PREPARING THE STAFF NURSE FOR THE ROLE OF CLINICAL TEACHING PARTNER
ON A DEDICATED EDUCATION UNIT

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A potential conflict of interest exists in the author is employed at the community college referenced in the article.

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Abstract
A community college associate degree nursing program collaborated with a rural hospital in the development of a DEU. Although many areas of quality improvement were identified with the implementation of a DEU, the success of the initiative was dependent on the CTP’s knowledge and self-efficacy of teaching/learning principles. The purpose of this study was to evaluate a quality improvement project by examining the effectiveness of an education program designed to prepare the staff nurse for the CTP role. The development of a DEU has been found to bring a quality improvement to both partners in the collaboration. Although limitations were present, the project provides a framework for future initiatives between associate degree education and hospital practice partners.

Highlights:

- An innovative education practice partnership that utilizes a dedicated education unit (DEU) was proposed.
- A quality improvement project informed development for the pilot DEU.
- A clinical teaching partner education workshop equipped the clinical staff nurse with teaching/learning principles.
- Evaluation of the project supports sustainability and replication.

Keywords: dedicated education unit, quality improvement, preceptors, teaching/learning, clinical staff nurse, associate degree nursing, nursing students

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Dramatic changes in health care and require a nursing workforce prepared to deliver high
quality, safe care in a complex, demanding environment. As the complexity of the health care
environment increases so are changes needed in how nurses are educated to meet these
challenges (Institute of Medicine, 2010; Smyer, Tejada, & Tan, 2015). Nurse educators are
challenged to prepare students to think critically and practice competently in a variety of
situations and to rethink the traditional teacher-center learning pedagogy, transitioning to a more
student-learning approach (Kaddoura, 2011; McDonald, 2014; Stanley & Dougherty, 2010).

Dedicated Education Units (DEU) are identified in the literature as an effective
academic-practice partnership that assists with the alignment of education and practice,
facilitating the translation of knowledge to application (Dapremont & Lee, 2013; Eskilsson,
Unlike the traditional clinical model, the DEU utilizes clinical staff nurses as the primary clinical
instructor and the nursing faculty role shifts to coaching and mentoring the clinical staff
(Mulready-Shick & Flanagan, 2014). The clinical staff nurse brings expertise and clinical
experience to the model, but do not have a background in effective teaching/learning principles
and therefore must be supported with professional development.

The development of a DEU brings quality improvement to both partners in the
collaboration. The clinical staff nurse or clinical teaching partner (CTP)-facilitated clinical
experiences assists the schools of nursing with faculty resources and increased student
satisfaction (Mulready-Shick, Flanagan, Banister, Mulott, & Curtin, 2013). Anticipated quality
improvement for hospital units includes increased patient experience scores, increased staff
retention, and decreased onboarding costs (Green & Turner, 2014; Seibert, Stroud, Cassel, & Huebner, 2015).

Quality Improvement Project

A community college associate degree nursing program collaborated with a rural hospital in the development of a DEU, recognizing it would bring quality improvement to both partners. As discussed by Plsek (1993) the Pareto principle states although any group of items may contribute to an effect there are only a few that account for the majority of an effect. An effective quality improvement project model should have a narrow focus as well (Plsek, 1993). Therefore, a quality improvement plan was developed and implemented for a CTP Education Workshop, designed to equip the CTP’s with the knowledge, skills, and attitudes for quality clinical instruction when working with nursing students (Quality and Safety Education for Nurses, 2014).

Quality Model

Quality improvement projects are used to address a problem, respond to an opportunity, or design a new process and there are a variety of models to utilize to help guide the development of a project (Plsek, 1993). The DEU and education workshop is a project that designed a new process or initiative and was analyzed with the quality evaluation model the Deming Cycle. Commonly used in health care, the model provides a cyclic approach to the assessment and improvement of a process (Deming Institute, 2016). The cycle is represented in the acronym “PDSA”:

- **P** = Plan the process improvement, identifying a goal.
- **D** = Do the improvement, implement the plan, gather data
- **S** = Study the outcomes, analyze for progress, success, or areas needing improvement
- **A** = Act by adopting, adjusting, or abandoning the change.

