The Implementation of an Evidence-Based Advanced Nursing Preceptor Course

DNP Final Project

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Abstract

“It is critical that preceptors are aware of the unique opportunity they have to connect with a new person in ways that ease the new hire transition, while still maintaining patient safety during the learning process,” (Baggot, Hensinger, Parry, Valdes, & Zaim, 2005, p.139). Maintaining patient safety and care delivery by maximizing internal employees to provide quality role modeling for new employees emerged as a topic for further review from a nursing educator’s perspective. Further investigation as a nurse educator, targeting the effectiveness and intentional support of nurse preceptor development in conjunction with the onboarding and orientation process of new hire employees, became the focus of review for this author’s DNP final project. The aim of this project was to describe the identification, development and implementation of an Evidence-Based Advanced Nursing Preceptor Education course within a large, Midwestern, academic medical center. The purpose of this quality improvement project was to evaluate an advanced nursing preceptor education course on nurse preceptors’ knowledge, skills, and perceptions to provide experienced nurse preceptors evidence-based education strategies to facilitate the orientation and onboarding of new staff. The rationale for this course was built upon the foundation that the participant has acquired skills and knowledge through experiential precepting, in order to address more complex topics related to the orientation and on-boarding process of new hire nurses (Neumann et al., 2004). Utilizing several levels of theoretical foundations for the development and implementation of this course, the pre-course baseline results were compared to the post-course results of nurse preceptor participants one week post attendance to assess the effects of the advanced nursing preceptor course on the preceptors’ knowledge, skills, and perceptions. A majority of the post-course results identified positive small to medium effect sizes for the course, which were consistent with clinically meaningful
outcomes associated with the development and implementation of the course. The end results measuring the outcomes associated with the effects of preceptor knowledge, skills, and perceptions from attending an advanced nursing preceptor course were consistent with supporting literature that identified that organizational recognition and support of nurse preceptors result in an increase of nurse satisfaction and the internal motivation to learn based on the Adult Learning Theory by Malcolm Knowles.
The Implementation of an Evidence-based Advanced Nursing Preceptor Course

**Chapter 1: Overview of Project**

The business of healthcare within the United States is currently in a state of rapid transformation due to the recent passage of the Patient Protection and Affordable Care Act (PPACA) into law, which has now provided approximately 88 million previously uninsured Americans healthcare access of affordable, quality health insurance coverage (U.S. Department of Health & Human Services, 2012). The regulatory requirements outlining the governing of the PPACA integrated with the Institute of Medicine’s (IOM) committee recommendations for improved quality healthcare delivery has garnered the attention of many healthcare leaders and their respective supporting organizations, to rapidly reassess and identify innovative ways to generate patient care revenues through inviting the newly, eligible patient consumers to utilize their organization’s providers and services.

This lawful action has rapidly shifted the focus of healthcare access and provision in the United States from a high volume-driven, fee-for-services business model to a one that encompasses a more evidence-based, patient-centered focus across the full healthcare continuum perspective (Porter & Lee, 2013). “The concurrent challenges of increased demand for nurses, declining nursing school capacity, and growing dissatisfaction of nurses combine to create a troubling future for the nation’s healthcare delivery system,” (Atencio, Cohen, & Gorenberg, 2003, p.138). “According to a paper by the Joint Commission on the Accreditation of Healthcare Organizations, low numbers for nursing staff were a factor in 19 percent of medical errors resulting in deaths or serious injuries in hospitals. Nurses’ inadequate orientation and training were cited as factors in 58 percent of serious errors,” (Tarkan, 2004; Baggot, et al., 2005, p.139).
Identifying key tactics to increase nurse retention and decrease turnover are essential strategies for healthcare leaders’ to focus on.

**Background**

Prior to the establishment of the PPACA, the IOM created committees to further review the various components that comprised the provision of healthcare services. In 2001, the Institute of Medicine (IOM) issued committee recommendations, titled *Crossing the Quality Chasm: A New Health System for the 21st Century* (Institute of Medicine [IOM], 2001) to address the need for delivery of consistent, high-quality healthcare to all Americans. The report highlighted six specific aims that should be addressed by healthcare delivery providers and organizations, in order to meet the standards set forth by the recommendations. The six aims are a) Safe; b) Effective; c) Patient-centered; d) Timely; e) Efficient; and f) Equitable healthcare delivery topics.

In addition to the six separate aims, the IOM committee further recommended ten rules to assist in the overall redesign of healthcare organizations, in order to better delivery high-quality patient care. The ten rules are listed as:

1. Care is based on continuous healing relationships
2. Care is customized according to the patient needs and values
3. The patient is the source of control
4. Knowledge is shared and information flows freely
5. Decision making is evidence-based
6. Safety is a system priority
7. Transparency is necessary
8. Needs are anticipated
9. Waste is continuously decreased

10. Cooperation among clinicians is a priority (IOM, 2001)

The passage of the PPACA has provided additional opportunities for healthcare organizations and providers to partner with the Centers for Medicare & Medicaid Services (CMS) to identify, create, implement and evaluate new approaches for the delivery of evidence-based, optimal, safe care for all patients. Utilizing the recommendations of the IOM’s quality committee and collaborating efforts with the CMS, the legislation allows the opportunity for change in reassessing the healthcare delivery model’s previous fragmented, fee-for-service model to a value-based, holistic continuum perspective, following the patient from a prevention and outpatient setting through inpatient and back out to outpatient care. This coordination of patient care allows the patient to not only receive optimal care across the trajectory of his or her life, but also for a lower overall cost savings to the patient and provider. Accountable care organizations (ACOs) were developed as monetary incentives to promote organizations to standardize and streamline patient care delivery by coordinating care. An ACO is defined as integrated provider groups that participate in the Medicare Shared Savings Program on behalf of the PPACA (Baicker & Levy, 2013).

The voluntary partnership of an ACO consists of several domains. These domains include patient experience, care coordination and patient safety, preventive health and at-risk populations. The higher the quality of care providers deliver, the more shared savings their accountable care organization may earn, provided they also lower growth in health care expenditures (CMS, 2015). Similar to the IOM’s recommendations, the emphasis placed on the recognition that the coordination of care to lower costs and efficiently deliver high quality patient care seems to be the focus for healthcare organization leaders.
The Institute of Medicine (IOM) issued a report brief titled, *the Future of Nursing: Focus on Education* in October 2010 as a recap to the American public that there is an easily accessible answer in the delivery of national high-quality healthcare. The authors of the report highlighted that in order to, “transform the health care system to provide safe, quality, patient-centered, accessible, and affordable care will require comprehensive rethinking of the roles of many health care professionals, nurses at the center among them,” (Institute of Medicine [IOM], 2012, p. 1). Competitive pressures placed on healthcare organizations from financial and outcomes perspectives will “essentially force these companies to utilize its internal structure as a key survival mechanism,” (Chang & Chang, 2009, p. 99).

Authors Porter & Lee (2013) identified that an essential strategy utilized by healthcare leaders is to guide their organizations to transition from the previous fragmented model of healthcare delivery to best utilize evidence-based strategies from a team-based approach in order to stay competitive with other rival organizations for the provision and delivery of quality patient care and service. “Health care leaders must not just be responsive to the changes within their organizations, but rather they must create their future,” (Ginter, Duncan, & Swayne, 2013, p. 6). The portrayal highlights the advanced efforts of an organization through maximizing the strengths of its’ own employees to deliver high quality patient care and services, rather than not choosing to incorporate the needs of the external environment, which is not fiscally or resource responsible in today’s health care arena (Ginter, Duncan, & Swayne, 2013).

Preceptors introduce new hire employees, whether an experienced nurse or new graduate, to the challenges of clinical nursing within the organization and are considered being the support structure throughout the new employee’s orientation process (Horton, DePaoli, Hertach, & Bower, 2012). Furthermore, “preceptors introduce new staff members to other health team
members and to the general social processes and knowledge unique to that work area,”
(Henderson, Fox, & Malko-Nyhan, 2006, p. 130). “New hire satisfaction requires a clinical orientation process that develops an individual’s competencies while easing the transition to the clinical unit through socialization and support from nursing leadership,” (Baggot, Hensinger, Parry, Valdes, & Zaim, 2005, p.139). “An organization’s focus on human capital development on individuals holding jobs that have the greatest impact is an essential business strategy,” (Kaplan & Norton, 2004; Baggot, et al. 2005, p. 140). “The genuine knowledge represented within the everyday practice of nurse preceptors is often overlooked and not considered in the recruitment, retention, and acknowledgement of talent these nurses offer towards the practice of the new nurses,” (Paton, 2010, p. 148).

**Problem**

The recognition of employees viewed as a value-added commodity in the unified effort towards delivering high quality, evidence-based care can be considered an essential strategy employed by leaders to improve relationship building amongst their staff. “Relationship building and networking can best assist organizations to better recognize what the needs and concerns are of its employees from a proactive approach,” (Christmas, 2007, p. 37). The identification and recognition of staff needs and concerns can relay the value an organization places on its own employees and the importance of retaining current and new staff. Additionally, proactive steps further “supports that nurse retention is a key driver of quality for nurse satisfaction and overall organizational patient safety,” (Fox, 2010, p. 311). Evidence shows that appropriate assignment of trained staff and staffing ratios not only directly impact patient outcomes, they also directly influence the likelihood of patient mortality (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002).
Dubois, D’Amour, Pomey, Girard, & Brault (2013), explored the ability of an organization’s leadership to acquire, deploy, and maintain resources, as well as to transform its resources into services resulting in a direct image of leaders’ ability to best utilize internal staff strengths in providing and delivering optimal patient care. The business of healthcare delivery has been defined by several authors as a means to the end (Asch & Volpp, 2012). An example of the transformation of resources into strategic services is illustrated through the creation of a professional onboarding environment with the provision of a skilled, proficient role model for the new employee to follow through their orientation and transition into the new workplace environment. Onboarding is the process by which, “a new employee is introduced to an organization and its mission, vision, and values and the process is considered complete when the employee is considered fully self-functional,” (Graybill, Hudson Carpenter, Offord, Piorun, & Shaffer, 2013, p. 201). The development and sustainment of a quality orientation and training program illustrates the ability to transform resources into opportunities to provide high quality services by measuring outcomes through opportunities where, “a new employee could concentrate on learning the skills and knowledge needed for providing excellent patient care,” (Ward, 2009, p. 87).

Within the context of onboarding, the actions signifying a fully functional status in providing competent, safe care by a new employee is generally achieved at the conclusion of the clinical orientation process. “Preceptors provide a vital role in the successful orientation of a new staff member’s transition to professional practice during the initial onboarding and orientation processes of an organization,” (Delfino, Williams, Wegener, & Homel, 2014, p. 122). The term preceptor is defined as, “one who embraces the roles of socializer, protector, educator, and evaluator of the nurse who is making the transition into a new work environment” (Boyer, 2008,
p. E6). The use of providing professional role model nurse preceptors to guide the employee through the orientation process to nurture and increase new nurses’ sense of identification can be illustrated as an organizational priority to best support its’ new employees (Ward, 2009).

Nurse preceptors provide the social contextual opportunity for new employees to amalgamate previous formal education processes in becoming a nurse with real world practice applications within an organization (Buffum & Brandon, 2009). Buffum & Brandon also highlight that many nurses resign if they are unable to assimilate socially or clinically during that orientation period. In addition to the social context environment, preceptors also review additional skills and competencies with new employees during their orientation process including, “confidence in skill performance; critical thinking/clinical knowledge; relationships and communication practices within interprofessional collaborations; identification of dependent vs. independent, safe practice; work environment; and organizational/individual priority setting,” (Casey, Fink, Krugman, & Propst, 2004, p. 307). Providing a sound structure to allow nurses experiential learning opportunities to develop and improve their technical capability is imperative, not only for the nurses’ wellbeing, but to also ensure safe patient outcomes.

**Significance**

Being viewed as the frontrunner of excellence through the provision and delivery of quality care for patients seems to be the foundation that healthcare leaders’ push their organizations to strive for. Quality care delivery begins with attracting and ultimately retaining high quality employees to provide the care. Leaders’ strive to increase staff retention ultimately by decreasing turnover rates. “Turnover is costly to an organization, creating significant financial burdens and affecting morale and clinical quality,” (Golden, 2008, p. E6). The author additionally highlights that the identification of proactive retention processes are essential
towards to the overall success for the financial and quality outcomes of the organization (Golden, 2008).

A direct result of turnover can best be illustrated as money invested and money lost, with a report that identified, “that organizations can spend over $300,000 annually in nurse turnover costs for every 1% increase in turnover,” (Jones, 2008, p. 11). Organizational leadership can begin addressing nurse turnover concerns in an indirect manner; simply, “by recognizing the value added commodity and importance of the nurse preceptor role during the orientation process,” (Neumann et al., 2004, p. 17). Hospitals and other healthcare organizations have a fiscal responsibility and challenge, as their leaders’ will have to continually evolve to engage and use nursing resources effectively, in order to maximize the benefits of nursing practice and care (Center for Studying Health System Change [HSC], 2008).

In addition to the cost drivers associated with turnover, “employers who have collected turnover rates have found a direct correlation between departments/areas that offer a process to assimilate the new employee versus no process, results in a “sink or swim” mentality for the employee that experienced no formal onboarding process” (D’Aurizio, 2007, p. 4) Effective orientation and investment in preceptor development and education programs are examples of excellent organizational retention strategies (Golden, 2008). “Nurse turnover contributes to higher organizational costs in the form of productivity losses and organizational inefficiencies that result from staff instability, and in the form of human capital losses that result when high-performing nurses leave and have to be replaced,” (Jones, 2008, p. 12).

