the models. The more extended placements of the DEU model offered students more learning opportunities and time to develop practical skills. Students had sufficient time to develop relational abilities with patients in

extended placements and learn to work with the clinical staff. These attributes of more extended placement could influence students' self-efficacy and satisfaction with their clinical placement.

Another finding of this review by Pedregosa et al. (2020), which informed this DNP project, is support and training for the staff nurses transitioning to clinical instruction. These studies reveal staff nurses' concern for their lack of preparation and empowerment to train students to transition from student to licensed professionals. The DNP project intervention addressed this concern by explicitly training staff nurses to prepare them to assume the role and carry out the responsibilities of clinical instructors.

This systematic review by Pedregosa et al. (2020) informed the DNP project by granularly describing the benefits and challenges of different academic-industry partnerships to enhance clinical learning and self-efficacy related to quality and safety competencies beyond the traditional clinical education model. The review discussed the high level of stakeholder collaboration required for these partnerships to produce results. Stakeholder collaboration is integral to the success of the DNP project; thus, evidence from the review helps design the type, extent, and cadence of stakeholder engagement.

A Level III-A quantitative study by Rusche et al. (2018) explored student competency related to the DEU model. A survey method was used in this study to compare student competencies and attributes in a traditional clinical learning model and a DEU model. The participants were 310 students in a baccalaureate nursing program who participated in a Dedicated Education Unit model (n = 163) or a traditional clinical teaching model (n = 147). Preceptors evaluated students for competency in the affective, psychomotor, and cognitive domains using a 33-item survey. Items in the tool were based on faculty assessments of student clinical performance, feedback from clinical partners, Quality and Safety Education for Nurses

(QSEN) competencies, and a review of literature on new nurse readiness for practice. To establish content validity (Cronbach alpha=.983), the tool was reviewed by 11 practicing nurses and nurse managers in seven different healthcare settings, all of whom had at least five years of experience mentoring nursing students. DEU students scored significantly higher in 26 of the 33 specific competencies and professional attributes than those who participated in the traditional clinical experience model. The DEU student participants scored significantly higher in seven affective competency areas and five psychomotor and cognitive competency areas. Students in the DEU model performed better in clinical skills, patient assessment, time management, team member communication, and ownership of care delivery. There were no differences in preceptor evaluation of competency in communication with patients and families, ethical behavior, or delivering culturally competent and age-appropriate care (Rusche et al., 2018).

As it relates to this DNP project, the findings of this study demonstrate the extent of domains in which the DEU model may improve nursing student competency. The study quantitatively compared specific competencies and attributes in the DEU and traditional clinical experience models. The study also indicated preceptors' heightened perception skills, knowledge, and professional attributes in students who participated in the DEU model compared to the traditional model. These findings were used in the DNP project to garner stakeholder support and encourage participation by staff nurses interested in mentoring nursing students as an opportunity for personal and professional fulfillment. This study's survey design helps consider the tools and data collection instruments used in the DNP project to assess self-reported efficacy with the competency categories of quality, safety, and team processes.

Bittner et al. (2021) explored the impact of the DEU model on students' critical thinking skills. The DEU model used in this study included a clinical faculty member to support both the clinical instructor and the nursing student. This structured collaboration enabled the clinical instructor to be the expert in clinical care and the faculty to share expertise in linking bedside care to classroom instruction. The nursing student benefited from their expertise and the synergy of their interaction. To measure the impact of the clinical education model on nursing students' critical thinking, the Critical Thinking Diagnostic tool (Cronbach alpha=.976) was administered to 234 associate-degree nursing students. The assessment results for students participating in the traditional clinical learning model (n=179) were compared with the DEU model (n=64). The DEU significantly affected student critical thinking after controlling for pretest scores ($F_{1,240}$=22.793, P<.0001).

In developing the DNP project, it was anticipated that training experienced staff nurses to become clinical instructors in a DEU could introduce role ambiguity for existing clinical faculty, thus eliciting both skepticism and resistance to change. The Bittner et al. (2021) study offered evidence to support the partnership between academic faculty and the new clinical instructors by demonstrating improvements in critical thinking for students who participate in the DEU clinical experience. This partnership includes instructor and faculty shared knowledge of student objectives and validated outcomes. For the DNP project, this included the ability to assess student confidence as it pertains to the Quality and Safety Education for Nursing (QSEN) competencies.

Flott et al. (2020) suggested that the DEU model compares favorably to traditional clinical education in assessing global student learning and competency as measured by standardized test scores. This retrospective analysis of 388 student standardized test scores for

three assessment categories (pharmacology, mental health, and medical-surgical) compared overall mean scores for students in traditional clinical and DEU model clinical settings. The study's outcome suggests that the DEU model produces comparable standardized test results and course grades as the traditional clinical learning model. In an additional comparison of the group mean scores on the National Council Licensure Examination predictor test, students in the DEU setting scored one point higher than students in the traditional setting. This additional point correlates with a greater likelihood of passing the national licensing examination (Flott et al., 2020).

This study is essential to the DNP project. It was used to demonstrate to key stakeholders the viability of the DEU model as an option for clinical education that did not put nursing program outcomes such as licensing exam pass rates at risk. Faculty and college administrators use National Council Licensure Examination pass rates to measure nursing program quality. Faculty required convincing evidence to support a change from the traditional clinical education model to the DEU model. The study's findings by Flott et al. (2020) did help mitigate the perceived threat of a change from the traditional clinical learning model to the DEU model, with evidence that licensing exam rates will not be put at risk. Coupled with evidence from Bittner et al. (2021) on improvements in critical thinking from the DEU clinical experience, skeptical faculty and administrators accepted the DEU model.

In a recent systematic review of the literature accompanying a mixed method study on transition to practice, Dimino et al. (2022) extracted data from seven studies (some included above) to identify and synthesize student learning outcomes. Eight valid and reliable instruments were used to measure student learning outcomes. However, the review concludes an over-reliance on student and faculty self-reports and perception as a low-level evaluation of the impact

of the DEU model. The authors acknowledge current results as promising and push for additional studies using refined objective measurement of outcomes.

Transition to Professional Practice

In a scoping review, Marcellus et al. (2021) evaluated 82 studies describing the DEU model's implementation, characteristics, and processes. The literature review comprised a search of five major databases for peer-reviewed studies. Duplicates were removed from an initial return of 455 studies, and filters were applied for inclusion and exclusion criteria. Two independent reviewers evaluated the remaining studies using the Joanna Briggs Institute System for Unified Management Assessment and Review of Information. Any discrepancies were resolved through discussion or third-reviewer evaluation. Using the PRISMA Flow diagram for further characterization, the authors identified five characteristics and four processes common to the DEU model. The five characteristics were (a) effective partnerships between schools and clinical sites; (b) a culture of excellence in education; (c) supportive unit leadership; (d) adaptability; and (e) clarity of roles/responsibilities. The four process themes were (a) building nurse and faculty capacity; (b) facilitating student learning; (c) consistent communication among partners; and (d) a system of ongoing evaluation for sustainability (Marcellus et al., 2021).

This study was of value in informing the elements of the DNP project implementation plan. The characteristics and processes described by Marcellus et al. (2021) were embedded in the DNP project work plan: (a) identifying key stakeholders in the partnership; (b) providing role clarity and growing faculty capacity through clinical instructor training on the DEU model, and (c) scheduling frequent meetings to foster communication and collaboration.

A mixed-method exploratory study (Dimino et al., 2020) indicated that new graduate nurses with clinical experience in a DEU are better prepared to transition into professional nursing practice than recent graduates from traditional clinical placements. In this Level II-B study, a convenience sample of new graduate nurses with DEU experience at a large public university and a large academic medical center in New Jersey responded to an electronic survey. The quantitative assessment tool was the Revised Casey-Fink Graduate Nurse Experience Survey to rate comfort and confidence in the transition to practice. For the qualitative portion of the study, semi-structured interviews were administered, recorded, and transcribed line by line by the primary investigator. Themes and concepts were captured, including nurse managers' competency expectations and experience working with DEU-trained students versus students trained in the traditional clinical model.

A finding of particular interest to the DNP project in the Dimino et al. (2020) study was that students with DEU training reported feeling more comfortable making suggested changes to the nursing care plan than students in a conventional clinical rotation. The difference was significant: Chi-square ($x^2 = 8.303$, $p < .04$). Nurse manager interviews revealed a perception that students from a DEU model transitioned into independent clinical practice with greater confidence and higher levels of critical thinking. This dual self-assessment and manager assessment provides insight into the DNP project's focus areas. In the study, student experience and confidence were affected by consistency in both the clinical setting and clinical instruction. This finding supported the DNP project to keep the student nurse with the same clinical instructor for the entire clinical rotation.

The support needs of a staff nurse transitioning to the role of the clinical instructor were captured in a qualitative study by Glynn et al. (2017) that used a structured interview design. The interview participants were staff nurses serving as clinical instructors in a DEU setting. The interviews of eight clinical instructors were audiotaped, transcribed verbatim, and thematically analyzed. Of the six themes identified, three themes pertaining to the role perception of the clinical instructors are (a) mentoring students, (b) ensuring student competency in basic skills, and (c) fostering critical thinking. Three additional themes surfaced around the clinical instructors' perceived learning needs in providing a student learning experience: (a) clear objectives from an academic partner; (b) acknowledgment of their role as clinical instructors by the educational institution; and (c) additional training on managing students with diverse learning needs and accommodations (Glynn et al., 2017).

A quality improvement study by Fusner and Melnyk (2019) provided results of a study design similar to the current DNP project. The study used staff nurse mentors to provide clinical practice instruction to undergraduate nursing students on three medical-surgical units. Using pre- and post-clinical questionnaires for students and participating nurse mentors, the authors measured the impact of the DEU model on clinical learning experiences, nurse mentor job satisfaction, intent to stay, perceived stress, and mentor demographics. Student satisfaction measures through the Clinical Learning Environment Supervision and Nurse Teacher Scale (CLES+T) showed an increase in mean scores in all subscale items on the post-DEU questionnaires. The nurse mentors reported a significant difference (p=.0446) in overall role satisfaction and building collaborative relationships (p=.0178) in the post-DEU survey; however, changes in other survey subscales did not meet statistical significance. The authors suggest that

the variation in the nurse mentors' preparation may contribute to these findings. The online training was voluntary, and only four of the 22 nurse mentors participated.

These studies provide insight into the development of the staff nurse training aspect of the DNP project intervention. These studies also offer direction on connecting classroom learning and clinical experience for the nursing student. The DNP project's training curriculum focuses on mentoring, skill validation, and critical thinking in quality, safety, and team processes. The training includes reviewing the students' clinical objectives as defined by the state board requirements for nursing schools and role play to practice managing student learning needs.

Using a convergent mixed-methods approach, Bowles et al. (2021) compared the traditional clinical learning model to an academic-clinical partnership (a modified-DEU model) as an enhancement to evidence-based clinical decision-making. Themes from this Level III A study included the strengthened relationships and partnership of the academic-clinical practice model in improving student learning and staff instructional support. This modified approach places an academic faculty member as part of the DEU model to support the clinical instructor and student. Students participating in the new model demonstrated a statistically significant increase in their belief in the evidence-based intervention compared to those in the traditional learning model.

These results informed the implementation phase of the DNP project. The partnership of academic faculty and clinical practice experts is critical to student knowledge acquisition and successful transition to practice. The implementation phase of the DNP project design included frequent stakeholder collaboration to allow for adjustments in instructional methods based on the evaluation of student progress.

Finally, two quality improvement studies by Masters (2016) and Pryse et al. (2020) provided insight into the design and implementation of this DNP project. Masters (2016) used a mixed methods approach to assess and compare clinical instructor perception of student quality and safety knowledge in the traditional versus DEU clinical learning models. The Quality and Safety Education for Nurses (QSEN) competencies are broadly used in pre-licensure nursing programs to align nursing education with the Institute of Medicine's aim of quality patient care.

Masters (2016) developed a questionnaire based on the Quality and Safety Education for Nurses' core competencies to measure clinical instructor perception of student knowledge. Similarly, the QSEN competencies are used as a guide in developing the clinical instructor training curriculum to focus the DNP project training on quality, safety, and team processes. This emphasis aligns with the sponsoring organizations' commitment to maintaining important quality programs from traditional education to the DEU model.

In the Masters (2016) study, mean scores from survey responses to (QSEN) test questions for the two clinical learning models. The study results suggest that the DEU experience improved student knowledge of quality and safety; however, data analysis did not determine the result's statistical significance. Five themes emerged from the qualitative interviews conducted with the clinical instructors: (a) thirst for knowledge; (b) teamwork; (c) time management; (d) student confidence in transition to professional nurse roles; and (e) establishing trust and decreasing anxiety.

Pryse et al. (2020) provide insight into the sustainability of DEU model units. This study reviewed six DEU units and their stakeholders. The conceptual framework for the study was Tuckman's Group Development Theory, with its *forming, storming, norming,* and *performing* elements. DEU design goals were framed and explored through Tuckman's four elements. The

findings suggest that implementing and spreading a DEU model require active participation from academic and practice partners. Pryse et al. (2020) identified three key factors that underlie the successful implementation of the DEU model: role clarity, adequate training for clinical instructors, and alignment of student and clinical instructor schedules. The authors recommended monitoring the impact of the DEU clinical experience on new graduate hires, NCLEX pass rates, and cost savings for schools and hospitals. The importance of student and staff recognition was noted. These findings and suggestions warrant careful consideration as the design and implementation of the DNP project progress.

The Pryse et al. (2020) quality improvement study is the only one that emerged in the review of evidence focusing on the sustainability of a DEU model for clinical education. The authors advocate for strong academic-industry partnerships that align students' and clinical instructors' schedules. Matching schedules offer consistency and continuity, foster relationship development, clarify roles and optimize clinical experiences. Schedule alignment was considered in the project design and implementation. Pairing students with the clinical instructor schedule provides continuity and consistency in the clinical experience.

Summary/Synthesis of the Evidence

The literature evidence supported the DNP project's design and implementation and assisted in answering the PICOT question. Good quality evidence emerged to guide both design and implementation of the DNP Designated Education Unit project. The DEU model compares favorably with the traditional clinical experience model, with consistent evidence that it enhances student self-efficacy and critical thinking and smooths the transition from student to licensed, practicing nurse.

Two studies (George et al., 2017; Plemmons et al., 2018) specifically referenced Bandura's Self-Efficacy Theory as a foundation for understanding self-efficacy in study participants and used the Generalized Self-Efficacy Scale to measure participant responses to clinical experience in the DEU model. Highlights of these studies were shared with appropriate stakeholders to garner support for the project. Bandura's Self-Efficacy Theory (Bandura, 1994) supplies the theoretical framework for the DNP project. The Generalized Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) measures the impact of the DEU model and clinical instructor training on student and instructor self-efficacy in this DNP quality improvement project.

Two critical success factors related to student outcomes from a nursing education program are passing the state licensure exam and competently transitioning from student to practicing nurse. The focus of self-efficacy in clinical experiences for the participants in the DNP project is quality, safety, and team processes. These three elements are part of the QSEN competencies established for nursing education programs and involve acquiring complex knowledge, skills, and attitudes required for critical thinking. The advantage of the DEU model over the traditional clinical experience model concerning knowledge, skills, and abilities that may reflect in licensure passing rate, transition to practice, and QSEN competencies were addressed in several studies (Bittner et al., 2021; Flott et al.; 2020; Rusche et al., 2018).