(Deming Institute, 2016)
The cycle provides opportunity to apply research methods in an action-orientated process in a health care setting by planning the project, implementing it, observing the results, and acting on what is learned (Institute for Healthcare Improvement, n.d.).

**Logic Model**

A logic model provided the framework to compile multiple facets and aspects of the quality improvement project. It displays the relationships among the core components and reminds the team to consider assumptions and internal/external factors (Peterson, Taylor, & Peikes, 2013). The model assured the alignment of the goal, objective, and outcome of the project with input, activities, outputs, and effects and is presented in Appendix A.

**Project Financials**

Both organizations identified the benefits of the collaboration as positive and thus began the project analysis based on financial considerations. Although the DEU was not considered a capital project, it was important to determine the financial risk to the organization and a project risk analysis was conducted. Assumptions were identified and a cost-benefit analysis (CBA) was conducted to provide a means to evaluate the potential costs and revenues that may be encountered with the project implementation. Based on the CBA, the DEU project course will transition from a project loss to project gain during fiscal year 2019. The project becomes cost neutral during the spring semester 2019, and profit is realized in the fall 2019 semester. This analysis provided information regarding the profitability and limited risk of the project.

**Problem Statement**

The purpose of this study was to assist in the evaluation of a quality improvement project by examining the effectiveness of an education program designed to prepare the staff nurse for the CTP role. The clinical questions to be studied were:
1. Do clinical teaching partners (CTPs) report an increased knowledge of teaching and learning strategies for clinical instruction after participating in an education program?

2. Do clinical teaching partners (CTPs) report an increased self-efficacy in teaching/learning strategies for clinical instruction after participating in an education program?

3. Do CTP’s report an increased generic preceptor skill for clinical instruction after participating in an education program?

**Clinical Significance**

Nursing is a practice profession requiring an intricate relationship between classroom and clinical learning as they are two parts of the same process (Chan, Chan, & Liu, 2011). To bridge the gap between academic preparation and nursing practice, theoretical knowledge can be directly applied to practice through active learning experiences that promote critical judgment and clinical reasoning (Stanley & Dougherty, 2010). Nursing students must be prepared to care for patients in a complex acute care environment. The traditional faculty-led clinical model brings limitations that often contribute to the limited exposure to direct patient care as rotation or observational experiences are necessary to maintain state Board of Nursing and hospital required faculty: student ratios. Engaging practice partners in clinical education is not new to nursing education. The professional clinical staff nurse who functions in the role of preceptor or teaching partner brings expertise to the collaboration but lacks the skills and knowledge of effective teaching/learning strategies. The preceptor must be supported with professional development to maximize the learning opportunity in a student/preceptor collaboration, (Martensson, Lofmark, Mamhidir, & Skytt, 2016; Panzavechia & Pearce, 2014).
Review of Literature

The Institute of Medicine (2010) calls for academic and health care organizations to align around the future nursing workforce to improve the quality and safety of patient care. The American Association of Colleges of Nursing (AACN) and American Organization of Nurse Executives (AONE) (2012) identifies academic practice partnerships as a means to strengthen nursing practice and to “create systems to achieve educational and career advancement, prepare nurses of the future to practice and lead, [and] provide mechanisms for life-long learning…(para 2).” The two professional organizations published guiding principles for effective partnerships. Guiding principle five (5) addresses the partnership as a commitment to collaborate in developing evidence-based transition programs for nursing students. Academic-practice partnerships can provide the structure to assist health care facilities and academic programs to meet expected high quality outcomes in an efficient manner (Neiderhauser, Barnes, Chyka, Gaylord, Mefford, Miller, & Mixer, 2016).

Dedicated Education Unit

Clinical education is a vital component of pre-licensure programs of nursing. In a traditional clinical model, a group of students is assigned to a nursing faculty. The faculty: student ratio is defined by the state Board of Nursing and the program’s governing organization. Based on the acuity of patients and workflow of the assigned clinical unit, the ratio may be further reduced. This model results in students participating in rotational experiences away from the nursing instructor. Although valuable, the rotational experiences lack a faculty member to facilitate the critical application or transfer of knowledge to practice.

