

NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE
PRECEPTOR DEVELOPMENT

by

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ABSTRACT

KATRINA GREEN: Nurses' Experiences in a Blended Learning Course for Nurse Preceptor Development
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Traditional methods of staff development do not meet the needs of current healthcare organizations. It is difficult to find training that is effective and flexible, meeting variable staff scheduling needs (Chen et al., 2022; Haggerty et al., 2012). Preceptor development was identified as a course important for nurse staff, but difficult to train through a traditional face-to-face class. This case study sought to gain insight into the experiences of nurse preceptors who participated in a blended learning nurse preceptor development course. Intentions of the course are to train preceptors so they have the confidence, tools, and resources they need to successfully train and onboard new nurses, providing confidence and safety in their practice. The following research questions will guide this study: 1) What are the experiences of nurse preceptors who attended the blended learning preceptor development course?; 2) How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?; 3) How do nurses who attended the blended learning course describe their ability to be able to precept a new hire? Twenty-one nurses participated in the blended learning course, 11 participated in interview one, 7 during focus group, and 6 for interview 2. Using thematic analysis, five themes and 14 subthemes were identified from the data collected. The nurses' perceptions were favorable for using blended learning for staff development, as it provided a method that they felt prepared them well for the role and increased their confidence to serve in role. They were able to identify benefits for the online component as well as the in-person class. The nurses were also able to use the resources and tools to develop a clear plan for working with new hires.

DEDICATION

One does not appreciate the doctoral journey until you start it yourself. This has been quite the adventure with significant bumps along the road. Job promotions—great, but more responsibility and more juggling. A pandemic that we thought would last a couple months and ended up impacting more than we could ever think. However, the journey was also exciting and dare I say fun? I have had the pleasure of meeting some of the smartest most supportive friends through the courses that we took. The writing groups, text messages, and weekend writes were so helpful to keep me focused, so thank you to all of you who were part of that.

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CHAPTER 1: INTRODUCTION

Background of the Study

Gallup polls have ranked nursing as the most honest and trusted profession in the United States for the last 19 years (Saad, 2020). Nurses are the members of the health care team that provide the most direct care for patients and their loved ones (Coleman & Angosta, 2016; Esplen, 2018). The COVID-19 pandemic has provided new struggles for nurses as they work to provide care to the COVID patients on top of the everyday stressors that they face. The challenges associated with caring for patients that have been expanded upon during the pandemic to include burnout, mental health issues, and questioning whether their decision to be a nurse was the right one (Gaines, 2021). In addition to these challenges, nursing shortages have been projected to be even worse in the upcoming years which is going to cause additional issues for staff. Retaining staff and developing our bedside leaders to help train new nurses is vital for the success of the organization (Senyk & Staffileno, 2017).

Nursing Shortages

Nursing shortages have been a concern before the COVID-19 pandemic, and since the pandemic hit, the need for nurses has increased. Current guidelines project a need of 1.2 million new nurses by 2030 to balance out the shortage (American Association of College of Nursing, 2020). The shortage can be attributed to having seasoned nurses who are ready to retire and then a shortage of faculty in nursing schools to provide formal education needed to have eligible nurses to fill those vacancies (American Association of College of Nursing, 2020). Faculty shortages are due to several causes such as an aging faculty workforce, inadequate salaries, and nurses not pursuing faculty roles (Bond et al., 2019). Another significant factor for the shortage is that there is a high turnover of nurses within the first year of practice, with the new nurses reporting that they leave because of low confidence levels and the inability to care for complex

patients (Sandler, 2018). This supports the need for strong nurse preceptors to help newly hired nurses successfully transition to practice.

With the increased nursing shortage, we also have a shortage of nursing preceptors (Senyk & Staffileno, 2017). Nursing preceptors are important to the development of staff as they have the responsibility of working with the newly hired nursing staff to provide the knowledge and skills validation that is necessary for the new nurse to be successful in their role. Without strong preceptors, the development of the nursing workforce will be impacted.

Staffing shortages have also led to difficulty for staff to leave patient care areas to be able to attend a traditional face-to-face staff development course. Blended learning is a method that can provide nurse preceptor development education that eliminates barriers related to time, place, and situation while still allowing for educators and participants to have an opportunity to have quality interactions (Jeffery et al., 2014; Santiago, 2017; Sultan, 2018). A blended learning course that includes both online self-paced learning matched with opportunities for small group face-to-face meetings can provide the nursing staff a more comprehensive training that enables the new nurses to provide excellent patient care and maintain patient safety. Blended learning for healthcare education can provide a comparable, or better, learning experience for nursing staff by allowing for staff to participate in the self-paced courses at times and at a pace that works for their work and personal schedule (Santiago, 2017; Vallee et al., 2020; Wu et al., 2020)

Nurse Preceptor Development

Nursing preceptor development is critical to help create a strong team of nursing preceptors to help train and prepare the new nursing staff. The National Council of State Boards of Nursing (2008) defined a nurse preceptor as a clinical expert whose scope includes role modeling, developing clinical competence, critical reasoning/thinking, fostering safety, and

effective communication for professional collaboration and patient satisfaction along with the role of a socializer of new nursing hires. In short, the role of a nurse preceptor is an educator, role model, evaluator, and someone to protect the newly hired nurse (Ulrich, 2018). In addition to low confidence to care for complex patients, other common causes of nurses leaving within their first year of practice have been reported to include interpersonal violence, stress, feeling incompetent, and poor relationships (Sandler, 2018). This supports that the development of nursing preceptors to help onboard new staff is one area of nursing that can benefit from using a blended learning approach to provide the training, in particular, to prepare the new nurse preceptors (Bradley et al., 2007; Lee et al., 2017; Senyk & Staffileno, 2017).

Patients have become more complex, and the pandemic has brought additional concerns for a nurse preceptor to consider when training and in this challenging and difficult environment it is even more important to ensure safe patient care (Boyer, 2008; Horton et al., 2012). With the increase in nurse turnover and seasoned nurses leaving the bedside, direct care is falling on many of the more inexperienced nurses who have only been practicing two years or less (Fordham, 2021).

The nurse preceptor must learn how to best guide the new nurses to decrease their stress, improve their confidence level, and facilitate the transition from student to professional (Borimnejad et al., 2018). With the limited supply of nursing staff, healthcare organizations must provide a well-supported experience so that the new nurses can be retained in the clinical area. When looking at the potential volume of staff who are going to be needed to perform in the role of the preceptor, using a blended learning approach will be beneficial, as blended learning allows for scalability to train large numbers of staff across many different service lines and locations (Ashurst, 2011).

Blending Learning for Nurse Preceptor Development

Blended learning is a method that can provide staff development education that eliminates barriers related to time, place, and situation while still allowing for educators and participants to have an opportunity to have quality interactions (Jeffery et al., 2014). Using a blended learning environment that includes staff viewing short modules to learn foundational skills and then attending a face-to-face live session to apply what they have learned and critically think through scenarios can provide the nursing staff with a more comprehensive training experience. This can provide the nurse with the knowledge that they need to appropriately function in their role.

Blended learning for healthcare education can provide a comparable, or better, learning experience by allowing for more flexibility for staff to complete their education, especially with the staffing shortages facing many (Sherman et al., 2012). Blended learning also allows for learners to view modules as many times as needed to have a solid foundational understanding of the topic so that the time that is available for face-to-face sessions can then focus on more complex concepts and critical thinking development.

Healthcare organizations have recognized that there needs to be a focus on providing preceptor development to help overcome the nursing shortage (Bradley et al., 2008; Piccinini et al., 2018). New nurses who are trained by preceptors had better success in their role with increased critical thinking skills and an increase in retention rates (Piccinini et al., 2018). Implementing a blended learning preceptor development course can provide the preceptor with the knowledge and skills that are required to be successful preceptors.

Research Problem

Research indicates that although some nurse preceptors are being prepared using the traditional method for preceptor development, they face difficulty in finding training that is effective and flexible for their busy schedules (Chen et al., 2022; Haggerty et al., 2012). Nurse preceptors who complete blended learning courses find the online portion beneficial in helping them increase basic knowledge and the face-to-face portion in developing critical thinking (Chen et al., 2022; Senyk & Staffileno, 2017). For example, Senyk and Staffileno (2017) explored the design of a quality improvement project that combined several evidence-based approaches for developing and supporting nurse preceptors. The results of the study showed that using a blended learning approach provided the new nurse preceptor with the ability to network with other nurse preceptors and provided the support and resources needed to develop in the role.

Chen et al. (2022) further supported blended learning as a method that can help to overcome the barriers that are seen with only providing online training or only providing face-to-face training. The online component allowed the nurse preceptor the resources, flexibility, and basic foundational knowledge that is needed to be able to have a more interactive and successful face-to-face experience (Chen et al., 2022).

While these studies provided evidence that blended learning was a useful methodology for developing nurse preceptors, limitations were identified such as restricted participant selection criteria that were limited to bachelor's degree or master's degree, participants employed at a tertiary care center (Chen et al., 2022), and experienced preceptors who had not attended formal training were included in the study (Senyk & Staffileno, 2017). The current nursing workforce includes nurses who are prepared at additional levels such as associate degree and diploma so it is important that these staff members be included in the study to ensure that

their perceptions are also included. Furthermore, these studies did not shed light on how nurse preceptors' experiences in the blended learning course contributed to their development to successfully train and onboard new nursing staff.

Purpose and Research Questions

The purpose of the study was to investigate the experiences of nurse preceptors in a blended learning nurse preceptor development course. The course was intended to train preceptors to have the confidence, tools, and resources they need to be able to successfully train and onboard new nurses so they are confident and safe in their practice. The following research questions guided this study:

RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

RQ3: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?

Theoretical Framework

To understand preceptors' experiences with the blended learning preceptor development course, Mezirow's transformative learning theory (1997, 2009) was chosen as the framework. The focus is that as "humans we have to understand the meaning of our experience" (Mezirow, 1997, p. 1) which will then lead to "beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2007, np).

Mezirow's transformative learning theory (1978, 1997) was used to guide the development of the blended learning preceptor course and to inform the interpretation of nurse

preceptors' meaning-making in the preceptor development experience. When providing staff development sessions, it is important to remember that the goal of the offering is to improve something about the staff's practice through change (Eisen, 2001). These changes are typically related to providing support to improve performance, productivity, encourage innovation, and share best practices (Eisen, 2001). Mezirow's transformative learning theory fits well with the staff development concept as it explains the process of how adults "transform" the way that they interpret their day-to-day in relation to the new knowledge (Revell et al., 2021).

Transformative learning can be defined as learning that provides the participant the ability to challenge the status quo perspective and critical thinking around ways of being more innovative and maintaining current best practices when providing care (van Schalkwyk et al., 2019). Traditional staff development involves an educator-centered process, having a one-direction sharing of information from the educator (expert) to the staff member (novice) (Eisen, 2001). To better develop and deliver staff education, educators need to consider how they can instead provide to the staff what they specifically need so that the staff members can make the performance-improving changes (Eisen, 2001; Eschenbacher & Fleming, 2020). This changes the focus from the educator delivering all the expertise, to instead the educator facilitating content designed on what the learner needs to be successful.

Mezirow's transformative learning theory provides a strong frame for staff development. The use of transformative learning theory allows for the educator to use learning methods such as problem-posing, coaching, experiential learning, as well as encouraging participant discussion about topics at hand (Eisen, 2001). When developing course content using transformative learning theory, educators should use real-life experiences and encourage small group work that can promote reasoning along with developing critical thinking (Mezirow, 1997). Educators

should also encourage participants to use reflection to help support their learning process (Eisen, 2001). Having staff reflect on practice helps to have an understanding of how complex our world is and reinforces that we should question what we think we know (van Schalkwyk et al., 2019).