A substantial body of literature on implementing the DEU model has emerged since its introduction in Australian nursing programs in 1999 and its subsequent adoption in the United States in 2003. There is a gap in the evidence regarding the long-term impact and sustainability of gains in the DEU setting, as few studies have this focus (Pryse et al., 2020). These areas warrant further investigation to understand better the impact on a healthcare organization's return

on investment in the DEU model over time, the ability to attract and retain nurses, including staff nurses as clinical instructors, and the impact on patient health outcomes.

Rationale

Albert Bandura's Self-Efficacy Theory (Bandura, 1994) provides a broad frame for understanding self-efficacy in the context of student nurses' and clinical instructors' perceived self-efficacy with clinical learning in the DEU model (See Appendix B for Albert Bandura's Self-Efficacy Theory). In the model Bandura developed from the theory, four sources of information influence perceived self-efficacy (a) performance accomplishments (past experiences), (b) vicarious experience (observing others), (c) social persuasion (coaching/feedback), and (d) physiological and emotional states (Bandura, 1994).

Performance accomplishments enable the clinical instructor to draw upon their clinical experience to assess their own confidence and competency as they engage with a student in a clinical learning experience. In vicarious experience, the student learns by observing the clinical instructor during clinical training, using these observations to gauge their own self-efficacy. Social persuasion measures the impact of the interaction between the clinical instructor and the student to strengthen self-efficacy. Finally, positive physiological and emotional states are supported by a safe learning environment in the clinical experience, enhancing self-efficacy for both instructor and student.

Methods

Context

The Dedicated Education Unit project aligns closely with the organization's mission, vision, values, and strategic plan. The system's chief nursing officer and the hospital president recognized the project's potential contribution. From the outset, they were essential supporters of this work (See Appendix C for Letter of Support). The organization's president co-founded the recently formed community-wide Healthcare Workforce Development Steering Committee, which aims to grow the healthcare workforce in the community, building capacity to serve the community's growing needs. The committee envisions several healthcare capacity-building initiatives, including embedding early healthcare vocational education into high school electives, preparing incumbent healthcare workers to advance into licensed nursing roles, expanding opportunities for nursing students, and developing future nursing faculty. The DNP student is the chair of the RN Pathways Taskforce for community workforce development. The core objective of the RN Pathways Taskforce is to increase clinical instructors and clinical placement opportunities for pre-licensure students. The RN Pathways Task Force stakeholders are faculty from local schools of nursing, hospital chief nursing officers, and college administrators. Many task force participants are key stakeholders in this DNP project (See Appendix D for the Stakeholder Analysis).

The DNP project employs a variety of project management tools for designing, planning, tracking, communicating, and evaluating outcomes. The current state was assessed through strengths, weaknesses, opportunities, and threats (SWOT) and gap analyses. A proposed intervention was then informed using a relevant PICOT (population, intervention, comparison, outcome, time) formulated for the project. A plan to create and track progress toward a desired

future state through a test of change incorporated a Gantt chart, work breakdown structure (WBS), proposed budget, and identification of a quality improvement method. After the project results were analyzed, a retrospective evaluation was conducted, describing implications for nursing practice and recommendations for sustainability and spread.

Interventions

The DEU model was implemented in the Medical-Surgical-Telemetry units of all three hospitals. The project targeted training five nurses to become clinical instructors. The new clinical instructors supported ten pre-licensure students during their clinical rotations. Nursing unit managers were critical stakeholders in the deployment of this model. The new clinical instructors are "shared staff" between the nursing schools and the nursing units. Coordinating schedules for the new clinical instructors to accommodate nursing student school schedules added to the work demands incurred by the nursing unit manager. The top priority for the unit manager is adequate staff to care for the patients assigned to the unit. Thus, a critical success factor for the project was establishing a partnership and spirit of cooperation between the nurse manager and the academic faculty.

Students are critical stakeholders in the success and sustainability of the DEU model. The nursing students partnered with the same clinical instructor throughout their semester-long clinical learning experience. This approach fostered a relationship between the nursing student and clinical instructor for meaningful coaching and feedback. The attributes of this model were evident from the literature review and included greater student satisfaction with their clinical experience, an important contributor to increasing the number of students who successfully transition to new graduate nurses and choose to stay with the organization.

The core intervention of this project was developing staff nurses to be clinical instructors through a six-hour course focused on quality, patient safety, and team processes. This training also provided orientation and context for the DEU model. All clinical instructors must meet the local nursing schools' qualifications for adjunct clinical faculty; however, they remain hospital employees and work their regularly scheduled hours. Clinical instructors were assigned four patients and two nursing students.

For the first three clinical days, the clinical instructor's patient assignment was reduced to two patients, one assigned to each student, as the clinical focus was higher acuity telemetry patients. The adjustment enabled instructors and students to immerse in the DEU model and develop effective workflow and communication patterns. The 1:1 ratio of student to a patient for the first three clinical days allowed sufficient focus on foundational student capabilities such as assessment and safe medication administration. After the initial three days of clinical instructor and faculty assessment of student readiness to progress, the nursing students were each assigned two of the instructor's patients for clinical experience.

The nursing students were partnered with one clinical instructor for the entire semester. Each student and clinical instructor participated in a pre-assessment before the start of the semester and the clinical instructor training. Weekly meetings with academic faculty, school administration, and the DNP project lead were held to assess the project's progress and consider any necessary adjustments. Monthly meetings with the nursing unit managers, clinical instructors, students, and the DNP project lead also allowed for feedback and refinements. During the final week of clinical experience, a post-assessment was administered to assess changes in student and clinical instructor self-efficacy related to clinical learning.

Gap Analysis

A gap analysis evaluates the changes required to move the organization from the current state of a traditional clinical learning model to the desired future state of a Dedicated Education Unit (DEU) model. The gap analysis reflects the project goals of increasing clinical placement and improving the student/faculty competence in clinical safety, quality, and team processes. Eleven action items were identified to move the organization to the DEU model (See Appendix E for the Gap Analysis). The 11 action steps align with the critical milestones in the project plan to close the gap in the development of clinical instructor training and move the staff nurse from assigning tasks to the nursing student to becoming a partner for the student's transition to independent clinical practice.

Gantt Chart

A Gantt chart is a project management tool used to show the progress of reaching key project milestones over a project (Finkelman, 2022). It gives the project leader and team a visual indicator of progress and timing of key communications. The Gantt chart for the DNP project lays out the timeline for implementing the project (See Appendix F for the Gantt Chart). The project is divided into five phases: (a) assessment; (b) planning; (c) implementation; (d) evaluation; and (e) sustainability. The assessment phase lays the groundwork for the project. The problem is defined, the PICOT question is developed, and the review of evidence is undertaken. Project support and approval are secured in the planning phase. The assessment tool and clinical instructor training course are developed in the planning phase. Project team meetings were scheduled in the implementation phase, and ongoing stakeholder communication occurred. Staff nurses are recruited for clinical instructor roles in the implementation phase, and training begins. Nurses' and students' pre- and post-assessments precede and follow the clinical rotations in the

implementation phase. Data analysis and evaluation of project outcomes occur in the evaluation phase. The final phase is sustainability, where stakeholders are debriefed, a formal handoff to the operational leader occurs, DEU is embedded in Nursing School Advisory Council reports, and ongoing student clinical placements are monitored.

Work Breakdown Structure

The Work Breakdown Structure (WBS) identifies the relevant work product to establish a Dedicated Education Unit model (See Appendix G for the Work Breakdown Structure). The WBS is related to the Gantt chart in that it further deconstructs the work in each project phase into tasks that must be completed to meet the project objectives (Moran et al., 2020). Detail at the task level helps the project lead assess resource needs, make clear work assignments, and fulfill project management functions such as securing approvals, developing the budget, and communicating with various stakeholders. The WBS tracks back to the action steps in the gap analysis, with each step assigned to a responsible party. For this DNP project, the most challenging aspect of the WBS will be coordinating the school and hospital stakeholder schedules to meet work product objectives. This DNP project lead is reliant on stakeholder motivation and engagement. Any unexpected stressor on the hospital or academic partner could interrupt progress and delay work completion. The DNP project lead used the mitigation strategies of stakeholder engagement through weekly meetings and keeping the Healthcare Workforce Steering committee apprised through monthly progress reports.

Responsibility/Communication Matrix

The DNP project aligns with the broader community-based Healthcare Workforce Steering Committee strategy. Many DNP project team members serve on the steering committee and the RN Pathways Taskforce, of which the DNP student is chair. This redundancy is an asset

to project communication but does not substitute for intentional project-focused communication (See Appendix H. Communication Plan Matrix). This project's Power Grid is skewed toward high power/high interest. This high power/high interest is a project asset requiring frequent and varied communications. The DNP student engaged clinical instructors and unit managers in weekly meetings to manage the daily operations of the DEU. Other high-power, high-interest stakeholders were briefed through written reports and monthly progress updates.

SWOT Analysis

A strengths-weaknesses-opportunities-threats (SWOT) analysis is used to identify factors that may enhance or detract from a project (Moran et al., 2020). The SWOT Analysis for this project helped the DNP project lead determine feasibility and align the project with the current organizational climate (See Appendix I. SWOT Analysis). The project's strengths are executive leadership support, strong academic partnerships, existing workforce development programs, and an urgency to act due to the growing need for nurses. The nursing staff shortage is a weakness, as are competing priorities for nurse leaders and staff nurses' expectations for additional compensation and reduced patient load performing the clinical instructor role. The new Community Steering Committee on Healthcare Workforce Pathways presents an opportunity. This group of decision-makers represents the entire continuum of healthcare educators and industry leaders across the County. A threat to the project is another surge of COVID-19, as it will strain resources, exacerbate the nurse shortage, and increase staff nurse workload. A second threat is competition in the market for clinical instructors. Newly trained clinical instructors participating in the DEU model are targets for competitors, posing a threat to nursing retention.

Comprehensive Financial Analysis

The projected budget for this project was $40,575 (See Appendix J for the Project Budget and Financial Analysis). The project implementation cost of training five RNs for six hours at an average wage of $55 per hour was $1,650 (5 RN x 6 hrs. x $55=$1,650). Each RN receives a $3 per hour differential while providing clinical instruction. Each RN provides 135 hours of instruction per semester for $2,025 in additional compensation cost (5 RN x135 hrs. x $3=$2,025). While providing clinical education for two nursing students in the first three clinical days, the nurse-patient assignment is reduced by two patients. For example, in the telemetry unit, the clinical instructor nurse-to-patient ratio in the first three days is 1:2 versus the usual ratio of 1:4. This change requires an additional RN to cover the care of the unassigned patients. The extra cost is calculated as three shifts of clinical instruction per five clinical instructors or 15 shifts requiring another RN resource. Assuming the average RN wage of $55 per hour, the extra cost is $9,900 (15 shifts x 12 hrs. x $55/hr.=$9,900).

This project is an investment in the future workforce to offset the millions of dollars spent monthly on contracted staff, which is a strong argument for undertaking the project. The base starting wage for a new graduate RN was approximately $42 per hr., or $6,048 per month full-time in 2020 when the budget and return on investment were developed. The rate for a contract RN at that time was $200 per hr. or roughly $28,800 per month. Additional project costs are incurred for the transition to practice of each new graduate RN. Industry estimates for these training costs in 2021 ranged from $28,400 to $51,700 per new graduate (Nursing Solutions Incorporated, 2021). Assuming the high-end amount, which is consistent with the pay scale for nurses in California, $51,700 would be deducted from the $273,024 annual savings. The return on investment is projected to be $221,324 annually by replacing one contract RN with a newly

hired graduate nurse. Should all ten students in the DEU project become new grad RN hires to replace ten contract RNs, the annual savings to the organization would be $2,213,400.

Study of the Interventions

The DEU model was selected for the intervention as a conduit to improve the student exposure to safety and team processes as part of their clinical training. The published literature provides consistent evidence that clinical experience in the DEU model enhances student self-efficacy and critical thinking and smooths the transition from student to licensed, practicing nurse, often with better outcomes than the traditional clinical experience model. Training the clinical instructors on the QSEN competencies, team processes, and DEU model was implemented to support instructor and student participant self-efficacy in the clinical experience. The emphasis on safety and team processes aligns with the core mission, values, and key performance indicators critical to the sponsoring organizations' success.

The DEU model was implemented with a prospective cohort of five new clinical instructors and ten nursing students participating across three hospitals. A pre/post-intervention study design with self-efficacy as the primary outcome measure was selected to gauge the impact of the clinical instructor training on new instructors and students. Self-efficacy was chosen as the primary outcome measure as it is a widely used, evidence-based measure to assess nursing students' clinical experiences under different training models, and is accepted as a reliable indicator of belief in one's ability to produce a specific level of attainment.

The Generalized Self-Efficacy (GSE) scale is a reliable (Cronbach's Alpha=.861), valid, and widely used tool to measure self-efficacy. The GSE scale was used in this project to measure student and new clinical instructor self-efficacy in the pre-and post-intervention surveys. A de novo confidence rating scale was created to measure participants' self-reported knowledge of

QSEN competencies and confidence in using structured techniques and team processes. The combined scale was tested for internal reliability using IBM Statistical Package for Social Sciences (SPSS) version 28. The analysis returned a Cronbach's Alpha of 0.89, showing high internal reliability. A survey containing the self-efficacy scale and confidence prompts was administered pre- and post-intervention through an anonymous electronic survey link using Qualtrics.

The impact of the intervention was assessed by analyzing the difference in survey responses from the pre-intervention baseline to post-intervention for both students and clinical instructors. Descriptive statistics, paired samples t-tests, and the Wilcoxon Signed Rank test were used to determine differences between the pre-and post-intervention responses.

Student clinical objectives approved as part of the nursing school curriculum were used as a process measure to evaluate student learning experience during the course of the project. Clinical instructors evaluated student clinical progression by observing and evaluating student clinical skills, clinical shift summary documentation, and student case study presentations.

Outcome Measures

The outcome measure for the intervention was participant self-efficacy. Self-efficacy is the belief in one’s ability to overcome challenges to accomplish goals (Bandura, 1997). Bandura compares confidence to self-efficacy by suggesting confidence as a generic term that describes one’s strength of belief, but without the specificity to include one’s belief about personal abilities to produce specific levels of attainment that comes with self-efficacy (Bandura, 1997). These two terms are positively related, so increased confidence may increase self-efficacy, indicating increased confidence. The items of the GSE were introduced to participants pre- and post-intervention by asking them to respond with a focus on their abilities to overcome challenges and

accomplish quality, safety, and team processes. The change from baseline for clinical instructors and students gauged the impact of the clinical instructor training itself as well as the new instructors' ability to translate their training into a better clinical experience for the nursing students.

CQI Method and Data Collection Tools

An updated version of the original Generalized Self-Efficacy (GSE) scale was used to measure participant self-efficacy in the DEU project. Developed in 1981, the original GSE was a 20-item tool designed to assess perceived self-efficacy in adults (Schwarzer & Jerusalem, 1995). The original intent of the tool was to predict individuals' ability to cope with stressful situations. Schwarzer and Jerusalem (1995) adapted the scale with positively worded prompts to measure successful coping skills and behaviors and reduced the number of items from 20 to 10. Participants respond to the prompts using a four-point Likert scale. (See Appendix K for the Generalized Self-Efficacy Scale). The updated GSE scale used in over 20 countries has a Cronbach's alpha reliability range of 0.76 to 0.90 (Schwarzer & Jerusalem, 1995). The GSE scale's authors granted permission to use the scale in the DEU project (See Appendix for Approval Letter to Use the Generalized Self-Efficacy Scale).