DEU’s have emerged as an innovative approach to clinical education. On a DEU the professional staff nurse assumes the primary role of teacher (preceptor), with the nursing faculty
providing support, coaching, and guidance (Dapremont & Lee, 2013; Seibert & Bonham, 2016). The DEU model has been studied in a variety of settings and has been found to produce positive outcomes. Benefits include improved learning culture for both nursing students and clinical staff, a more prepared graduate nurse, increased student perception of growth in clinical learning and professional behaviors (Glynn, McVey, Wendt, Russell, 2016; Mulready-Shick & Flanagan, 2014; Mulready-Shick, Flanagan, Bannister, Mylott, Curtin, 2013). Health care organization benefits include increased patient experience scores, decreased staff turnover on the patient care unit, and decreased onboarding costs (orientation training) (Seibert, Stroud, Cassel, & Huebner, 2015).

**Preceptor Preparedness**

Nursing preceptors are defined as expert staff nurses who hold a dual role of their usual clinical job duties while supervising/guiding nursing students (Pearson, Wyte-Lake, Bowman, Needleman, & Dobalain, 2015). Although an important role in an academic practice collaboration, preceptors often receive little to no preparation for the teaching role. Preceptors often lack the confidence, knowledge, or skills for effective teaching and learning (Panzavechia & Pearce, 2014; Smedley, Morey, & Race, 2010).

To maximize the learning experience for both the student and preceptor, a formal education program must be provided for the staff nurse. Research shows an increased preceptor satisfaction and perceived support when provided a workshop or education program regarding the roles and responsibility of precepting, teaching and learning strategies, and communications (Larsen & Zahner, 2011; Martensson, Lofmark, Mamhidir, & Skytt, 2016; Mulready-Shick & Flanagan, 2014; Smedley, Morey, & Race, 2010). Seibert and Bonham (2016) conducted a literature review to identify evidence to support curriculum content for a preceptor program and
identified themes of critical thinking, evaluation of student with constructive feedback, team building, conflict management, and generational differences.

Academic-practice partnerships of a DEU can provide an innovative and collaborative approach to clinical education. Supported by an education program designed to equip the professional clinical nurse with transformational teaching/learning strategies, the DEU enhances the preparation of student nurses for the transition to practice.

**Theoretical Framework**

**Theory of Self-Efficacy**

The middle range theory of self-efficacy was developed by Albert Bandura and originally published in 1977 (Bandura, 1977). The theory of self-efficacy originated from the social cognitive theory and is defined as one’s perception of his/her skills or ability to successfully accomplish performance outcomes (Bandura, 1986). Perceived self-efficacy is applied to certain areas of function and cannot be applied globally to all areas of one’s performance. For instance, a professional staff nurse may have a high sense of efficacy in relation to clinical performance but a low sense of efficacy regarding clinical teaching. Efficacy beliefs impact not only behavior but goals and aspirations and opportunities and barriers the individual perceives in their environment (Mann, et al., 2012). A strong sense of efficacy facilitates cognitive and psychomotor behaviors, including quality of decision making and academic achievement (Zulkosky, 2009). The theoretical concept is built on the premise that individuals who doubt their ability to accomplish difficult tasks interpret these tasks as threats and give up easily when faced with difficulties (Hayden, 2014).

The theory of self-efficacy has four basic constructs that determine and contribute to perceived self-efficacy. Mastery experience refers to being successful at tasks. Self-efficacy
increases as individuals are more likely to believe they can do something new if it is similar to something they have successfully accomplished in the past (Zulkosky, 2009; Hayden, 2014). The second construct is vicarious experiences or the observation of successes or failures of others similar to themselves. Individuals feel confident in completing the same task they have observed being successfully completed by another, thus increasing perceived self-efficacy (Hayden, 2014). Verbal persuasion is the third construct and includes the positive feedback an individual receives as encouragement to achieve or master a task (Hayden, 2014). The fourth construct is physiological cues. Stress, anxiety, and fear can negatively affect self-efficacy. If the emotional state is controlled or perceived positively the negative impact is decreased (Hayden, 2014).

**Methods**

**Participant**

The participants were recruited through a convenience sampling from the Clinical Teaching Partner (CTP) pool of full-time staff nurses. All CTP’s were selected from the respiratory/telemetry medical unit at which the DEU was piloted. CTP qualifications established by the unit manager included baccalaureate prepared nurse preferred or equivalent experience defined as associate-degree prepared nurse with two (2) years’ experience. Additional requirements included unrestricted state board of nursing licensure and no disciplinary conditions by the hospital.