The key to the success of transformational learning is being able to use trusting relationships to help the learner feel comfortable asking questions, brainstorming ideas, or sometimes just being able to say, I don't know (Eisen, 2001). Building these relationships that support the learner to be honest, allows for better opportunities for discussions and also helps the educator have a better idea of how the learner is comprehending the content being delivered.

The concepts of the transformative learning were used to guide the development of the course content. Mezirow (2003) identified two focuses of transformative learning which include instrumental learning and communicative learning. Instrumental is seen when learning involves problem solving as well as cause and effect relationships. The preceptor course included content with the face-to-face simulation experience. The learners were given a scenario and then had to determine how to deal with that situation. Communicative learning is how the learners are able to share their thoughts, feelings, and needs. Once again, working in their groups during the face-to-face session will provide an opportunity for the learner to practice this and develop how they can best implement this new knowledge for continued learning.

Both instrumental and communicative focus data will also be evaluated at the post course two-month interview. Participants were asked to share their perceptions of their ability to communicate with their team to help problem solve the various situations that arise as they are precepting. This data can help determine what content might be valuable to add to the blended learning preceptor development course.

Research Methodology

This study used a case study research design intending to understand the experiences of nurse preceptors within a specific lived phenomenon; the blended learning preceptor development course. The use of case study provides a better understanding of the behavior themes identified with participants and not focusing as much on what might have been similar or different between participants (Hancock & Algozzine, 2017). For this study, I am attempting to understand the nurses' experiences after attending a blended learning nurse preceptor development course and perceptions of ability to perform in the role of a preceptor.

The study was conducted at a large academic teaching hospital in the southeast. The health system was chosen, as it offers a variety of clinical areas with varying scopes of practice. The nurse preceptor development course was selected as the course to evaluate the use of blended learning, as it is an area of professional development that bridges all nursing areas and it is a course that is not as effective in the traditional learning environment.

A purposeful sample of 21 nurse preceptors who attended the blended learning nurse preceptor course were invited, as they can provide informed insights about their experiences with the blended learning course, which is the phenomenon under study. The data was collected through two knowledge assessments, two semi-structured interviews using open-ended questions, an observation, and participation in a focus group. Knowledge assessments were gathered prior to starting the online learning modules and then again at the completion of the course. An observation tool was used to gather data during the face-to-face simulation scenarios to better understand the ability of the nurse preceptors' ability to function in the role.

The participants were asked to participate in the first interview within one week of completing the course. Then, an additional interview approximately two months after the first

interview. In addition to these individual interviews, participants were also asked to participate in a structured focus group to provide additional opportunity to gather synergistic data as topics are discussed.

Significance of the Study

This study examines the experiences of the nurse preceptor after attending a blended learning nurse preceptor development course. There are three areas of impact that will be addressed. First, this study will provide additional evidence for the limited finding of literature to support the effectiveness of a blended learning nurse preceptor course. Additionally, this study will also provide data on how the nurse preceptor reported their perceived preparedness and ability to serve in the role of a nurse preceptor. The role of the nurse preceptor can expose the nurse to many situations where they will need to critically think through the situation to best handle it. The blended learning method will provide them with the resources that they will need to critically think through the process. Finally, the study will examine the nurse's experience with attending a blended learning course for preceptor development. Most professional development courses are still provided in the traditional face-to-face environment. While historically this has been accepted as best practice, using the blended learning approach can provide a better alternative to meet the challenging needs of staff attending training and educators providing training.

This study can also provide a framework for educators to develop additional blended learning opportunities. As a staff development department, using the blended learning process for other staff development courses can also be beneficial to improve patient care. Other nursing development courses have the same challenges with staff being able to attend when they are

delivered as a traditional classroom offering. Using a blended learning approach can overcome many of these challenges.

Assumptions and Delimitations

Some assumptions were made as part of this study. First, it was assumed that staff can learn in a non-traditional way. However, using the blended learning format can be used to support an education method that allows for diverse learning. Not all adults learn in the same way and can learn at the same rate (Nolan, 2017). Using a variety of methods to deliver content is a more effective way to provide content (Nolan, 2017). There is also an assumption that staff will have access to the technology needed to be able to complete the online learning that is required before attending the face-to-face sessions. While the staff has access to computers while at work, they may choose to not complete their modules during work hours. They may prefer to do learning in a quieter environment, such as their home, so they will need to be able to access the learning modules and any resources that are part of that learning.

At times, developing in the role of the nurse preceptor is something that a nurse is required to do, instead of a role that the nurse may be interested in doing. This could impact the learning and the new nurse preceptors' perceptions of the course. Perceptions of effectiveness of the course can also be influenced by the stress and current working conditions of dealing with the COVID-19 pandemic.

Definitions of Terms

While the terms staff development, professional development, and continuing education have very different definitions, they are commonly interchanged throughout the healthcare industry. All three terms will be used throughout this dissertation.

Staff development typically focuses on job-related skills directly related to the function of the role. Staff development is typically used to support areas where productivity, efficiency, or safety need to be improved (Johnston, 2021).

Professional development is defined by the American Nurses Association (2010) as a “vital phase of lifelong learning in which nurses engage to develop and maintain competence, enhance professional nursing practice, and support achievement of career goals” (p. 42).

Continuing education provides the staff with opportunities to learn and advance their practice and techniques to provide safe patient care. Typically continuing education is associated with some type of educational credits whether through the American Nursing Credentialing Center (ANCC) or a formal education program (Quan, 2017).

The role of nurse preceptor is defined as “one who guides the new nurse in gaining knowledge and skills needed in performing patient care and teaches the roles and responsibilities of the staff nurse in the clinical setting” (Bumgarner & Biggerstaff, 2000, p. 251). Additionally, the nurse preceptor is seen as an experienced nurse who is able to guide and evaluate learning to help develop critical thinking along with their clinical skills (Lippincott Solutions, 2022). The National Council of State Boards of Nursing (2008) defined a nurse preceptor as a clinical expert whose scope includes role modeling, developing clinical competence, critical reasoning/thinking, fostering safety, and effective communication for professional collaboration and patient satisfaction along with the role of a socializer of new nursing hires.

While there are many definitions for blended learning, this study used the definition from Garrison and Kanuka (2004) that includes that blended learning is the combination of face-to-face learning with online learning. For this study, participants completed on-line modules to develop a foundational understanding of the role of a preceptor. Once the on-line modules were

completed, the learner attended a face-to-face course to practice the concepts and work through various learning scenarios to improve their critical thinking and work as a preceptor.

Organization of the Study

Chapter one is an introduction to the importance of nurse preceptor development and an overview of using blended learning as a method to provide the needed education. An overview of the research purpose, methodology, and significance of the study is also included. The chapter concludes with a few key definitions.

Chapter two focuses on the literature review to better understand using blended learning for staff development as well as the importance of nurse preceptor development. The benefits of using a blended learning approach will be reviewed. Overview of various studies that have been conducted on using blended learning for nurse preceptor development will also be discussed.

The third chapter, will define the methodology that was used for the research project. The research design and plans for data analysis will be discussed in more detail. Chapter four will provide more information regarding the results of the study and include details regarding the themes and what significant findings were discovered. Chapter five will then take those research findings and discuss how these findings fall within what current literature revealed the relationship to the theoretical framework and the research questions. Considerations and suggestions for future research will also be identified as well as the researchers' reflections on the study.

CHAPTER 2: LITERATURE REVIEW

Today's healthcare setting requires staff members to adapt quickly to changes (Sherrod et al., 2020). Nurse continuing education is one way to help nursing staff stay updated on the current best practices that are supported by evidence-based practice (Esplen et al., 2018). The nursing workforce spans many generations of learners who require a variety of education modalities that will allow for self-pacing, incorporate the use of simulation to develop their new knowledge, safe environments to practice learning, and meaningful feedback to validate strengths and opportunities (Glover et al., 2017). The overall goal of continuing nursing education is to provide a means to ensure safe nursing practice (Esplen et al., 2018; Sherman et al., 2012). Providing ongoing staff development can also improve employee retention, increase staff morale, improve practice efficiency, strengthen competency, leading to improved patient satisfaction (Esplen et al., 2018; Gesme et al., 2010).

The role of a nursing preceptor is unique, as the preceptor could be working with a student, a new graduate nurse, or a nurse that has many years of experience (Sherrod et al., 2020). A preceptor is a competent nurse who is responsible for training new nursing staff by “teaching, leading, facilitating, evaluating, socializing, protecting, and role modeling” (Smith et al., 2022, p. 1). These nurses are seen as the informal leaders in the clinical space and serve as role models for many of the staff (Li & Su, 2014; Santiago, 2017). The preceptors work very closely with the formal nursing leaders to provide a safe transition for new hires to the clinic environment and help to overcome the challenges that might be faced in that environment (Sherrod et al., 2020).

Providing continuing education and support for the nurse preceptor is essential (Nelson et al., 2019). The role of the nurse preceptor is important to support the successful onboarding of

new nursing staff (McKinney & Aguilar, 2020; Nelson et al., 2019) and to develop a highly-skilled nursing workforce and provide quality patient care (O'Brien et al., 2018; Wu et al., 2020). Preceptors can help decrease the preparation-practice gap, decrease turnover, and support the new graduate nurse (Hickerson et al., 2016; McKinney & Aguilar, 2020; Shinnars et al., 2020).

Blended learning has shown to be a learner-driven and interactive method that can provide a way for nursing staff to learn new material that is needed to provide care in complex work environments (Darcy, 2020; Glover et al., 2017; Kang & Kim, 2021). This method also provides the flexibility that is wanted by adult learners (Knowles et al., 2012; Santiago, 2017). Blended learning can provide a method for the learner to further develop their critical thinking skills and participate in meaningful learning experiences (Kang & Kim, 2021; McLaughlin et al., 2014; Santiago, 2017). A strong preceptor development course, providing preceptor support, and providing preceptor recognition are important to support both the preceptor and the preceptor program (Shinnars et al., 2018).

Traditional preceptor development courses using conventional teaching methodology of face-to-face learning have shown to have low learner engagement and high staff dissatisfaction (Darcy, 2020). Using blended learning for preceptor training can provide the education and support that is needed to be a quality preceptor (Bradley et al., 2007; Lee et al., 2017; Senyk & Staffileno, 2017, Wu et al., 2020). This method provides a foundational theory base along with the in-person ability to work together to develop critical thinking (Hew & Lo, 2018; Mulla et al., 2020; Wu et al., 2020). Table 1 provides some of the most relevant support for using blended learning to provide nursing continuing education, in particular the preceptor development course.