“Preceptorships are organized instructional programs that facilitate the integration of newly employed nursing staff into their role responsibilities in the work setting,” (Alspach, 2000; Moore, 2008). The effort to provide a quality, evidence-based training program for nurse
preceptors can reflect an organizational commitment to its’ employees, while promoting self-worth of those selected to participate as preceptors (Fox, 2010). “Clinicians experience substantial pressure to gain further qualifications and expertise, facilitate learning, and still function in an increasingly complex, dynamic, and stressful healthcare environment,” (Henderson et al., 2006, p. 131). “Nurse preceptors play a key role in helping new staff to transition to the workplace, and require both training and management support to balance their roles as clinician and mentor during the orientation process,” (Henderson et al., 2006, p. 135). Conversely, organizations may experience detrimental consequences related to the delivery of quality care to patients, as well as to staff satisfaction and retention, if prior preparation of the organizational workforce hasn’t been adequately addressed (Sorrentino, 2013).

**Purpose/PICOT**

The purpose of this quality improvement project was to evaluate an evidence-based educational advance preceptor course on preceptors’ knowledge, skills, and perceptions in order to ultimately facilitate high quality orientation and onboarding of new staff. The rationale for this course was built upon the foundation that the participant has acquired skills and knowledge through experiential precepting, in order to address more complex topics related to the orientation and on-boarding process of new hire nurses (Neumann et al., 2004).

The PICOT question that guided the development of the course was, “In experienced nurse preceptors employed in a hospital setting, how does the implementation of an advanced nursing preceptor course compared to the previous one-time preceptor development workshop affect the nurse preceptors’ knowledge, skills, and perceptions of the role after course participation?”

**Project Description**
Utilizing evidence to support the development of the course, the content focused on goal setting, creative teaching strategies, conflict resolution and communication, as well as organizational recognition and support/appreciation (Speers, Strzyzewski, & Ziolkowski, 2004). Nurse preceptors are “held accountable for providing clinical instruction and overall competency evaluation of the new employees during the orientation process,” (Baltimore, 2004, p. 133). Therefore, it is important for course participants to demonstrate effective communication and critical thinking techniques through the observation of preceptor-preceptee relationship case scenarios and subsequent application and use of evidence-based evaluation skills.

**Outcome Measures**

To measure the effects of the evidence-based course, participants were asked to evaluate the course pre and post course attendance. The Preceptor Program Evaluation Outcome scale (PPEO) developed by Smedley, Morey, and Race (2010), was utilized to capture the effectiveness of the course. The tool was developed as a 15-item Likert-based survey that aimed to highlight the experienced nurse preceptors’ knowledge of the teaching and learning process; knowledge, understanding and use of generic preceptor skills; perception of self-efficacy and confidence; and if their attitude changed toward new hire nurse preceptees. The results from a 10-item organizational, internal nurse preceptor learning assessment with open ended questions were collected, as well as the nurse preceptors’ baseline demographic information.

The author of this DNP project sought to assess the effects of the course on experienced nurse preceptors’ knowledge of the teaching and learning process; their knowledge, understanding and use of generic preceptor skills; their perception of self-efficacy and confidence; and finally to identify if there were any changes in their attitude toward new hire nurse preceptees one week post-course attendance.
Capstone Objectives

1. What are the knowledge, skills, and perceptions of experienced nurse preceptors prior to attending the Advanced Nursing Preceptor course?

2. What are the effects on the Advanced Nursing Preceptor course on the knowledge, skills, and perceptions of experienced nurse preceptors one week after attending the course?
Chapter 2: Review of Literature

Organizations interested in the development, retention, and recognition of nurse preceptors as valuable assets to the orientation program with onboarding new hire nurse preceptees has been identified in the literature as the foundation for numerous studies. The importance of the nurse preceptor role is vital and dependent upon the preceptor’s ability to share critical knowledge and skills necessary to assist the new hire nurse’s transition to practice in the new environment. The rationale for the development of the evidence-based course is built upon the foundation that the participant has acquired skills and knowledge through experiential precepting, in order to address more complex topics related to the orientation and on-boarding process of new hire nurses (Neumann et al., 2004, table 1).

Theoretical/Conceptual Framework

Several theoretical models were utilized throughout the development of this evidence-based project. Everett Rogers’ Diffusion of Innovation theory was used to guide the process for the identification, creation, implementation, and evaluation of the Advanced Nursing Preceptor course within the construct of the development of a larger, system-wide Preceptor Education Program. The content for the Advanced Nursing Preceptor course was developed utilizing Malcolm Knowles’ Adult Learning Theory and the course participants were provided a handout that included the Patricia Benner Novice to Expert Theory (Benner, 1982), as a structured tool that sought to assist preceptor-preceptee communication.

Rogers’ Diffusion of Innovation Theory

The concepts of Rogers’ Diffusion of Innovation theory were utilized in the development of this course to better illustrate and examine the effects that can impact the integration of an advanced educational course for nurse preceptors. Everett Rogers’ defined and identified
diffusion as, “the process in which an innovation is communicated through certain channels over time among the members of a social system,” (Rogers, 2003, p.5; Hanrahan, et al., 2015, p. 4). Furthermore, his theory identified five separate stages that highlight the supportive process utilized to implement change within an organization. Those stages included, “agenda-setting, matching, redefining, clarifying, and routinizing,” (Hanrahan, et al., 2015, p. 4). Rogers’ initial diffusion of innovation theory highlighted the five steps of “knowledge, persuasion, decision, implementation, and confirmation,” (Jasovsky, Morrow, Clementi, & Hindle, 2010, p. 29).

**Stage 1 – Knowledge**

The initial process that began the course development was illustrated by the first stage of Rogers’ theory, knowledge. As a health system educator, this author pondered several components that dealt with the integration of newly hired employees within the inpatient, unit setting across a large academic medical center. From a background perspective, this author also served as a new graduate nurse educator, who facilitated the transition and integration of new graduate nurses into their workplace settings within the organization. Utilizing previous knowledge of the orientation and onboarding process, this author hypothesized that the socialization and transition of the new graduate nurse to the unit setting appeared to have a significant impact on the new graduate nurse’s ability to adapt into the organization’s complex workflow process. Furthermore, the transition process for any new hire nurse within the organization seemed to be affected most influentially through the initial orientation process.

Further investigation by this author was conducted and based upon the understanding and recognition of the importance of the unit-based nurse preceptor role within organizational setting. More specifically, this author sought to increase her knowledge in further understanding the dynamic of the relationship between nurse preceptors and newly, hired nurses during their
initial transition to practice through their orientation process within a large Midwestern, academic medical center.

Dynamic organizations must find innovative ways to not only introduce methods of incorporating change, but also find ways to successfully sustain the changes once they are implemented. One such sustainability strategy was identified and known as collective learning. The overall collective learning method was “used to develop new knowledge by means of clarifying a common ground as well as highlighting differences, in a process also known as unlearning,” (Loorbach, Van Bakel, Whiteman, & Rotmans, 2010, p. 135). This author further identified that this was an important concept to understand in building a new course, as the process of unlearning assists to break up institutional habits and barriers through collaborative approaches ultimately leading to the sustainability of an idea or concept (Loorbach, et al., 2010).

Utilizing previous experiential knowledge as a military spouse and resource mentor, this author simultaneously posited that the need for evidence-based, education and professional development support for new employees within an organization was similar to the military family-readiness model used to best prepare new spouses and families for their journey within their new military-lifestyle. The latter model utilized experienced spouses, already proficient in their knowledge of the military lifestyle by providing a structure to further educate these mentor spouses regarding additional, organizational and installation-location based information. It appeared that the structured training coupled with the actual, firsthand life experiences of the mentor spouses augmented the knowledge of the military lifestyle for the new spouses and families by assisting with their integration and transition as the newest members of the military family.
Using experiential knowledge, this author developed a PICOT question responding to the increased need to proficiently onboard and orient new hire staff, while still allowing for the delivery of high quality patient care within the unit setting. “For experienced nurse preceptors employed in a hospital setting, how does the implementation of an advanced nursing preceptor course compared to the previous one-time preceptor development workshop effect the nurse preceptors’ knowledge, skills, and perceptions of the role after course participation?”

Stage 2 - Persuasion

Through the collaborative efforts of various members from the department of nursing education, departmental directors, and unit management teams, this author was sought by nursing administration to further pursue the investigation to compare the organization’s previous practice supporting preceptor education with the published, supporting evidence of nurse preceptor development and education. The ensuing differences were collected and presented to the administrator of nursing quality, education, and evidence-based practice and subsequent supporting directors, and resulted in the identification and development of a cross-sectional advisory group. This advisory group consisted of various roles across the organization and included members of nursing administration/leadership, nursing management, clinical nurse specialists, nurse educators, and nurse preceptors throughout the medical center. This stage was defined as, “the stage that proceeds with individuals or organizations that form favorable or unfavorable attitudes about innovation,” (Jasovsky, et al., 2010, p. 30).

The development of this advisory group was essential in moving the discussion of transforming current practice into an evidence-based, innovative structure forward. The experiential knowledge of the various roles required that input be received that allowed the forward movement of the groups’ activities into the third stage of Rogers’ theory, decision
making. The supporting feedback of the advisory group members were invaluable. The group further identified the impact of nurse preceptors within the unit setting in support to orient and onboard new hire staff in relation to the impact on patient care delivery, patient satisfaction, and budgetary/time constraints related to lengthy orientation processes. The receipt of the additional feedback supported other changes and innovations that were introduced, including the creation of a recommendation tool and other course content components.

Stage 3 – Decision

This stage was defined as the period of time that follows when “organizations engage in activities that lead to adopting or rejecting the innovation or change,” Furthermore, an additional essential action is “the importance of assessing the state of either the individual or units’ decisions to adopt the innovation prior to the full-scale implementation,” (Jasovsky, et al., 2010, p. 30). This author sought the support of the advisory group’s innovators, early adopters and early majority to finalize the decision to move forward based on the evidence that supported the necessity for providing additional educational and professional development support for experienced nurse preceptors within the organization.

The education, information and evidence that was presented during the monthly advisory group meetings provided members the ability to support and present the information within their circles of influence to assist in gaining additional support from their respective peers as the course was developed. Once the decision was made to move ahead with the implementation of this course, additional steps were identified that required to be addressed prior to advertising the class throughout the organization.

The additional decision-based steps included notification of the organization’s nursing quality feasibility committee, the union representative that represented the professional nursing
union, and the development of continuing education (CE) material for the participants to receive CEs for course attendance. The academic Institutional Review Board (IRB) was also contacted and an application placed for IRB approval, prior to implementation of the course. After submission to the IRB, the determination was made that the course was not considered human subjects research, as the data collected was to only be utilized to improve current practice from a quality improvement standpoint and therefore did not require IRB approval. The nursing quality feasibility committee further identified the importance of confidentiality and utilizing aggregate data, as steps towards implementation. The union representative approved the use of the questions listed in the survey for data collection from nurse preceptor participants and clarified the use of data in aggregate form, rather than individual data, as that would allow for anonymity for the nurse participant to share feedback during the surveys. Continuing education (CE) was also developed and approved for the course participants.

Stage 4 – Implementation of the Course

The elements that encompassed the fourth stage included the supportive organization’s leadership putting the innovation into practice through action steps. “Implementation is the stage that modification or adaptation to the intervention is likely to occur,” (Rogers, 1995, 2003; Bowen, et al., 2015, p. 818). This stage was best illustrated by the advisory group’s support to allow the progressive advancement and advertisement of two separate preceptor education courses within the organization and included the initial, introductory Preceptor I class in addition to the Advanced Nursing Preceptor course. Organizational implementation was also illustrated through the development of continuing education credits that were provided to the nurse preceptor participants in both courses. Lastly, the organization’s nurse managers were
collectively encouraged through the additional guidance and support of the departmental directors to recruit their staff to register for the classes.

The advisory group met to discuss results following the implementation of the first course – Preceptor I, as well as to receive a progress update for the Advanced Nursing Preceptor course. Once the progress update was provided regarding the details that surrounded the implementation of the advanced course, the department directors were notified via council meetings and the nurse managers were notified via email and through word of mouth. Flyers were created for advertisement and the manager for the online learning management system for the organization was contacted in order to upload the flyer and open up the online registration system. Participants registered for first class set for Tuesday May 19, 2015. Due to time constraints associated with implementing an organizational course, the number of participants that registered for the initial course was limited. Due to the small sample size, the decision was made to advertise and open registration for additional participation by nurse preceptors to attend a second class set for Tuesday June 9th, 2015.

*Stage 5 – Confirmation*

The final stage was defined as the culmination step when individuals or organizations seek reinforcement regarding the initial decision to move forward with the innovation (Jasovsky et al., 2010). This was the phase for which the individual or organization that has adopted the innovation seeks justification for implementation of the course. The validation seeking measures could include but are not limited to the written program evaluations, verbal comments from course participants or management teams, as well as positive feedback for support by nursing administration and leadership. Confirmation for the Advanced Nursing Preceptor course was supported by several elements. Further defined through the written comments received from the
CE evaluations and the anonymous online participation of the pre and post learning assessment surveys used as an element of the course content. This author has continued to work with the supporting organization’s leadership to further seek opportunities to discuss and improve the course implementation, as aligned to the feedback and evaluations of course participants.

**Related Research**

A comprehensive review that supported nurse preceptor education, as well as the importance and overall effects of the role within an organization were found within numerous evidence-based articles. The topic of nurse preceptor education and professional development generated several key categories that were considered all equally valuable to the development and continued support in the development of the course. This author began this project’s initial literature review based upon the outcomes listed for the development and purpose of the course.