**Intervention/Tools**

A workshop was designed to prepare the clinical staff nurse for the role of a clinical teaching partner based on the content themes identified by Siebert & Bonham’s (2016) literature review. The agenda and content summary was shared with the unit manager, hospital educators, and nurse researcher. This internal review was necessary to ensure compatibility with existing
education programs offered at the hospital. An implementation date for the workshop was
selected six (6) weeks in advance for unit scheduling of staff.

The CTP Education Workshop was conducted in a one, eight (8) hour day format at the
simulation center located on the campus of the community college. Instruction and activities
included an overview of the nursing program philosophy and program/course student learning
outcomes, student learning, clinical instruction methods, communication, DEU team
responsibilities and simulation. A more detailed description of topic areas is located in Table 1.

Table 1

Content of Clinical Teaching Partner Education Workshop

<table>
<thead>
<tr>
<th>Content</th>
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<tbody>
<tr>
<td><strong>ADN Program Information</strong></td>
</tr>
<tr>
<td>Philosophy and End of Program Student Learning Outcomes (SLOs)</td>
</tr>
<tr>
<td>Nursing Course Review (SLOs, clinical learning guides, clinical evaluation tool)</td>
</tr>
<tr>
<td><strong>Student Learning</strong></td>
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<tr>
<td>Adult Learning</td>
</tr>
<tr>
<td>Learning Styles</td>
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<tr>
<td>Generational Differences</td>
</tr>
<tr>
<td><strong>Clinical Instruction Methods</strong></td>
</tr>
<tr>
<td>Learning Environment</td>
</tr>
<tr>
<td>Teaching/Evaluating Skills</td>
</tr>
<tr>
<td>Coaching Critical Thinking Skills</td>
</tr>
<tr>
<td>Role Socialization</td>
</tr>
<tr>
<td><strong>Communicating</strong></td>
</tr>
<tr>
<td>Faculty</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Challenging Situations</td>
</tr>
<tr>
<td><strong>DEU and Team Responsibilities</strong></td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>CTP</td>
</tr>
<tr>
<td>Faculty</td>
</tr>
<tr>
<td>Simulation</td>
</tr>
</tbody>
</table>
The Preceptor Program Educational Outcomes (PPEO) scale developed by Smedley, Morey and Race (2010) was administered at the beginning (along with demographic data collection) and at the end of the CTP education workshop.

The 15-item survey tool assesses the participants perceived change in knowledge of teaching and learning (survey items one (1) to five (5)), change in preceptor skills (survey items six (6) and eight(8) to 12), and change in preceptor self-efficacy (survey items 13 to 15). Responses are based on a five (5) point likert scale. To establish internal reliability Cronbach’s Alpha was calculated for each of the subscales by the original author and was reported as 0.88 to 0.95 (Smedley, Morey and Race, 2010). Cronbach’s Alpha coefficient of 0.70 or higher is considered acceptable (Privitera, 2014). The PPEO scale is provided in the Appendix B.

Descriptive information was collected and included questions about age, gender, years employed at the hospital, years on the hospital unit, years as a registered nurse, pre-licensure education preparation, current level of nursing education, previous experience precepting nursing students, and if previous preceptor training was completed. For assessment of the overall workshop, including content and learning strategies, a participant evaluation was also completed.

Permissions

Institutional Review Board (IRB) approval was granted by the health care organization, community college, and the student’s educational institution. Additional project approval was obtained by the nurse manager of the DEU, Chief Nursing Officer of the health care organization, research department of the hospital, and the Vice President of Academic Affairs at the community college. Survey copies were assigned a number to ensure confidentiality and anonymity of the participants and results were collected and maintained as confidential.
The Preceptor Program Educational Outcomes (PPEO) scale was provided in full as an appendix in the published research by Smedley, Morey, and Race (2010). Although copyright was not indicated in the research, the primary author was contacted via email and permission was granted for use of the survey and permission to adapt the items to reflect quantifiable statements.

**Results**

The purpose of this project was to examine the effect of an education program designed to prepare the staff nurse for the CTP role. The assessment process was designed to assist with the improvement, maintenance or termination of the program through formative evaluation processes (Smekad, 2011).