Table 1*Core Components for Considering Blended Learning for Staff Development*

Core Component	Supporting Evidence
Nursing Foundational Development	<ul style="list-style-type: none"> ● Need for staff development (Leu et al, 2010; NC Board of Nursing, 2020; Price & Reichert, 2017; Wu et al., 2020) ● Attitudes about professional development (King et al., 2021; Krugman, 2003; Perry, 1994; Price & Reichert, 2017) ● Being prepared for the role of preceptor (Bengston & Carlson, 2015; Haggerty et al., 2013; Jeggles et al., 2014; Kennedy, 2019; Macey et al, 2021).
Staff Development Methods for Professional Development	<ul style="list-style-type: none"> ● Incorporating blended learning into staff development to improve the teaching and learning experience (Benson, 2004; Billings et al, 2006; Christensen, 2003; Clark, 2002; Garrison & Kanuka, 2004; Hainey et al., 2017; Hake, 1998; Hsu, 2011; Jeffery et al, 2014; Melton et al., 2009; Puppe & Nelson, 2019, Ruiz et al, 2006; Sung et al., 2008) ● Technology strategies (Dickerson, 2012; Gormley, 2013; Swaminathan et al., 2020) ● Resources to engage the learner (Boyer, 1999; Hew & Lo, 2018; Hsu, 2011; Kang & Kim, 2021; Lahti et al., 2016; Smyth et al, 2012; Wu et al., 2020)
Considerations of Using Blended Learning	<ul style="list-style-type: none"> ● Educator as the facilitator (Billings et al., 2006; Dickerson 2012) ● Development of blended learning (Garrison & Kanuka, 2004; Glogowska et al., 2011; Gormley, 2013; Mulla et al., 2020, Wu et al., 2020) ● Support professionalism and autonomous learning (Ashurst, 2011; Benson, 2004; Billings et al., 2006; Boyer, 1999; Bradley et al., 2007; Choi et al., 2012; Condrey, 2015; Dickerson, 2012; Edmonson et al, 2021; Franck & Langenkamp, 2000; Glogowska et al., 2011; Gormley et al., 2012; Haggerty et al., 2012; Hew & Lo, 2018; Owston et al., 2013; Price & Reichert, 2017; Puppe & Nelson, 2019; Rouse, 2000; Smyth et al., 2012) ● Organizational implications (Benson, 2004; Billings et al., 2006; Condrey, 2015; Franck & Langenkamp, 2000; Hainey et al., 2017; Hege et al., 2020; Mulla et al., 2020; NAM, 2020; Ratka, 2010; Sung et al., 2008)
Use of Blended Learning for Preceptor Development	<ul style="list-style-type: none"> ● Blended learning format for preceptor development (Ashurst, 2011; Bradley et al., 2007; Clipper & Cherry, 2015; Condrey, 2015; Haggerty et al., 2012; Kang & Kim, 2021; Lee et al., 2017; Njie-Carr et al., 2017; Senyk & Staffileno, 2017; Wu et al., 2020, Wu et al., 2022)

Nursing Foundational Development

Need for Staff Development

Nursing is a profession that requires lifelong learning to support the need for advanced knowledge, technology, and complex care (IOM, 2011; Leu et al, 2010; NC Board of Nursing, 2020; Price & Reichert, 2017, Wu et al., 2020). Health care environments change rapidly due to the discovery of new treatment options, advances in technology, and the ability to provide advanced care to very complex patients (Jokinen & Mikkonen, 2013; Vogenberg & Santilli, 2018). The nursing code of ethics states that it is the nurses' responsibility to maintain their competency and develop a plan to further their personal and professional growth (American Nurses Association, 2015). With this being said, it is crucial that there is access to reliable continuous education to help support the nursing staff (Wu et al, 2020).

The U.S. Bureau of Labor Statistics (2019) reports that there are more than three times as many nurses in the United States than physicians with at least 3.8 million nurses in current practice. Due to a large number of nursing staff, there is an ongoing challenge to keep staff nurses educated to what is required of them to provide this care (Leu et al, 2010; Wu et al., 2020) and incorporating a flipped classroom (blended learning) approach could be a tool to be able to educate large numbers of staff who may be spread out over multiple locations (McLaughlin et al., 2014; Wu et al., 2020).

Clinical nurse educators can find it difficult to create education programs to address the current healthcare challenges while also considering budget and staffing needs (Franck & Langenkamp, 2000; Schneider & Good, 2018). Sarre et al., (2018) reported that the major barriers for staff completing their course are the ability to access training (whether in person or

online), staff shortages, lack of leadership support for staff to complete training, and technology challenges from lack of availability to troubleshooting when the technology fails.

The nurse is accountable for their professional development to maintain competence. However, it is also on the health care organizations to support and provide education as they are able (Price & Reichert, 2017). Health care organizations are challenged to provide continuous education due to concerns of the cost of training (Schneider & Good, 2018; Wu et al., 2020), taking staff away from the bedside to attend training, and the decreased time available to attend a face-to-face session (Glogowska et al., 2011; Santiago, 2017). Unfortunately, the benefit of continuing education is not always seen as a valid investment (Pool et al., 2016). Healthcare leaders need to instill a culture that supports learning and will reinforce that continuing education is a priority for all nursing staff (Schneider & Good, 2018).

Table 2 provides an overview of the various staff education options that are currently used for ongoing education for nursing staff. While these terms may be used interchangeably, they do have very specific meanings. Typically nursing staff will refer to their ongoing education as continuing education.

Table 2

Definitions of Various Staff Education Options Seen in Healthcare

Term	Definition
Staff development	Typically focuses on job-related skills directly related to the function of the role. Used to support areas where productivity, efficiency, or safety need to be improved (Johnston, 2021).
Professional development	“Vital phase of lifelong learning in which nurses engage to develop and maintain competence, enhance professional nursing practice, and support achievement of career goals” (American Nurses Association, 2010, p. 49).
Continuing education	Provides opportunities to learn and advance their own techniques in safe patient care. Typically continuing education is associated with some type of education credits whether through ANCC or a formal education program (Quan, 2017).

Attitudes about Professional Development

The importance of participating in staff development opportunities, or continuing education offerings, is understood even by the undergraduate nursing students as an expectation through their nursing careers (Price & Reichert, 2017) to maintain competence and build on the knowledge of the current evidence-based practice (King et al., 2021; Krugman, 2003). The development of new medications, the creation of new healthcare products, and changes to equipment happen so quickly that it is difficult to maintain ongoing education required for the nursing staff so that they are able to stay current and provide safe care.

The goal of the clinical nurse educator, or staff educator, is to foster and support the desire for lifelong learning with all levels of the nursing staff (Coffey & White, 2019; Dickerson, 2010; IOM, 2011). Staff who have access to ongoing training and education opportunities have reported that the sessions are important to foster job satisfaction which then leads to an improved retention rate (Choi et al., 2012; Price & Reichert, 2017). The clinical nurse educator is challenged with providing staff development for large volumes of learners to be trained, education or training has to occur in a short period of time, education has to be up-to-date supported by the latest evidence, and that content provided has to meet the needs of the learner and organization (Coffey & White, 2019; Hendrickson, 2007). The importance of providing quality education to further develop the knowledge base of both nursing and the individual is essential (Esplen et al., 2018; Perry, 1994). Evaluation of learning needs is something that the educator should do so that they are aware of the needs of the staff as they work to develop sessions that can build critical thinking skills and ensure that education is developed that is also applicable to the clinical practice (Hege et al., 2020; Puppe & Nelson, 2019).

Not only does professional development improve both job satisfaction and retention, but nurses have also expressed that it is a component of a healthy workplace organization (Ulrich et al., 2019). This is demonstrated by the organization being invested in providing continuing education and professional development support to help the nurses to continue to grow in their role and continue to provide quality patient care (Price & Reichert, 2017). Many nurses agree that in addition to having organizational support, education is one of the most important investments that one can make to keep themselves up to date on the most current evidence needed to provide complex patient care (King et al., 2021; Perry, 1994) and a worthwhile investment to developing their clinical expertise (Price & Reichert, 2017).

Preparedness and Ability of Nurse Preceptors from Training

Kennedy (2019) examined two groups of nurses and reviewed their perceptions of effectiveness in the role of a preceptor. One group received formal training and the other did not. Kennedy showed that nurse preceptors who had dedicated formal preceptor training felt more prepared for their role and had more confidence with their practice.

Understanding the role of the preceptor and the impact of appropriately training staff is important (Kennedy, 2019). Preceptors in general agree that having preceptor development training is necessary to be successful and are searching for ways to develop their teaching and learning strategies, development of critical thinking, improve communication skills and develop a better understanding of the roles of a preceptor (Bengtsson & Carlson, 2015; Panzavecchia & Pearce, 2014).

Having effective preceptors correlates to the successful onboarding and retention of new graduate nurses (Haggerty et al., 2013). The preceptor program provides the nurse with strategies that can be implemented to improve their clinical experiences and decrease training challenges

that may be experienced (Kennedy, 2019). There is a higher commitment level from preceptors who have a greater understanding of importance of development in role and overall impact on the organization through retention and team building (Macey et al., 2021).

Jeggels et al., (2014) also recognized that the nurse preceptor is vital for the success of the team, but preceptors are not always appropriately prepared for their role. Preceptors who have not received this training do not have the knowledge and competency to be able to help transition staff into their new role (Kennedy, 2019). Nurse preceptors acknowledge that the formal development in their role is important to be successful (L'Ecuyer, 2018, Macey et al., 2021). Having the ability to gain knowledge and improve their overall experience prior to serving as a preceptor was also identified (Macey et al., 2021).

Educational Methods for Professional Development

Incorporating Blended Learning

While healthcare organizations acknowledge the importance of continued education, many organizations do not use the most effective methods. Most organizations continue to use the traditional classroom education format which consists of the teacher/educator lecturing to the learners (Clark, 2002; IOM, 2011). Incorporating a more blended learning approach is helpful as it can address a wide variety of topics from mandatory education to ongoing professional development education (Ashurst, 2011; Benson, 2004; Kang & Kim, 2021). Healthcare education provided using blended learning is a way to positively increase knowledge gained (Liu et al., 2016).

Blended learning is the format for providing education that incorporates a hybrid approach by blending the traditional teaching and simulation with the use of online modules, videos, quizzes, and other activities (Hsu, 2011; Le et al., 2019; Liu, 2016; Wu et al, 2020). This

method provides a process to support a better learning experience and facilitate interactions with the teachers and identified resources (Garrison & Kanuka, 2004; Lie et al., 2016). Santiago (2017) states that “blended learning is learning about self, learning from others, and learning how to learn”. Taking advantage of a variety of teaching strategies can help develop the learner in several different ways. Glover et al. (2017) stated that using self-paced online learning using multiple modalities followed by challenging simulation experiences where the learner can work with their peers to problem solve can provide a stronger educational experience. Using web-based learning for nursing professional development is a successful modality to provide the needed education (Effland & Hays, 2018).

Traditionally, staff development training is based on the behaviorist standpoint where the educator is telling the learner what they need to know. Incorporating the blended learning approach helps to meet the current pedagogy that puts that control about what to learn, how to learn, and when to learn back on to the learner making the learning student-centered (Clark, 2002, Oh et al., 2017). The trajectory of the course will allow learners to review theory and basic content online before class and then spend the in-person class time for the staff to focus on hands-on practice and application (Benson, 2004; Hainey et al., 2017; Puppe & Nelson, 2019) or development of more advanced critical thinking skills (Lee et al., 2017; Swaminathan et al., 2020). The review of core content before in-person time can provide the learners with a consistent knowledge base so every participant can begin the in-person class with a similar baseline (Puppe & Nelson, 2019). This allows for a more engaging learning opportunity than traditional courses (Hege et al., 2020; Khalil et al., 2018; Santiago, 2017).

Sung et al., (2008) compared traditional classrooms to the blended learning approach to teach safe medication administration practices. The study showed that both methods provided

needed education; however, the learners who participated in the blended learning format had higher test scores in their post-class assessment. Students who are participating in a blended learning format who are encouraged to use both online content and resources to learn can develop the knowledge-searching skills that are going to be important for the learner to have as they develop in their role (Santiago, 2017; Walsh, 2014; Wu et al, 2020).

The traditional classroom approach addresses only one type of learning style, however, using a blended learning approach a variety of learning opportunities are identified that support adult learning principles and provides an education that effectively addresses different learning styles (Clark, 2002; Rowe et al., 2012; Santiago, 2017). The blended learning approach decreases the actual in-person class time while increasing learner satisfaction, assisting with retention of material learned, and allowing for timely application of knowledge into practice (Puppe & Nelson, 2019). This modality of education provides needed flexibility to the learners and promotes knowledge retention (Brandley et al., 2007; Khalil et al., 2018; Patterson & Resko, 2020). Patterson and Resko (2020) demonstrated the use of a blended learning approach was able to increase the learner's retention over three months versus using traditional classroom education.