The identified PICOT question that was developed and sought to assess the effects of the evidence-based, Advanced Nursing Preceptor education course to the previous one-time only, Preceptor Development workshop guided the literature search. Evidence that supported the PICOT question, contained information regarding the rationale for development of the course, elements outlining the course content/structure, course delivery methods, as well as the importance for organizational support and recognition of the nurse preceptor role. Literature discussing the significance of nurse turnover and retention rates were also reviewed in support of the importance of the nurse preceptor role from an organizational perspective.

The review was initiated and conducted using PUBMED, Ovid, and CINAHL search engines, using the terms/MeSH headings: preceptor, preceptee, preceptorship, precept, nurse, orientation, personality types, competency-based education, orientation, new hire, new
employee, quality, recognition, retention, turnover, program development, on-boarding, satisfaction, cost, fiscal, delivery, education, and learning styles.

Limiters included “NOT student only, NOT transition program, and NOT undergrad,” as to help narrow the focus of the literature review to best clarify the evidence that supported the necessity and importance for nurse preceptor education and professional development. Further exclusion criteria included human studies only, English language, trials/reviews in the past 15 years, academic journals and field title/abstracts. Lastly, the articles needed to be published after 2000 and through early 2015. The identified mass of articles included several key categories related to the topic of nurse preceptor.

The categories included, but were not limited to the areas of nurse competency; nurse orientation; preceptorship programs; preceptor; learning styles; use of evaluative instruments; delivery methods for nurse preceptor education; organizational recognition/support; and the development of course content. Additional topics also identified the importance of ongoing professional development and educational support for the nurse preceptor role, as well as management-level support of the role within the immediate/unit-setting. A majority of the identified articles represented the strength of Levels V-VII evidence, due to the qualitative nature of the topic of nurse preceptor education and professional development support. This author will systematically identify the supporting topics that reinforced the development and implementation of the Advanced Nursing Preceptor course.

**Preceptor Program Development**

Authors Mann-Salinas, Hayes, Robbins, Sabido, Feider, Allen and Yoder (2014) conducted a systematic review of literature in support for the development of an evidence-based precepting program for nurses transitioning to the burn specialty practice. Through their search,
the authors ultimately identified 43 pertinent articles. Due to the variety of topics supported by the numerous articles, they delineated the information into smaller groups for clarification and convenience of reading. They highlighted the sub-group headings and the resultant number of pertinent articles as: preceptee, preceptor, preceptor development (n=7), precepting programs (n=15), personality types (n=8), competency (n=8), and learning styles (n=5). A synthesis table was developed and also included within their article. Furthermore, the authors highlighted the 43 articles by strength: IV – 1; V-5; VI-23; VII-14; with the quality graded as A (n=13); B (n=29); and C (n=1). A high level of quality and author expertise is evident by the “A” category; “B” indicated a good level of quality with author expertise appearing credible and “C” was consistent with a level indicating low quality/major flaw with non-discernable expertise listed of the authors.

The systematic review concluded outlining the importance of certain aspects when developing a preceptor program, as derived from available, pertinent, and current evidence supporting the creation of preceptor development programs. The authors highlighted the definition and role delineation of the nurse preceptor, the importance of the role of a qualified preceptor in relation to a new orientee, highlighted personality characteristics and adult learning style clarification and rationale needed in preceptor program development, and how preceptor selection should occur based on evidence within the practice setting. Key barriers were also discussed that appeared to prevent overall success of preceptor program development, as well as the need for long-term sustainment measures required for the implementation of preceptor education. Evaluation methods utilized to assess and evaluate competence for both the preceptor and preceptee was also discussed. Overall, the systematic review provided a good foundation for
reviewing the components necessary in support of nurse preceptor education and professional development support.

Outlining the steps for an organization to proactively attempt to impact nurse retention, decrease turnover, increase satisfaction, while maintaining fiscal responsibility were topics discussed by the author, P. Sorrentino (2013). This article described how the author’s organization dealt with the nursing shortage by the development of a unique orientation and preceptor program that fostered nurses’ professional growth while maintaining excellence. The author’s organization had attempted earlier attempts in creating an orientation program that met efforts to improve quality care delivery and patient outcomes due to constraining regulatory requirements, but failed in its attempts. In turn this caused budget overages, staff dissatisfaction and the comparison of tasks to work efforts. The organization’s 9% growth in patient volume coupled with a regional shortage of experienced nurses forced the need to reevaluate and construct a deliberately focused orientation program. Creating an efficient, cost-effective orientation model that produced nurses that could function independently in a relatively short period of time was of the essence for the fast-growing organization.

Benner’s Novice to Expert Theory was used as the guiding framework in the development of this NGN orientation process. In the initial steps of the orientation process development, the authors identified a need to develop a structured preceptor program to help guide the NGN through the orientation process. The mandatory 8 hour class was structured to assist the preceptors in defining their role and responsibilities to the NGN during the orientation process. An interactive learning and teaching process was created utilizing case scenarios enacted out on a High Fidelity simulator and participant awareness of effective communication styles with providing feedback. Kolb’s 4 part model, adult learning preferences, & generational
differences round out the interactive sessions. In addition to the preceptor model, preceptor assignments and orientee development are also key components in the orientation process development. The orientation process was determined to follow between 8-12 weeks, dependent on the transitioning nurse’s experience level.

The clinical components that were discussed related to the orientation process covered the following topics: socialization, time management/remaining calm, leadership and team members, reflective feedback, and maintaining patient satisfaction. From a professional growth perspective, the organization realized that succession planning and building a collaborative environment were key qualities needed to encompass the entire orientation process for ensuring its success.

In conclusion, the author found that the formation of an adequate and appropriate preceptor-led, structured orientation program during new nurses’ transition to ER practice assisted in a successful, cost-effective program. Professional growth was enhanced when nursing leadership offered support and an environment that fostered team building efforts. Preceptors must be looked at as an integral key member of the team in achieving quality orientation and providing leadership for the transitioning nurses.

Jane Baltimore (2004) discussed the importance of adequate preceptor education and development in relation to orientee competency and evaluation as provided by the hospital organization. The author specifically describes essential components of preceptor development and educational support, as well as outlines the elements associated with definition of the preceptor role, pairing of the preceptor-orientee dyad, delivery methods for preceptor education, as well as creative resources suggested for the orientation process.
Although the author doesn’t highlight the development of a specific preceptor education course, she does detail the elements of describing the purpose and rationale in developing an educational structure for preceptor support tying that directly to the description of the role and the general characteristics of the preceptor role. She discussed in detail the importance of self-awareness of the preceptor related to emotional intelligence and social skill proficiency. An additional component of the emotional intelligence and self-awareness discussion is the suggestion for the use of personality tools and behavior-strengths inventories, including but not limited to the Myers-Briggs Type Indicator (MBTI), the Hartman Personality Profile, and the DiSC Inventory listed as examples. Further review also identified that any preceptor education course should be developed utilizing adult learning principles as the basis of understanding how to develop course content, in addition to utilizing Patricia Benner’s Novice to Expert model as a guide to assist in the evaluation of new hire orientees with providing feedback and competency validation. A table outlining the Benner model was included that outlined the orientee characteristics to preceptor implications. Lastly, teaching strategies were discussed in how to best prepare nurse preceptors and included video role playing, skill instruction exercises, group discussion and brain storming exercises.

Horton, DePaoli, Hertach, & Bower conducted a study in 2012 with the purpose to determine if a) if preceptors felt better prepared to precept after attending the Nurse Preceptor Academy (NPA); b) the content they believed to be most important to them; c) the ideas or content discussed at NPA they were using in the preceptor role; d) the levels of support provided by peers, managers and educators; e) the factors that caused them the most stress when precepting. The research question was, “Did the preceptors feel better prepared to precept after attending the NPA?”
The NPA was a collaboration that was formed in the Kansas City community to take a proactive approach in the quality education and support of nurse preceptors and became the sole focus of the workshop. The vision of the NPA was to foster a collaborative work environment based on nursing’s core values of professionalism, diversity, compassion and integrity. The development of the NPA was one of several healthcare initiatives funded by the Department of Labor through a Workforce Innovations in Regional Economic Development grant aimed at increasing the workforce in the Kansas City Metro area.

The conclusion of this study found that it is crucial for organizations to recognize that preceptor development is just as (if not more) important as orienting new hires to their facilities. Preceptors must be offered experiences to develop their roles as facilitators to the new hires in practice. Additionally, nursing faculty must understand the role that workplace preceptors have when transitioning the student to professional nurse, in order to better prepare the students, as well as sharing key information with workplace preceptors. A supportive environment limiting barriers for preceptors and preceptor education/development must be an area addressed by nursing leaders and organizations in order to better grasp the need to retain and increase the nursing workforce in a high quality manner.

Another supporting article for the use of preceptorships was written by Marsha Moore (2008) identifying evidence that characterizes the relationship between a nursing department and nurses involved in preceptorship programs. This was an exploratory study that compared and examined nursing departments that utilized preceptorships and those that did not utilize preceptorships through the lens of the organizational learning model. In conclusion, the study identified that benefits in support of the development of a structured preceptorship program in conjunction with the organizations’ leadership offering input and guidance regarding the roles
and responsibilities required within the program development. Additionally, the study identified that the nurses felt more supported within their workplace environment, through their immersion within a culture of shared values that guided their daily work. Preceptorships were also identified as being an emerging strategy dealing with the demands of the nursing shortage/scarcity.

**Program Development and Evaluation Methods**

Nelson et al., (2012) queried new nurses within their organization to identify the best methodology regarding perceived, organizational support by the preceptors during their orientation process. Key findings included the new hire RN perspective and illustrated that more feedback with communication efforts from other healthcare team members, in addition to ongoing markers and evaluations outlining the expectations of orientation progress and advancement were requested. Additionally, new hire staff wanted clarification in knowing that there was still a high level of support via on the spot meetings with preceptors and other staff as resources, when no longer working with preceptors in an orientation setting.

Themes that emerged included: exhaustion, need for validation, feedback and reflection; need for nurturing; incomplete knowledge of policies/workplace rules; limited experiential knowledge; underdeveloped leadership and delegation skills; and desire to prioritize patient education activities. The collected information was shared in six separate preceptor forums accommodating the 78 total preceptor participants. Four stations with four separate strategies were listed and a committee representative was located at each station for assistance during the outlined strategy activities. The first strategy was asking questions; second strategy was engaging in reflective debriefing; strategy 3 was teaching the novice nurses to teach patients; and the fourth strategy was applying the nursing care model so that theory assists in guiding practice. The preceptors rated the learning sessions as excellent (40%) or very good (60%) and
appreciated the interactive learning format in acquiring the new knowledge of working with the new hire nurse.

**Program Development and Course Structures**

Leadership from the Mayo Clinic-Rochester in Minnesota recognized the importance of the role of the nurse preceptor in comparison to their overall health system (Neumann, Brady-Schluttner, McKay, Roslien, Twedell, & James, 2004). The authors developed a centralized preceptor education program and discussed their course within the body of the article. The discussion initially introduced the essential, overall importance of the organization’s leadership team recognizing the importance of the role prior to the development of the course. Once the leadership team is engaged and understands the rationale for the development of supporting structures for preceptor education, the additional components necessary for the program development can be then be highlighted. Financial support of the program, the need for recognition from an organizational perspective of the role, continuing education and professional development support for the nurse preceptor role, as well as the breakdown of several courses, including the RN Preceptor I and RN Preceptor II courses. A table is provided that outlines the target audience and as well as the topics that should be discussed and covered during the respective courses. Lastly, a database to track productivity of preceptors during the orientation process and discussion surrounding the development of a continuing education website were also outlined as key preceptor development and course structure creation.

A preceptor learning needs assessment was conducted by another organization in developing preceptor education and support. Foy, Carlson, & White (2013) outlined their organization’s development of two separate preceptor education courses, including their Preceptor Essentials class (I) and the Experienced Preceptor Seminar (II) discussing the length of
the courses, as well as the time limitations placed on the participants for each course. The article further describes the preceptor participants’ perception of the importance of the various topics related to preceptor education and support. The topics included but were not limited to the expectations of the role of the preceptor, giving feedback/evaluation, socialization, paperwork, conflict management, clinical resource access, communication and learning/teaching techniques. Lastly, the authors highlight their concluding thoughts to support the importance for any organization to fully discuss and take into account the preceptors’ input for the development of preceptor education and professional development support courses, as it is essential and specifically relevant to the overall impact of the course.

Speers, Strzyzewski, and Ziolkowski (2004) provide their organization’s development and implementation towards proactively providing preceptor preparation and education support in their article. The authors initially identify the importance of role support within an organizational setting, as well as the general definition of the role, itself. Recognition for the role and organizational support are elements that are highlighted with importance for the success of the role. Preceptor selection criteria is another element in the development of their program that is discussed in detail.

The authors discuss in detail their organization’s approach with regards to the course components, the target audience for the courses that were developed, the teaching strategies used during the course delivery, as well the importance of how the authors assisted with the breakdown of preceptor education into two separate courses, including an advanced preceptor course with a more specific targeted approach towards the content and delivery methods for this audience. Goal setting, generational approaches, conflict resolution and effective communication
methods are all discussed, in addition the outcomes from the preceptor participants that completed the education course.

**Learning and Teaching Styles**

Authors’ Poradzisz, Kostovich, O’Connell, & Lefaiver, (2012) created an article that initially highlighted the need for adequate opportunities for New Graduate nurses (NGN) to transition to the role of professional practitioner and highlights the cost of nurse turnover and decreased retention that could affect an organization that hires NGNs. The purpose of the study was to conduct research with NGN orientees and preceptors from two large academic medical center in determining the characteristics of psychological types from the use of the Meyers-Briggs Type Indicator and comparison to the Kolb Learning Style Inventory. The findings of the study are presented as descriptive data using the MBTI characteristics, with offering suggestions working with new Nurse Orientees during orientation in both classroom and clinical settings may be beneficial, as compared to one or the other delivery methodology.