**Demographic Analysis**

The pilot project included eight (8) staff nurses from the dedicated education unit. Demographic data was collected as a part of the pre-test. Although the sample size was not adequate to achieve significant correlations when comparing demographic variables to the survey variables, it was important to identify the characteristics of the participants. The majority of participants were female, a mean age of 32.8 years, and an average of 10.4 years as a registered nurse. Average years of employment at the hospital was 2.6 and the average number of years on the selected patient care unit was two (2) years. The majority of participants obtained their pre-licensure nursing education at the associate degree level. One half (50%) of the sample had precepted students and completed some type of preceptor training course previously. Descriptive analysis of the participants are included in Table 2.
Table 2

Descriptive Analysis of Sample

<table>
<thead>
<tr>
<th></th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>87.5</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30 years</td>
<td>3</td>
<td>42.9</td>
</tr>
<tr>
<td>31-40 years</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>41-50 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>51-60 years</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Years as Registered Nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>6-10 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>20-30 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Years of Employment at Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 years</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>4-7 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Years of Employment on the Patient Care Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 year</td>
<td>3</td>
<td>37.5</td>
</tr>
<tr>
<td>2 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>3 years</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>4 years</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Pre-licensure Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADN</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>BSN</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Current Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADN</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>BSN</td>
<td>3</td>
<td>37.5%</td>
</tr>
<tr>
<td>MSN</td>
<td>1</td>
<td>12.5%</td>
</tr>
<tr>
<td>History of Precepting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>4</td>
<td>50%</td>
</tr>
<tr>
<td>no</td>
<td>4</td>
<td>50%</td>
</tr>
</tbody>
</table>

Data Analysis

Like items on the PPEO subscales were grouped and added together. Items 1-5 measured knowledge of teaching and learning, items 6, 8-12 measured generic preceptor skills, and items 13-15 measured preceptor self-efficacy (Appendix B). Statistical Package for the Social Sciences
(SPSS), Version 22 was utilized to conduct a paired T-test to analyze the pre- and post-intervention survey results and are reflected in Table 3.

Table 3

PPEO Scale Item Analysis

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Std Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 Pre and Post Knowledge of teaching and learning</td>
<td>0.25</td>
<td>0.411</td>
<td>0.145</td>
<td>-0.093 - 0.093</td>
<td>1.722</td>
<td>7</td>
<td>0.129</td>
</tr>
<tr>
<td>Pair 2 Pre and Post Generic preceptor skills</td>
<td>0.625</td>
<td>0.583</td>
<td>0.206</td>
<td>1.112</td>
<td>3.035</td>
<td>7</td>
<td>0.019</td>
</tr>
<tr>
<td>Pair 3 Pre and Post Preceptor self-efficacy</td>
<td>0.333</td>
<td>0.504</td>
<td>0.178</td>
<td>-0.088 - 0.088</td>
<td>1.871</td>
<td>7</td>
<td>0.104</td>
</tr>
</tbody>
</table>

Note: *p-value < 0.05

Analysis of the paired T-test had no statistical significant difference in the pre-and post-education intervention in the knowledge of teaching and learning and preceptor self-efficacy. However, analysis of the paired T-test did reflect statistical significant difference in the pre-and post-education intervention in generic preceptor skills with a P-value 0.019. Due to the limited sample size of the pilot (n=8) correlation analysis of the likert scale to demographics would have limited interpretations and thus was not conducted. The participant evaluations of the education workshop showed 100% of participants satisfied or highly satisfied with the content and active learning strategies incorporated.

Relationship of Results to Framework. The theory of self-efficacy originated from the social cognitive theory and is defined as one’s perception of his/her skills or ability to successfully
accomplish performance outcomes (Bandura, 1986). Although an important role in an academic practice collaboration, preceptors often receive little to no preparation for the teaching role. Lack of confidence, knowledge, or skills for effective teaching and learning can affect the CTP’s ability to be successful (Panzavechia & Pearce, 2014; Smedley, Morey, & Race, 2010).

The constructs of the theory was successfully utilized as the foundation of the education program for the CTPs. The perception of mastery (construct 1) came with the successful completion of the education session. The participants worked in small groups, role-playing and observing each other, providing opportunities for construct two and three, or the observation of others successes or failures. Positive feedback and encouragement from peers and facilitators was encouraged to build confidence in the ability to succeed. Finally, construct 4, or limiting the anxiety and fear influence, was included with simulated CTP/student nurse scenarios, allowing the practice application of techniques in a controlled learning environment.