Educators, leaders, and learners recognize that blended learning can enhance both teaching and learning (Ruiz et al., 2006; Santiago, 2017; Wu et al., 2020) by providing a way that can challenge the learner to think more in-depth about complex situations (Sultan, 2018). Blended learning offerings provide education that can eliminate barriers related to time, place, and situation while still allowing for educators and participants to have an opportunity for quality interactions (Jeffery et al., 2014; Santiago, 2017; Sultan, 2018). The self-paced ability of the blended learning format can also help to ensure that those who are familiar with content do not

lose interest while those who might be hearing content for the first time will not be too overwhelmed (Puppe & Nelson, 2019).

Using the blended learning process for education can be a win-win for both the instructor and the learner (Hege et al., 2020; Melton et al., 2009) as the education modules are more easily accessible and more convenient for learners (Santiago, 2017) and educators (Billings et al., 2006; Khalil et al., 2018). The development of blended learning incorporates rethinking and redesigning the learner and teacher relationship (Garrison & Kanuka, 2004; Khalil et al., 2018; Wu et al., 2020). Blended learning improves the learning experience by moving education from teacher-centered to learner-centered (Hake, 1998; Hsu, 2011; Kang & Kim, 2021) empowering the learner to have a role in their education process (Boyer, 1999; Sutherland & Porter, 2019; Tebbs et al., 2021). This is reflected in the learner having more confidence in what they have learned and reporting a perceived change in how they can provide care (Tebbs et al., 2021; Wu et al., 2020).

One of the most reported challenges with using blended learning is the technology aspect. Fortunately, new technology has been developed to support learning which has led eLearning to be more accepted and more accessible for learners (Gormley, 2013; Santiago, 2017). The newer nursing staff, recently graduated from college, are often referred to as digital natives and would prefer to receive their education through the incorporation of online learning (Swaminathan et al., 2020). Although education may be provided by advanced technology, the educator needs to be sure to focus on the education, not the technology (Rowe et al., 2012; So et al., 2019). The educator should also consider incorporating videos in blended learning (Hew & Lo, 2018). Videos allow the learner to view multiple times, as needed, to have a better comprehension of the topic being discussed. Boyer (1999) proposes that because thoughts occur in images and

pictures, videos are more easily remembered. Additional teaching tools incorporated include presentations, links to relevant sites, research articles, video lectures, discussion forums, and patient learning scenarios (Kang & Kim, 2021; Lahti et al., 2016; Smyth et al., 2012). Hsu (2011) used a strategy of scenario-based learning, giving participants a carefully constructed job scenario and asked to come up with a way to effectively handle the situation.

For the in-person sessions, there are a variety of teaching strategies used to help facilitate advanced learning. Kang and Kim (2021) incorporated the use of team-based learning with their blended learning format to further develop advanced critical thinking skills. Research shows that team-based learning helps to support low-performing learners to not only increase their ability to learn but also improve their attitude about the course itself (Koh et al., 2020). Wu et al. (2020) used case-based learning that incorporated case studies to facilitate the critical thinking component of the course.

Blended Learning for Staff Development

Educator as the Facilitator

A blended learning format can be used for a variety of topics addressing mandatory organizational needs or addressing individual ongoing education (Ashurst, 2011; Benson, 2004; Tebbs et al., 2021). Staff development educators can use blended learning to provide education offerings for large numbers of learners, across many locations. It allows for education anytime and anywhere (Ruiz et al., 2012; Wu et al., 2020). Blended learning takes the benefits of each modality, such as being able to self-pace the online learning with having personal connections with the face-to-face, and merges to create a program that can best benefit the learner (Hege et al., 2020). Blended learning can be used to help standardize course content and delivery (Duran-Guerrero et al., 2019; Ruiz et al., 2012; Wu et al., 2022). Learners can build their confidence by

having the ability to do the pre-course work to develop basic understanding in a safe environment and then practice these skills in a situation where no patient harm can be done, for example in a simulation suite.

The facilitation of the course will look different. Educators no longer spend their valuable time arranging and confirming agendas, negotiating space, and preparing handouts (Franck & Langenkamp, 2000). In a traditional classroom setting, updates to the content can be a challenge to ensure that all the educators are made aware of the changes. With the blended learning approach, educators can adjust and quickly update the online content (Benson, 2004; Hege et al., 2020; Ruiz et al., 2012). The blended learning approach allows the educator to be in a role where they are not required to know everything, but instead to facilitate the identification of reliable resources and ask critical questions (Dickerson, 2012). In this sense, the educator becomes both the coach and the facilitator for the learner (Billings et al., 2006; Naeem & Khan, 2019). As a coach, the educator will learn how to challenge the learner, stimulate their desire to further their development, and then provide guidance for a better learning experience (Gormley, 2013; Naeem & Khan, 2019). In the role of the facilitator, the educator transitions from a traditional teacher to a facilitator of learning by asking questions and not providing all the answers (Dickerson, 2010; Naeem & Khan, 2019).

A blended learning approach can provide the educator with a method that can improve the efficiency and effectiveness of the education while helping to overcome clinical teaching challenges seen with the more complex care situations (Ruiz et al., 2006; Santiago, 2017). Long term impact of using blended learning benefits educator time, allowing for the educator to focus on critical thinking skills, higher function skills, and advanced practice (Mulla et al., 2020; Wu et al., 2020). This method provides the educator with time to do more focused education to improve

critical thinking (Benson, 2004; Lee et al., 2017) and be more engaged with all learners in the classroom sessions (Bradley et al., 2007; Wu et al., 2020) as they are not having to focus on lecturing, but instead on facilitation of learning (Hew & Lo, 2018; Lee et al., 2017).

It may be time-consuming upfront to create blended learning. Creating online components is not posting modules to be watched and then students attend a face-to-face session, but should instead be the educator thoughtfully integrating the online and face-to-face to maximize each format's abilities (Glogowska et al., 2011; Lee et al., 2017; McGee & Reis, 2012). The development of the online format can be challenging, as the educator needs to be mindful of the content to ensure that it provides the learner with a strong foundation for when they meet in the classroom (Milan, 2013; Wu et al., 2020; Wu et al., 2022). If the development and design are not strong, it can negatively impact the learners (Lee et al., 2017). There may be software that has to be purchased and then the staff has to be trained on how to successfully use it (Hege et al., 2020). Even with advances in software, educators will have to learn how to plan their courses keeping in mind the subjects, learning tasks, and interactive activities (Jokinen & Mikkonen, 2013; Sutherland & Porter, 2019). For the more seasoned educator, using blended learning continues to provide the face-to-face learner content that the educator feels is important to the education process.

Educators struggle with how to encourage students to have autonomy with their learning (Jokinen & Mikkonen, 2013; Sutherland & Porter, 2019). Autonomy and success with the program can be improved with the educator communicating clear expectations to the learners. This can be hard for educators who do not have any familiarity with designing and implementing blended learning. They may find that creating education in this format is intimidating when they are beginning a new program (Gormley, 2013; Hege et al., 2020; Sutherland & Porter, 2019).

Development of Blended Learning

The education plan for a blended learning approach will include using face-to-face sessions along with a variety of technology-based learning sessions with a focus on developing a connection with the participants, educators, and resources available (Bliuc et al., 2007; Santiago, 2017). When the educator is developing blended learning, they will have to plan and develop the online courses and should not revert to just posting the current course online and then schedule a time to meet to discuss (Glogowska et al., 2011; Lee et al., 2017; McGee & Reis, 2012).

At the beginning of the development process, the educator must consider scheduling enough time for the planning, development, and design of the course material (Hege et al., 2020; Jokinen & Mikkonen, 2013). Consideration of the time for learner completion will also need to be monitored and not cause an increase in learner job fatigue that many nurses already have to balance (Haggerty et al., 2012; Santiago, 2017). Educators need to be mindful of staff schedules when developing blended learning. While the online sessions are flexible and provides the learner with access as they can attend, the scheduling of face-to-face sessions should include times that will meet the staffs' various work hours (Condley, 2015; Hege et al., 2020).

The development of the program itself can also pose challenges to the educator when determining the timing of the online courses compared to the classroom portion (Hege et al., 2020; Jokinen & Mikkonen, 2013). Classroom hours will be significantly lower, which some educators feel impairs the learning (Hege et al., 2020; Jokinen & Mikkonen, 2013). In addition, the educator will also need to assess that the learning method meets the needs of the various learners who will be attending (Hege et al., 2020; Jokinen & Mikkonen, 2013).

Additionally, the educator should consider evaluating the blended learning experience in terms of what are the learning outcomes and not just focusing on learner satisfaction (Scott et al.,

2017). With evaluation, the educator will also need to determine how to assess the learners during the online portion as the educators will not have the non-verbal cues that can be used in a traditional classroom space (Twomey, 2004).

As the learner has access to education for any time on any day, the educator will need to consider how questions on content will be addressed or dealt with (Mulla et al., 2020). The staff who attend blended learning professional development sessions will possess a varying degree of technical skills from being tech-savvy to having difficulty navigating the basics of websites and will need to have technical assistance available to help them (Dickerson, 2012).

Support Professionalism and Autonomous Learning

Staff schedules have made it very difficult for learners to attend traditional staff development offerings. The blended learning approach can provide a method that allows staff to attend training at a time that is convenient for their schedule (Ashurst, 2011; Benson, 2004; Boyer, 1999; Haggerty et al., 2012; Rouse, 2000; Santiago, 2017). The method provides the education to be divided into smaller, easier to comprehend modules and not be so overwhelming to the learner (Benson, 2004; Condrey, 2015). This can also further support the ability of the learner to review modules multiple times for topics or areas that they are most challenged with (Liu et al., 2016; Puppe & Nelson, 2019; Wu et al., 2022). This further supports the learner as the driver of their education and being able to go as fast or as slow as they need (Dickerson, 2012; Puppe & Nelson, 2019).

With the learner having control of their learning, it can be found that the interactive abilities of the blended learning offerings can improve learner motivation (Kang & Kim, 2021; Ruiz et al., 2012). Interactive education is more interesting and encourages the learner to practice and reinforces what they have learned in the blended learning sessions (Kang & Kim, 2021; Ruiz

et al., 2012). Learners also report that using this format provides greater problem-solving skills than traditional classroom teaching (Kang & Kim, 2021; Smyth et al., 2012). Blended learning can also promote the learner to have more accountability for their learning (Dickerson, 2012; Sutherland & Porter, 2019; Wu et al., 2020). No longer is the expectation that the learner just shows up and will be told what they need to know (Dickerson, 2012; Santiago, 2017; Wu et al., 2020).

As learners make their way through online education, they can quickly go through material that they feel comfortable with but allow extra time for topics or content that they are finding more challenging (Scott et al., 2017). Learners report that they perceive their time spent doing blended learning was less than the time spent having to learn in a classroom (Hsu, 2011) and they are more engaged with their learning, and they can comprehend key concepts better (Kang & Kim, 2021; Owston et al., 2013). Learners also shared that they overall felt that they were able to learn more using the blended learning approach (Smyth et al., 2012; Santiago, 2017).

For topics that the learner may need extra support, blended learning provides the learner with the ability to view as many times as necessary the online component for retention and mastery (Benson, 2004; Hailey et al., 2017; Scott et al., 2017). The ability for the learner to view modules any time, any day also enables the learner to balance the completion of their staff development with their work schedule and personal responsibilities (Glogowska et al., 2011; Santiago, 2017). This will allow the learner to process what they are learning at their pace and then better be able to integrate it into their day-to-day practice (Clark, 2002; Santiago, 2017).