Furthermore the findings and conclusions for the study indicate that uniquely matching new hires and preceptors solely based on matching the exact MTBI scores may prove implausible; however pairing based on the one of the four dimensions might prove to be a more likely situation. This would in turn allow both the educator/preceptor to better strategize opportunities in teaching/reaching the NGN orientee based on their personality type. Examples were given based on classroom type of orientation settings and the more interactive preceptor-NGN orientee at the bedside. Understanding the personality dimensions might offer a more balanced approach in reaching the needs of the orientee in an efficient and applicable manner.
Retention, Satisfaction, & Fiscal Responsibility

Sandau & Halm (2010) conducted a clinical evidence review of the current literature supporting the cause in discovering what impact precepted orientation programs have on clinical knowledge and skills of nurse orientees, as well as organizational and financial outcomes. Twelve program evaluation reports were discussed and based from the United States. Samples included both NGNs and experienced nurse preceptors with sizes ranging from 18-197. Both classroom and preceptor-based learning highlighted the nursing interventions in the studies. Program types included nurse internships (8 weeks to 1 year); structured orientation programs (7 weeks to 1 year); and nurse residency programs (1 year). Length of clinical preceptorships varied based on specialty, experience and learning needs.

Regular meetings between preceptors, orientees, and nurse managers and professional role development sessions were outlined in the results and orientee outcomes that were measured included: knowledge/skills (critical thinking, competency, autonomy); organizational (sense of belonging, job satisfaction, organizational commitment, and organizational satisfaction); and financial (retention/turnover, cost avoidance). There were various measurement approaches that were used. All studies resulted in representing a Class IIa evidence grade in support of preceptor based orientation in increasing program satisfaction and retention in reducing turnover and cost.

In conclusion, the article highlighted that many organizations may initially look to the education department to make budgetary cuts; however leaders should consider thorough structured orientation programs with adequately prepared preceptors as a means to return on investment at one year by decreasing turnover and increasing retention. The overall effectiveness of a preceptor based orientation program should ultimately not be underestimated in its value to an organization when thinking long-term goals.
Lastly, a study conducted by Bullock, et al. (2011), the conclusion of the literature states that long-standing support systems are only effective if the needs of new graduate nurses/new hires, preceptors, nursing leadership/management and patients are met in a well-designed program and the met needs are in context to the audience it is supporting.

The problem that was identified and attempted to be resolved by the study’s authors was the challenge to integrate large numbers of new graduates in ways that promote retention beyond the first year of practice, without compromising care, working experienced staff nurses/preceptors to the point of burnout or incurring prohibitive expenses that inflates overall healthcare costs. Successful retention allows hospital organizations and their employees the benefit from the investments made in the development of safe competent nursing colleagues.

Turnover rates, vacancy rates and orientation expenses were all reviewed to establish a baseline for performance improvement. Baseline results also reported five themes in the qualitative report of the data. Hopelessness, impropriety, regret, overwhelming responsibility, and discontinuity from preceptor, new graduate and nursing leadership responses were identified.

Edwin Locke’s Goal-Setting theory was selected as the conceptual framework for the redesigning of the orientation process. This process supports that employees are motivated by clear, set goals and when given appropriate feedback. A total of 75 preceptors, new graduates, nursing leaders and other organizational stakeholders met for a one day workshop for creative brainstorming and strategy development to develop a goal-driven orientation process. The goals that were set to incorporate into the redesign process included understanding the collective responsibility of both nursing preceptors, nursing leaders and other staff; eliminating significant frustrations when possible, develop resources to assist preceptors, engage and acclimate
preceptors in ongoing educational opportunities, and provide meaningful support and
development for this key group of leaders.

The new orientation process was changed to reflect 7 phases with each focusing on a set
of outcomes that move the learner toward effective professional practice. Meetings between new
graduate orientee, preceptor and nursing leaders were conducted on a weekly basis to discuss and
ensure the forward progression of the new learner to the next level towards independent practice.
Time frames were established as a guideline only and are were not intended to be prescriptive for
budgeting purposes for nursing leadership. Unit specific checklists were formed to meet
orientation needs and to individualize every new phase of the new orientation model. A resource
guide was created for each phase-based checklist that contained evidence-based support via
pictorial guides for various unit based procedures to complex articles describing and conducting
critical thinking activities.

The phases include: Phase I – Preparation, Phase 2 – Welcome, Engagement, and
Assessment, Phase 3-Intense Support, Phase 4-Increasing independence, Phase 5 – Increasing
patient load/assignments, Phase 6-Increasing acuity, Phase 7-Independent with Feedback and
Phase 8 – Resourced practice after independence. In addition to the phases of orientation, toolkits
were developed for the nursing preceptors, with input from various stakeholder groups in the
hospital to assist this new process in supporting both the new graduate nurse and the preceptor
leaders. New graduate nurses were separated into different cohorts and met at different time
points to offer an additional support system.

Statistics show that new hires decreased by 51% in 2 years; however new graduates
increased as a percentage from 18% to 30% over the 2 year timeframe. The vacancy rate
decreased from 8.3% to 0.7% and total nurse turnover declined from 19% to 11.6%, as well over
the 2 year timeframe. Each year since the new redesigned program was introduced, new graduate turnover has decreased by 50% (n=14 to n=7) and then again from (n=7 to n=0). The return on investment (ROI) to the organization was identified through the implementation of the program by calculating the cost of turnover and the cost of the previous orientation program compared to the new model. The new model reflected a cost of $1,220 per new graduate, with the total investment fully recovered at the end of the first year of the program.

In conclusion, the authors identified that this study could not prove causal relationship between the orientation program and the reported outcomes, due to the varying uncontrollable market conditions. Although the initial cost to reinvent the orientation model was $100,000, the cost savings of the decreased turnover reflected a savings that exceeded $1,000,000. This cost-savings benefit combined with the repeated outcome measures in the qualitative format indicated that this study should be repeated in other organization. Once the recession recovers, the potential for improved professional growth, collaborative team building and organizational cost-savings can only improve/increase for the organization.
Chapter 3: Methods

Methodology

The purpose for the development and implementation of the Advanced Nursing Preceptor Education course was to provide evidence-based education for experienced nurse preceptor participants who attended the course and to evaluate participant feedback via an online survey in order to identify baseline preceptor knowledge, skills, and perceptions prior to attending the course and to assess the effects of the course on these outcomes one week post-course attendance. The online survey included participant demographic information; questions related to an organizational nurse preceptor learning needs assessment; and questions from an evidence-based, published Preceptor Program Education Outcomes (PPEO) tool. This evidence-based evaluation compared participants’ feedback using a pre-test and post-test evaluation.

Sample and setting, data collection, and data analysis

Sample and setting:

The initial goal of this proposal sought to include 25 potential nurse participants as a convenience sample of experienced nurse preceptors who would attend the Advanced Nursing Preceptor Education course. The resulting number of course participants was 15 experienced nurse preceptors. The course was in part facilitated by the Department of Nursing Education, within a large, Midwestern academic medical center. The participant sample included nurse preceptors with prior experience in the role of a preceptor, who worked in an inpatient acute care hospital setting. Approval from the Institutional Review Board (IRB), the state’s supporting nurses’ union representative and the organization’s Nursing Quality Feasibility committee were obtained prior to proceeding with the formal process of utilizing the sample and setting for the implementation of the course. The IRB identified that the course development and
implementation constituted an internal quality improvement process instead of conducting human subjects’ research and, therefore, no approval or permission was needed from their respective department for progression of the course.

The Advanced Nursing Preceptor Education Course

The concepts that outline Malcolm Knowles’ Theory of Andragogy or also better known as the Adult Learning Theory guided the content development for the Advanced Nursing Preceptor Course. There are six components that highlight Knowles’ theory, including:

1. Need to know concept
2. Self-Concept
3. Learner’s Experiences
4. Readiness to Learn
5. Orientation to learning
6. Motivation to Learn (Palis & Quiros, 2014)

This author used Knowles’ Adult Learning Theory as the foundation for building and supporting the rationale for the content of the course. Based on delivering the content in the context of a real-life situation or case-based scenarios, effective learning practices could be developed (Eshleman, 2008). In addition to the Knowles’ theory connection the author further identified that learners tend to receive new information through “learning models that address the intake preferences of how people learn, organize, remember and access new information,” (Eshleman, 2008, p. 298). The author identified several examples and included the tool that was utilized for this course, also known as the VARK (Visual – Auditory-Reading/writing – Kinesthetic) model (Fleming & Mills, 1992). In addition the use of the VARK model, the initial steps that outlined the course content included a brief review of the general concepts of the
Preceptor I course, including but not limited to discussion regarding the preceptor role and description, role expectations for the preceptor and new preceptee, legal, ethical and organizational concepts, as well as the brief discussion regarding the use of evaluation tools, including Patricia Benner’s Novice to Expert theory model. This strategy was discussed across the span of several articles outlining the importance of the model used to visually outline the role of the nurse preceptor’s growth throughout the elements of the course. Biggs and Schriner (2010) identify that Benner’s model support “how preceptors and new hires begin their respective roles by exhibiting novice skills in the way they guide and facilitate learning during orientation,” (p. 319).

The second component of the Advanced Nursing Preceptor Education course was the decision to utilize a personal strengths and behavior inventory assessment for each participant to complete. The tool was the DiSC inventory and a key element take away was that “preceptors who are aware of their styles are better able to be matched with orientees of similar characteristics,” (Baltimore, 2004, p.135). Self-awareness and preceptor perception have an important position with the development of preceptor education content, as this awareness can assist to help educators and staff development coordinators better define the teaching modalities and content delivery methods for greater course engagement by the participants (Foy, Carlson, & White, 2013).

The last component of the course was to integrate the first two aspects into an application of actual evaluation and knowledge of case scenario-based interactions. The application of this concept was developed by seeking a constructive method and approach for preceptors to engage in difficult situations using caring behaviors and techniques to engage novice nurses during the discussion (Blum, 2014). The use of eLearning and online technology supported the application
of evidence-based case scenarios illustrating unsafe practices demonstrated by the new hire novice nurse. “One way to teach this concept with simulation is through offering a concrete experienced followed by a structured debriefing in which the process of reflective observation begins,” (Wilson, Acuna, Ast, & Bodas, 2013, p.186).

Lastly, the course was developed overall as an effort to illustrate the message to nurse preceptors that the leadership support from within the organization was aware of the importance of their role to the unit, department, and organizational environments. Support seemed to be a common theme that appeared amongst articles written regarding supporting preceptors and their perceptions of the role. The workplace environment and leadership support were themes that were consistently mentioned throughout the literature, as measures that would assist the preceptor in gaining confidence in their role. Authors Henderson, Fox, & Malko-Nyhan (2006) created a table identifying the top five strategies that organizations could use to support their preceptors. These strategies included elements that dealt with organizational assistance with scheduling, time management, resource development, creating a reward and recognition system for the role, and lastly developing key communication strategies that are sustainable and effective for two way communication efforts.

The authors from another article revealed that through their literature review two concepts related to the positive and negative aspects of the preceptor role emerged. The negative aspects included, “lack of administrative support, workload adjustment, and financial recompense for the additional workload of precepting,” (Dibert & Goldenberg, 1995, p. 1145). Another study highlighted finding consistent with the identification that preceptors perceive the importance of self-awareness and knowledge in order to be most effective as role models. “The preceptorship experience should contain objectives that are realistic, materials and resources are
short and concise, and any communication is helpful and sensitive to the time constraints place on preceptors,” (DeWolfe, Laschinger, & Perkin, 2010, p. 205). The process to support preceptors appears to be an essential element that consists of more than just providing education regarding the preceptor role. Authors have also identified that stakeholder and leadership support are vital in overseeing the process to best outline role expectations, provide education and create communicate avenues for ongoing conversations.

Measures

**Demographic Data.** Demographic data were collected anonymously from each participant to identify the general participant and environmental characteristics prior to collection of the additional course survey questions identified in the organizational internal learning needs assessment and the Preceptor Program Educational Outcomes Scale (PPEO). The questions outlined in the demographic section include the following items located on Table 1.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Type of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Age group</td>
<td>20-30; 31-40; 41-50; 51-60; 60 +</td>
</tr>
<tr>
<td>2 Gender</td>
<td>Male or Female</td>
</tr>
<tr>
<td>3 Educational Level</td>
<td>Diploma, Associate Degree; Bachelors’ Degree; Masters’ Degree; Doctoral Degree</td>
</tr>
<tr>
<td>4 Years of experience as a nurse</td>
<td>1-5; 6-10; 11-20; 21-30</td>
</tr>
<tr>
<td>5 Years of experience as a preceptor</td>
<td></td>
</tr>
<tr>
<td>6 Number of times as a preceptor</td>
<td>≤4; 5-10; 11-20; 21 +</td>
</tr>
<tr>
<td>7 Previous formal preceptor education</td>
<td>Yes or No</td>
</tr>
<tr>
<td>8 Length of time since formal preceptor education listed in years (if applicable)</td>
<td></td>
</tr>
<tr>
<td>9 Did you take this course because of an interest in helping others learn in the clinical area?</td>
<td>Yes or No</td>
</tr>
</tbody>
</table>

Table 1
Demographic Characteristics and Information
Organizational Internal Learning Needs Assessment Survey. The organizational internal learning needs assessment survey was originally created as part of an online-organizational nurse preceptor learning needs assessment in May 2014. The original learning needs questionnaire contained 26-items that measured both quantitative and qualitative participant responses. Responses included yes-no format; yes-no-not applicable; check all that apply; 1-5 Likert style answers (Strongly agree-agree-neutral-disagree-strongly disagree) with comments; and qualitative, open-ended comments. The number of items administered to the preceptors from this questionnaire was limited to nine after careful review. Table 2 contains the type of question, the new order for survey placement (#) with the location # from the original 26-item survey; the type of response; and the general purpose for selecting the question.