Relationship of Results to Goals and Objectives. Clearly defined goals and objectives of a project are critical to successful implementation and evaluation (Balch, John, Reynolds, & Rick, 2011). The goal of the project was to increase the knowledge, self-efficacy, and generic preceptor skills of CTP’s related to teaching/learning when working with student nurses on a dedicated education unit. The specific objective supporting the program goal was all clinical staff nurses serving as a CTP will have received professional development (education workshop).

Although the project results did not reflect statistically significant correlations in the increase of knowledge of teaching and learning or the self-efficacy of the CTP, it did guide the revision of the education program contents as well as promote additional research in the area of clinical teaching partner preparedness. The logic model for the DEU education program (Appendix A) illustrates an ultimate or long term outcome of increased patient satisfaction scores
and increased unit retention of staff nurses. This outcome aligns with the hospitals quality indicator of patient experience, supporting the organization’s strategic plan.

**Discussion**

The scope or plan for the project was developed with a logic model, assuring the alignment of goals and objectives for both the hospital and community college. The design and implementation of the education workshop was completed, grounded in evidence obtained through the literature review and on-site visits of established DEU’s. Data was collected and analyzed for maintenance or revision of the education workshop.

Survey results reflected no significant correlation of the education program to the CTP’s knowledge and self-efficacy in teaching/learning principles but did reflect significant correlation in the improvement of generic precepting skills. Analysis of the pre-intervention surveys reflected a high level of existing knowledge of teaching and learning principles and self-efficacy in serving as a CTP. These confounding variables included previous completion of a preceptor training (n=4) and years licensed as a registered nurse (n=4 with seven or more years’ experience). Due to the small sample size conduction of an analysis of covariance (ANCOVA) would not be reliable in interpretation for clinical meaning when calculating the impact of these variables. This influence will be important to study as the participant size increases. Research conducted by Larsen and Zahner (2011) found no significant relationship between knowledge and self-efficacy scores but did find a correlation between previous preceptor experience and higher level of education to preceptor self-efficacy.

Additional assessment information was obtained from the CTP’s evaluation of the education workshop objectives. CTP’s responses indicated that after attending the workshop they were knowledgeable in interpreting the impact of learning styles and generational differences on
student learning and identifying and applying clinical instruction methods including learning
environment teaching/evaluating skills, coaching critical thinking skills, and role socialization.
The ability to identify and modify communication styles when dealing with students and
challenging situations were other content areas found to be evaluated by the CTP’s as highly
valued.

Strengths and Limitations

Project success depends on input and involvement of each stakeholder identified
(Walters, 2011) and was a strength of the pilot program. A multidisciplinary team was identified
early in the planning of the project as important to the development of a culture of teaching and
learning. The initial interdisciplinary project team members included representatives from the
school of nursing (dean and nursing faculty) and the patient care until selected for the DEU
(nurse manager, two staff nurses, and one unlicensed assistant personnel). Additional members of
the team included the director of nursing research, representative from the hospital education
department, and a staff nurse that graduated within the last year from the nursing program and
was now employed at the hospital. During the first meeting a readiness survey was successfully
completed and additional team members were added as the project moved to the next level.
These team members included a hospital finance representative, director of nursing, hospitalist
for the unit, and representatives from occupational therapy and physical therapy; health care
disciplines frequently consulted on the targeted unit. The support of both the hospital
organization and the community college was the foundation strength of the project. Additional
positive aspects of the project was staying on budget and timeline.

Limitations for this project include a small sample size due to studying only one cohort of
the CTP training. The pilot DEU academic-practice partnership was launched on one unit of the
hospital, thus recruitment population was limited. Due to this limitation, generalizability cannot be determined. As previously mentioned, the small sample size also brought great limitations in identifying correlation of confounding variables. Further exploration of the impact on various demographic variables (50% of the sample had previously completed some type of preceptor training and had more than seven (7) years’ experience as a registered nurse) would have provided more information. The limited participant size will be addressed in future project assessments as additional staff nurses are identified to serve as CTPs.