Using the same survey link, participants were also asked to assess their knowledge of the six QSEN (Quality and Safety Education for Nurses) competencies and their confidence in using QSEN, SBAR (situation-background-assessment-recommendation) communication, CUS (concern-uncomfortable-safety) technique, and team processes in the clinical unit. Participants rated themselves on a scale of zero to 100 for each prompt.

A survey combining the ten items of the adapted GSE scale and five-item confidence scale was administered pre- and post-intervention to students and clinical instructors through an anonymous electronic survey link using Qualtrics (See Appendix M for the Survey Instrument). The pre-intervention survey was distributed immediately before training the staff nurses and students began the clinical experience. The post-intervention survey was administered at the end of the semester following participants' experience in the DEU model. Two prompts were added to the post-intervention survey. One asked participants if they would recommend the Dedicated Education Unit model to other students. The second provided an area for open-ended comments on their experience with the DEU model. Participants were asked to complete each survey within 48 hours of receipt.

Analysis

Data collected via Qualtrics from the four surveys (pre- and post-intervention student and pre- and post-intervention instructor) was imported into a single Excel spreadsheet to facilitate analysis. Data analysis was performed with the IBM SPSS statistical package version 28. Descriptive statistics, paired samples t-tests, and Wilcoxon Signed Rank test were used to determine differences between the pre-and post-intervention responses, with results displayed in data tables (See Appendix N for the Data Tables).

Ethical Considerations

This project aligns with the ethical standards of the University of San Francisco and the sponsoring healthcare organization. There are no conflicts of interest to disclose. This quality improvement project has been determined to be non-research. It is exempt from IRB review, as noted in the Statement of Non-Research Determination form (See Appendix O for the DNP Statement of Determination). Participation in the project was voluntary, and disclosure was

provided for all participants. Participant privacy and confidentiality in survey responses were maintained through a coding system and administration through Qualtrics. All data is reported in aggregate to prevent possible unintended identification of individuals.

As the participating healthcare organization and the University of San Francisco are faith-based, specific values permeate the design and implementation of this project. The Ignatian value of Contemplation in Action is connected to assessing self-efficacy as a form of reflection and spiritual growth. It is written that St. Ignatius Loyola believed reflection (contemplation) and prayer were a way to praise God. Through reflection, a person can appreciate the gift of life, nature, and the presence of God in all things (Ignatian Values, n.d.). This project implements a model of clinical education to expand clinical education opportunities for nursing students. At its core, nursing is a sacred calling to care for others. The demand for highly trained, professional nurses is growing to meet increasingly complex care needs. This project expresses the value of caring for the community by developing nurses' unique gifts, talents, and resources provided by God to meet these needs.

This project identifies with the American Nurses Association (ANA) Code of Ethics Provision 5 (ANA, 2015). This provision speaks to the nurse's duty to self and others to promote health, safety, competency, and professional development (ANA, 2015). This evidence-based quality improvement project enables nurses in multiple roles to fulfill this duty. This DNP project offers training for the new clinical instructors specific to quality, safety, and team process competency. This professional development for the staff nurses prepares them to validate quality, safety, and team process competencies for pre-licensure nursing students.

Results

Paired samples *t*-tests were used to evaluate the impact of the clinical instructor training in the DEU model on participants' pre- and post-intervention survey responses and determine if differences were statistically significant (see Appendix N for the Data Tables). There was a statistically significant increase in student GSE survey scores from pre-intervention (*M*=28.11, *SD*=1.97) to post-intervention (*M*=33.33, *SD*=3.24), *t* (4.05), *p*=.002. The mean increase in GSE scores was 5.22, with a 95% confidence interval ranging from -8.19 to -2.25. Cohen's *d-point* estimate for this statistic is 1.35, indicating a large effect size. Due to the small sample size (n=9), the non-parametric Wilcoxon Signed Rank test was also used to determine if differences in the student GSE scores were statistically significant from pre- to post-intervention. The test decision to reject the null hypothesis indicated eight positive item differences, zero negative, and one tie. Paired *t*-tests were also run to compare student confidence ratings pre-and post-intervention. There was a statistically significant increase in student self-reported confidence from pre-intervention (*M*=280.00, SD=18.93) to post-intervention (*M*=406.67, *SD*=23.51), *t*(3.37), *p*=.005. The mean increase in confidence was 125.56, with a 95% confidence interval from 39.61 to 211.51. Cohen's *d-point* of 1.351 indicated a large effect size.

All ten students responded to the pre-intervention survey, while only nine of 10 students (90%) responded to the post-intervention survey. The missing response may be attributed to competing demands on the student, as the post-intervention survey was administered during semester final exams. The post-intervention survey included a Yes/No question on whether participants would recommend the DEU model to other students. All nine respondents (100%) answered Yes. The post-intervention survey also invited a free text comment. All nine students commented with positive feedback.

The results for the clinical instructors did not show a statistically significant change. The same statistical analysis with paired sample *t*-tests was used to compare the clinical instructors' pre-intervention and post-intervention survey responses. There was no statistical difference between the pre-intervention GSE mean scores (*M*=35.00, *SD*=4.06) and the post-intervention mean scores (*M*=34.80, *SD*=5.54), *t*(-.140), p=0.448. The mean decrease in GSE scores was -0.200, with a 95% confidence interval ranging from -4.166 to 3.766. Cohen's *d-point* estimate of -0.063 shows no effect. The lack of effect between the pre-and post-intervention GSE survey scores for instructors may be attributed to the small sample size (n=5) and the high pre-intervention mean score of 35 (out of a maximum score of 40). Similarly, the difference in means for the clinical instructor self-reported confidence ratings was not statistically significant from the pre-intervention survey ((*M*=426.00, *SD*=75.37 to post-intervention survey (*M*=424.00, *SD*=58.57), *t* (-.055), *p*=.479.

The mean difference in confidence rating for clinical instructors from pre-intervention to post-intervention was -2.0 with a 95% confidence interval ranging from -102.64 to 98.64. Cohen's *d-point* estimate of -0.025 shows no effect. The clinical instructor selection process may have influenced this outcome. While participation was voluntary, beyond meeting the nursing school clinical instructor eligibility requirements (nursing degree and experience), these were experienced nurses whose unit manager approved their participation based on demonstrated performance as an effective clinical preceptor for new staff.

All five clinical instructors also responded to the post-intervention Yes/No question on recommending the Dedicated Education Unit model to students. Four instructors responded Yes to recommending the DEU model, and one responded No. Four free-text comments were

submitted. These comments included feedback about clinical instructor compensation commensurate with the role and the instructor-to-student ratio.

Discussion

Summary

A key outcome of the project was an increase in student-perceived self-efficacy and confidence in managing clinical quality, safety, and team processes related to their experience in the DEU. Participating students experienced a statistically significant (16%) increase in mean self-efficacy scores and a statistically significant (31%) increase in mean confidence, exceeding the 10% target of the specific aim. Increases in self-efficacy and confidence are consistent with published studies on outcomes for students participating in DEU models for clinical experience. While participating clinical instructors did not show a meaningful change in either self-efficacy or confidence, the mean pre-intervention scores were high. This outcome is not inconsistent with Bandura's Self-Efficacy Theory in that the participating nurses were able to assess their own performance accomplishments as they engaged with students. One consideration in selecting the clinical instructors for participation in the DEU model was demonstrated performance as an effective clinical preceptor for new staff.

Interpretation

The association between the project intervention and outcomes requires evaluating the process or project design, the impact of change on people and systems, and achieving set outcomes. The project plan was developed by reviewing the literature for best practices and expressed through the project team charter, GANTT chart, and Work Breakdown Structure, which provided a guideline for project implementation. The engagement of key stakeholders,

communication plan, and adherence to the projected timeline and budget provided a structured change management approach.

The initial steps of the project intervention involved engaging key stakeholders in defining the current and proposed state of clinical education for pre-licensure nursing students, including students' readiness for independent practice upon graduation. An extensive literature review revealed the Dedicated Education Unit model as an appealing, evidence-based alternative to traditional clinical education. Evidence from the literature was used to demonstrate to key stakeholders the viability of the DEU model as an option for clinical education that compared favorably with traditional models (Bittner et al., 2021; George et al., 2017; Rusche et al., 2018), and did not put nursing program outcomes such as licensing exam pass rates at risk (Flott et al., 2020). The review of published studies revealed staff nurses' concern for their lack of explicit training to prepare students to transition to new roles as licensed professionals (Pedregosa et al., 2020). The DNP project addressed this concern by explicitly training staff nurses to assume the role and responsibilities of clinical instructors.

The project team proposed an intervention to prepare five practicing bedside nurses to become clinical instructors and affiliate clinical faculty partnered with a school of nursing. Nurse managers were asked to identify bedside nurses who (a) met the school requirements, (b) were clinically strong, (c) had mature team practices, and (d) enjoyed teaching/precepting. Five candidates were selected, vetted through the school's clinical instructor requirements, and given a new instructor orientation, which included the project intervention of a six-hour training on the QSEN competencies, team processes, and information on the DEU model. The new instructors were each assigned two third-semester nursing students for clinical instruction following the DEU model over the next four months.

The project implementation positively impacted people and systems, evident in collaborative efforts to support the test of change. The nurse managers on the clinical units adjusted their unit schedules to accommodate the existing student clinical day (Monday). The clinical instructors worked every Monday to adhere to the mentoring model. Before the first clinical day, the new instructors and their assigned students took the pre-intervention survey. The project team committed to being highly visible on the unit during the first few weeks of the project. All stakeholders were asked to commit to asking questions and making suggestions to improve the project. The uniting principles included patient safety and successfully completing student learning objectives.

Overall, the project proceeded according to the implementation plan. However, one temporary adjustment of clinical instructor assignments was needed to help instructors adjust to the DEU model. The evening before the first clinical day, students presented on the unit to receive their patient assignments for the next day. This is a common practice in the traditional clinical education model, which allows students to review patient diagnoses, current diagnostics, and medications. On the first clinical shift the following day, the clinical instructor was given a complete telemetry assignment of four patients. Each student had one of those patients, and the instructor alone had two additional patients. As the shift progressed, it became clear that an entire four-patient assignment with two students would not be manageable. The instructor assignment was adjusted to just the two patients assigned to the students to ensure safe patient care and provide adequate time for student instruction. This change allowed the instructors and the students to become familiar with the unit routines and program expectations. By the fourth clinical day, the instructors were able to resume the two-student, four-patient assignments.

The main challenge to this project was overcoming familiarity with the traditional clinical education model and resistance to change. The academic faculty, clinical instructors, and even the students had a difficult time with the role of the DEU clinical instructor. The role was sometimes referred to as “preceptor” rather than clinical instructor, reflecting the familiar role of the bedside nurse in the traditional model. In the role of clinical instructor, the bedside nurse must provide instruction and evaluate the students’ clinical progress, including grading clinical paperwork at the end of each clinical day. Additional paid time outside of the clinical day was part of the instructor orientation in the DEU model; however, compensation is an area that will require refinement for future DEU cohorts and budgets.

The DEU at the medium-sized hospital experienced a drop in overall patient admissions during the final month of the semester. This reduced the number of patients with sufficiently complex and varied conditions to meet the student learning objectives. The DNP project lead and the academic faculty decided to have the two affected students complete their final two clinical days at another facility. While this shortened their DEU experience with a single instructor, the student learning objectives for the semester were still met.

There were several unexpected benefits to this project. In the traditional model, third-semester students come to the hospital the evening before the clinical day to select and research their patients. They are assigned a single patient for the following clinical day. Neither of these practices adequately prepares students for the transition to independent practice, where they will be assigned multiple patients per shift. As the semester progressed, the DEU students received their assignments along with their clinical instructors at the beginning of the shift. By the end of the semester, with the support of their mentor, they were caring for multiple patients.

New possibilities for future DEU cohorts include expanding the hours of each clinical day from six bedside hours to a 12-hour shift. This extension would allow students to experience a full bedside clinical shift, provide continuity in patient assignments, and involve students in additional team practices such as bedside shift report. Another possibility with implications for sustaining a change in practice is a longitudinal study of DEU student outcomes, including pass rates on the new National Council Licensure Examination (NCLEX) RN licensing exam, Next Generation NCLEX (NGN). Comparative studies of onboarding time and orientation costs for newly hired nurses coming through clinical experiences in DEU versus traditional models would add appreciably to what is known about the financial implications for healthcare organizations of adopting a DEU model. This model allows experienced nurses the growth opportunity of becoming clinical instructors while maintaining their employment with the hospital. The model also assists in reducing the financial burden of high-cost contracted staff by maintaining experienced clinical instructors at the bedside and increasing nursing school enrollment. The cost avoidance of a contract RN is approximately $153/hour or $22,032 per month, a cost savings of $6,768 per contract RN per month.

The project implications for advancing nursing practice include increasing student nurses' perceived self-efficacy and confidence in their own knowledge of quality, safety, and team practices. The dedicated mentoring relationship provides an approach to accelerate clinical learning and preparation for independent practice. Most studies on student satisfaction with the clinical learning experience in the DEU model are limited to qualitative outcomes (Dimino et al., 2020). Quantitative studies are needed to relate improved self-efficacy, confidence, and clinical knowledge from the DEU experience to transition to practice in a licensed nurse role.

Limitations

As a quality improvement project, the intervention and assessment of its impact represent a small test of change that may need to be replicable on a larger scale. The intervention was conducted in three facilities of a single healthcare organization, with a small sample size of five instructors and ten nursing students. The setting and the small sample size limit the generalizability of the findings. Students and clinical instructors self-reported their subjective perceptions of self-efficacy and confidence. Cognitive processes, situational influences, and immediate experiences can alter responses and introduce a measurement error. While a widely used and validated scale was used to assess self-efficacy, the positively worded items and Likert scale options add subjectivity and imprecision to the ratings.

Additional factors that may affect internal validity and were not assessed were participant awareness of the study, the time between assessments, and parallel work within the nursing unit to improve quality, safety, and team processes. Students and clinical instructors could select the DEU model for clinical experience, potentially introducing selection bias. Students and clinical instructors were aware of their potential to influence the outcome of the intervention, introducing the possibility of participant bias in trying to drive the perceived desired outcome. During the project, as part of the organization's commitment to continuous quality and safety improvement, hospital staff (including clinical instructors) received annual training on team practices such as using SBAR and the CUS technique. This parallel work is acknowledged in relation to clinical instructor survey results.

Conclusions

As the demand for highly trained nurses continues to outpace the local supply, new models of clinical education are required to prepare greater numbers of nursing students to provide high-quality, safe, and team-based clinical care. Strong and consistent evidence supports implementing a DEU model as a quality improvement practice change that leverages the value of academic-practice partnerships. This practice change will expand clinical placement opportunities for the healthcare organization and the nursing school. This model also creates an opportunity for cost-saving benefits by creating a pipeline of well-prepared new graduate nurses to replace contract RNs.