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preceptor Learning Needs Assessment Questionnaire (Organizational internal survey)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantitative Questions</th>
<th>New Survey # / Previous # Survey</th>
<th>Category</th>
<th>Type of response</th>
<th>Purpose/Comments for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>I attended the preceptor class before serving as a preceptor</td>
<td>1 (5)</td>
<td>Background</td>
<td>Yes/No</td>
<td>Knowledge</td>
</tr>
<tr>
<td>If you attended the preceptor class, did it help you be an effective preceptor?</td>
<td>2 (6)</td>
<td>Background</td>
<td>Yes/No/NA</td>
<td>Perception</td>
</tr>
<tr>
<td>I felt adequately prepared to be a preceptor</td>
<td>3 (8)</td>
<td>Experience</td>
<td>Likert 1-5</td>
<td>Preparation</td>
</tr>
<tr>
<td>When precepting, I am genuinely interested in the success of my orientee</td>
<td>4 (16)</td>
<td>Experience</td>
<td>Likert 1-5</td>
<td>Interest</td>
</tr>
<tr>
<td>I have access to resources needed to be a successful preceptor</td>
<td>5 (18)</td>
<td>Experience</td>
<td>Likert 1-5</td>
<td>Resources</td>
</tr>
<tr>
<td>As a preceptor, I understand my role in completing and documenting orientation on the required department/role orientation checklists</td>
<td>6 (21)</td>
<td>Experience</td>
<td>Likert 1-5</td>
<td>Understanding</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualitative Questions</th>
<th>New Survey # / Previous # Survey</th>
<th>Category</th>
<th>Type of response</th>
<th>Purpose/Comments for use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges that I have encountered as a preceptor include</td>
<td>7 (22)</td>
<td>Commentary</td>
<td>Qualitative comments</td>
<td>Organizational/ environmental knowledge Extrinsic knowledge</td>
</tr>
<tr>
<td>Is there anything that would have helped you as a preceptor or wish you would have been told prior to taking on the preceptor role? If so, what?</td>
<td>8 (24)</td>
<td>Commentary</td>
<td>Qualitative comments</td>
<td>Organizational/ environmental knowledge Extrinsic knowledge Intrinsic knowledge</td>
</tr>
<tr>
<td>I would like to be rewarded (excluding monetary) for precepting by:</td>
<td>9 (25)</td>
<td>Commentary</td>
<td>Qualitative comments</td>
<td>Intrinsic knowledge</td>
</tr>
</tbody>
</table>
Preceptor Program Educational Outcomes scale (PPEO). The PPEO scale was developed as a 15-item tool which measured and assessed three subscale categories and one question about the learning outcomes of the study’s author’s preceptor education program, as identified in the accredited unit outline offered by the faculty of nursing and health at Avondale College, Australia (Smedley, Morey, & Race, 2010). The overall PPEO survey scale consisted of the three subscales that were generated by grouping similar learning outcomes using the Delphi process of nursing academic and professional nursing clinician consultation and discussion. The survey was created to be assessed from the preceptors’ perspective, as well as for each of the three subcategories. The three subcategories within the PPEO scale included:

1. Change in knowledge of teaching and learning (KTL)
2. Change in generic preceptor skills (GPS)
3. Change in preceptor self-efficacy (PSE)
4. Change in preceptor attitude towards student nurses (PATSN) – language modified per author permission to reflect “Change in preceptor attitude towards new hire nurse preceptees (PATNHN)”

Smedley et al. (2010) identified that each survey question was constructed such that the respondents were asked to evaluate to what extent the preceptor program influenced their understanding of or changed their attitude toward the respective PPEO subcategories. The overall outcomes scale was designed to measure the three subcategories and one question on a 4-point Likert scale (Strongly Disagree to Strongly Agree).

Validity. The scale was developed using a convenience sample of voluntary participants (n = 117) who had successfully completed the university preceptor course between August 2004 and November 2007. All participants utilizing the PPEO scale after completion of the course had
worked as nurse preceptors for 3 to 4 years, when this study was conducted at the end of 2008. The total number of usable distributed surveys was (n=63), for a response rate of 53.8%. The three PPEO subscales were standardized to a scale of 1 to 4 by dividing the total generated by adding the individual item scores by the number of items within the respective PPEO subscales in an effort to enhance comparability. Descriptive statistics were created for each PPEO subscale using SPSS software, version 16.0. Independent groups $t$ test and one-way between groups analysis of variance with post hoc comparisons were run to locate any area of significant difference based on demographic data. Linear regression analyses were used, with independent variables entered into the regression equation to explore the relationship between the sets of demographic variables, PPEO subscales, and specified dependent variables.

**Reliability.** Internal reliability for each scale was evaluated using Cronbach’s alpha. The reliabilities of this scale can be found in Table 3. Mean and standard deviation were also utilized to measure the standardized PPEO and subscales.

**Scoring.** There are 15-items on the PPEO scale and respondents are asked to circle the number (1-4) that best described their agreement or disagreement with each of the statements. The 4-point Likert choices included: (1) Strongly disagree; (2) Disagree; (3) Agree; (4) Strongly Agree.

**Change in Knowledge of Teaching and Learning subscale (KTL).** The PPEO KTL subscale included survey questions 1 through 5. This subscale was developed to assess whether nurse preceptors believed that they had gained knowledge and understanding in teaching and learning models and styles, adult learning, reflection, critical thinking and problem solving.
Table 3
Characteristics of the Preceptor Program Educational Outcomes Scale and Subscales

<table>
<thead>
<tr>
<th>Preceptor Program Educational Outcomes Scale and Subscales</th>
<th>Survey Questions</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in knowledge of teaching and learning subscale (KTL)</td>
<td>1 to 5</td>
<td>3.11</td>
<td>0.50</td>
<td>0.91</td>
</tr>
<tr>
<td>Change in generic preceptor skills subscale (GPS)</td>
<td>6, 8 to 12</td>
<td>3.07</td>
<td>0.54</td>
<td>0.91</td>
</tr>
<tr>
<td>Change in preceptor self-efficacy subscale (PSE)</td>
<td>13 to 15</td>
<td>3.10</td>
<td>0.61</td>
<td>.088</td>
</tr>
<tr>
<td>Change in preceptor attitude toward student nurses subscale (PATSN)</td>
<td>7</td>
<td>3.05</td>
<td>0.71</td>
<td>NA</td>
</tr>
<tr>
<td>Change in preceptor program educational outcomes scale</td>
<td>15</td>
<td>3.09</td>
<td>0.50</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Note. NA = Not applicable

Table 4
Multiple Regression Analysis for Predictors of Change in Preceptor Attitude Towards Student Nurses (PATSN)

<table>
<thead>
<tr>
<th>model ($R^2 = 0.549$)</th>
<th>beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in knowledge of teaching and learning</td>
<td>0.085</td>
<td>0.464</td>
<td>.645</td>
</tr>
<tr>
<td>Change in generic preceptor skills</td>
<td>0.759</td>
<td>8.254</td>
<td>.000*</td>
</tr>
<tr>
<td>Completed previous postgraduate study before beginning this program</td>
<td>0.187</td>
<td>2.035</td>
<td>.047*</td>
</tr>
</tbody>
</table>

Note. *Significant at the .05 level.

Change in Generic Preceptor Skills subscale (GPS). The PPEO GPS subscale encompasses survey question 6, and 8 through 12. This subscale aims to measure more generic preceptor skills that are required in the role of nurse preceptor. The generic preceptor skills include effective communication skills, understanding how others learn, assessing student nurses’ learning needs, delivery of logically sequenced teaching, and use of student nurse feedback to improve practice.
Table 5
Multiple Regression Analysis for Predictors of Change in Generic Preceptor Skills (GPS)

<table>
<thead>
<tr>
<th>Model ($R^2 = 0.726$)</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in knowledge of teaching and learning</td>
<td>0.828</td>
<td>11.768</td>
<td>.000*</td>
</tr>
<tr>
<td>Age group</td>
<td>-0.127</td>
<td>-1.803</td>
<td>.077</td>
</tr>
<tr>
<td>Completed previous postgraduate study before beginning this program</td>
<td>-0.208</td>
<td>-2.964</td>
<td>.004*</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

Change in Preceptor Self-Efficacy subscale (PSE). The PPEO PSE subscale concludes the survey with questions 13 through 15. This subscale measures the nurse preceptors’ perception of their own ability and performance in the nurse preceptor role. Attributes include confidence, role modeling behaviors, and the ability to include students in day-to-day nursing practice.

Table 6
Multiple Regression Analysis for Predictors of Student Preceptor Self Efficacy (PSE)

<table>
<thead>
<tr>
<th>Model ($R^2 = 0.741$)</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in generic preceptor skills</td>
<td>0.818</td>
<td>12.003</td>
<td>.000*</td>
</tr>
<tr>
<td>Chose program for interest</td>
<td>-0.155</td>
<td>-2.206</td>
<td>.032*</td>
</tr>
<tr>
<td>Years of experience as a registered nurse</td>
<td>-0.099</td>
<td>-0.873</td>
<td>.079</td>
</tr>
</tbody>
</table>

*Significant at the .05 level.

Procedure

A course flyer and educational paragraph was developed to promote the course and registration opened within the organization’s electronic learning management system. Once registration was confirmed, an email cover letter was sent to each participant to provide introductory course information and to request assistance with two pre-course activities prior to attending the class. The letter also included a hyperlink to the pre- and post-course measurement survey utilizing Survey Monkey, for the participants to access and complete at the designated requested times. The participants were asked to complete the online survey at 2 intervals: prior to
attending the Advanced Nursing Preceptor course and 1 week post attendance of the course. The timeline for the data collection is represented in the grid below:

<table>
<thead>
<tr>
<th>Group 1: Course date 5/19/2015</th>
<th>1 week Posttest #1</th>
<th>Pretest #1</th>
<th>Pretest #2</th>
<th>1 week Posttest #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>KTL</td>
<td>Knowledge of Teaching and Learning subscale</td>
<td>Questions 1-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPS</td>
<td>Generic Preceptor Skills subscale</td>
<td>Questions 6, 8-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSE</td>
<td>Preceptor Self-Efficacy subscale</td>
<td>Questions 13-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATNHN</td>
<td>Preceptor attitude towards new hire nurse preceptees question</td>
<td>Question 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preceptor Learning Needs Assessment Questionnaire (Internal pre-survey): 10-item: Yes/No, 1-5 Likert &amp; open ended</td>
<td>Pre-Pretest</td>
<td>Pretest #1</td>
<td>1 week Posttest #1</td>
<td>Pretest #2</td>
</tr>
</tbody>
</table>

The data collected via Survey Monkey included demographic information (see Appendix A); the 9-item 5 point Likert scale questions from a previous preceptor learning needs assessment survey conducted within the organization for nurse preceptors in May 2014 (see Appendix B); and a 15-item 4 point Likert scale from a published, evidence-based tool,
Preceptor Program Educational Outcomes (PPEO) scale (see Appendix C). The authors identified that clinical “preceptors provide direct supervision, instruction, and clinical teaching for student nurses in the healthcare setting.” (Smedley, Morey, & Race, 2010, p. 451). Furthermore, they identified that without high-quality guidance, the experiential learning process could be far from positive. A professional collaboration between academia and a clinical practice setting was established to develop a formal preceptor education course aimed to better prepare the nurses for the preceptor role.

The PPEO scale was created as a tool to evaluate for any changes occurring with the preceptor participant’s knowledge of teaching and learning; generic preceptor skills; self-efficacy/confidence; and attitude towards student nurses after participation in the formal education course. Direct permission from the authors of the PPEO scale was sought to modify the language to better reflect the intended audience with using the evaluation tool in the inpatient hospital setting. Permission was granted by the authors to utilize and modify the tool if necessary. Elements of the modification included changing the language to reflect new hire nurse preceptee from student nurses, as originally written. Completion of each round of the online survey process was projected to take 20 minutes or less; however the time stamps on the post-survey responses indicated the participant time frame was no longer than 5 minutes for completion.

The cover letter attached to the survey link provided information about the course, as well as confidentiality and protection of their responses. Participants were made aware that the submission of their survey indicated approval to participate in this author’s, evidence-based DNP final project. The participant was further informed that data collection was confidential and there was no intention to access participant identity by linking back to their IP address/computer or via
any other identification method. The data collected was encrypted and stored on a secure, password protected computer and server. Any printed documents were kept in the author’s locked office within a locked cabinet. Only the principal investigator (PI), co-principal investigator (co-PI)/author, and key personnel have access to the data collected from this survey.

Furthermore, explanation was provided to the participants that the evaluation results from this evidence-based capstone project could be used in reports, presentations, or publications and that all data would be used in aggregate form only. Additionally, the data could be used to re-evaluate and modify the educational components of the Advanced Nursing Preceptor course to better suit the learning needs of future participants and of the supporting organization. Each participant was also informed that if they chose not to participate with the surveys – it would not affect their participation or completion of the course or future access to preceptor education materials and resources.