**Recommendation and Implication for Future Practice**

According to the National Council for State Boards of Nursing (NCSBN) (2016) 50% of RNs are age 50 or older, representing an aging workforce preparing for retirement in the next 15 years. Additionally 61% of respondents to the National Nursing Workforce Survey (NCSBN, 2016), reported associate degree as their initial nursing education. However, there is limited research in the incorporation of the DEU in associate degree nursing programs. More research with the prelicensure associate degree programs is needed, including the exploration of student confidence in caring for patients as a result of participating in DEU clinical experiences as well as impact on academic retention rates.

The workforce projection combined with the increased complexity of the health care environment, require innovative approaches in how nurses are educated to meet these challenges (Institute of Medicine, 2010; Smyer, Tejada, & Tan, 2015). Dedicated Education Units (DEU) have been identified in the literature as an effective academic-practice partnership that assists with the alignment of education and practice, facilitating the translation of knowledge to application (Dapremont & Lee, 2013; Eskilsson, Carlsson, Ekebergh, & Horberg, 2015; Moore & Nahigian, 2013; Murray & James, 2012). Although many areas of quality improvement were
identified with the implementation of a DEU, the success of the initiative is dependent on the
CTP’s knowledge and self-efficacy of teaching/learning principles.

The fourth and final step of the Deming Cycle quality model is the identification of an
action plan based on the evaluation findings. A second cohort of CTP’s was identified by the unit
manager and the education workshop will be presented without revision. The content themes will
remain the same, however an additional PPEO survey assessment will be administered to the
CTP’s after the completion of the DEU clinical experiences. The PPEO survey assessment pre
and post-workshop completion and at the end of the clinical experiences will provide the CTP
opportunity to apply learned concepts during the student interaction and will provide additional
insight to the effectiveness of the education program.

The successful launch of the pilot DEU project brings opportunity for future research.
Research on the impact of DEU’s on student retention and clinical confidence are two areas to be
investigated and align with nursing program and college/university’s strategic plans. Additional
assessment of the impact of the DEU project will include exploration of the DEU on the health
organization’s outcomes. Unit specific outcomes such as patient experience scores and staff
retention will be monitored. New graduate confidence will be assessed utilizing the Casey Fink
Graduate Nurse Readiness Survey (Casey, Jaynes, Campbell, Cook, and Wilson, 2011).

**Sustainability**

A solid infrastructure of cooperation and collaboration is necessary for sustainability. The
DEU collaboration is strongly supported by both the hospital and community college. A three-
year time plan has been developed with a commitment from each organization for the
sustainability of the academic-practice partnership. Recognizing the anticipated benefits to
program completion, retention, graduate preparedness, and program satisfaction, the community
college provides in-kind physical and fiscal support for the ongoing CTP education program. The hospital partner is providing in-kind support for the fiscal support of the DEU staffing and has calculated the project as cost neutral by year three (3) based on return on investment projections.

The Associate Degree Nursing program coordinator at the community college and the unit manager of the DEU will collaboratively oversee the continued project. Additional research projects are planned and awaiting Institutional Review Board approval to explore the impact of the DEU on graduate nursing student confidence, patient experience scores, and staff retention.

Table 4 displays an ongoing timeline for the overall DEU project.

Table 4

**DEU Project Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 12, 2017</td>
<td>Completion of first DEU student cohort one (1) (12 students)</td>
</tr>
<tr>
<td>October 9 and 30, 2017</td>
<td>Debriefing and evaluation of pilot project</td>
</tr>
<tr>
<td>November 28, 2017</td>
<td>Education Workshop for additional six (6) CTs</td>
</tr>
<tr>
<td>January – May, 2018</td>
<td>Student cohort two (2) complete DEU clinical experience (24 students)</td>
</tr>
<tr>
<td>May, 2018</td>
<td>Debriefing and evaluation of full implementation of the project, including assessment of need for additional CTCPs</td>
</tr>
<tr>
<td>Summer, 2018</td>
<td>First student cohort graduates and is hired (research begins on decreased onboarding time and graduate confidence)</td>
</tr>
<tr>
<td>August – December, 2018</td>
<td>Student cohort three (3) completes DEU clinical experience (24 students)</td>
</tr>
<tr>
<td>July, 2018</td>
<td>Workshop offered for new CTP’s and review workshop developed and presented for existing CTP’s</td>
</tr>
<tr>
<td>January – May, 2019</td>
<td>Student cohort four (4) completes DEU clinical experience (24 students)</td>
</tr>
</tbody>
</table>
Conclusion