As learners gain their foundational knowledge, they will also be able to use the modules as a reference to refer back to as needed to reinforce what they are learning (Boyer, 1999; We et

al., 2020). After reviewing the core content online, learners appreciated and value having the opportunity to meet in a traditional setting to further practice and develop their understanding of the content being reviewed (Hew & Lo, 2018; Smyth et al., 2012). This in-person opportunity also allows for the staff to further learn from each other as every adult can bring their own experiences and have their strengths and weaknesses to share with the team (Franck & Langenkamp, 2000; Santiago, 2017).

Students, especially the high performers, were in favor of using the blended learning approach over just attending a traditional class (Hew & Lo, 2018; Hsu, 2011; Melton et al., 2009; Smyth et al., 2012). A previous study conducted by Bradley et al., (2007) found that 91% of participants in their blended learning study felt that online foundation content prepared them for classroom activities and that 96% believed that the classroom activities reinforced what they learned with the online education. The study also showed that 94% of preceptors that attended the blended learning training reported an improvement of knowledge or roles and responsibilities (Bradley et al., 2007).

Learners who attend a blended learning course felt prepared for their role (Billings et al., 2006; McCutcheon, et al., 2018; Santiago, 2017; Wu et al., 2020; Wu et al., 2022). More importantly, learner outcomes showed that those who attend a blended learning offering were able to apply their new knowledge to practice in a more timely fashion (Billings et al., 2006; Santiago, 2017). While there is concern about losing the social interaction with fellow staff, using small group discussion during the face-to-face classroom time can promote interactions with peers and provide an opportunity to network (Hew & Lo, 2018).

The staff has reported that they feel that continuing education is sometimes not supported by leadership and that finding the time and being compensated for their training is difficult to

navigate (Price & Reichert, 2017). Learners also shared that they feel that new staff lose the ability to socialize and develop relationships when doing blended learning (Boyer, 1999, Smyth et al., 2012). Poorly motivated learners, or learners who may be considered low achievers, may not have the same outcomes with blended learning as those who are high achievers (Owston et al., 2013). Staff who participated in blended learning also reported that doing blended learning can be overwhelming when completing it at home, especially when trying to complete it after a busy day at work (Santiago, 2017; Smyth et al., 2012). In general, providing well-developed professional development offerings can show an increase in nurse retention which in turn then supports improvements in the quality of patient care (Edmonson et al., 2021). Nurses have been able to identify that participating in professional learning offerings increases their confidence level and provides a better foundation for nursing to promote safe patient care (Hailey et al., 2017).

By using a blended learning approach, learners will be able to better apply what they are learning into their practice (Santiago, 2017; Smyth et al., 2012; Wu et al., 2020; Wu et al., 2022). Nursing leadership report that psychiatric nursing staff who completed a blended learning session that focused on providing psychiatric care discovered that their staff was more apt to discuss what they are learning with coworkers (Lahti et al., 2015). Leaders also were able to see an improvement in their staff's clinical practice more so than those who attend the traditional classroom courses (Lahti et al., 2015). These psychiatric nurses were also better prepared to discuss clinical concerns with their team members and their patients after attending the blended learning session (Lahti et al., 2015). This all supports healthy workplace guidelines, builds teamwork, and is key for safe patient care.

Hew and Lo (2018) suggested that there is an increase in learner performance by those who attended a blended learning offering. This approach has shown to have a significant improvement in learner performance when compared to just the traditional in-person learning. Using blended learning for the development of nurse preceptors can provide the new preceptor with the training and resources that they need. In turn, these participants become stronger preceptors who can onboard and provide support to new nursing staff that then can improve new staff retention (Boyer, 2008; Condrey, 2015). Increasing staff retention helps to ensure that competent nurses stay within the profession to be able to provide high-quality care (Choi et al., 2012; Gesme et al., Wu et al., 2020; Wu et al., 2022).

Organizational Implications

Health care organizations should strive to provide the best patient care while retaining trained nurses in the workplace (O'Brien et al., 2018). Many organizations are faced with the need to provide more using fewer resources (Williams et al., 2021). Using the blended learning approach can reduce the organizational cost of staff development opportunities without decreasing the volume provided. Blended learning also helps the organization to meet the National Academy of Medicine's Future of Nursing 2020-2030 guidelines that have identified one goal to stress the importance of nurses' well-being and resilience in ensuring high-quality care (NAM, 2020).

Although many healthcare leaders believe that the best format for training would be face-to-face sessions, this often puts strain on the budget by putting many staff members into overtime. Blended learning can provide a way to balance scheduling and budget needs (Benson, 2004; Condrey, 2015) by using the most effective use of resources compared to traditional learning environments (Hainey et al., 2017).

Organizations may also experience an increase in the initial cost for e-learning platforms or need technology upgrades for the success of both the educators and learners (Billings et al., 2006; Ratka, 2010; Sung et al., 2008; Santiago, 2017). In addition to the cost of purchasing or upgrading the various learning platforms, developing high-quality online learning can also have an initial cost as the educator works to implement the online component (Hege et al., 2020). Finally, an organizational plan needs to be identified on what to do if technology fails by identifying who will be responsible for assisting the students or educators (Mulla et al., 2020). Organizations should consider using the blended learning approach to provide preceptor education, as it is an effective method to meet the needs of the preceptor and organization (Wu et al., 2020).

Blended Learning for Preceptor Course

Many times, nurses who are considered to be clinical experts are asked to become preceptors. Clinical experts are not necessarily educational/preceptor experts as they need a different knowledge base (Carlson, 2015; Good, 2020). It has been shown that providing a nurse preceptor development course can have a positive impact on the knowledge, skills, and attitudes of a preceptor (Kamolo et al., 2017; Wu et al., 2018). The development of nursing preceptors to help onboard new staff is one area of nursing that can benefit from using a blended learning approach to provide the training to prepare the new nurse preceptors (Bradley et al., 2007; Lee et al., 2017; Santiago, 2017; Senyk & Staffileno, 2017).

A preceptor program consists of having the new nurse partnered with an experienced nurse in a particular clinical area. Preceptors are responsible for providing an individualized orientation experience for the newly hired nurse (Queck & Shorey, 2018). Many nurse preceptor education programs do not adequately train preceptors for their role (Lee et al., 2016) and that

the education needs to include training in all of the roles that they may serve so that they can appropriately train new nursing hires (Condrey, 2015). Training will also need to include how to assess the learning needs of the individual they are working with and adapt their teaching styles to meet those needs (Bengtsson & Carlson, 2015). Preceptors need to learn how to appropriately onboard new nursing staff by supporting the socialization to the clinical area, establishing competency to care safely for the patient population (Shinners et al., 2020). The role also includes being able to provide feedback and evaluate the new staff as they are developing (Wu et al., 2022). These are all components that are not part of the clinical role and can be reviewed using a blended learning approach.

It has been identified that a lack of proper training for a preceptor can cause a preceptor to be ineffective in their role (Budgen & Gamroth, 2007; Johnstone et al., 2008; Santiago, 2017; Wu et al., 2020). Additional effects of poor preceptor performance are that the preceptor is unable to guide and evaluate the new hire and can increase the stress level of the preceptor and causes a decrease in the level of guidance provided for the new hire (Budgen & Gamroth, 2007; Santiago, 2017; Wu et al., 2020). Poor preceptor support can also lead to a decrease in new nurse retention (Condrey, 2015). It is important to have a well-developed preceptor training course to support both the preceptor and the new nurse (Haggerty et al., 2012; Santiago, 2017).

When using the traditional method for preceptor development, participants often share that it is hard to find classes that fit with their schedule and when they do, staffing often interferes with the learner being able to attend preceptor education (Haggerty et al., 2012; Santiago, 2017). Preparing a preceptor to be able to train in a more challenging and difficult environment is even more important to ensure safe patient care (Boyer, 2008; Renda et al., 2022; Santiago, 2017; Wu et al., 2020). The nurse preceptor must learn how to best guide the new

nurse to decrease their stress and facilitate the transition to practice. This can help to support quality nursing care and improve patient safety (Borimnejad et al., 2018). When looking at the staff who are going to perform in the role of the preceptor, using a blended learning approach will be beneficial, as blended learning allows for scalability when looking at having to train large numbers of staff across many different service lines and locations (Ashurst, 2011; Wu et al., 2020).

Benefits for using the blended learning approach to provide a preceptor development course include that it provides an increased satisfaction with the course itself, staff performance is improved, and increase in overall in-class participation (Njie-Carr et al., 2017; Santiago, 2017). Participants from a study conducted by Johnstone et al. (2008) reported that having a prepared preceptor can lead to the new hire having more confidence in their practice. Developing nurse preceptors to help with this transition should be a priority of healthcare systems (Clipper & Cherry, 2015). Condrey (2015) revealed that using a blended learning approach provided a format to deliver the preceptor training to meet the needs of both the learner and the organization when considering time and budget. Using a blended learning approach to provide education in a nursing program has been shown to enhance the knowledge, problem-solving abilities, and learning satisfaction of nursing students (Kang & Kim, 2021).

Wu et al., (2020) found that participants in clinical teaching blended learning courses were more competent, had higher self-efficacy, and had a positive experience with blended learning. A blended learning course can provide the needed knowledge that can provide increased role satisfaction and meet the needs of the diverse needs of the learners (Renda et al., 2022; Santiago, 2017; Wu et al., 2020). Blended learning is also supported by McCutcheon et al., (2018) findings that blended learning has more value than just providing online learning.

Participants to blended learning report increased motivation and attitudes about their course, higher assessment scores, and satisfaction with the experience (McCutcheon et al., 2018).

Santiago (2017) showed that participants felt that blended learning was able to support them with professional development and also felt the learning was “informative and empowering.” The participants also reported that the technology challenges did, at times, prevent them from being able to engage in the modules (Santiago, 2017). Overall, they stated that blended learning was well received even though they felt that the online component left them feeling overwhelmed, frustrated, and in stimulation overload (Santiago, 2017).

Transformative Learning Theory

In an effort to understand nurse preceptors’ experience in the blended learning course, the transformative learning theory was used to guide the design of the preceptor development course and to inform the analysis of the data and interpretation of findings. The goal of transformative learning is to support “autonomous, responsible thinking” (Mezirow, 1997, p1). Adult learners seek to have some form of understanding for their experiences by using their own interpretations and not relying on others to tell them what they should know (Mezirow, 1997). Eschenbacher and Fleming (2020) summarize that we use transformative learning to explain how we use our experiences and reflections to grow and develop in our role. It is a form of learning that is seen as the core for adult learning (Mezirow, 1997).

With the complex health environment, it is more evident that staff will need to not only acquire the needed knowledge but also have the ability to critically think through unprecedented situations using that foundational knowledge base (Mezirow, 1997). The blended learning format is a way that the educator can support transformative learning by allowing for the educator to serve in the role of a facilitator rather than the content expert allowing learners to be more autonomous thinkers (Mezirow, 1997). Table 3 provides an overview of the Mezirow’s ten

phases of transformational learning theory when looking at the blended learning preceptor development course (Mezirow, 1978).