There was a possibility that participation in this evidence-based class would elevate the nurse preceptor participants’ awareness and interest supporting the role of preceptor, continuing preceptor education, conflict management and communication strategies, and personal self-awareness. These concepts were outlined and identified to be beneficial to the nurse participants, new hire nurse preceptees, their patients, and the overall organization. The benefits included potential to highlight evidence-based knowledge about the preceptor role, preceptor education and preceptor self-awareness. Additionally, the use of evidence-based practice as utilized in the DNP curriculum is a sound method to incorporate best practice changes within an area of practice, including nursing education and professional development. Lastly, the use and implementation of evidence-based practices is correlated to improved patient outcomes.
**Data Analysis:**

The dependent variables of concern regarding the purpose of this evaluation included the participants’ knowledge of teaching and learning, general preceptor skills, preceptor self-efficacy, and change in attitude towards the new hire nurse preceptee based upon the knowledge, skills, and perceptions gained from the course. The instrument used to measure these variables was the PPEO scale. Independent variables included characteristics of participants (including gender, level of education, age group, work experience, and previous preceptor education) and characteristics of the work environment, i.e. resource availability, barriers/challenges and rewards for precepting.

Data was collected at two time points: prior to and one week after the course (referred to as the pre and post measures). Baseline (pre-course) statistics were collected from the results of the organizational, internal learning needs assessment questions and the PPEO scale. The mean scores with standard deviation were highlighted, along with the question minimum range, median response and the maximum end range. Cronbach’s alpha was also conducted to identify internal reliability of both of the measurement tools.

*T*-tests comparing pre and post scores of the organizational, internal learning needs assessment questions and the questions within the PPEO scale (PPEO) were used to estimate the effects of the course on the preceptors’ knowledge of teaching and learning, generic preceptor skills, and preceptor self-efficacy/perception. Lastly, to assess the effects of the course, participant-shared open-ended responses in the form of data collected related to barriers, facilitators, and outcomes reported at one week after the course was also reviewed. Due to
proprietary data, the specific results of the qualitative data findings will not be discussed; however more general topics of discussion will occur.

Chapter 4: Findings

Data collection and analyses was initially based on a convenience sample of approximately 25 experienced nurse preceptors attending the Advanced Nursing Preceptor Education course and would anonymously participate in a pre-course and 1-week post-course online survey. After final review and approval was received from the IRB, the nursing union representative, and the organization’s Nursing Quality Feasibility committee, two courses were advertised and opened for participant registration. A convenience sample of 15 experienced nurse preceptors participated in the Advanced Nursing Preceptor course resulting in 14 completed baseline pre-course surveys and 12 completed post-course surveys.

Results

The participant pre- and post-online surveys obtained through Survey Monkey contained a total of 34 questions. Due to the small sample size and for ease in comparison of surveys, pre-data and post-data from each of the two educational sessions were combined for the analysis. The pre and post survey questions were identical. No identifying information was collected for individual comparison, therefore, the results will be provided in aggregate form. The survey completion date and time were the only identifying markers that separated the data into either the pre or post survey categories.

Demographic Data

A total of nine demographic questions were asked of each participant. Table 7 highlights the demographic information of the sample. All participants agreed that the course was taken due to a shared interest in helping others learn in the clinical area. The majority of the group
participants’ ages ranged from 31-40 years of age (n=7); 51-60 years of age (n=3); 20-30 years of age (n=3); and 41-50 years of age (n=1). There were 12 females and two males. Twelve individuals had a Bachelor of Science degree, one had an associate degree, and one reported having a master’s degree. Participants reported that they had the following years of nursing experience: between 6-10 years of nursing experience (n=6); 11-20 years of experience (n=2); 1-5 years’ experience (n=3); 21-30 years’ experience (n=2); and 1 with 31+ years’ experience. The number of years’ experience as a preceptor were identified as greater than 6 years (n=4); 4 years (n=4); 5 years (n=1); 1 year (n=2); 2 years (n=2); and 3 years (n=1). The number of opportunities the participant has previously had to precept included 5-10 opportunities (n=7); 21+ opportunities (n=3); 11-20 opportunities (n=2); and less than 4 opportunities (n=2). Lastly, a majority of the group participants identified that they have not previously had any formal preceptor education (n=10), as compared to 4 responses identified as having previous formal preceptor education (n=4).

### Table 7

Baseline Demographic Characteristics of the Sample

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Category Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>20-30</td>
</tr>
<tr>
<td>N=14</td>
<td>3 (21%)</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
</tr>
<tr>
<td>N=14</td>
<td>12 (86%)</td>
</tr>
<tr>
<td>Education Level</td>
<td>Associates’</td>
</tr>
<tr>
<td>N=14</td>
<td>1 (7%)</td>
</tr>
<tr>
<td>RN years’ experience</td>
<td>1-5 years</td>
</tr>
<tr>
<td>N=14</td>
<td>3 (21%)</td>
</tr>
<tr>
<td></td>
<td>1 yr.</td>
</tr>
</tbody>
</table>
### Organizational Internal Learning Needs Assessment

The organizational internal learning needs survey was identified as Table 8 using the same questions from a May 2014 organizational learning needs survey. The variables listed in the descriptive baseline (pre-course) distribution table included preparation, interest, resources, understanding and the combination of all 4 variables as an overall response. The pre-course population identified one additional respondent with an n=14. The range of distribution for the preparation question varied with a minimum score of 2.00 to a max score of 5.00. The median score was found to be 4.00 and the respondents’ replies identified a mean score of 4.07 with a standard deviation of 0.83. The interest category showed pre distribution of values of a minimum range of 4.00 and a max score of 5.00. The median for this question was 5.00, with a mean score of 4.86 and standard deviation of 0.36. Resources had a minimum of 4.00 and a max of 5.00 with a median listed at 4.00. The mean for this category was 4.36 and the standard deviation was 0.50. The understanding question illustrated a minimum range of 2.00 and a max of 5.00 with a median response of 4.50. The mean score was 4.29 and the standard deviation was 0.53. Overall the responses indicated a minimum range beginning at 3.25 and the max high range at 5.00. The median response was 4.50 and the mean score at 4.39 with a standard deviation of 0.53. Cronbach’s alpha was calculated at 0.76.

<table>
<thead>
<tr>
<th>Preceptor years’ experience</th>
<th>&lt; 4 times</th>
<th>5-10 times</th>
<th>11-20 times</th>
<th>21+ times</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=14</td>
<td>2 (14%)</td>
<td>2 (14%)</td>
<td>1 (7%)</td>
<td>4 (29%)</td>
</tr>
<tr>
<td># of times as preceptor</td>
<td>2 (14%)</td>
<td>7 (50%)</td>
<td>2 (14%)</td>
<td>3 (21%)</td>
</tr>
<tr>
<td>N=14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous formal preceptor education</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N=14</td>
<td>4 (29%)</td>
<td>10 (71%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 8**

Descriptive Table of Baseline (pre-course) Distributions
Organizational Internal Learning Needs Assessment
Table 9 compared the pre- and the post-test results, noting the preparation question was found to have a pre-mean score of 4.07 (0.83) and a post-mean score of 4.5 (0.52), which illustrated a medium effect size of 0.61. The question related to interest resulted in a pre-mean score of 4.86 (0.36) and a post-mean score of 4.75 (0.45) which resulted in a small effect size of 0.26. The resource question had a pre-mean score of 4.36 (0.5) and a post-mean score of 4.42 (0.51) with an effect size of 0.12. The question related to understanding showed a pre-mean of 4.29 (0.91) and a post-mean of 4.58 (0.51) with a small effect size of 0.39. The overall mean for the internal learning needs survey questions had a pre-mean score of 4.39 (0.53) and a post-mean score of 4.56(0.44), and resulted in a small effect size of 0.35. Questions seven through ten were identified as open ended questions and are listed separately under the topic of open ended findings.

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>14</td>
<td>4.07</td>
<td>0.83</td>
<td>4.00</td>
<td>2.00</td>
<td>5.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Interest</td>
<td>14</td>
<td>4.86</td>
<td>0.36</td>
<td>5.00</td>
<td>4.00</td>
<td>5.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Resources</td>
<td>14</td>
<td>4.36</td>
<td>0.50</td>
<td>4.00</td>
<td>4.00</td>
<td>5.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Understanding</td>
<td>14</td>
<td>4.29</td>
<td>0.91</td>
<td>4.50</td>
<td>2.00</td>
<td>5.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Overall Survey</td>
<td>14</td>
<td>4.39</td>
<td>0.53</td>
<td>4.50</td>
<td>3.25</td>
<td>5.00</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Table 9: T-tests of Pre-Post Subscale and Scale Differences of Organizational Internal Learning Needs Assessment

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Baseline (Pre-Course) N= 14 Mean (SD)</th>
<th>Post-Course N=12 Mean (SD)</th>
<th>T value</th>
<th>p value</th>
<th>Effect Size (Cohen’s d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>4.07 (0.83)</td>
<td>4.5 (0.52)</td>
<td>-1.55</td>
<td>0.14</td>
<td>0.61 Medium Positive Effect</td>
</tr>
<tr>
<td>Interest</td>
<td>4.86 (0.36)</td>
<td>4.75 (0.45)</td>
<td>0.67</td>
<td>0.51</td>
<td>0.26 Small Negative Effect</td>
</tr>
<tr>
<td>Resources</td>
<td>4.36 (0.5)</td>
<td>4.42 (0.51)</td>
<td>-0.30</td>
<td>0.77</td>
<td>0.12 No effect</td>
</tr>
</tbody>
</table>
Preceptor Program Educational Outcomes (PPEO) Scale

As highlighted earlier in the Methods section, this survey consisted of a total of 15 questions, with four separate subscales identified. These findings are discussed based on the subscales – knowledge of teaching and learning (KTL); generic preceptor skills (GPS); preceptor self-efficacy (PSE); and one question related to preceptor attitude towards new hire nurses (PATNHN). Table 10 outlines the components within the PPEO scale.

Each of the scales’ answers were averaged based upon the number of questions resulting in a pre and post distribution table, highlighted by the Mean, SD, Median and minimum/maximum scores per scale. The pre group resulted in a population n=13 and the post group resulted in n=12. There was one participant that was considered a loss for not responding to this scale. Based up on the average post-scores, all four scales showed in an increase within the post-survey means results. In addition to a distribution table, “t-tests,” of pre-post subscale differences also were conducted, resulting in effect size changes for three of subscale findings and for the overall scale findings. The limited small sample size didn’t have enough power to be statistically significant and therefore regression analyses were not achieved due to the limited sample. Although the p-Value was calculated; it too did not appear to show statistical significance due to the small sample population size. Cohen’s d effect size was found and identified for each subscale, as it was not dependent upon the sample population size in order to show the strength of the effect of the presented variable.

<table>
<thead>
<tr>
<th>Understanding</th>
<th>4.29 (0.91)</th>
<th>4.58 (0.51)</th>
<th>-1.00</th>
<th>0.33</th>
<th>0.39</th>
<th>Small Positive Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Survey</td>
<td>4.39 (0.53)</td>
<td>4.56 (0.44)</td>
<td>-0.88</td>
<td>0.39</td>
<td>0.35</td>
<td>Small Positive Effect</td>
</tr>
</tbody>
</table>
The KTL subscale baseline (pre-course) findings illustrated a mean score of 3.23 with a standard deviation of 0.52. The minimum range was 2.20, the median was 3.00 and the max was 4.00. Cronbach’s’ was found at 0.95. The GPS subscale mean was 3.19 with a standard deviation of 0.47. The minimum range was 2.17 and the median was 3.00. The max range was 4.00 and the Cronbach’s was found at 0.92. The PSE subscale mean was 3.26 with a standard deviation of 0.47 and the minimum range of distribution 2.67, a median of 3.00 and a max of 4.00. Cronbach’s’ was 0.93. The PATNHN subscale illustrated a mean score of 3.31 with a standard deviation of 0.48. The minimum range was 3.00 and the median was also 3.00. The max range was 4.00 and a Cronbach’s’ was not calculated due to only including one question. The overall mean score was 3.23 with a standard deviation of 0.45, and highlighted a minimum range of 2.33, a median of 3.13 and a max of 4.00. Cronbach’s’ was found at 0.97.

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>N</th>
<th>Mean</th>
<th>STD</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge (KTL)</td>
<td>13</td>
<td>3.23</td>
<td>0.52</td>
<td>3.00</td>
<td>2.20</td>
<td>4.00</td>
<td>0.95</td>
</tr>
<tr>
<td>Generic Preceptor Skills (GPS)</td>
<td>13</td>
<td>3.19</td>
<td>0.47</td>
<td>3.00</td>
<td>2.17</td>
<td>4.00</td>
<td>0.92</td>
</tr>
<tr>
<td>Perceptions (PSE)</td>
<td>13</td>
<td>3.26</td>
<td>0.47</td>
<td>3.00</td>
<td>2.67</td>
<td>4.00</td>
<td>0.93</td>
</tr>
<tr>
<td>Attitude (PATNHN)</td>
<td>13</td>
<td>3.31</td>
<td>0.48</td>
<td>3.00</td>
<td>3.00</td>
<td>4.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Overall PPEO Scale</td>
<td>13</td>
<td>3.23</td>
<td>0.45</td>
<td>3.13</td>
<td>2.33</td>
<td>4.00</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Table 11 illustrated the average KTL pre-mean score 3.23 (0.52) and post-mean score 3.52 (0.42). The effect size was found to be 0.6 and considered to be medium in nature. The average GPS pre-mean score was 3.19 (0.47) and post-mean score 3.36 (0.4) for an effect size of 0.39. The average PSE pre-mean score at 3.26 (0.47) and post-mean score at 3.42 (0.47) for an effect size of 0.34. Both the average GPS and PSE subscales identified a small effect size in the
score trend. The average PATNHN had a pre-mean score of 3.31 (0.48) and post-mean of 3.33 (0.49), resulting in no effect size change at 0.05. The overall PPEO scale illustrated a pre-mean score of 3.23 (0.45) and a post-mean of 3.42 (0.38), which resulted in a small effect size at 0.47.