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Appendix A

Evidence Evaluation Table

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Bittner, N. P., Campbell, E., & Gunning, T. (2021). Impact of a Dedicated Education Unit experience on critical thinking development in nursing students. *Nurse Educator, 46*(6), 386–388. https://doi.org/10.1097/NNE.0000000000000966							
To identify impact of Dedicated Education unit on 12nursing students' critical thinking ability.	Design: Descriptive Method: Pre and posttest Conceptual Framework:	Sample: 234 associate degree nursing (ADN) Students Traditional Model (non-DEU) n=179 DEU n=64 Setting: 2-year nursing program Boston, MA	Independent Variable: Clinical Education Models: -Traditional Clinical (TC) -DEU Dependent Variable: Nursing student critical thinking skill	Critical Thinking Diagnostic (CTD) tool -25-items -5 categories Prioritization Problem recognition Clinical decision making Clinical implementation Reflection Cronbach α = .976	Descriptive statistics, paired-samples correlation, analysis of variance comparing all groups, and analysis of covariance (ANCOVA)tests between subjects' effects	CTD Scores: -Non-DEU pretest 118.24, posttest 126.34 (P=.343) -DEU pretest 116.31, posttest 133.86 (P<.0001) Significant effect of the DEU intervention on CTD posttest scores after controlling for pretest scores ($F_{1,240=}$22.793, P<.0001)	Level of Evidence: III B Worth To Practice: Potential of DEU in promoting a well-prepared graduate nurse Strength: CTD tool validity/reliability. Weakness: One ADN program Feasibility: Use of CTD and method could be repeated Conclusion: Important study for DNP project Recommendations: Use for support of DEU implementation

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Bowles, W., Buck, J., Brinkman, B., Hixon, B., Guo, J., & Zehala, A. (2022). Academic-clinical nursing partnership use an evidence-based practice model. *Journal of Clinical Nursing, 31* (1), 335-346. https://doi.org/10.1111/jocn.15710							
To compare the experience of new clinical model with traditional clinical teaching and examine effects of evidence-based practices (EBP) among participating staff and students	Design: Mixed method quasi-experimental Method: Pre & Post Test, and Focus Group Interviews Conceptual Framework: None	Sample: N=120 students, n=35 N=30 staff n=8 staff Setting: Midwest, College of Nursing, large academic medical center	Independent Variables: -New clinical training model (Evidence-based Clinical Academic Partnership (ECAP) Model) -traditional clinical training model Dependent Variable: -organizational culture and readiness for evidence-based practice, -differences in evidence-based practice beliefs -student learning environment related to facilitation of learning, preceptor facilitation, and learning opportunities	EBP Beliefs (EBPB) Scale -16-item Likert -construct validity >.85 EBP Implementation scale -18-item Likert -Cronbach >.85 Organizational Culture and Readiness for Systemwide Integration of EBP (OCRSIEP) -19 item, Likert -Cronbach >.85 EBP Competencies Self-assessment 24 items Likert Student Evaluation of Clinical Education Environment (SECEE) Scale -32-item Likert -.94 Cronbach alpha	Statistical Analysis System (SAS) version 9.4 -Descriptive statistics (frequencies and percentages) -Paired t-test to measure pre- & post-intervention -Cohen's d for sample sizes	EBPB statistically significant mean difference (5.54) and SE (1.11) in student beliefs of EBP for with-in group comparison p-value <.0001with a large effect size, Cohen's d=1.15 Overall intervention vs. control group findings shows weak evidence against the null hypothesis with low effect size	Level of Evidence: III A Worth To Practice: Impact of new clinical training models on EBP Strength: Reliability of tool, mixed method Weakness: single site, small sample size Feasibility: Tool readily available Conclusion: Explored alternative to traditional and DEU model to enhance EBP Recommendations: Use of tools and EBP rounding for sustainability of project improvement

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Dimino, K., Louie, K., Banks, J., & Mahon, E. (2020). Exploring the impact of a dedicated education unit on new graduate nurses' transition to practice. *Journal for Nurses in Professional Development*, *36*(3), 121–128. https://doi.org/10.1097/NND.0000000000000622							
To explore the impact of a DEU on role transition of the new graduate nurse.	Design: Mixed-methods retrospective Method: -Electronic survey -Semi-structured Interviews with nurse managers Conceptual Framework: None stated	Sample: -Convenience sample, BSN graduates January 2012-May 2018 in an RN position within 1 year of graduation N=137: (DEU=83, non-DEU=54) -Nurse Managers N=9: (DEU=3, non-DEU=6) Setting: Large, public university in New Jersey and large academic medical center	Independent Variable: Participation in a Dedicated Education Unit Dependent Variable: Graduate nurse role transition experience	Revised Casey-Fink Graduate Nurse Experience Survey - Demographic, Self-reported kill/procedure performance, Comfort/confidence (25 item Likert scale) and Job satisfaction (9 items) Response rate= 28% Internal consistency reliability -Cronbach's α =.78 Semi-structured interviews -recorded -transcribed -de-identified -concepts and themes extracted	New graduate nurses with DEU experience reported significantly more: -comfort with making suggestions to change the nursing plan ($x^2 = 8.303,\ \rho < .04$) -supported by nurses on the unit ($x^2 = 5.808, \rho < .016$)	DEU new graduate nurses better prepared for transition to practice versus traditional model	Level of Evidence: II B Worth To Practice: DEU impact on transition to practice Strength: Reliability of tool, mixed method Weakness: retrospective self-report, response rate Feasibility: Tool readily available Conclusion: DEU model positive impact on transition Recommendations: Consider use of Casey-Fink Graduate Nurse Experience Survey in DNP Project

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Domino, K., Vargas, P., & Banks, J. (2022). Student learning outcomes of Dedicated Education Units: A systematic review. *Journal of Doctoral Nursing Practice, 15* (3), 188-196. https://dx.doi.org/10.1891/JDNP-2021-0036							
To evaluate research conducted on the Dedicated Education Unit (DEU) to identify and synthesize student learning outcomes	Design: Systematic literature review Method: -Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) guidelines Conceptual Framework: None stated	Sample: N=7 studies N=8 valid & reliable instruments Setting: Databases: -CINAHL -Medline -PsychInfo -PubMed -Scopus Studies published in United States, no timeframe was used, study conducted between May 2019- December 2020	Independent Variable: Evaluate research conducted on DEU to identify and synthesize student learning outcomes. Dependent Variable: Available evidence that meets the review inclusion criteria	Researcher developed data extraction she included: -study characteristics -participant characteristics -instruments used -significant findings Three reviewers	Study Characteristics: -4 of 7 quantitative methods -3 of 7 mixed method Participant Characteristics: -All 7 student self-report -(1) entry-level -(1) junior level -(2) senior level -(1) accelerated BSN -(2) new graduate nurses transition to practice Instrument & Significant Findings: -Confidence -Critical Thinking -Anxiety -Clinical Growth -Leadership -Evidence-based Practice -Team Process -Professional Role Development -Thinking like a Nurse	Statistically significant outcomes in self-reported increase in confidence and critical thinking, decreased anxiety, enhanced leadership skills, and feeling more supported by experienced nurses during transition to practice.	Level of Evidence: II A Worth To Practice: DEU model acceptance and summary of current evidence Strength: Highlights need to quantify role of DEU in meeting student learning objectives Weakness: lack of heterogeneity of the included studies Feasibility: Ease of reproducing literature search Conclusion: DEU model positive impact transition to practice Recommendations: Few studies measuring impact post-DEU (competency & clinical judgement)

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Flott, E. A., Schoening, A. M., McCafferty, K., Beiermann, T., & Hercinger, M. (2020). The influence of the Dedicated Education Unit clinical model on standardized test scores. *Nursing Education Perspectives, 42*(1), 41–43. https://doi.org/10.1097/01.NEP.0000000000000626							
To analyze the effectiveness of DEU model on most recent standardized assessments	Design: Retrospective, comparative Method: Standardized test scores, comparison between students with DEU experience and those with traditional clinical (non-DEU) model Conceptual Framework: none	Sample: Test score for ten student cohorts both traditional 4-year BSN and an accelerated 12-month program (N=388) -DEU (n=198) -non-DEU (n=190) Setting: Private midwestern university	Independent Variable: -Student clinical experience in DEU model -Students enrolled in accelerated program Dependent Variable: Students standardized assessment scores	Results of standardized assessments were compared using independent *t*-tests. Reliability coefficients for items on assessment: -Pharmacology (.91) -Mental Health (.90) -Medical Surgical (.94) Control included all students who completed rotations in traditional (non-DEU) model.	Overall mean scores: -Pharmacology (DEU=61.39, non-DEU=61.83) -Mental Health (DEU=69.53, non-DEU=69.92) -Medical Surgical (DEU=65.71, non-DEU=65.99) -NCLEX predictor test (DEU=66.43, non-DEU=65.53) correlates with higher likelihood of passing on first attempt Greater spread when compare Accelerated Program DEU and Traditional 4-yer program DEU versus non-DEU scores.	DEU model does not negatively impact standardized test scores.	Level of Evidence: III C Worth To Practice: DEU compares favorably to traditional clinical model Strength: Large sample Weakness: Retrospective, students not randomized into clinical setting/model, single site Feasibility: Access to student assessments and testing is confidential /Difficult to obtain Conclusion: DEU is a valid alternative to traditional model Recommendations: Implementation of DEU

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Fusnar, S., & Melnyk, B. (2019). Dedicated Education Units: A unique evaluation. *Journal of Doctoral Nursing Practice*, *12* (1), 102-110. https://dx.doi.org/10.1891/2380-9418.12.1.102							
To evaluate an evidence-base change from a traditional model of clinical instruction to a dedicated education unit.	Design: Quantitative, quality improvement project Method: Pre- & Post-questionnaires for students and staff nurses Conceptual Framework: Iowa Model of Evidence-Based Practice	Sample: n=41 undergraduate students -n=22 qualified staff nurse mentors Setting: -Three Medical-Surgical units -Large Academic Medical center in Ohio.	Independent Variable: Clinical Learning setting: Traditional clinical experience versus DEU clinical experience Dependent Variables: Students: -belief about clinical instructor -satisfaction with clinical experience -stress about clinical experience Staff Mentors: -job satisfaction -role engagement -stress	Clinical Learning Experience Questionnaire for Nursing Students (CLES+T): -34 item, 5-point Likert scale -Cronbach alpha 0.95 Personal Beliefs about Nurse Mentor -10 item, 5-point Likert -Cronbach alpha 0.96 Perceived Stress Scale-4 (PSS-4) -4 item, 4-point Likert -Cronbach alpha student sample 0.73 -Cronbach alpha mentor sample 0.63	Statistical Analysis System (SAS) version 9.4 Descriptive and inferential statistics CLES+T Student belief about clinical educator Pre-DEU 4.01 (SD=.83) Post-DEU 4.52 (SD=.59) Student Nurse Perceived Stress 34% pre-DEU to 16% post-DEU No significant change in perceived stress for mentors Mentor job satisfaction (p=.0446) between pre-& post DEU	DEU supportive and engaging model for the students and the staff mentors	Level of Evidence: V A Worth To Practice: Implementation of DEU alternative supports staff and student learning experience Strength: Validated tools Weakness: single facility, varied mentor preparation Feasibility: Design, methods, and approach similar to proposed DNP study Conclusion: DEU is a valid alternative to traditional model Need for standard clinical instructor training Recommendations: Implementation of DEU including use of standard clinical instructor training

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
George, L. E., Locasto, L. W., Pyo, K. A., & Cline, T. W. (2017). Effect of the dedicated education unit on nursing student self-efficacy: A quasi-experimental research study. *Nurse Education in Practice, 23*, 48–53. https://doi.org/10.1016/j.nepr.2017.02.007							
To compare student self-efficacy outcomes related to the use of the DEU model as compared to traditional clinical education model	Design: Quantitative, quasi-experimental Method: Pre-clinical and post-clinical self-efficacy assessment Conceptual Framework: Bandura's Self-Efficacy Theory	Sample: Convenience sample of students enrolled in a 4-year baccalaureate program in nursing (N=193) Setting: Three clinical settings in Pennsylvania	Independent Variable: Clinical experience setting: DEU vs. Traditional Dependent Variable: BSN student self-efficacy scores	Generalized Self-Efficacy (GSE) Scale adapted with permission to include concepts related to undergraduate clinical education. -10-item Adapted GES Pretest Cronbach's α = .856 Posttest Cronbach's α =.810	**Pre-clinical** -Independent-samples *t*-test with Levene's test (*F*=6.26, p=0.013), *t*=0.547, *DF*=83.61, p=0.586 Mean DEU (*M*=3.042, *SD*=0.514). Mean traditional (*M*=3.087, *SD*=0.356) **Post-clinical** -Independent-samples *t*-test with Levene's test (*F*=0.349, p=0.555), *t*=2.93, *DF*=189, p=0.004. Mean DEU (*M*=3.40, *SD*=0.383). Mean traditional (*M*=3.23, *SD*=0.372) **Paired *t*-test** DEU (*t*=4.56, *DF*=57, p<0.001), Traditional (*t*=4.21, *DF*=131, p<0.001) **Effect Size** DEU=0.60 "medium" Traditional=0.38 "low"	Both clinical groups experienced significant increases in self-efficacy scores post-clinical experience. The increase in self-efficacy for the DEU group was significantly greater than traditional group.	Level of Evidence: II A Worth To Practice: Quality of DEU as a clinical education model Strength: Three different schools, strong assessment tool, use of Bandura Weakness: convenience sample, only one health system Feasibility: Use of Adapted GSE is possible Conclusion: Self-efficacy is an important measure of nursing student outcomes Recommendations: Consider use of adapted GSE for project

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Glynn, D. M., McVey, C., Wendt, J., & Russell, B. (2017). Dedicated Educational Nursing Unit: Clinical instructors role perceptions and learning needs. *Journal of Professional Nursing*, *33*(2), 108–112. https://doi.org/10.1016/j.profnurs.2016.08.005							
To identify the role perceptions of staff nurses participating as clinical instructors on a DEU and the perceived educational learning needs of these experienced staff nurses.	Design: Qualitative Method: audiotaped interviews Conceptual Framework: None	Sample: 14 staff nurses serving as clinical instructors in DEU. Eight agreed to participate. Setting: Veteran Affairs Healthcare System in Boston, MA	Independent Variable: Interviews of staff nurses in the role of clinical instructors on DEU Dependent Variable: Staff nurse perceptions of role of clinical instructors on DEU and learning needs	Audiotaped interviews were transcribed verbatim	Three themes emerged from interviews regarding role of staff nurse as clinical instructor: -Mentoring -Ensuring Competency with basic skills and tasks -Critical thinking Three themes emerged related to perceived learning needs of the staff nurses to provide clinical instruction: -Clear objectives from academic affiliate -Acknowledgment of the clinical instructor role by academic affiliate -Learning needs related to students with diverse learning needs and accommodations	Academic-practice partnerships must evaluate clinical instructor needs and provide support	Level of Evidence: III C Worth To Practice: Focus on staff nurses as clinical instructors Strength: IRB approval Weakness: Coded Data analysis not shared Feasibility: Interviews can be duplicate, but coding not thoroughly explained. Conclusion: The perception of staff nurses serving as clinical instructors in DEU is positive and seen as career growth Recommendations: Study suggests orientation for CI, timely feedback from academic partner, and clinical adjunct faculty appointment