Table 3

Mezirow's Ten Phases of Transformational Learning Theory Applied to Blended Learning Preceptor Course

Phase	Defining Characteristics	Demonstrated in Blended Learning Preceptor Course
1	Disorienting dilemma	Identify gap in preceptor education
2	Self-examination with a feeling of guilt or shame	The current preceptor training is not supporting the preceptor in their role
3	Critical assessment of epistemic, sociocultural, or psychic assumptions	Participants to the blended learning course question their role as a preceptor and how prepared they are
4	Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change	Face-to-face group activities allow participants to work together to develop a shared understanding
5	Exploration of options for new roles, relationships, and actions	Determine how to improve their practice, how can they be a better preceptor
6	Planning of a course of action	Define the action steps to reach goal
7	Acquisition of knowledge and skills for implementing one's plans	Identify resources to help reach the goal (through class, networking, etc.)
8	Provisional trying of new roles	Applying their new knowledge in the preceptor role with new hire
9	Building of competence and self-confidence in new roles and relationships	Able to critically think through new situations using all that has been gained in previous steps
10	A reintegration into one's life on the basis of conditions dictated by one's perspective	Becomes an expert and role models process for transformative learning

Revell et al.'s (2021) study of senior nursing students completing their studies during the COVID pandemic demonstrated that implementing Mezirow's transformative learning theory allowed for transformative learning to occur by using a journaling method. Through the participant's journaling, there were themes that emerged. The themes identified included response to change, discovering resilience, developing confidence, gratitude, embracing advocacy, and transforming and becoming (Revell et al, 2021). Responding to change was

shown with the students sharing their perceptions of what they thought it was to be a nurse and how society views being a nurse during a pandemic. Resiliency was found through self-reflection of the students from what they experienced during this time. A mentorship program was implemented as part of the course redesign caused by COVID. Through the mentorship program, the nursing students wrote that they became resilient from using positive reframing, support, and their self-determination. While the pandemic had decreased the clinical time and some students stated that they felt that they had less confidence, the mentorship program provided support for developing critical thinking skills. Overall, the students felt that they were ready to become nurses (Revell et al., 2021).

In another study, Gillian et al. (2021) used the transformative learning theory to help develop the scenarios for the end-of-life care training. Results demonstrated that the students felt they were able to provide better care after participating in the training. The participants stated that they were able to apply the knowledge and skills that they acquired from the training to the bedside, providing better outcomes for the patient and the family. The training used simulation to allow the participants to role-play through various scenarios that could occur at the end of life that they probably had not been exposed to yet. These scenarios provided uncomfortable situations that the students worked through using Mezirow's transformative learning theory. This encouraged them to not only learn the skills, but reflect on new ways of approaching the situation (Mezirow, 1997, 2009). From this study (Gillian et al., 2021), three themes emerged including disorienting dilemma of caring for a dying patient, the disorienting dilemma of approaching difficult conversations at the end-of-life, and the disorienting dilemma of witnessing death for the first time. Using this process students were able to practice how to answer questions, determine how their approach would be so that the empathy and sympathy skills were

improved. Finally, the opportunity to see a simulated death and then determine how they would handle that in real clinical space (Gillian et al., 2021).

Using transformative learning allowed a safe space to apply Mezirow's steps of transformation with a new clinical situation that many have never experienced. It provided a well-developed process for health care education that is applicable for many staff development situations. The research of Revell et al., (2021) and Gillian et al., (2021) informed the current research in its aim to investigate transformative learning experiences of nurse preceptors within the blended learning nurse preceptor development course.

Summary

Continuing education is vital for the RN to participate in, as the changes in healthcare happen so quickly. Providing education promptly is more important now more than ever. With so many organizations having a large number of learners, healthcare educators should transition from the traditional face-to-face classrooms and consider using a more creative approach such as blended learning. Blended learning that is created in a thoughtful well-developed manner is an effective method of providing continuing professional development education that healthcare providers need. As identified through the literature, the traditional education format is not able to keep up with these changes. Blended learning can be used for a variety of healthcare topics as well as the various members of the healthcare team. Implemented blended learning programs have been well received by learners, educators, and organizational leaders. This study will focus on investigating the experiences of nurse preceptors in a blended learning course that provides a method of learning that supports the development of nurse preceptors and provide the tools and resources that a nurse preceptor needs to perform their role. The study will also help determine if the nurse perceives themselves as able to serve in the role and if they are able to apply what they have learned into their practice as a preceptor.

CHAPTER 3: METHOD

This study used a qualitative case study research methodology to gain an understanding of the perceptions of nurse preceptors' experiences after attending a blended learning preceptor development course. This chapter will describe the research methodology used to explore the research questions and to interpret the data collected. We will then utilize this information to interpret the data collected.

Research Design

This study was conducted using a qualitative case study research design to provide an understanding of how learners perceive their ability to perform in the role of a preceptor. Qualitative research is often used to determine an explanation for the problem identified and the need to have a more in-depth knowledge of the experience (Castleberry & Nolen, 2018; Hancock & Algozzine, 2017). A case study research has been reported as an under used method that can provide evidence about ability to transfer and provide a better understanding of the relationship of the experience (Paparini et al., 2020).

A case study approach is able to provide a better understanding of how the participants are able to use the content from the course to impact their practice as a preceptor. Using case studies to compare preceptors across different clinical settings, using their specific clinical experiences, can provide an overall idea of the practice (Darke et al., 2002; Paparini et al., 2020). Case study research is "a detailed analysis of a person or group, especially as a model of medical, psychiatric, psychological, or social phenomena" (Hancock & Algozzine, 2017, p. 91). Interviews, observations and focus groups can be used during case study research to gain a better understanding of the topic being studied.

The goal of this study was to learn about the individual preceptors' experiences with attending the blended learning course and how they are able to apply the knowledge learned into

how they train new hires. The case study approach was used to help focus on one particular experience (Hancock & Algozzine, 2017) and has become more popular over the past years and is a reputable and effective methodology used to examine complex issues in real world settings (Crowe et al, 2011; Harrison et al, 2017). Additionally, case study research is a flexible methodology used with qualitative studies that can be used for a variety of topics and is most commonly used to gain a better understanding of the complex phenomena being studied (Merriam, 2009; Stake, 2006; Yin, 2014). The case study research method is used by reviewing the data gathered to help answer the “how” and “why” research questions thus gaining a better understanding of both the situation and those individuals who participated (Hancock & Algozzine, 2017; Yin, 2018). For this study, the case that was studied was the individual who attends the blended learning preceptor development course.

The study was conducted using interviews, observations, and focus groups. Semi-structured interviews were conducted to help the researcher gain a better understanding of the perceptions of those participating in the study. Using an interview protocol, participants were individually interviewed to gather the data needed. The goal of this approach was to identify themes or categories of the phenomena, not determining the similarities or differences of the individuals (Brinkmann & Kvale, 2015; Hancock & Algozzine, 2017).

Observations were conducted to help gather data for this study. Observations can provide an objective view of the ability of the nurse to function in the role of a preceptor (Hancock & Algozzine, 2017). These were completed during the face-to-face sessions where the participants were applying what they had learned from the on-line modules to be able to work through various scenarios.

Focus groups were conducted to help identify additional data that may not have been discovered during individual interviews. Focus groups can provide the participants a way to “groupthink” and provide additional insight on both content and process (Ravitch & Carl, 2021). When setting up focus groups, it was important that each participant recognized that their input was important and the group was encouraged to allow for everyone to be able to voice their opinions. It was also imperative for the facilitator to help keep the focus group on track and not to digress and delve into topics that are not addressed in the study (Ravitch & Carl, 2021).

Limitations of using case study included that there was potential to have more data than expected which can then become hard to organize and analyze (Heale & Twycross, 2018). I was vigilant to only take the data for what it is. That includes containing my own bias in the interpretation of the data.

Research Questions

The purpose of this study was to investigate the experiences of nurse preceptors in a blended learning nurse preceptor development course. The course was intended to train preceptors to have the knowledge, tools, and resources they need to be able to successfully train and onboard new nurses so they are confident and safe in their practice. The following research questions guided the study:

RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

RQ3: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?

Role of Researcher and Positionality

I have been a nurse for 25 years and I have served in many different roles from bedside nurse to administrative director. My experiences have taught me a lot along the way. I am a lifelong learner and can appreciate the importance of continuing education and staff development. My research interests are around providing continuing education to nursing staff that is beneficial and can make a difference.

Being an educator has been a rewarding job and can give you a sense of accomplishment when you see the staff you work with excel in their roles. There are issues with trying to find the best way to provide staff development/continuing education to learners. The COVID pandemic has led to even more challenges. Besides the obvious social distancing restrictions, staff had additional factors that would make it difficult to attend class. Some staff had children at home that they now had no childcare and needed to homeschool. Work schedules had been manipulated to have better coverage to care for the patients. All these factors supported doing more online or virtual education for our learners. Determining if online learning can provide a better professional development/continuing educational opportunity for our learners can be a valuable tool as we continue to plan for future learning opportunities.

The internal review board (IRB) application for both the study site as well as the University of North Carolina–Charlotte (UNCC) were completed. Once the study has been approved, the course will be posted for participants to register. Once the participants sign up to attend the preceptor development course, I will provide the information to determine if they may be interested in participating in the study.

My current role as director of the education department has allowed me to build many relationships through the health system that will help with the identification of participants and then leader support for the program. For this study, I conducted focus groups with stakeholders to the preceptor program to develop the training. This group included the nurse leaders, current nurse preceptors, and staff who have recently gone through the onboarding process. Based on the feedback from these members, I developed the content outline for five online modules. I then facilitated in person sessions, using two clinical nurse educators to assist with the role play exercises. Due to my role, it could lead to potential conflicts with participants, as they may feel that they are not able to provide their true perceptions without feeling that there might be repercussions. Participants may also feel that they have to participate and that they do not have an opportunity to decline or drop out of the program if they do not feel comfortable continuing with the study. Participants will be reassured that all information will be kept anonymous and held in confidence.

Those who express interest will then attend the blended learning preceptor development course. Within one week of completing the entire course, both the online and the face-to-face session participants will be asked to complete the first interview to share their initial perceptions of the course. Approximately two months after the completion of the blended learning preceptor course, the participants will be invited to participate in another interview to evaluate how their perceptions have changed or if they are still the same.

Ethics/Protection of Human Subjects

IRB approval for the study was obtained from both the study site as well as UNCC. Participants verbally consented to participate using the IRB-approved consent process before participating, with the understanding that they can drop out of the study at any time. Participants

were emailed a copy of the consent, and then at the beginning of each interview, the consent was reviewed with the participant to ensure clear understanding and address any questions that may arise.

All data for this study was stored through a secure online box platform that will allow only myself and my dissertation chair access. The interview transcriptions were blinded and any documents that had included individual names were deleted. Additionally, no names of participants for this study will be published.

Conflicts of interest are handled per our institution's standards. Those who are facilitating professional development courses are required to complete a Joint Accreditation conflict of interest form to identify if there are any conflicts. Conflicts of interest can include if the researcher or the research team has any personal interests that may interfere with their judgments, decisions, or actions toward the study (Korenman, 2006). If any conflicts are identified, the conflicts will be announced so the participants are aware. Any concerns that arise regarding conflict of interest will be addressed and handled as required including notifying the IRB if necessary.

This study will benefit staff by demonstrating improved competency and confidence in their training. The long-term benefit of this study can demonstrate an intervention for increased retention of new nurses due to a better onboarding experience. Using blended learning for staff development can be a viable method to provide much-needed education to all healthcare workers in a timely and user-friendly process.

Ethical concerns will be addressed by developing a protocol that will include the process of the review of the consent, conducting the interview, and addressing any conflicts of interest that may occur. Participants will be provided contact information to be able to report or ask

questions about any ethical risks that they feel maybe present. All participants will be encouraged to bring all concerns forward.

Research Site and Participants

Research Site

The site for this study is a large academic health system in the southeast. This site offers a wide range of clinical service lines that include both inpatient and ambulatory clinics. There are three entities within the health system which include two community hospitals, one with 369 beds and the other with about 175 beds. The main hospital is a large level one trauma center with 900 plus beds. These three inpatient hospitals care for patients from intermediate care to critical care. In addition to the inpatient areas, there are also ambulatory care areas that provide care from general practice to specialty clinics.