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Baseline (Pre-Course)</th>
<th>Post-Course</th>
<th>T value</th>
<th>p value</th>
<th>Effect Size (Cohen’s d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge (KTL)</td>
<td>3.23 (0.52)</td>
<td>3.52 (0.42)</td>
<td>-1.51</td>
<td>0.14</td>
<td>0.6 (Medium Positive Effect)</td>
</tr>
<tr>
<td>Generic Preceptor Skills (GPS)</td>
<td>3.19 (0.47)</td>
<td>3.36 (0.4)</td>
<td>-0.98</td>
<td>0.34</td>
<td>0.39 (Small Positive Effect)</td>
</tr>
<tr>
<td>Perceptions (PSE)</td>
<td>3.26 (0.47)</td>
<td>3.42 (0.47)</td>
<td>-0.84</td>
<td>0.41</td>
<td>0.34 (Small Positive Effect)</td>
</tr>
<tr>
<td>Attitude (PATNHN)</td>
<td>3.31 (0.48)</td>
<td>3.33 (0.49)</td>
<td>-0.13</td>
<td>0.90</td>
<td>0.05 (No effect)</td>
</tr>
<tr>
<td>Overall PPEO</td>
<td>3.23 (0.45)</td>
<td>3.42 (0.38)</td>
<td>-1.17</td>
<td>0.25</td>
<td>0.47 (Small Positive Effect)</td>
</tr>
</tbody>
</table>

**Open-ended Responses**

As identified earlier, there were four separate open-ended questions embedded within the internal organizational learning needs assessment survey. The questions were identical and will be used as an internal comparison against results from data collected the previous preceptor learning needs assessment survey conducted in May 2014. The data collected during both learning needs assessments are proprietary and are not presented here. The general nature of the open-ended findings are consistent and supported by literature and encompass topics including challenges and barriers faced within the preceptor role; previous assistance prior to taking the role of preceptor; recognition and rewards; and other comments. Some of the feedback received by the nurse preceptor participants included the following comments related to barriers and
challenges they have previously faced. “Never really had a truly comprehensive education in how to evaluate my orientees – missing concrete milestones;” “Different learning styles;” “Cultural/generational barriers; “Personality conflicts;” and “Not enough time and unclear expectations for preceptor and orientee.”

In addition to the qualitative data identified within the survey, secondary evaluations were anonymously collected for feedback for the participant to receive continuing education credit (CE) from course attendance and participation. The content of the course was evaluated and the overall feedback included all positive comments related to the different components of the course in relation to their active role as a preceptor within the organization, resulting in increased understanding and self-awareness, provision of evidence-based tools to be utilized in assisting with evaluating preceptee performance, as well as general insight to the preceptor role in clarifying the expectations of the role and initial recognition for the role, as evidenced by the organizational support for the development of this DNP project.
Chapter 5: Discussion and Conclusions

Discussion

Demographic Data

A majority of the respondents were between the ages of 31-50 years of age and represented 57% of the group (n=8); considered by some authors’ as members of “Generation X.” This population sometimes referred to as “generation Xers,” were born between the years of 1965-1980 and are considered self-reliant and independent with their actions. Additionally, this generation is described to be self-identified as “self-directed, as they prefer coaching and mentoring and are motivated by continuous education and training,” (Lavoie-Tremblay, 2010, p. 4).

The “Baby Boomer” generation was defined as individuals between 51-69 years of age and represented 21% of the group in the findings (n=3). Boomers tend to have thoughts of changing the world due to witnessing civil rights and technology changes over the course of a lifetime. Due to this mentality, this group “tends to question authority and derive a sense of self-worth from their contributions to their selected professions,” (Lavoie-Tremblay, 2010, p. 3). The last demographic group included the Generation Y nurses with a 21% response (n=3). This population was defined as the “Generation Net, Millennials, and Nexters” group. These nurses represent a group that strives and expects immediate feedback and information from technology and are adept at multitasking within their work and home environments. It is important to also understand that this generation, born after 1980, tend to have “little company loyalty, but recognize that training and development are the means to career development,” (Alch, 2000; Lavoie-Tremblay, 2010, p.4).
Organizational Internal Learning Needs Assessment

The baseline data showed that the participants appeared to be fairly confident in the preparation, interest, understanding with the role of nurse preceptor, also identifying that there was general consensus for the availability of nurse preceptor resources for the role of preceptor, as well. Review of the pre and post assessment results collected from the organizational internal learning needs assessment appear to illustrate a small effect towards the nurse preceptors’ interest (0.26), understanding (0.39) and overall belief of the outlined questions (0.35). The preparation question that highlighted the preceptor’s perception of feeling prepared after participating in formalized preceptor education in support of the role was found to have a medium effect size at 0.61, illustrating clinical meaning and supporting the findings of the literature that preceptor education and professional development support given by organizations increase the feelings of support and validation of the employees.

Preceptor Program Educational Outcomes (PPEO) Scale

The experiential learning process is two-fold within the dyad between a nurse preceptor and the new hire nurse preceptee. To best provide an optimal learning environment in training the trainer to then train the new incoming staff, role definition and expectations, in addition to understanding the process supporting adult learning, as well as course content delivery all must be taken in account for. The utilization of an evidence-based, reliable and valid evaluation tool to measure outcomes against the interventions is an essential step that is often overlooked within the nursing profession. The outcomes of the baseline PPEO (pre-course) survey indicated that the range of scores with the identification of the mean scores for all the of subscales, in addition to the overall course mean score that nurse preceptors identified as mid-level when reviewing the content that discussed knowledge, generic preceptor skills, preceptor perceptions, and the overall
means score related to the entire course. All of the subscales with the exception of the one question that illustrated Preceptor Attitude towards New Hire Nurses showed internal reliability based upon the presented Cronbach’s alpha results.

Similar to the organizational, internal learning need survey responses, the PPEO pre and post assessment results illustrated an upward shift and small to medium effect size changes related to the PPEO subscales. The generic preceptor skills subscale (GPS) identified a small effect size at 0.39, in addition to the preceptor perceptions of self-efficacy effect size of .039. The overall effect size based upon the entirety of the PPEO scale was found to be at 0.47, which was an increased based upon the first two findings; however still considered small by definition. The knowledge of teaching and learning (KTL) subscale appeared to have a much more clinically meaningful increase with an effect size of 0.6. This finding would be consistent with the content delivery of the completion of the VARK tool, as well as the DiSC personality assessment tools during the course.

Comparing the effect sizes, to the open-ended question feedback that was received by several participants support the use of self-awareness and personality/strengths and behavior inventories, in addition the VARK, which assessed the participant’s individual learning style. This was grounded and supported, as the majority of the post-scores illustrate an increase related to the general knowledge of the course content. Preceptor perception of skills and self-efficacy were also impacted in a positive way showing a small changed related to clinical meaning related to course content. Utilizing the experiential knowledge of the preceptors’, the content focus was to target an internal assessment of the participant’s perception of the importance of the preceptor role. Building upon the need to know concept based upon Knowles’ Adult Learning theory, the content delivery methods using an interactive, discussion-based environment created an
atmosphere conducive to exchanging knowledge, stories, and validating each preceptor’s prior experiences within the role.

**Overall Results**

The results from the pre and post survey responses appear to be consistent with the evidence illustrating the need to provide organizational support for preceptor education and ongoing development. Nursing leadership’s decision to review the literature, compare current practices to the themes presented by the various represented studies, and then to implement and utilize best practices related to providing an additional level of education for nurse preceptors appears to be correct based upon the generalization from the overall results, a majority of which show some improvement in the post-comparison of scores related to each of the listed variables.

**Conclusions**

**Project Summary**

Recent healthcare delivery reform has caused healthcare leaders and their supporting organizations to shift their focus of attention towards realigning the level of quality care delivery with the care providers themselves, nurses. The increased availability of health insurance coverage has set forth a cascade of inter-related components, including the need for organizations to attract, recruit and retain high quality practitioners to deliver the services for patients. Through the orientation and onboarding processes of new employees, healthcare leaders’ have an opportunity for their organizations to create welcoming, supportive environments for new nurses, as well as to retain their current workforce through retention strategies.

Organizational attempts to prevent turnover are essential, as the result of losing staff in the workforce can be costly. Other costly components associated with nurse turnover include “lost productivity relate due to vacancy, lost productivity of remaining employees related to

“Preceptorships help integrate newly employed nurses into healthcare organizations that are constantly changing in response to medical advances and pressures to contain costs,” (Moore, 2008, p.E9). “The preceptor is the most critical link in the orientation of new staff in any healthcare arena,” (Speers, Strzyzewski, & Ziolkowski, 2004, p. 127). It is through the orientation process, “preceptors assist orientees to acquire basic nursing/unit-specific skills and become familiar with patients, protocols, care providers, and the unit’s culture,” (Sandau & Halm, 2010, p.184). Furthermore, preceptors provide the opportunities for new nurses to “gradually increase their skills and knowledge, refine their practice efficiency and effectiveness, and become increasingly independent in managing patient care,” (Burns, Beauchesne, Ryan-Krause, & Sawin, 2006, p.172).

By guiding new employees through the initial transition process of orientation and welcoming them into the new workplace environment, preceptors appear to be the vital linchpin towards securing success for an organization. This author’s organization decided to allow the development and implementation of a quality improvement project to best provide experienced nurse preceptors evidence-based education strategies to facilitate the orientation and onboarding of new staff. The ultimate goal of any program is that “the preparation of preceptors must foster their growth and development in the role,” (Speers, Strzyzewski, & Ziolkowski, 2004, p. 127). Course development began by utilizing the PICOT question, “For experienced nurse preceptors employed in a hospital setting, how does the implementation of a secondary, advanced nursing
preceptor course compared to the previous one-time preceptor development workshop affect the nurse’s knowledge, skills, and perceptions of the role after course participation?”

**Project Outcomes**

A four-hour Advanced Nursing Preceptor Education course was developed based upon Knowles’ Adult Learning Theory and opened for nurse participant registration after approval was received by the organization’s internal Nursing Feasibility Quality Committee and the nurses’ union. Two separate courses were offered in order to increase the number of participants for the pre- and post-survey results; and the results were combined into one aggregate group. Data was collected by means of an anonymous online survey platform through asking demographic questions, an organizational, learning needs assessment and the use of an evidence-based, valid and reliable Preceptor Program Educational Outcomes (PPEO) scale developed by Smedley, et al, (2010). The post-comparison of mean scores across organizational internal learning needs assessment survey questions and the PPEO subscales were favorable for showing improvement of the participants’ knowledge, skills, and self-perceptions of the preceptor role following completion of the course.

Additionally, the open ended data that was collected was similar in comparison for the organizational internal learning needs assessment, conducted in May 2014. The general picture from a qualitative perspective is in alignment that preceptors seek to provide the best opportunities for new hires and their units; however simple recognition and acknowledgement of their role, in addition to guidance for the expectations and responsibilities of the preceptor by the leadership team is also greatly sought. Lastly, continuing education and professional development support for the growth as leaders’ in their workplace setting was also mentioned. Overall, the findings collected indicated a positive, upward trend for implementation of the evidence-based course.
Project Limitations

Limitations included the availability of nursing staff to be scheduled for the course, as the organization’s central scheduling system is released 4-6 weeks prior. Two courses needed to be offered in order to increase the number of participants for collection of data. Due to approval needed from several external components, time became a limitation with the advertisement for the course. The nurses that attended the course were not previously scheduled to work and therefore available for attendance. Another limitation that was noted included the time frame that the class was offered, 7:00am – 11:00am. Due to shift change, many nurses are providing bedside report and are not able to leave until 7:30am, if working on night shift. Additionally, the four hour class after working a full shift isn’t always conducive to the learning process.

Another limitation included the necessity for the pre- and post-survey responses to be collected anonymously, as to allow the participants the freedom to be honest in their responses without fear of any type of negative consequence within the workplace setting. The ability to provide true pre and post result comparison would have been clarified with the results. Additionally, the turnaround time in collecting post-survey responses was a limitation in understanding the true long-term responses of all participants, as the goal would be to compare results at three, six or twelve months post course attendance. Lastly, the ability for the participants to complete the post-survey at the designated time period became a limitation, as there was not a 100% post response rate for the second available class that was offered.

Implications for Nursing
The implementation and data collection results for the Advanced Nursing Preceptor Education course opens up the realm of possibility related to professional development and educational support for nurse preceptors working within the supporting organization. The data analysis including the limitations identified earlier illustrates that an advanced nursing preceptor education class offered by the supporting organization’s Department of Nursing Education, positively impacted the participants that had the opportunity to attend the course. Both the quantitative and open ended data that was collected showed improved post-course responses, in addition to suggestions for future course development by the nurse preceptor participants.

Although this course was developed for the requirement of an evidence-based DNP final project, the effects from the development and implementation of this class have clearly highlighted the continuing need for re-evaluation of several other potentially, high-impact areas that may affect direct patient care and are loosely synonymously associated with nurse preceptor education and professional development. These areas include but are not limited to the organization’s approach towards the onboarding and orientation process of all new employees, ensuring that each one is offered similar opportunities related to department/unit support and educationally-prepared preceptors to guide their transition process. Additionally, team leadership classes, including charge nurse development and the creation of preceptor education to include other interdisciplinary groups across the organization’s purview is another potential area for development. Lastly, nurse manager development and continuing education opportunities for preceptors for leadership growth and development are key strategies that should be considered by the organization for future investment.