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Marcellus, L., Jantzen, D., Humble, R., Sawchuck, D., & Gordon, C. (2021). Characteristics and processes of the dedicated education unit practice education model for undergraduate nursing students: A scoping review. *JBI Evidence Synthesis*, 2993–3039. https://doi.org/10.11124/JBIES-20-00462							
To review literature related to the dedicated education unit practice education model for undergraduate nursing students, to identify common characteristics and processes for implementing and sustaining this model.	Design: Scoping review Method: Three-step search strategy, in accordance with the JBI methodology for scoping reviews Conceptual Framework: Definitions: -Dedicated Education unit -Characteristics -Processes	Sample: N=455 n=82 final articles Setting: Databases: -PROSPERO -MEDLINE -CINAHL -Cochrane Database of Systematic Reviews -JBI Database of Systematic Reviews 6 countries, primarily US and Australia; 66% DEU in hospital medical or surgical settings	Independent Variable: Review question: What evidence is available that describes characteristics and processes of the DEU practice education model for undergraduate nursing students? Dependent Variable: Available evidence that meets the review question	All identified citations were entered into EndNote v.X8 and duplicates removed Collated titles and abstracts were compiled in an inclusion/exclusion MS Excel spreadsheet Screening completed by two independent reviewers and uploaded to JBI System for Unified Management Assessment and Review of Information, any discrepancy resolved through discussion or third reviewer	PRISMA Flow diagram Five characteristics: -Effective academic-practice partnerships -Adaptability to diverse contexts -Unit culture of educational excellence -Responsive and supportive unit leadership -Clarity of roles and responsibilities Four processes: -Building nurse and faculty capacity -Facilitating student learning -Communicating regularly at systems and unit levels -Evaluating and sustaining the model	A substantive body of literature was noted describing the characteristics and processes of the DEU model related to planning, adaptation, and implementation	Level of Evidence: III A Worth To Practice: DEU implementation literature Strength: Funding, rigorous inclusion/exclusion process Weakness: Varied nomenclature for DEU model Feasibility: Review process is replicable Conclusion: Most available literature focus on planning, implementation, and initial evaluation. Little on long-term impact Recommendations: Expand key terms in literature search for DNP project. Consider characteristics and processes in implementation

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Masters, K. (2015). Integrating quality and safety education into clinical nursing education through a dedicated education unit. *Nurse Education in Practice, 17*, 153–160. https://doi.org/10.1016/j.nepr.2015.12.002							
To assess and compare student knowledge of quality and safety in a DEU model vs. traditional model To assess clinical instructors' perception of the DEU experience	Design: Quantitative and Qualitative Quality improvement project Method: Pre-and Posttest for students Focus groups for clinical instructors, recorded Conceptual Framework: None	Sample: 2 groups of 8 undergrad nursing students (n=16) 7 clinical instructors Setting: 27-bed MedSurg unit in acute care hospital Private, midsize college, baccalaureate nursing students Pennsylvania	Independent Variable: Integration of quality and safety competencies into clinical nursing education in a DEU model Dependent Variable: Nursing student knowledge of quality and safety competency Clinical instructor perception of experience	Two sets of questions for students: First set: -Five multiple-choice questions related to quality and safety administered after first group of students completed six-week DEU rotation Second set: - Five multiple-choice questions related to quality and safety administered after second group of students completed six-week DEU rotation Focus group with Clinical instructors midsemester, recorded transcripts with themes recorded	Descriptive statistics to compare scores between clinical groups. Qualitative data analyzed by reading and re-reading transcripts by project leader. Themes verified through constant comparison. Transcripts also reviewed by two qualitative experts from the nursing faculty to achieve consensus on themes.	**DEU group 1:** Mean scores 88% (*SD*10) to 78% (*SD*16) **DEU group 2:** Mean scores 63% (*SD*21) to 83% (*SD*7) **Mean scores** second set 80% (*SD*13) (n=15) for DEU students 70% (*SD*21) (n=14) for trad students **Themes:** -Thirsting for knowledge -Teamwork/ collaboration -More trust/less anxiety -Mirroring organization/ time manage. skills -Evolving confidence in nursing role	Level of Evidence: V B Worth To Practice: A QI study like DNP project Strength: Mixed approach to study Weakness: small sample, findings suggest DEU improved knowledge, but data analysis does not determine significance Feasibility: Limited ability to reproduce study Conclusion: Unable to state impact on quality and safety competencies Recommendations: Consider different measurement of student and clinical instructor knowledge/experience

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Pedregosa, S., Fabrellas, N., Risco, E., Pereira, M., Dmoch-Gajzlerska, E., Senuzun, F., Martin, S., & Zabalegui, A. (2020). Effective academic-practice partnership models in nursing students' clinical placement: A systematic review. *Nurse Education Today, 95*, 1–14. https://doi.org/10.1016/j.nedt.2020.104582							
To examine effectiveness of academic-practice partnership models which include clinical faculty and clinical mentor roles in improving nursing students' clinical learning as compared to traditional models	Design: Systematic Review Method: Joanna Briggs Institute critical appraisal tools Conceptual Framework: None	Sample: Randomized Control Trials and quasi-experimental studies published between 1999 to 2020 N=1092 n=14 studies Total number of students in studies=1990 Total clinical faculty=18 Total clinical mentors=13 Setting: -PubMed -CINAHL -PsycINFO -Cochrane Library Multiple countries	Independent Variable: Studies involving academic-practice partnerships which include clinical faculty and clinical mentor roles Dependent Variable: Student nurses' clinical learning	Research question: Are academic-practice partnership models which include clinical faculty and clinical mentor roles effective for clinical learning in nursing compared with traditional models implemented in clinical placements? Search strategy using predefined eligibility criteria, addressing specific research questions and minimizing bias using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) checklist	Two independent researchers screened titles and abstracts for methodological analysis as to meeting inclusion criteria. Joanna Briggs Institute critical appraisal tool to assess quality of included studies. Papers included if both reviewers agreed using -Yes -No -Unclear -Not applicable Any divergent opinion was reached by consensus -Four experimental studies -Ten quasi-experimental studies	Outcomes: **1**-Perception of clinical learning measured by: -Clinical Learning Environment Inventory -Clinical Learning Environment, Supervision and Nurse Teacher -Student Evaluation of Clinical Education Environment **2**-Students' clinical knowledge **3**-Student clinical skills, quality, and safety competencies	Level of Evidence: II A Worth To Practice: Most common outcomes and challenges of academic-practice clinical learning models Strength: Review methodology Weakness: Limited RCT, small sample of studies Feasibility: search criteria could be reproduced but independent review would vary Conclusion: Presence of clinical faculty and clinical mentor enhances learning in academic-practice models vs. traditional learning models Recommendations: Use this review for most common outcomes and quality of available evidence

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Plemmons, C., Clark, M., & Feng, D. (2018). Comparing student clinical self-efficacy and team process outcomes for a DEU, blended, and traditional clinical setting: A quasi-experimental research study. *Nurse Education Today, 62,* 107–111. https://doi.org/10.1016/j.nedt.2017.12.029							
To explore how each of three clinical teaching models affects clinical self-efficacy and attitude toward team process, and to compare dedicated education unit model and blended model to traditional clinical	Design: Non-equivalent control group, quasi-experimental Method: Pre and Posttest Conceptual Framework: Albert Bandura's social learning theory	Sample: Convenience sample 272 entry-level baccalaureate nursing students: -84 DEU -66 blended model -122 traditional model control group Setting: Southwestern state university or midwestern state university Nevada and South Dakota	Independent Variable: Clinical education model: -DEU -Blended -Traditional Dependent Variable: -Student perceived clinical self-efficacy -Student attitude toward team process	**18-item demographic questionnaire** **General Self-Efficacy (GSE) scale** -10-item, 4-point Likert scale (not true at all to exactly true) - Pretest Cronbach's α = .83 -Posttest Cronbach's α = .87 **TeamSTEPPS© T-TAQ** -30-item, 5-point Likert scale (strongly disagree to strongly agree) -- Pretest Cronbach's α = .86 -Posttest Cronbach's α = .86	Descriptive statistics IBM SPSS v. 23. Mixed model analysis of covariance (MM ANCOVA). Statistically significant difference ($p < 0.05$) in between groups for several demographics: age, gender, marital status, race/ethnicity, prior employment as nurse's aide, and college degree. **Time effect for self-efficacy** F (1,258) =4.28, p=0.04 on posttest, after controlling for demographics. Effect of time by teaching model F (2, 258) =7.52, p=0.001 **Attitudes towards team** F (1, 257) =9.27, p=0.003 on pre to posttest but no significant interaction effect of time by teaching model F (2, 257) =2.02, p=0.135	All three models achieved higher self-efficacy in post-test and improved attitude toward team process. Both DEU and blended models promote clinical self-efficacy more effectively than the traditional model	Level of Evidence: II B Worth To Practice: DNP project focus on clinical self-efficacy Strength: Large study, multi-site Weakness: convenience sample, limited generalizability due to pre/posttest design Feasibility: limited Conclusion: Increased self-efficacy in students Recommendations: Use of GSE tool

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Pryse, Y. M., Heiskell, J., Goetz, J., Hittle, B. M., & Glazer, G. (2020). Dedicated education units: Redirecting for success. *Nurse Education in Practice*, *46*, 1–5. https://doi.org/10.1016/j.nepr.2020.102806							
To describe evolution and growth of Dedicated Education Units through academic-practice partnership	Design: Quality improvement Method: Process paper Conceptual Framework: Tuckman's Group Development Theory	Sample: Six DEU units and stakeholders: -practice/ academic organizations -staff nurses -clinical faculty -students -patients -healthcare team Setting: -Urban college of nursing -Level III Urban Medical Center, Cincinnati, Ohio	Independent Variable: Tuckman's Group Development Theory elements: -Forming -Storming -Norming -Performing Dependent Variable: DEU design goals: -improve student learning experience -advance socialization of novice nurse to nursing practice -strengthen partnerships -increase DEU quality -teamwork and collaboration -use academic and practice resources effectively and efficiently	Measured DEU design goals against Tuckman's theory	Identified opportunities: -Success does not transfer passively -Staff turnover and clinical instructor requirements -Scheduling students with same clinical instructor around in-class time -Clinical instructor education -Teamwork and collaboration between clinical and academic partners -Celebrations and recognition -Evaluations to include time on task analysis, peer review, impact of student QI project, NCLEX pass rates, number of DEU student hires post-graduation on DEU, cost savings for both practice and academic system	Pilot unit considered successful but as more DEUs opened drift through storming from vision and goals. Role of clinical faculty coordinator (CFC) necessary to maintain relationships of stakeholders in norming	Level of Evidence: V C Worth To Practice: Provides a framework for DNP project implementation Strength: Discussion of DEU sustainability and spread Weakness: Limited data, one program/hospital Feasibility: unlikely to replicate exact process Conclusion: Need to use change model for implementation of DEU Recommendations: Potential to use learning to assist in implementation of DEU as DNP project

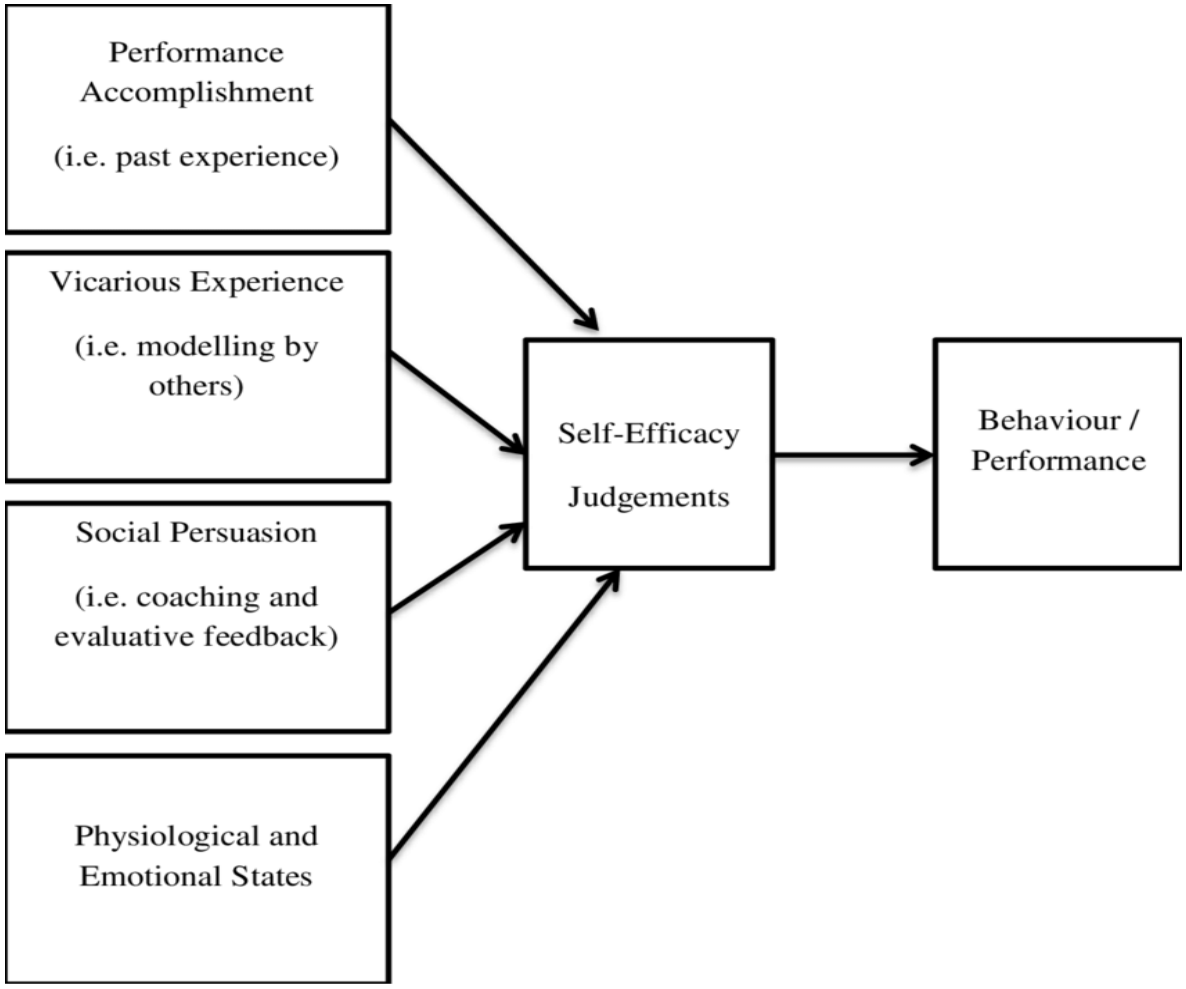
Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Rusche, L. M., McCafferty, K., Schoening, A. M., Hercinger, M., & Manz, J. (2018). Impact of the dedicated education unit teaching model on the perceived competencies and professional attributes of nursing students. *Nurse Education in Practice, 33*, 90–93. https://doi.org/10.1016/j.nepr.2018.09.002							
To compare evaluations of the competencies and professional attributes of nursing students who participate in DEU model to students who participated in traditional model	Design: Quantitative, descriptive, comparative Method: Survey Conceptual Framework: None	Sample: Eight cohorts, senior-level BSN students N=481 n=310 returned surveys, students randomly assigned to clinical model Setting: Private, midwestern school	Independent Variable: Clinical learning model -DEU -Traditional Dependent Variable: Preceptor evaluation of student competencies and professional attributes	Researcher developed survey -33-item -Content validity established -3 domains (affective, psychomotor, cognitive) -4-questions regarding student's overall confidence, competence, and readiness for clinical immersion -5-pt Likert Scale (not meeting expectations to exceeding expectations) - Cronbach's α = .983	Survey response rate=64% DEU student preceptors=163 Traditional student preceptors=147 SPSS v.25 Mann-Whitney U analysis	DEU students performed better **Affective** -7 areas **Psychomotor** -5 areas **Cognitive** -5 areas No differences in five competencies: Communication with patients and families, Professional and Ethical behavior, Delivering culturally competent care, and Delivering age-appropriate care	Level of Evidence: III A Worth To Practice: Preceptor perception of students in DEU model Strength: IRB-approval, Random assignments, large sample Weakness: Single site Feasibility: good if have use of survey questions Conclusion: DEU model promotes strength in several aspects of nursing student competency Recommendations: Consider use of preceptor evaluation survey vs. preceptor self-efficacy assessment