There are approximately 7,000 nurses that are currently employed by this health system. This large number of nursing staff will provide many potential participants for this study. The health system offers nursing orientation biweekly, bringing in an average of 100 new nurses. This large number of new staff requires a well-trained pool of preceptors to provide their training and orientation.

Before COVID, preceptor development classes consisted of a four-hour face-to-face course that primarily reviewed the theory and basic precepting best practices. During the pandemic, courses were transitioned to online with no opportunity to have face-to-face interaction. Using a blended preceptor development course can provide the best aspects of the face-to-face and online courses.

Preceptor Blended Learning Course

It is widely recognized that a preceptor development course is imperative for the nurse preceptors to be effective in their role (Bengtsson & Carlson, 2015; Wu et al., 2020). It has been shown that the most successful way to prepare the new nurse hire for their clinical area is to provide structured orientation programs with well-trained preceptors (Powers et al., 2019). A blended learning approach can provide a flexible learning method to help meet the diverse learning needs of the nurse preceptor (Wu et al., 2020).

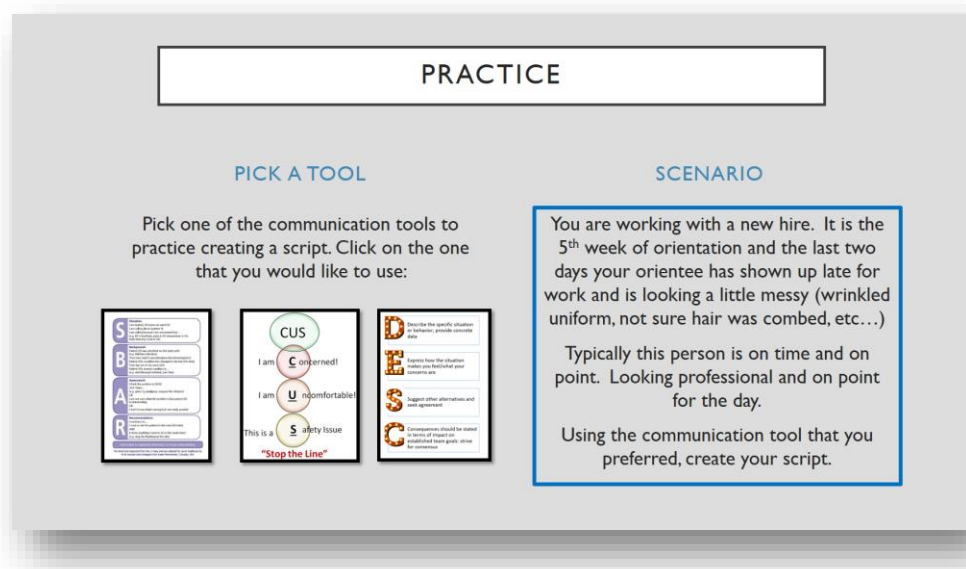
The goal of the preceptor development course was to provide the nurse with the knowledge, tools, and resources that are needed to successfully onboard new nursing hires. Many times, it is assumed that a nurse that is a clinical expert will be the best preceptor, but this is not true. A preceptor must know the basic adult learning theories and learning principles in addition to their expert clinical skills.

Participants for the blended learning preceptor course had four weeks to complete all required components. The nurses who participated in this study first completed a baseline knowledge assessment to review the core components of the role of the preceptor. The online portion of the course was asynchronous and available to the participant four weeks before the first scheduled face-to-face session. I developed the content outlines for all the modules based on focus group feedback about the important topics that were needed. The modules were developed using Articulate 360 and then posted in the learning management system for the health system. The participant was able to self-pace themselves to be able to complete the modules. There are four sections that can include completion of online modules, review of videos, and opportunities to work with resources that are in place.

These interactive online learning modules develop foundational learning practices. As is seen in Mezirow's transformative learning theory, these modules will help the participant to have a better understanding of what their current knowledge is and where are their opportunities to grow (Eschenbacher & Fleming, 2020). The components of the online course content will include adult learning theory, the married state practice model, tools and resources available for the nurse preceptor, evaluation techniques, and steps to help develop critical thinking in the new nurse (Bengtsson & Carlson, 2015; Powers et al, 2019; Wu et al., 2020; Wu et al., 2022). Each online module should be able to be completed in 20 minutes or less. Any material that is posted for this course will remain accessible to the learner so that they can review it as needed going forward. Upon completion of the online modules, participants will be asked to again complete the assessment to determine if knowledge was gained. Figures 1-3 provide a sample of some of the slides.

Figure 1

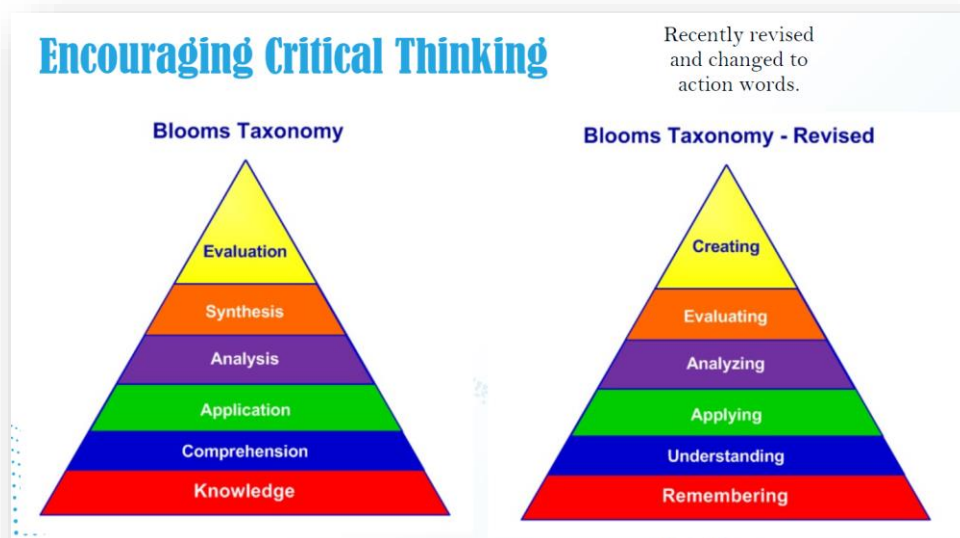
Interactive Activity, Screen Shot From Online Learning Modules



Note. Sample slide for the interactive review of common communication tools that are available for the nurse preceptor.

Figure 2

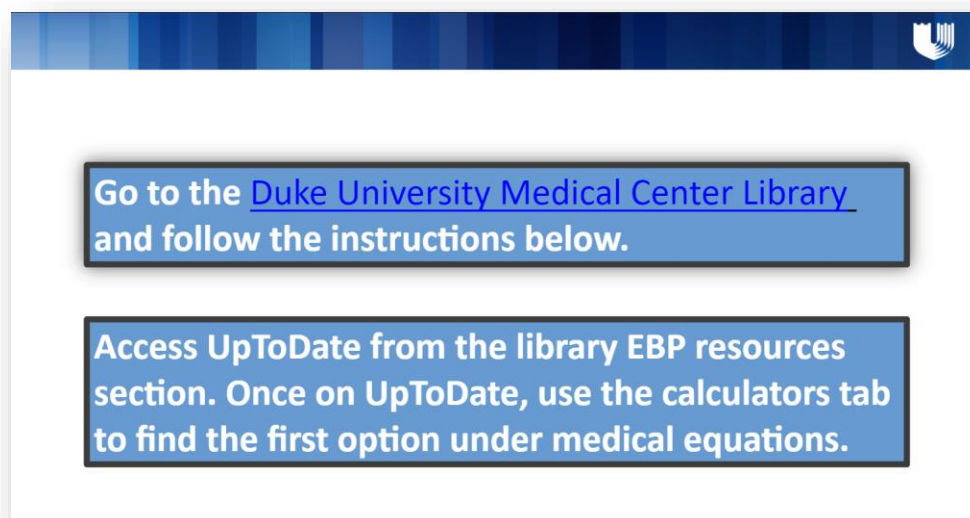
Foundational Learning, Screen Shot from Online Learning Modules



Note. Explanation of updates to Revised Blooms Taxonomy that can help guide learning.

Figure 3

Accessing Resources, Screen Shot From Online Learning Module



Note. Links for learners to access some of the preceptor resources available.

Four weeks after the opening of the course, participants were able to self-enroll in one four-hour face-to-face session to complete the program. To allow for small group discussions as well as meet the current restrictions in place due to COVID, class size was limited to no more than 10 participants. There were four face-to-face sessions spread out over different days and times to allow for scheduling options for the participants.

During this face-to-face session, the participants were asked to participate in various simulation experiences to build on the material that was reviewed in the modules. The content for the scenarios was created using various preceptor experiences that the participants worked in small groups to determine the best approach to the situation. The face-to-face courses supported Mezirow's transformative learning principles of explaining how the participants interpreted their experiences, how they questioned their practice and encouraged the participants to have needed conversations to strengthen their practice (Eschenbacher & Fleming, 2020). While addressing a specific topic, such as providing feedback, the scenarios themselves were adapted based on the participants learning needs and clinical location to ensure that it was more applicable to participants (Garrison & Kanuka, 2004).

Participants had an opportunity to discuss shared experiences to gain a deeper understanding of the challenges when precepting and recognize that many of the issues are universal to many different situations. Following the transformative learning theory, the participant will then be able to develop new ways of handling situations and then a chance to role-play for practice which will help to build their confidence in their role (Eschenbacher & Fleming, 2020).

Participant Selection

This research is focused on nurse preceptors' experiences in the blended learning preceptor development course. As such, it was necessary to select participants who know the experience under investigation (Jones et al., 2014). Therefore, purposeful sampling was used, as it provided participants who have participated in the specific experience or experienced the phenomenon (Ravitch & Carl, 2021). This allowed the participants to be specifically chosen for the study based on their qualifications for becoming a preceptor and their participation in the development course (Barbour, 2001; Ravitch & Carl, 2021). Participants who have attended the blended learning preceptor development course were asked to participate in the study and share their perceptions.

Participant Recruitment

Initially an email was sent to the nurse managers from across the health system to identify staff who may be ready to be developed into the preceptor role. The nurse managers provided a list of eligible participants for this study. These individuals were then contacted through email to determine if they had an interest in participating in the program.

A total of 43 names were provided as potential staff to participate. Of those 43 participants, five staff sent messages stating that they had to withdraw from the study, 15 stopped communicating and were withdrawn from study. There were two participants who completed the modules and were very interested in continuing, but were not able to adjust schedule to be able to attend the face-to-face session, so they too were withdrawn from the study. The remaining 21 participants completed the modules and face-to-face session, verbally consenting to participate in the pre-course and post-course assessment as well as the observations.

Of those 21 participants, only 11 agreed to participate in the first interview. The second interview had only 6 participants, as the questions were focused on those who were able to

precept a new hire after the completion of the course. Some of the areas had not had any new hires for the participants to work with, so they were not able to provide any additional information. The focus group had seven participants that were able to have a robust discussion about what was learned and the preparedness for the role.

Participant Demographics

Of the 21 nurses who participated in some aspect of the study, none had precepted a new hire at their current organization, there was one who precepted outside of the organization. None had reported any formal preceptor training and all participants expressed interest in the role and a willingness to develop themselves to perform in role.

Participants were from 15 unique clinical spaces across the organization. This was able to provide a variety of precepting challenges to discuss. Additionally, there were two males and 19 females. Four of the participants had less than two years of experience as a nurse, two had been a nurse for 2-5 years, and four had been nurses for more than 10 years. When looking at tenure on current clinical space, nine of the nurses reported two years or less and two had been on their unit for more than two years. Years at the organization showed nine of the participants had been within organization for less than two years and two had been with the organization for more than five years.