Future Goals
Succession planning and human capital investment are vital elements that healthcare organizations should not overlook with the creation of future strategic plans. Rather than promoting a reactive environment and to become more efficiently proactive, organizational leaders must develop “a systematic process for anticipating leadership needs and ensuring that well-prepared leaders will be available when the need arises,” (Redman, 2006, p.292).

Future studies should be further investigated by healthcare leaders’ seeking to maximize the potential for their organization. Orientation and onboarding practices are areas that could be initially identified for review and provide the potential basis for future studies. Investigating nursing professional development and educational strategies to a possible connection with nurse retention, turnover, and improvement with patient quality indicators is another potential aspect of further review. Manager-level education and the impact of the provision of a positive, supportive leadership structure with preceptor development is an area that appears would be benefit with additional studies. Furthermore, “leadership succession planning is a “long-term business strategy that requires both strategic thinking and action to ensure that leadership needs in the organization will be anticipated and leadership competencies will be sufficiently developed in those individuals who have potential for leadership roles in the future,” (Bolton & Roy, 2004; Corso, 2002; Charan, 2005; Redman, 2006, p.292). The understanding that the provision of high-quality evidence-based patient care delivery results from the professional development and support of high-quality care delivers in the form of nurses, is the first step towards recognition and action of ensuring organizational and individual success.
References


http://dx.doi.org/10.1097/NND.0b013e31825dfb90.


http://dx.doi.org/10.1177/0894318409353806.


Appendix A

**Demographic Characteristics**

1. Did you take this course because of an interest in helping others learn in the clinical area?
   - Yes
   - No

2. What is your age group?
   - 20 – 30 years
   - 31 – 40 years
   - 41 – 50 years
   - 51 – 60 years
   - 60 + years

3. What is your gender?
   - Male
   - Female

4. What is your highest education level?
   - Diploma
   - Associate Degree (ADN)
   - Bachelor’s Degree (BSN)
   - Master’s Degree (MS)
   - Doctoral Degree (PhD or DNP)

5. Please indicate your years of experience as a registered nurse
   - 1 – 5 years
   - 6 – 10 years
   - 11 - 20 years
   - 21 – 30 years

6. Number of years of experience as a preceptor

7. Number of times as a preceptor
   - ≤ 4
   - 5-10
   - 11-20
   - 21 +

8. Have you had previous formal preceptor education?
   - Yes
   - No

9. Length of time since formal preceptor education listed in # of years (if applicable)
### Organizational Preceptor Learning Needs Assessment Survey

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly Disagree</th>
<th>2 Disagree</th>
<th>3 Neutral</th>
<th>4 Agree</th>
<th>5 Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I attended the preceptor class before initially serving as a preceptor</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>If you attended the preceptor class, did it help you be an effective preceptor?</td>
<td>N/A</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I felt adequately prepared to be a preceptor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>When precepting, I am genuinely interested in the success of my preceptee</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>I have access to resources needed to be a successful preceptor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>As a preceptor, I understand my role in completing and documenting orientation on the required department/role orientation checklists</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Challenges that I have encountered as a preceptor include:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Is there anything that would have helped you as a preceptor or wish you would have been told prior to taking on the preceptor role? If so, what?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I would like to be rewarded (excluding monetary) for precepting by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Any additional comments you would like to make:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix C

**PPEO Survey Questions**

#### PRECEPTOR PROGRAM EDUCATIONAL OUTCOMES SCALE (PPEO)

<table>
<thead>
<tr>
<th>KTL Scale – Change in Knowledge of Teaching and Learning</th>
<th>GPS Scale – Change in Generic Preceptor Skills</th>
<th>PATSN Scale – Change in Preceptor Attitude toward new hire nurses</th>
<th>PSE Scale – Change in Preceptor Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Disagree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Strongly Agree</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. My knowledge of teaching and learning models used in the clinical environment has increased.  
2. My understanding of the teaching and learning process has improved.  
3. I am now able to learn more through reflecting on my own nursing practice.  
4. I am now able to think more critically about problem-solving.  
5. My understanding of adult learning has developed.  
6. My communication skills with preceptees have improved.  
7. My attitude toward new hire nurses has been positively influenced.  
8. My greater understanding of how others learn has provided me with alternatives to the way I teach.  
9. I can now assess preceptees' learning needs more effectively.  
10. I am now more able to logically sequence my teaching sessions.  
11. I am now more able to effectively reflect on my own learning style.  
12. I can now more willingly accept and use feedback from preceptees' to improve my practice.  
13. I have gained confidence in my role as a preceptor.  
14. I now find it easier to include preceptees' in my day-to-day nursing practice.  
15. I believe that I am a better role model for preceptees.

---

**SMEDLEY, MOREY, & RACE (2010) - 15-item 4 point Likert Survey**

ENHANCING THE KNOWLEDGE, ATTITUDES, AND SKILLS OF PRECEPTORS
### Advanced Nursing Preceptor Course

**Tuesday May 19th, 2015**

7:00am – 11:00am

**Location**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:00 – 07:05a</td>
<td>Welcome and Introduction to Class</td>
</tr>
<tr>
<td>07:05 – 07:15a</td>
<td>Socialization Icebreaker Exercise</td>
</tr>
<tr>
<td>07:15 – 07:50a</td>
<td>Preceptor I Review - Role description; learning needs/styles, use of VARK tool; role expectations for new hire/preceptor; legal, ethical, organizational concepts; evaluation tools – Benner Novice to Expert Model, etc.</td>
</tr>
<tr>
<td>07:50 – 09:00a</td>
<td>DISC Personal Strengths &amp; Behavior Inventory: Discussion &amp; Activity</td>
</tr>
<tr>
<td></td>
<td>• DISC Index</td>
</tr>
<tr>
<td></td>
<td>• Values Index</td>
</tr>
<tr>
<td></td>
<td>• Picture exercise</td>
</tr>
<tr>
<td>09:00 – 9:05a</td>
<td>Get up and Stretch/Break</td>
</tr>
<tr>
<td>09:05 – 10:30a</td>
<td>Case Scenario Review &amp; Evaluation techniques</td>
</tr>
<tr>
<td></td>
<td>• Overview: Use of Benner’s Novice to Expert Model, Critical Thinking Tool (Pocket card), &amp; Nurse Executive Center Critical Thinking Evaluation tool</td>
</tr>
<tr>
<td>10:30 – 10:40a</td>
<td>Review &amp; Networking opportunity</td>
</tr>
<tr>
<td>10:40 – 10:45a</td>
<td>Evaluations</td>
</tr>
</tbody>
</table>

**Criteria for successful completion:**

Participants must attend 80% of the class & complete the CE evaluation
Appendix E

Advanced Nursing Preceptor Course
Lesson Plan & Learning Objectives

<table>
<thead>
<tr>
<th>Location</th>
<th>Tuesday May 19th, 2015</th>
<th>7:00am – 11:00am</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Learning Objectives</th>
<th>Content &amp; Action (Topics)</th>
<th>Clock Time Frame (# minutes)</th>
<th>Knowles’ Adult Learning Theory Principles</th>
<th>Teaching &amp; Evaluation Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7:00a - 10:45am (3 hours 45 min)</td>
<td>✓ Need to know (1) ✓ Self-Concept (2) ✓ Learner’s Experiences (3) ✓ Readiness to Learn (4) ✓ Orientation to learning (5) ✓ Motivation to Learn (6)</td>
<td>Teaching Method: Discussion, PowerPoint, Drill &amp; Practice, Case Study, Demonstration Evaluation Categories: 1. Demographic Info 2. PPEO Scale (Pre/Post) • KTL • GPS • PSE • PATNHN 3. Organizational Preceptor Learning Needs Survey (Pre/Post)</td>
</tr>
</tbody>
</table>

**Course Description:**
Experienced nurse preceptors will be provided evidence-based education strategies to facilitate the orientation and onboarding of new staff. Course participants will demonstrate effective communication and critical thinking techniques through the observation of preceptor-preceptee relationship case scenarios and subsequent application and use of evidence-based evaluation skills.

**Course Goals:**
1. Describe the role and responsibility of the preceptor.
2. Identify the use of personal strengths to understand self and others behaviors.
3. Apply preceptor evaluation tools to communication and critical thinking preceptor/preceptee case scenarios.

**Welcome & Introduction**
1. Registration and sign-in
2. Housekeeping
3. “Safe zone” confidentiality discussion

**Socialization Activity**
1. M&M’s/Skittles Activity – Color Q&A & Grouping

<table>
<thead>
<tr>
<th>Teaching Method:</th>
<th>Discussion, PowerPoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00a-7:05am 5 minutes</td>
<td>Need to know (1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Method:</th>
<th>Drill &amp; Practice, Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:05a-7:15am 10 minutes</td>
<td>Need to know (1) ✓ Learner’s Experiences (3) ✓ Orientation to learning (5)</td>
</tr>
<tr>
<td>Goal #1: The participant will review the responsibilities and expectations of the nurse preceptor role. (Review of Preceptor I concepts)</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>1. Use of VARK tool</td>
<td></td>
</tr>
<tr>
<td>2. Definition, responsibility, and expectation of preceptor role - socializer, protector, educator, &amp; evaluator of the new hire nurse preceptee</td>
<td></td>
</tr>
<tr>
<td>3. Legal, ethical, and organizational concepts</td>
<td></td>
</tr>
<tr>
<td>4. Evaluation techniques and tools</td>
<td></td>
</tr>
<tr>
<td>7:15a – 7:50am 35 minutes</td>
<td></td>
</tr>
<tr>
<td>✔ Need to know (1) ✔ Self-Concept (2) ✔ Learner’s Experiences (3) ✔ Readiness to Learn (4) ✔ Orientation to learning (5)</td>
<td></td>
</tr>
<tr>
<td>Teaching Method: Discussion, PowerPoint</td>
<td></td>
</tr>
<tr>
<td>Evaluation Categories: 1. PPEO Scale (Pre/Post) 2. Organizational Preceptor Learning Needs Survey (Pre/Post)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal #2: The participant will understand the use of DiSC in relation to precepting new nursing staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review of the DiSC personal strengths and behavior inventory activity (Pre-course work)</td>
</tr>
<tr>
<td>2. Discussion of strengths of understanding individual (personal) behavior approaches/filters</td>
</tr>
<tr>
<td>3. Activity: Selection of photographs</td>
</tr>
<tr>
<td>7:50a - 9:00am 70 minutes</td>
</tr>
<tr>
<td>✔ Need to know (1) ✔ Self-Concept (2) ✔ Learner’s Experiences (3) ✔ Orientation to learning (5)</td>
</tr>
<tr>
<td>Teaching Method: Discussion, Drill &amp; Practice</td>
</tr>
<tr>
<td>Evaluation Categories: 1. PPEO Scale (Pre/Post) 2. Organizational Preceptor Learning Needs Survey (Pre/Post)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Get Up &amp; Stretch /Break</th>
</tr>
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<tbody>
<tr>
<td>9:00a – 9:05am 5 minutes</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>Teaching Method: Demonstration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal #3: Apply real-world case scenarios of preceptee and preceptor behaviors to identify, develop, and appraise critical thinking, communication and evaluation strategies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Preceptee scenario examples: lack of confidence; know-it-all; inability to demonstrate knowledge, poor communicator, unprofessional behavior</td>
</tr>
<tr>
<td>3. Preceptor scenario examples: Micromanager, unavailable/hands-off, too nice, destroyer of confidence</td>
</tr>
<tr>
<td>4. Review selected examples through discussion and application of effective communication and critical thinking strategies utilizing appropriate evaluation resource tools.</td>
</tr>
<tr>
<td>9:05a-10:30am 85 minutes</td>
</tr>
<tr>
<td>✔ Need to know (1) ✔ Self-Concept (2) ✔ Learner’s Experiences (3) ✔ Readiness to Learn (4) ✔ Orientation to learning (5) ✔ Motivation to Learn (6)</td>
</tr>
<tr>
<td>Teaching Method: Case Study, Demonstration, Discussion, Drill &amp; Practice</td>
</tr>
<tr>
<td>Evaluation Categories: 1. PPEO Scale (Pre/Post) 2. Organizational Preceptor Learning Needs Survey (Pre/Post)</td>
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</table>
### Review & Network opportunity

| 1. | Review course concepts and overview |
| 2. | Provide opportunity to network with other nurse preceptor colleagues |
| 3. | Answer course questions |

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
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<tbody>
<tr>
<td>10:30a-10:40am</td>
<td>10 minutes</td>
</tr>
</tbody>
</table>

- Need to know (1)
- Self-Concept (2)
- Learner's Experiences (3)
- Readiness to Learn (4)
- Orientation to learning (5)
- Motivation to Learn (6)

**Teaching Method:** Discussion, Drill & Practice

**Evaluation Categories:**
1. Organizational Preceptor Learning Needs Survey (Pre/Post)

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| 1. | Reminder of online survey evaluation – 1 week post attendance |
| 2. | Collection of CE-evaluation |

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
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<tbody>
<tr>
<td>10:40a - 10:45am</td>
<td>5 minutes</td>
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</tbody>
</table>

N/A

**Teaching Method:** Discussion, Drill & Practice

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**Evaluation Legend:**

1. Demographic Info - 9 questions

2. PPEO Scale – Preceptor Program Educational Outcomes: 15-item 1-4 Likert scale

3. Organizational Preceptor Learning Needs Survey: 10-item – (2) Y/N; (4) 1-5 Likert; (4) qualitative