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Vnenchak, K., Sperling, M., Kelley, K., Petersen, B., Silverstein, W., Petzoldt, O., Cooper, L., & Kowalski, M. O. (2019). Dedicated education unit improving critical thinking and anxiety. *Journal for Nurses in Professional Development*, *35*(6), 317–323. https://doi.org/10.1097/NND.0000000000000586							
To evaluate the impact of DEU model on outcome measures of critical thinking, anxiety, self-confidence in clinical decision making, self-efficacy, and confidence with translation of these findings into nurse training and professional development	Design: Quasi-experimental, longitudinal Method: Collaborative study, within-subject, repeated measures Conceptual Framework: None	Sample: Convenience, N=17 senior BSN students all assigned to DEU unit 10 Practicing Experienced Nurses (PEN) Setting: Private, liberal arts college and single inpatient acute care unit at Magnet teaching hospital	Independent Variable: Four points in time as student transition to new roles T1=Baseline just before senior semester T2=Graduation from BSN program T3=6 months after graduation T4=12 months after graduation Dependent Variable: -Nurse anxiety and self-confidence with clinical decision making -General self-efficacy -Graduate nurse confidence	**Health Education System Inc. (HESI) Critical Thinking Exam** **Nurse Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM)** -6-point, Likert -Anxiety (α = .96) -Self-confidence (α = .97) **General Self-Efficacy Scale (GSES)** -Internal consistency from .82 to .93 **Casey-Fink Graduate Nurse Experience Survey** -Stress (α = .71) -Patient Safety (α = .79) -Support (α = .90) -Comm/ leadership (α = .75) -Pro satisfaction (α =.83)	HESI critical thinking results used paired *t* test. Repeated measure analysis of variance (RM-ANOVA) IBM SPSS (2018) HESI Average Score -pre-DEU=831 -post-DEU=912 ($p < .001$) from beginning of semester to graduation Pairwise time comparisons showed decreased anxiety over time ($p < .05$), increased self-confidence between T1 and T2 ($p < .001$) and T1 - T4($p < .001$), self-efficacy increase between T1 and T2 ($p < .05$), and confidence improved at every point. Statistical significance between T1 and T2 ($p < .05$) and T1 to T4 ($p < .001$)	DEU participants indicated less anxiety and increase in self-efficacy, self-confidenceand confidence during the DEU	Level of Evidence: II C Worth To Practice: Study of self-efficacy as part of DEU experience Strength: Validated tools, good retention of participants over time, statistical analysis Weakness: Participants were not randomly selected and aware they were in study, small sample size Feasibility: reproducible approach, however, time constraints could become issue Conclusion: DEU model does impact measures of critical thinking, self-efficacy, and self-confidence Recommendations: Consider use of tools within this study for DNP project

Purpose	Design/Method/ Conceptual framework	Sample/setting	Major variables studied with definitions	Measurement of major variables	Data analysis	Study findings	Level of evidence (critical appraisal score) / Worth to practice / Strengths and weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
Williams, G., Al Hmaimat, N., AlMekkawi, M., & Melhem, O. (2021). Implementing dedicated nursing clinical education unit: Nursing students' and preceptors' perspectives. *Journal of Professional Nursing, 37*, 673–681. https://doi.org/10.1016/j.profnurs.2021.04.002							
To investigate the nursing students and nursing preceptors' perceptions of the Dedicated Education Unit (DEU)	Design: Convergent parallel, mixed method Method: Quantitative used cross-sectional online survey Qualitative used semi-structured focus group Conceptual Framework: Post-positivism and naturalistic perspective	Sample: N=67, nursing students N=20, nursing preceptors Setting: 350-bed major trauma Mafraq Hospital, United Arab Emirates Two 38-bed Med-Surg DEU units March to May 2019	Independent Variable: Student's level of study Dependent Variable: -nursing student perception of DEU -preceptor perceptions of DEU	**Student Clinical Learning Culture (SCLC)** -21-items, 5-point Likert (strongly disagree to strongly agree) -student perceptions: staff engagement (α = .87) student motivation (α = .75) satisfaction (α = .67) dis-satisfaction (α = .78) **Support Instrument for Nurses Facilitating the Learning of Others (SINFLO)** -17-items, 5-point Likert (strongly disagree to strongly agree) -workload (α = .953) -acknowledgment (α = .858) -communication (α = .847) -preparation (α = .942) -teamwork (α = .852)	SPSS version 21 -descriptive statistics of mean, standard deviation, and frequencies -independent *t*-test to measure any difference in mean among SCLC subscales. Qualitative data analyzed using content analysis. All interviews were audiotaped, transcribed, and repeatedly read to identify themes; interviews completed until data saturation. Three themes: -students' attitudes to learning -preceptors' role understanding -improving students' experiences	Support preceptors by decreasing workload to align teaching role with patient care responsibility Provide preceptor preparation to increase knowledge, skill, and confidence to supervise students at all learning levels Allocate fixed clinical days with same preceptor	Level of Evidence: III B Worth To Practice: Provides guidance on structure of DEU participant preparation Strength: mixed method Weakness: Foreign setting, may impact generalizability Feasibility: generalizability due to different country Conclusion: Perception of nursing preceptors as important to DEU as student perceptions Recommendations: Use assessments for students and clinical instructors

Appendix B

Albert Bandura's Self-Efficacy Theory



(Bandura, 1997)

Appendix C

Letter of Support

AdventistHealth

Bakersfield | Delano | Tehachapi

Administration

2615 Chester Ave.
Bakersfield, CA 93301
661-869-6180
AHBakersfield.org

January 31, 2022

University of San Francisco
School of Nursing and Health Professions
2130 Fulton Street
San Francisco, CA 94117

This is a letter of support for Heather Van Housen, MSN, RN, NEA-BC to implement her DNP Comprehensive Project on the topic of a Dedicated Education Unit for nursing students at Adventist Health Kern County hospitals.

Daniel Wolcott
President of Kern County Care Delivery

Appendix D

Stakeholder Analysis

Stakeholder	Stakeholder's Interest in the Project	Assessment of Impact	Potential Strategies for gaining support or Reducing Obstacles
President, Adventist Health Kern County Network	**Role:** Approval and Inform	**Impact-Significant:** ● hospital reputation ● staffed beds/volume ● Financial support **Influence–Significant:** ● Relationship with community partners	A leader in workforce development. Recently chartered a community steering committee for Healthcare Workforce Pathways ● Chair RN Pathway Taskforce ● Provide clear project timeline ● Frequent project updates
Director, College, School of Nursing	**Role:** Responsibility and Approval	**Impact-Significant:** ● Clinical placement ● Quality of clinical instructors ● Student affiliation agreement **Influence–Significant:** ● Faculty buy-in ● Student success	A good partner. Multiple competing demands and frequently requires support from practice partners. ● Frequent Communication ● Deliver on project timeline/results ● Ask for her input but do the work ● Include Associate Director in all communications
Administrative Director of Nursing	**Role:** Consult and Inform	**Impact–Moderate:** ● Change role of staff nurse to clinical instructor **Influence–Significant:** ● Engagement of Unit leaders (his staff) required for success	A champion for professional growth. Staff will follow his lead on the worth/work of this project. ● A seat at the table with the project team ● Clear project timelines and objectives ● Frequent updates for him and to share with his staff ● A plan for staff nurse recognition, compensation, and modified patient assignment
Nursing Director, Inpatient Care	**Role:** Responsibility and Inform	**Impact–Significant:** ● Leader of target units ● Need to hold staff accountable to assignments/requirements **Influence–Significant:** ● Engagement of staff	A new director. An advocate for staff and cautious to not overwhelm the team with multiple change projects. ● Communicate benefit to staff and unit ● Involve in identifying incentives ● Involve in planning celebrations/recognition/incentives

Nurse Manager	**Role:** Responsibility and Inform	**Impact–Significant:** ● Leader of target units ● Need to hold staff accountable to assignments/requirements **Influence–Significant:** ● Engagement of staff	They will attempt to change the scope of the project (with good intentions). ● Overcommunicate project purpose ● Involve in any opportunity for feedback or change process ● Currently leading large development academy
Nurse Manager, Small Hospital	**Role:** Responsibility and Inform	**Impact-Significant:** ● Leader of target units ● Need to hold staff accountable to assignments/requirements **Influence–Significant:** ● Engagement of staff	There are currently no student clinical rotations at this critical access hospital. This work is brand new for Angela and her buy-in will be critical. ● Overcommunicate project purpose ● Involve in any opportunity for feedback or change process ● Foster collaboration with other stakeholders for support
Staff RN transitioning to clinical instructors	**Role:** Responsibility and Inform	**Impact-Significant:** ● Must meet school qualifications ● Must attend training and complete pre-post assessments ● Engagement is critical **Influence–Significant:** ● Project should improve role, not be seen as more work	Staff are collectively weary from multiple surges and heavy workload. ● Overcommunicate project purpose ● Include 1-2 on project team ● Involve in any opportunity for feedback or change process ● Staff nurse recognition, compensation, and modified patient assignment
Nursing Faculty	**Role:** Responsibility and Consult	**Impact–Moderate:** ● Relationship with new clinical instructors must be clear ● Role clarity **Influence–Significant:** ● Perception of change as a threat	Nursing Faculty are unionized so any perceived threat to their role could impact project. ● Overcommunicate project purpose ● Involve in any opportunity for feedback or change process ● Include faculty recognition ● Include 1-2 faculty on project team
CFO	**Role:** Approval and Inform	**Impact–Moderate:** ● Monitor project budget **Influence–Moderate**	Provide monthly and as needed updates on project and budget

Adapted from: Sample stakeholder analysis matrix.png. (2020, August 30). Wikimedia Commons, the free media repository. Retrieved 23:45, August 13, 2021, from https://commons.wikimedia.org/w/index.php?title=File:Sample_stakeholder_analysis_matrix.png&oldid=445345830.

Appendix E

Gap Analysis

Gap Analysis		
Implementation of Dedicated Education Units to increase clinical placement and improve student/ faculty confidence and competence in clinical safety, quality, and team process.		
Desired State	**Current State**	**Action Steps**
Expanded clinical placement opportunities for nursing students	Clinical placement is limited by number of qualified clinical faculty	Secure additional clinical faculty
Clinical Faculty compensation is competitive with practicing bedside nurse	Clinical Faculty compensation is below market making it difficult to recruit qualified applicants	Keep qualified clinical instructors as hospital employees during clinical instruction time
Frontline staff qualify as clinical adjunct faculty to be called clinical instructors	Staff unaware of qualifications	Provide staff information regarding clinical faculty qualifications
Training for clinical instructors to support students in safety, quality, and team process	Limited initial and ongoing clinical instructor support and development regarding safety, quality, and team process	Design and implement initial clinical instructor training on safety, quality, and team process
Clinical instructors with high confidence and confidence in ability to support students in clinical learning about clinical safety, quality, and team process	Clinical instructors have not been assessed for confidence and competence in the ability to support students in clinical learning about clinical safety, quality, and team process	Design and implement a pre and post training assessment of clinical instructor confidence and competence with supporting students in clinical learning about safety, quality, and team process
Incorporate the findings from pre-assessment into initial and ongoing clinical instructor training	There is not a current process for this assessment and improvement to curriculum.	Review of pre-assessment with academic partners for incorporation into clinical instructor training
Nursing students demonstrate confidence and competence with clinical safety, quality, and team practices.	There is not a current process for this assessment.	Design and implement assessment of nursing student confidence and competence with clinical safety, quality, and team practices
Clinical instructor to support the same two nursing students for the clinical rotation.	Nurses are assigned a new student each clinical day	Develop a schedule with academic partners to allow for continuity in student assignments
Clinical instructors to carry a smaller patient assignment while providing clinical instruction	Nurses (clinical instructors) with student assignments carry full patient assignment in addition to clinical instruction	Develop proposal with associated cost for hospital administration
Clinical placements are open to all shifts including weekends and nights	Clinical placements are primarily weekdays during dayshift	Assess available qualified clinical instructors per shift
Unit managers routinely meet with academic partners to provide updates to clinical area	Unit managers have no routine interaction with academic partners	Schedule stakeholder meetings for improved clinical learning

Appendix F

Gantt Chart

DNP Project GANTT-Responsibility-Status Chart

ID #	Dedicated Education Unit	Responsible Party(ies)	2021 May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2023 Jan	Feb	Mar	Apr	May	Jun	Status & Date
1	**Assessment Phase****																												
1.1	Assess Current State and Define Problem	DNP Student																											Completed-9/30/21
1.2	Develop PICO (T) Question	DNP Student																											Completed-9/30/21
1.3	Initial search for evidence	DNP Student																											Completed-10/1/21
1.4	Evidence appraisal	DNP Student																											Completed-12/10/21
1.5	Revise evidence-based practice question as needed	DNP Student																											Completed 12/10/21
1.6	Define Future state and AIM Statement	DNP Student																											Completed 12/10/21
2	**Planning Phase**																												
2.1	Create project proposal	DNP Student																											Completed 1/20/22
2.2	Define project team	DNP Student																											Completed 1/20/22
2.3	SWOT Analysis	DNP Student																											Completed 11/1/22
2.4	Stakeholder Analysis	DNP Student																											Completed 11/1/22
2.5	Work Breakdown Structure	DNP Student																											Completed 1/20/22
2.6	Develop project budget	DNP Student																											Completed 1/20/22
2.7	Secure project support and approval	DNP Student																											Completed 3/1/22
2.8	Project Charter	DNP Student. Project Team																											Completed 3/1/22
2.9	Develop pre and post-assessment tool using General Self-Efficacy Scale	DNP Student																											Completed 7/1/22
2.10	Develop clinical instructor training course	DNP Student																											Completed 7/1/23

(continued on next page)

3	**Implementation Phase**																											
3.1	Schedule Project Team meetings	DNP Student																										Completed 8/1/22
3.2	Communicate with stakeholders project launch and updates/key milestones	DNP Student																										Completed 5/1/2022-12/2/2022
3.3	Recruit staff nurses to become clinical instructors	DNP Student																										Completed 7/19/22
3.4	Administer pre-assessment to students and new clinical instructors	DNP Student																										Completed 8/29/22
3.5	Provide clinical instructor training	DNP Student																										Completed 8/19/22
3.6	Monthly student, unit manager, clinical instructor touchbase	DNP Student, Unit Manager, Clinical Instructor, Nursing Student																										Completed 8/19-12/2/2022
3.7	Administer post-assessment to students and clinical instructors	DNP Student																										11/20-12/2/2022
4	**Evaluation Phase**																											
4.1	Analyze data from pre- and post-assessment	DNP Student																										12/2/2022-2/25/2023
4.2	Evaluate project outcomes to AIM statement and PICOT	DNP Student																										1/12/23
4.3	Project Team Debrief/Evaluation	DNP Student, Project Team																										1/12/23
4.4	Present Final Report to Administration	DNP Student																										3/15/23
4.5	Submit final project paper	DNP Student																										Due March 15, 2023
5	**Sustainability Phase**																											
5.1	Schedule stakeholder project debrief	DNP Student																										Completed 1/19/2023
	Celebration and Recognition of Staff, Faculty, and Students	DNP Student, Unit Manager, Director SON																										Completed 1/19/2023
5.2	Project Handoff to Operational Leader	DNP Student																										Initiated 1/19/2023
5.3	Add DEU to School of Nursing Advisory Council	DNP Student, Director SON																										Completed
5.4	Monitor student clinical placements on DEU	Hospital Education Department																										Ongoing