Outcome assessment of projects are important to drive public policies as well as healthcare organizations efforts to provide safe, quality care (Minnick, 2013). Utilizing a logic and quality model such as the Deming Cycle, provided a strategy for the ongoing assessment and evaluation of the pilot DEU program. The comparison of program outcomes with the desired outcomes provides opportunity to correct any identified discrepancies for program improvement. Although the number of DEU’s are increasing numbers of DEU, there are a limited number of partnerships with associate degree nursing (ADN) programs. The quality project designed to equip CTP’s in their role in a DEU provides a framework for future initiatives between associate degree education and hospital practice partners.
Reference


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Appendix A

Logic Model for Education Workshop for DEU
(Gholson, 2017)

**Situation:** By engaging practice partners in clinical education through a Dedicated Education Unit (DEU), the professional clinical staff nurse functions in the role of preceptor or teaching partner, bringing expertise to the collaboration but lacks the skills and knowledge of effective teaching/learning strategies.

<table>
<thead>
<tr>
<th>INPUT</th>
<th>OUTPUT</th>
<th>OUTCOME/EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eight (8) staff nurses and salary for eight (8) hours professional development</td>
<td>Facilitate a teaching/learning workshop for CTP</td>
<td>Short Term Outcome: Increased Self-efficacy in Teaching/Learning</td>
</tr>
<tr>
<td>Two (2) nursing faculty and salary for eight (8) hours facilitating</td>
<td>Partnership between WKCTC and BHP</td>
<td>Ultimate Outcome: Increased patient experience scores, increased unit retention of staff nurses, decreased onboarding costs</td>
</tr>
<tr>
<td>Time to develop the workshop</td>
<td>TCP’s Nursing Faculty</td>
<td></td>
</tr>
<tr>
<td>Materials and simulation lab cost</td>
<td>Dean of Nursing</td>
<td></td>
</tr>
<tr>
<td>Partners</td>
<td>Nurse Manager of DEU unit</td>
<td></td>
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<tr>
<td></td>
<td>BHP Nurse Researcher</td>
<td></td>
</tr>
</tbody>
</table>

**Assumptions**
- Staff nurses will be motivated to learn Workshop content is comprehensive and meaningful to improve teaching/learning

**Internal/External Factors**
- The project is a part of two separate organizations
- Existing preceptor program for BHP clinical ladder but is not specific to DEU

**EVALUATION**
Survey administration pre- and post- attendance to the workshop. Analyze and Interpret -Report
Thank you for participating in the research study. This survey is designed to assess whether the education workshop has been of value to you in your preparation for the role of Clinical Teaching Partner. It is important for you to read the questions carefully and to answer honestly about your experience.

<table>
<thead>
<tr>
<th>In relation to your current beliefs regarding your preparation for the role of a Clinical Teaching Partner, please complete the following by selecting the most appropriate option using the following key: 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. I have knowledge of teaching and learning models used in the clinical environment.</td>
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<tr>
<td>2. I have understanding of the teaching learning process.</td>
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<tr>
<td>3. I am able to guide students’ through critical thinking.</td>
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<td>4. I am able to learn through reflecting on my own nursing practice.</td>
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<tr>
<td>5. I am able to think critically about problem-solving.</td>
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<td>7. I have good communication skills with students, including providing feedback for improvement.</td>
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<tr>
<td>8. I have a positive attitude when working with students.</td>
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<tr>
<td>9. I understand how others learn and utilize alternative teaching approaches.</td>
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<tr>
<td>10. I am able to assess student’s learning needs.</td>
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<tr>
<td>11. I am able to logically sequence my teaching sessions.</td>
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<tr>
<td>12. I am able to effectively reflect on my own learning role.</td>
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<tr>
<td>13. I willingly accept and use feedback from students to improve my practice.</td>
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<tr>
<td>14. I have confidence in my role of preceptor</td>
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<tr>
<td>15. I find it easy to include students in my day-to-day nursing practice.</td>
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<tr>
<td>16. I am a role model for students.</td>
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