Appendix G

Work Breakdown Structure

Level 1	Level 2	Level 3
1.0 Dedicated Education Unit	1.1 Assessment & Problem Definition	1.1.1 Perform Gap Analysis 1.1.2 Organizational Assessment 1.1.3 Develop PICO(T) Question 1.1.4 Search Literature 1.1.5 Appraise available evidence
	1.2 Planning	1.2.1 Develop project proposal and charter 1.2.2 Define project team 1.2.3 SWOT Analysis 1.2.4 Stakeholder Analysis 1.2.5 Communication Plan 1.2.6 Develop Project Budget 1.2.7 Secure project approval 1.2.8 Develop pre- and post-assessment tool using GSE 1.2.9 Develop approved clinical instructor training program
	1.3 Implement	1.3.1 Identify staff nurses qualified as clinical instructors 1.3.2 Schedule project team meetings 1.3.3 Implement communication plan 1.3.4 Recruit staff nurses into clinical instructor roles 1.3.5 Administer pre-training assessment to clinical instructors and nursing students 1.3.6 Provide clinical instructor training 1.3.7 Monthly meetings with student, clinical instructor, and unit manager 1.3.8 Administer post-assessment to clinical instructors and nursing students
	1.4 Evaluate	1.4.1 Analyze data from pre-and post-assessments 1.4.2 Evaluate project outcomes to AIM statement and PICO(T) 1.4.3 Project Team Debrief/Evaluation 1.4.4 Present Final Report to Administration 1.4.5 Submit Final Project paper

	1.5 Sustainability	1.5.1 Schedule stakeholder project debrief 1.5.2 Celebration & recognition for DEU project participants 1.5.3 Project Handoff to hospital operational leader 1.5.4 Add DEU updates to Nursing School Advisory Board quarterly meeting agenda 1.5.5 Monitor student clinical placements into DEU model as part of organization's monthly Engagement Committee agenda

Appendix H

Communication Plan Matrix

Level of Power		
	Keep Satisfied **High Power, Low Interest**	**Manage Closely** **High Power, High Interest**
	Patients Other departmental leaders Medical Staff CFO	Senior Executives Director, School of Nursing Academic Faculty Unit Nurse Managers Community Healthcare Workforce Steering Committee
	Monitor **Low Power, Low Interest**	**Keep Informed** **Low Power, High Interest**
	Other staff on units	New Clinical Instructors Students
Level of Interest		

Adapted from: Power-interest matrix.png. (2020, September 16). Wikimedia Commons, the free media repository. Retrieved 23:42, August 13, 2021, from https://commons.wikimedia.org/w/index.php?title=File:Power-interest_matrix.png&oldid=460794454

Audience	Information	Method	Frequency	Responsible Person(s)
Senior Executives	Project Purpose, Timeline, and Progress	In-person and monthly reports	Monthly and as needed	DNP student
Director, School of Nursing	Support, buy-into partnership Collaboration	Project Meeting	Weekly and as needed	DNP student
Academic Faculty	Collaboration	Project Meeting Written Updates	Monthly	DNP student
Unit Nurse Manager	Team project status	Huddles, Project Meetings	Weekly and as needed	DNP student
Community Healthcare Workforce Steering Committee	Project Overview & Timeline, then Progress updates	Initial presentation Meeting	Once, Monthly, and as needed	DNP student
New Clinical Instructors	Introduction of DEU Model, recruitment into clinical instructor role, pre-assessment, training dates, progress updates	Initial information session Training Session Huddles, Project Meetings	Once Once Weekly and as needed	DNP student

Nursing students	Introduction of DEU Model	In-person, in writing with Initial with pre-assessment	Once and monthly meetings with clinical instructors	DNP student
Patients	Address any care concerns or compliments	Rounding on patients	Daily and as needed	Unit Manager Charge Nurse DNP student
Other department leaders	High-level overview of program purpose and launch date	Memo, Leadership meetings in July/Aug 2022	Once, and as needed	DNP student
Medical staff	High-level overview of program purpose and launch	Memo, medical staff meetings in July/Aug 2022	Once and as needed	DNP student
Finance Officer	Budget approval and monitoring	Email project	Monthly	DNP student
Other unit staff	High-level overview of program purpose and launch date Address any care concerns or compliments	Staff meetings July/Aug 2022 Memo Rounding and huddles	Once Monthly and as needed	Unit Manager/ DNP student

Appendix I

SWOT Analysis

	Favorable/Helpful	Unfavorable/Harmful
Internal-attributes of the organization	Strengths ● Leadership commitment to new approaches to RN workforce development. ● Strong academic partnerships requesting more clinical placement availability. ● The urgency to act is acknowledged as the need for nurses locally rises. ● System-level support from the corporation ● Professional growth opportunities for staff RNs serving as clinical instructors ● Incentives for nurses to participate (clinical ladder, preceptor differential) ● Staff on units committed to student-friendly, clinical excellence ● Preceptor training ● COPE RN Scholar & Leadership Certificate Programs	Weaknesses ● Current nursing staff shortage ● Overcoming traditional model of clinical education ● Time and cost of training when hospital finances are stressed ● Nursing staff and leaders may have competing operational priorities. ● Staff will expect increased compensation and reduced patient assignment as clinical instructors.

External-attributes of the organization	Opportunities ● Community Steering Committee on Healthcare Workforce Pathways ● Student preference as a clinical site ● Two of the three hospitals in the local network will offer clinical placement for the first time. ● Schools of Nursing are looking at innovative ways to increase capacity.	Threats ● Faculty vacancies& burnout ● Another COVID-19 surge ● Competitive market-clinical instructors will be a target for competitors ● Nursing programs competing for clinical placement ● Reputation in the community if the DEU program is not sustainable ● Clinical faculty resistance to change in education model.

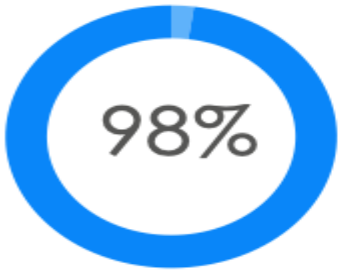
Adapted from: SWOT en.svg. (2020, November 5). *Wikimedia Commons, the free media repository*. Retrieved 23:09, August 13, 2021, from https://commons.wikimedia.org/w/index.php?title=File:SWOT_en.svg&oldid=510267924

Appendix J

Proposed DNP Project Budget

DNP Project Budget

Percentage of Project Spend



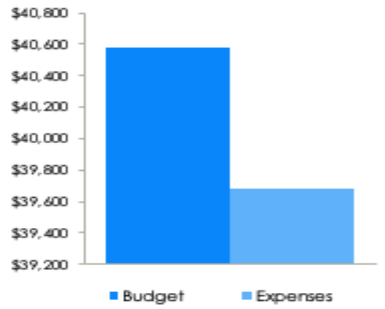
Summary

PROPOSED PROJECT BUDGET
$40,575

TOTAL MONTHLY EXPENSES
$39,680

TOTAL Projected ANNUAL SAVING
$2,213,400

BALANCE
-$2,212,505



Proposed Budget

ITEM	AMOUNT
Clinical Instructor Training	$1,650.00
Additional Preceptor Differential for Clinical Instructor shifts	$2,025.00
Additional RN Assignment to cover 1:4 Ratio Clinical	$9,900.00
Project Manager Wage (in kind)	$26,000.00
Project Recognition/ Celebration	$1,000.00

Monthly Expenses

ITEM	DUE DATE	AMOUNT
Clinical Instructor Training Time	July	$1,650.00
Clinical Instructor Preceptor Differential	Aug	$120.00
Additional RN	Aug	$3,300.00
Project Manager Wage (in kind)	Aug	$2,000.00
Clinical Instructor Preceptor Differential	Sep	$360.00
Additional RN	Sep	$6,600.00
Project Manager Wage (in kind)	Sep	$6,000.00
Clinical Instructor Preceptor Differential	Oct	$600.00
Project Manager Wage (in kind)	Oct	$10,000.00
Clinical Instructor Preceptor Differential	Nov	$480.00
Project Manager Wage (in kind)	Nov	$6,000.00
Clinical Instructor Preceptor Differential	Dec	$120.00
Project Manager Wage (in kind)	Dec	$2,000.00
Recognition/Celebration	Dec	$450.00

Projected Annual Savings 10 New Grad RN Replacing 10 Contract Staff

DATE	AMOUNT
12/30/23	$2,213,400.00

Appendix K

Generalized Self-Efficacy Scale

GENERALIZED SELF-EFFICACY SCALE

GL assessment
the measure of potential

Name: .....

Date: ..... **Record Number:** .....

		Not at all true	Barely true	Moderately true	Exactly true
1.	I can always manage to solve difficult problems if I try hard enough.	1	2	3	4
2.	If someone opposes me, I can find means and ways to get what I want.	1	2	3	4
3.	It is easy for me to stick to my aims and accomplish my goals.	1	2	3	4
4.	I am confident that I could deal efficiently with unexpected events.	1	2	3	4
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4
6.	I can solve most problems if I invest the necessary effort.	1	2	3	4
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.	1	2	3	4
8.	When I am confronted with a problem, I can usually find several solutions.	1	2	3	4
9.	If I am in a bind, I can usually think of something to do.	1	2	3	4
10.	No matter what comes my way, I'm usually able to handle it.	1	2	3	4

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Code 0090005090

Appendix L

Approval Letter to Use General Self-Efficacy Scale

Freie Universität Berlin

Fachbereich Erziehungs-
wissenschaft und Psychologie
- Gesundheitspsychologie -

Professor Dr. Ralf Schwarzer
Habelschwerdter Allee 45
14195 Berlin, Germany

Fax +49 30 838 55634
health@zedat.fu-berlin.de
www.fu-berlin.de/gesund

Freie Universität Berlin, Gesundheitspsychologie (PF 10),
Habelschwerdter Allee 45, 14195 Berlin, Germany

Permission granted

to use the General Self-Efficacy Scale for non-commercial reseach and development purposes. The scale may be shortened and/or modified to meet the particular requirements of the research context.

http://userpage.fu-berlin.de/~health/selfscal.htm

You may print an unlimited number of copies on paper for distribution to research participants. Or the scale may be used in online survey research if the user group is limited to certified users who enter the website with a password.

There is no permission to publish the scale in the Internet, or to print it in publications (except 1 sample item).

The source needs to be cited, the URL mentioned above as well as the book publication:

Schwarzer, R., & Jerusalem, M. **(1995)**. Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp.35-37). Windsor, UK: NFER-NELSON.

Professor Dr. Ralf Schwarzer
www.ralfschwarzer.de

Appendix M

Adapted General Self-Efficacy Scale & Confidence Rating Survey

Q1	I can always manage to solve difficult problems in the clinical unit if I try hard enough.	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q2	If someone opposes me in the clinical unit, I can find the means and ways to get what I want	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q3	It is easy for me to stick to my aims and accomplish my goals in the clinical unit	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q4	I am confident that I could deal efficiently with unexpected events in the clinical unit	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q5	Thanks to my resourcefulness, I know how to handle unforeseen situation in the clinical unit	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q6	In the clinical unit, I can solve most problems if I invest the necessary effort	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q7	In the clinical unit, I can remain calm when facing difficulties because I can rely on my coping abilities	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q8	When I am confronted with a problem in the clinical unit, I can usually find several solutions	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Q9	If I am in trouble in the clinical unit, I can usually think of a solution	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true

Q10	I can usually handle whatever comes my way in the clinical unit	1-Not true at all	2-Hardly true	3-Moderately true	4-Exactly true
Please rate your confidence level on the following topics (“0” no confidence, “100” complete confidence)					
Q11a	Knowledge of the six Quality & Safety Education for Nursing (QSEN) Competencies				
Q11b	Use of QSEN in my clinical practice				
Q11c	Use of SBAR				
Q11d	Use of CUS technique to raise concerns				
Q11e	Use of team processes in the clinical unit				
Q14	I would recommend the Dedicated Education Unit model to other students			1-No	2-Yes
Q15	Please provide any further comment here:				

Appendix N

Data Tables

Table N1

Descriptive Statistics: Composite General Self-Efficacy (GSE) scale

1-Clinical Instructor 2-Student		Valid N	Minimum	Maximum	Mean		Std. dev.
					Statistic	SE	
1	Post/Mean Scores	5	27	40	34.80	2.478	5.54
	Pre/Mean Scores	5	29	39	35.00	1.817	4.06
2	Post/Mean Scores	9	29	38	33.33	1.080	3.24
	Pre/Mean Scores	10	25	32	28.11	.655	1.965

Table N2

Paired Samples Test: General Self-Efficacy (GSE) Scale

1-Clinical Instructor 2-Student		Mean	SD	SE mean	95% Confidence		t	df	Significance	
					Lower	Upper			One-sided p	Two-sided p
1	Post/Pre	-.200	3.194	1.428	-.4.166	3.766	-.140	4	.448	.895
2	Post/Pre	5.222	3.866	1.289	2.251	8.194	4.053	8	.002	.004

Table N3

Paired Samples Effect Sizes: General Self-Efficacy (GSE) scale

1-Clinical Instructor 2-Student		Cohen's d Standardizer	Cohen's d Point Estimate	95% Confidence	
				Lower	Upper
1	Post/Pre	3.194	-.063	-.936	.819
2	Post/Pre	3.866	1.351	.409	2.252

Table N4

Wilcoxon Signed Rank Test: Student Pre & Post-Survey General Self-Efficacy (GSE) scale

Null Hypothesis	Test	Sig[a,b]	Decision
The median differences between the student pretest and posttest equals 0.	Related-Samples Wilcoxon Signed Rank Test	.012	***Reject the null hypothesis*** (8 positive differences) (0 negative differences) (1 tie)

a. The significance level is .050
b. Asymptotic significance is displayed.

Table N5

Descriptive Statistics: Confidence Rating Scale (Q11a-Q11e)

1-Clinical Instructor 2-Student		Valid N	Minimum	Maximum	Mean		Std. dev.
					Statistic	SE	
1	Post/Mean Scores	5	360	500	424.00	26.19	58.57
	Pre/Mean Scores	5	310	500	426.00	33.71	75.37
2	Post/Mean Scores	9	260	490	406.67	23.51	70.53
	Pre/Mean Scores	10	180	380	280.00	18.92	59.82

Table N6

Paired Samples Test: Confidence Rating Scale (Q11a-Q11e)

1-Clinical Instructor 2-Student		Mean	SD	SE mean	95% Confidence		t	df	Significance	
					Lower	Upper			One-sided p	Two-sided p
1	Post/Pre	-2.0	81.06	36.25	-102.64	98.64	-.055	4	.479	.959
2	Post/Pre	125.56	111.82	37.27	39.61	211.51	3.37	8	.005	.010

Table N7

Paired Samples Effect Sizes: Confidence Rating Scale (Q11a-Q11e)

1-Clinical Instructor 2-Student		Cohen's d Standardizer	Cohen's d Point Estimate	95% Confidence	
				Lower	Upper
1	Post/Pre	81.06	-.025	-.900	.853
2	Post/Pre	111.82	1.123	.255	1.951

Table N8

Participant Post-Survey Question (Q14) Would Recommend Dedicated Education Unit Model

1-Clinical Instructor 2-Student		Valid N	Would recommend	
			No	Yes
1	Post-Survey	5	1	4
2	Post-Survey	9	0	9

Table N9

Participant Post-Survey Comments (optional)

Clinical Instructor	1. Clinical Instructors should be compensated as clinical instructors and not preceptors 2. It is very important that the clinical instructor has no more than 2 patients to allow time for teaching. It was also helpful to float students to other unit when there was not adequate patient selection on the medical-surgical unit. 3. Thank you for the opportunity to educate our future colleagues. 4. The dedicated program was a a great learning experience for the nursing students. Students were able to see and do more. Students had more hands-on experience compared to their classmates.
Student	1. This program was very helpful. I gained much more experience. 2. I enjoyed working 2-1 students to clinical instructors on the unit. Having a staff member has its benefits at times when you want to get a better info from the physician or other sources. Overall, it was a good fit. 3. I have learned so much in the short amount of time here and feel like I have grown significantly more than I would have in a bigger clinical group. I am very thankful for the experience I have gained through this new program. 4. This style of clinic really helped improve student autonomy when working with patients. We were able to work individually to complete tasks but also utilize our instructor when we were faced with difficult tasks. This increased by confidence working bedside exponentially. I would highly recommend this style of clinic. 5. I really enjoyed the pilot program with Adventist Health. I felt like I learned more this clinical rotation than any other rotation. We get hands-on learning and felt like we were able to do more hands on with our clinical instructor. 6. I really appreciated the opportunity to be part of this program. I learned so much and was able to get much more clinical experience than in the past. I have grown immensely in my

	confidence in patient care, and medication administration. I feel like I have a much better understanding of what a day in the life of a nurse will look like, and it just adds to my excitement to graduate and begin my own practice 7. This was an amazing opportunity, and I am so grateful to have been a part of this program. I feel very well prepared going into fourth semester. 8. The program allowed me to further and improve my hands-on clinical skills. I would 100% participate in this program again. I felt lucky for the opportunity. 9. This clinical experience was fantastic. I really feel like we were able to learn so much in such a short amount of time, and I feel like I have grown so much in the last 14 weeks.

Appendix O

DNP Statement of Determination

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

DNP Department Policy on IRBPHS

Approval of DNP Practicum or Project Activity

All research projects conducted by faculty or students at USF require prior approval by the IRBPHS Committee. Refer to USF IRB guidelines (USF Connect) for current procedures regarding application for approval of your research. Any research conducted by students must have faculty support and approval prior to submission of the application to the University IRB Committee. Do not proceed with any type of recruitment, data collection or analysis until you receive written approval from the University IRBPHS Committee.

All DNP Projects must receive approval by the Committee Chair and the Department prior to enrollment in N789/795. Approval forms can be downloaded from the DNP Student Portal.

Quality Improvement, Research and IRBPHS

Quality Improvement is defined as "a systematic pattern of actions that is constantly optimizing productivity, communication, and value within an organization in order to achieve the aim of measuring the attributes, properties, and characteristics of a product/service in the context of the expectations and needs of customers and users of that product". *[Source: The Institute of Medicine]*

• QI projects do not require IRB approval

Research is defined as “a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities

which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities." http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.102

• All research involving human subjects requires IRB approval.

DNP Projects might use mixed methods, whereby research activity is combined with QI/ Process improvement. In these cases federal guidelines state "most quality improvement efforts are not research subject to the HHS protection of human subjects regulations. However, in some cases quality improvement activities are designed to accomplish a research purpose as well as the purpose of improving the quality of care and in these cases, the regulations for the protection of subjects in research (45 CFR part 46) may apply." http://answers.hhs.gov/ohrp/categories/1569

• QI projects that include research activity or potential research activity must have IRB approval.

Definition of Human Subjects

The federal regulation used to define human subjects will be used by DNP faculty, Committee Chairs and the DNP Department to determine whether DNP projects involve research and must have IRB approval.

- DHHS definition – a living individual about whom an investigator conducting research obtains (1) data through intervention or interaction with the individual; or (2) identifiable private information.
    - Intervention includes both physical procedures by which data are gathered (e.g., venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes.
    - Interaction includes communication or interpersonal contact between investigator and subject.
    - Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an

individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

- FDA definition- an individual who is or becomes a participant in research, either as a recipient of the test article or as a control. A subject may be either a healthy human or a patient.

The following examples are NOT human subjects research and therefore do not normally require IRB approval:

- **Quality Improvement** – Projects aimed at improving local systems of care. The intent is to promote *"betterment"* of a process of care, clinical outcome within the institution.

- **Quality Assessment** – activities that determine whether aspects of medical practice conform to established standards.

- **Quality Assurance** – Process of reviewing, analyzing or evaluating patient or provider specific data that may indicate (the need for) changes in systems or procedures that improve quality of care. The knowledge generated is typically for local, immediate application within the institution.

- **Outcome analysis**: Projects in which medical records are reviewed to evaluate the outcome of medical treatment or the course of patients with a specific medical condition. Results are not compared to an established standard.

- **Resource utilization review**: Medical record review conducted to evaluate the use of resources in a specific health care activity.

- **Public health practice**: e.g., surveillance (monitoring of diseases) and program evaluation (immunization coverage, or clinical preventive services such as mammography).

- **Education**: transferring information from one group of people to another – i.e., teaching somebody something.

- **Evidence-based nursing practice change**: designed to enhance the well-being of a patient or patient population.

IRB Approval Necessary to Publish

IRB approval is not necessary to publish or present QI projects and findings as long as the publication or presentation does not refer to the project as research and makes it clear that the publication is the result of a quality/process improvement activity. The following federal guideline makes this clear and can be disseminated to journals that question this determination.

- *"**the intent to publish is an insufficient criterion for determining whether a quality improvement activity involves research.** Planning to publish an account of a quality improvement project does not necessarily mean that the project fits the definition of research; people seek to publish descriptions of non-research activities for a variety of reasons, if they believe others may be interested in learning about those activities. Conversely, a quality improvement project may involve research even if there is no intent to publish the results." http://answers.hhs.gov/ohrp/categories/1569*

IRB Exempt categories:

The following types of research are exempt from IRB approval. ***45 CFR 46.101(b)***

1. Research conducted in established or commonly accepted **educational settings**, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, **unless**:

(i) information obtained is recorded in such a manner that **human subjects can be identified**, directly or through identifiers linked to the subjects; and (ii) any disclosure of the

human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

3. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if:

(i) the human subjects are elected or appointed public officials or candidates for public office; or

(ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

4. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

5. Research and demonstration projects which are conducted by or subject to the approval of Department or Agency heads, and which are designed to study, evaluate, or otherwise examine:

(i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or

approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Please ensure that you have completed the Statement of Non-research Determination and provided that document to your Chair/Advisor. The document can be found on the DNP portal.

DNP Department Policy on IRBPHS
Approval of DNP Practicum or Project Activity

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Quality Improvement is defined as "a systematic pattern of actions that is constantly optimizing productivity, communication, and value within an organization in order to achieve the aim of measuring the attributes, properties, and characteristics of a product/service in the context of the expectations and needs of customers and users of that product". *[Source: The Institute of Medicine]*

- QI projects do not require IRB approval

Research is defined as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities."
http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.102

- All research involving human subjects requires IRB approval.

DNP Projects might use mixed methods, whereby research activity is combined with QI/ Process improvement. In these cases federal guidelines state "most quality improvement efforts are not research subject to the HHS protection of human subjects regulations. However, in some cases quality improvement activities are designed to accomplish a research purpose as well as the purpose of improving the quality of care and in these cases, the regulations for the protection of subjects in research (45 CFR part 46) may apply. " http://answers.hhs.gov/ohrp/categories/1569

- QI projects that include research activity or potential research activity must have IRB approval.

Definition of Human Subjects

The federal regulation used to define human subjects will be used by DNP faculty, Committee Chairs and the DNP Department to determine whether DNP projects involve research and must

have IRB approval.

- DHHS definition - a living individual about whom an investigator conducting research obtains (1) data through intervention or interaction with the individual; or (2) identifiable private information.
    - **Intervention** includes both physical procedures by which data are gathered (e.g., venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes.
    - **Interaction** includes communication or interpersonal contact between investigator and subject.
    - **Private information** includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.
- FDA definition- an individual who is or becomes a participant in research, either as a recipient of the test article or as a control. A subject may be either a healthy human or a patient.

The following examples are NOT human subjects research and therefore do not normally require IRB approval:

- **Quality Improvement** – Projects aimed at improving local systems of care. The intent is to promote *"betterment"* of a process of care, clinical outcome within the institution.

- **Quality Assessment** – activities that determine whether aspects of medical practice conform to established standards.

- **Quality Assurance** – Process of reviewing, analyzing or evaluating patient or provider specific data that may indicate (the need for) changes in systems or procedures that improve quality of care. The knowledge generated is typically for local, immediate application within the institution.

- **Outcome analysis**: Projects in which medical records are reviewed to evaluate the outcome of medical treatment or the course of patients with a specific medical condition. Results are not compared to an established standard.

- **Resource utilization review**: Medical record review conducted to evaluate the use of resources in a specific health care activity.

- **Public health practice**: e.g., surveillance (monitoring of diseases) and program

evaluation (immunization coverage, or clinical preventive services such as mammography).

- **Education**: transferring information from one group of people to another – i.e., teaching somebody something.

- **Evidence-based nursing practice change**: designed to enhance the well-being of a patient or patient population.

IRB Approval Necessary to Publish

IRB approval is not necessary to publish or present QI projects and findings as long as the publication or presentation does not refer to the project as research and makes it clear that the publication is the result of a quality / process improvement activity. The following federal guideline makes this clear and can be disseminated to journals that question this determination.

> • *"**the intent to publish is an insufficient criterion for determining whether a quality improvement activity involves research.** Planning to publish an account of a quality improvement project does not necessarily mean that the project fits the definition of research; people seek to publish descriptions of non-research activities for a variety of reasons, if they believe others may be interested in learning about those activities. Conversely, a quality improvement project may involve research even if there is no intent to publish the results." http://answers.hhs.gov/ohrp/categories/1569*

IRB Exempt categories:

The following types of research are exempt from IRB approval. ***45 CFR 46.101(b)***

1. Research conducted in established or commonly accepted **educational settings**, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, **unless**:

> (i) information obtained is recorded in such a manner that **human subjects can be identified**, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

3. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if:
(i) the human subjects are elected or appointed public officials or candidates for public office; or
(ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

4.Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

5. Research and demonstration projects which are conducted by or subject to the approval of Department or Agency heads, and which are designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

6. Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Please ensure that you have completed the Statement of Non-research Determination and provided that document to your Chair/Advisor. The document can be found on the DNP portal.

Doctor of Nursing Practice
Statement of Non-Research Determination (SOD) Form

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

General Information

Last Name:	Van Housen	**First Name:**	Heather
CWID Number:	20628127	**Semester/Year:**	Spring 2022
Course Name & Number:	N749E Qualifying Project		
Chairperson Name:	Elena Capella	**Advisor Name:**	Elena Capella

Project Description

1. Title of Project

A Dedicated Education Unit: Increasing Capacity and Confidence

2. Brief Description of Project

Clearly state the purpose of the project and the problem statement in 250 words or less.

To train staff nurses on Medical Surgical units into the role of DEU model clinical instructors including Quality and Safety Education for Nurses (QSEN) competencies and team process to increase instructor confidence in providing quality, safety, and team process clinical learning 10% and increase student confidence in managing clinical quality, safety, and team process issues 10% by December 2022.

3. AIM Statement: What are you trying to accomplish?

- What do you hope to accomplish with this project? Aims should be SMART, specific, clear, well-defined, and at a minimum describe the target population, the desired improvement, and the targeted timeframe.
- To improve (your process) from (baseline)% to (target)%, by (timeframe), among (your specific population)

Complete this statement:

To train staff nurses on Medical Surgical units into the role of DEU model clinical instructors including Quality and Safety Education for Nurses (QSEN) competencies and team process to increase instructor confidence in providing quality, safety, and team process clinical learning 10% and increase student confidence in managing clinical quality, safety, and team process issues 10% by December 2022

4 Brief Description of Intervention (150 words).

As part of the implementation of a Dedicated Education Unit model. A training course will be provided staff nurses to prepare them for acting as clinical instructors for pre-licensure nursing students. The course will include a focus on Quality and Safety Education for Nurses (QSEN) competencies, team process, and providing student feedback and evaluation. These new clinical instructors will be assigned two nursing students each with two patients during their shift. The students will be assigned to the same clinical instructor for their entire semester on a unit. A pre-and post-assessment of the clinical instructors and the students to assess self-efficacy with quality, safety, and team process in clinical learning.

4a. How will this intervention be implemented?

- Where will you implement the project?
- Attach a letter from the agency with approval of your project.
- Who is the focus of the intervention?
- How will you inform stakeholders/participants about the project and the intervention?

The project will be implemented on several medical-surgical units at a 254-bed community-based, general acute care hospital in Central California.

The focus of the intervention is the staff nurse developing as a clinical instructor.

Through information and recruitment sessions, stakeholders and participants will be informed of the project. There will be a workgroup comprised of stakeholders from the hospital and the School of Nursing.

5. Outcome measurements: How will you know that a change is an improvement?

- Measurement over time is essential to QI. Measures can be outcome, process, or balancing measures. Baseline or benchmark data are needed to show improvement.
- Align your measure with your problem statement and aim.

o 10% increase in clinical instructor self-reported confidence in providing quality, safety, and team process clinical learning.

  - 10% increase in student self-reported confidence with managing clinical quality, safety, and team process.

- Try to define your measure as a numerator/denominator.
  - What is the reliability and validity of the measure? Provide any tools that you will use as appendices.
    - Pre and Post Implementation Assessment. Adapted General Self-Efficacy Scale for measurement of confidence.
  - Describe how you will protect participant confidentiality.
    - Pre and post-assessments will be coded and results will be reported in aggregate to protect confidentiality.

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

DNP Statement of Determination

Evidence-Based Change of Practice Project Checklist*

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

Staff nurse knowledge, skill, and attitudes in providing clinical instruction to nursing students on a Dedicated Education Unit.

Mark an "X" under "Yes" or "No" for each of the following statements:	**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.	X	
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.	X	
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.	X	
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.	X	
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.	X	
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.	X	
The project has **no** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
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.	X	
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."*	X	

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.

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

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DNP Statement of Determination
Evidence-Based Change of Practice Project Checklist Outcome

The SOD should be completed in NURS 7005 and NURS 791E/P or NURS 749/A/E

Project Title:

The Dedicated Education Unit: Increasing Capacity and Confidence

x 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:

Student Last Name:	Van Housen	**Student First Name:**	Heather
CWID Number:	20628127	**Semester/ Year:**	Spring 2022
Student Signature:	Heather Van Housen	**Date:**	3/3/22
Chairperson Name:	Elena Capella		
Chairperson Signature:	Elena Capella	**Date:**	03/03/22

DNP SOD Review Committee Member Name:	*Nicholas R. Webb, RN, DNP, ESQ* <<ElectronicallySigned>>	Date: 03/04/2022
DNP SOD Review Committee Member Signature:		**Date:**