Looking at their education and certification levels showed that all participants had obtained their Bachelor of Science in Nursing (BSN), one reporting that because of a previous bachelor degree, she completed the Accelerated Bachelor of Science in Nursing (ABSN) degree. One of the participants also has earned a Master in Business Administration (MBA) degree. Only two of the participants had a professional nursing certification; one being certified in critical care and the other in medical surgical nursing. This is not surprising, as many of those

participating did not have the ability to obtain certification yet. Participant demographics are displayed in Table 4.

Table 4

Participant Demographics

Participant	Yrs as Nurse	Yrs in Current Clinical Area	Yrs in Organization	Highest Degree	Certifications
1	17	1	1	BSN	CCRN
2	7	1	1	BSN	
3	2	2	2	ABSN	
4	16	7.5	7.5	BSN	MEDSURG-BC
5	5	1.5	5	BSN	
6	1.5	1.5	1.5	BSN	
7	30	1.5	1.5	BSN	
8	<1	<1	<1	BSN	
9	1.5	1.5	1.5	BSN	
10	22	1	1	BSN	
11	3	1.5	1.5	BSN, MBA	

Data Collection

Based on the case study lens of this research, interviews as well as focus groups and observations were used as the methods to collect narrative data from research participants to examine their lived experiences in the blended learning nurse preceptor development course. For this study, participants completed two knowledge assessments, two interviews, and then also asked to participate in a focus group. Table 5 displays the number of participants that

participated in the various types of data collection. An observation tool was used to gather data during the face-to-face component of the course to gather additional data to support this study.

Table 5

Data Collection Methods

Number of Participants	Type of Data Collection
21 Nurses	Completion of pre course assessment
21 Nurses	Completion of on-line modules
21 Nurses	Attended the in person course/observations
16 Nurses	Completion of the post course assessment
11 Nurses	Participated in the initial interview within one week of course
7 Nurses	Participated in focus group
6 Nurses	Participated in second interview

The participants completed the knowledge assessment prior to initiating the online learning modules. This helped to determine the baseline knowledge about the role of the preceptor. The participants repeated the assessment at the completion of the course to determine if foundational knowledge was gained during the course. This can help determine if the nurse preceptor has the knowledge that is required to be able to perform the role.

The first interview, was completed after the preceptor development course to determine initial perceptions of the course. The focus group was conducted next to help clarify that data that was collected during the first interview. The second interview was scheduled two months after the completion of the course to determine if there were changes in perceptions of an overall learning experience as well as if their knowledge can support the training of new hires. These

two different interview protocols and focus group protocol were developed to help gather the in depth understanding of the perceptions of the nurse preceptor/participant.

Additional data was gathered using observation. Hancock et al. (2021) states that there are five factors that should be included when doing observations. First, and most importantly, is that the researcher should clearly identify what is to be observed. For this study, the focus for the observation was to see if the participant was able to apply the knowledge used during the foundational course work. The observation was documented by using the observation guide that helped identify key behaviors to be observed. The third factor is for the researcher to be able to blend in with the environment and gain the trust of the participants. As with many different methods of data gathering, the fourth step focuses on the researcher being aware of their own biases and beliefs and not let them influence the data being gathered. Finally, the fifth component is to be sure that IRB is being followed and all ethical and legal considerations are addressed. Additional notes were recorded with as much detail as possible, as the significance of the observation may not be really understood until reviewing the data that has been gathered (Vagle, 2018). Observations were completed on each individual who participated in the face-to-face courses to understand better the knowledge gained by the participants, and if they could apply that knowledge.

Using interview, observation, and focus groups provided multiple data sets. These then helped to triangulate the data providing greater rigor and validity (Barbour, 2001; Crowe et al., 2011; Ravitch & Carl, 2021). Interviews and focus groups provided the subjective data to interpret while the observation will then provide the objective data to provide additional insight into the study (Hancock et al., 2021; Ravitch & Carl, 2021).

The verbal informed consent statement approved by the Institutional Review Board was used to obtain participants' permission to participate. Each participant was asked to provide verbal consent to participate in the study. The interview protocol (see Appendix A) was developed and reviewed with members of the dissertation committee.

Prior to starting the online modules, the participants completed a baseline knowledge assessment to see what they may already know. After the blended learning course, the participant completed the knowledge assessment again and then was invited to a semi-structured interview. Due to COVID pandemic restrictions, interviews were conducted virtually through Zoom. The Zoom platform was chosen, as it does have some advantages over the use of other virtual conference programs. The Zoom platform allows for screen sharing if needed, which can be used to help with consent and explain any forms or documents that may be needed (Gray et al., 2020).

The purpose of using a semi-structured interview approach was that it provided the participant's descriptions and explanations of the phenomena, in this case, the perceptions of the newly developed preceptors (Brinkmann & Kvale, 2015). The interview is structured around the themes of the role of the preceptor and the interview protocol will provide questions to help guide the interview (Brinkmann & Kvale, 2015). The interview protocol guided the understanding of how the participants perceived the experience of using blended learning for preceptor training. The initial interviews with 11 participants lasted approximately 45 min to one hour and provided data on the participants' immediate perceptions after attending the course. After the first round of interviews were completed, seven of the nurses then joined the focus group, also lasting approximately 45 min to one hour, providing additional clarification of the data collected during the first interview. The second interview with six of the nurses who had done the first interview occurred about two months later and provided the participant an

opportunity to share their perceptions once they were actually in the clinical space and serving in the preceptor role. All of the interviews and the focus group were completed using the Zoom platform and having the transcript de-identified and original deleted.

Data Analysis

Thematic data analysis is a process that is done using an iterative and reflective approach to review and interpret data in six phases (Braun & Clarke, 2006). During phase one, I familiarized myself with the data that has been collected. I conducted several reviews of transcripts, observations and notes to have a thorough understanding of the data. Triangulating the various data collection samples can provide a stronger probability that the findings will be credible (Lincoln & Guba, 1985). I strived to have a better awareness of my own biases and preconceived knowledge so that this did not influence the analysis.

Once I had reviewed the data I started to make connections for phase two of the process. This phase focuses on the identification of codes. I continued to review the data to ensure that I had a more comprehensive understanding. I attempted to be as thorough as I could during the review of data ensuring not to skip anything that may be important (Braun & Clarke, 2006). I identified the codes, ensuring to not develop too many unique codes that will then make it difficult to identify the themes (Cassell & Symon, 2004). I used reflexive writing to have a better understanding of my thoughts, understandings, and ideas as I read through the different points of data and then reviewing codes and thinking about themes (Cutcliffe & McKenna, 1999). This process provided clarity and helped me to have a better understanding of how those codes and themes were created (Cutcliffe & McKenna, 1999; Starks & Trinidad, 2007).

The codes were then organized in to themes during the third phase of the analysis. This helped me to connect the codes, which by themselves may seem insignificant (Aronson, 1994). I

used inductive analysis identifying themes related to the data instead of trying to fit the data into predetermined codes (Nowell et al., 2017). While some of the codes fit in very well with themes, there were some codes that did not seem to fit. These codes were not discarded, and I continued to review them as I knew that they may be useful during the fourth phase (Braun & Clarke, 2006).

The refinement of themes occurred in the fourth phase of the analysis. During this phase, I reviewed the themes to determine if they have enough data, do they belong merged with another themes, or perhaps even divided into two different themes (Braun & Clarke, 2006). This phase helped me to have a clear rationale for how each theme was created using the data that I had collected (Nowell et al., 2017).

Once finalized, the fifth phase is where I defined what it is about that theme that is interesting to me, and then to articulate why (Braun & Clarke, 2006). Data was reviewed again to ensure nothing was omitted or overlooked. Once this had been completed, I moved into phase six, and created the report keeping in mind that the report should identify a clear, logical, and informative explanation of the data across all the themes (Braun & Clarke, 2006). I then strengthened the analysis by identifying direct quotes and reflections from the study participants that supported the themes and subthemes identified (Cassell & Symon, 2004). This made the analysis more interesting and provide richness to the data.

Strategies for Quality

A variety of qualitative research methods can be used to ensure reliability and trustworthiness. In particular, data triangulation, member checking, and peer review were used (Brinkman & Kvale, 2015; Hancock & Algozzine, 2017; Ravitch & Carl, 2021). First, data triangulation was accomplished by gathering data from the study participants through interviews,

observations, and focus groups. The review of data then allowed for the ability to create different aspects of the same phenomenon, as it is experienced by the individuals. Data triangulation included the exploration of various data sources to help develop an understanding of the study participants and their experiences (Ravitch & Carl, 2021). Using triangulation helped coordinate the findings from the data that has been gathered (Vagle, 2018).

Second, member checking was done by asking the members of the study to review both the transcripts as well as the themes to ensure that it is correct and if any important components are missing. Members were asked to verify the data and then provide any comments to clarify what might have been misinterpreted (Carlson, 2010). Using member checking provided increased credibility of the research and allowed the participants to have a more active role in the research process (Iivari, 2018).

Finally, as part of peer-review process, I asked for constructive feedback from colleagues who were familiar with the staff development process and preceptor development to ensure the course content, interview process, and data analysis were free from bias. Ravitch and Carl (2021) explain that even as a lone researcher, having conversations with colleagues throughout the process can provide additional verification of data sources to ensure that interpretations are valid. Using peer review and debriefing techniques helped to manage interviewer biases and clarified the experiences and themes (Mitchel et al., 2018). Colleagues were chosen based on their expertise with preceptor training and can review the interpretation of the data gathered and provide feedback for ongoing modifications to the content of courses based on participants' interviews (Hamilton, 2020).

Any concerns that participants had regarding the research project, the data collection, or analysis would have been investigated and corrected if it had been needed. Listening to the

concerns of the participants could help to build trust and strengthen the research. Participants were also be provided resources of who they can contact if they do not feel comfortable contacting the researcher directly.

Risk, Benefits, and Ethical Considerations

The benefits of this program can be seen with the learner, educator, and organization. The learner was the driver of their education and can go as fast or as slow as they need, as well as determine how successful they, as a learner, will be with the blended learning approach (Dickerson, 2012). Learners were able to take advantage of the convenience, flexibility, and engagement level of learning, which allowed for better learning of key concepts (Owston et al., 2013).

The course facilitator benefited by having the opportunity to transition from being a “teacher” to instead being a facilitator of learning (Dickerson, 2012) and coaching learners through their development (Benson, 2004). Instead of focusing on the basics of being a preceptor, the educator reinforced what the learner had reviewed. This was then used to provide a more advanced teaching method to strengthen critical thinking skills.

When thinking about benefits to the organization, the staffing and budget can be positively impacted (Benson, 2004). Blended learning utilizes the most effective use of all resources as compared to the traditional learning environment (Hailey et al., 2017). Finally, when considering meeting quality indicators, nurses have identified that their confidence level improved, which, in turn, promotes safe practice (Hailey et al., 2017)

There was minimal risk to nurses who participate in this study in relation to psychosocial distress as seen by feelings of the embarrassment of ability to function or frustration with the role. I also considered that there might be some hesitancy from the participants to provide their

true perceptions if they feel it might not be what the expected answers are. The participants were encouraged to share their true perceptions.

Participants were able to ask questions and get clarification at any point during the process. If ever a participant determined that it was not in their best interest to continue with the study, they were able to drop out of the study. Verbal informed consent will be obtained by each participant at the initiation of the study.

Summary

This study is a qualitative case study research study designed to better understand the perspectives of the participants to answer the research questions regarding how the new preceptors (participants) perceive their level of competence to train staff and were the preceptors (participants) able to apply the knowledge gained in the course to their practice. Participants attended a nurse preceptor development course, and then once the course was completed, they were invited to participate in two interviews to determine their perceptions. Data from the transcribed interviews was analyzed using the thematic analysis approach. This will define codes and themes. Member checking will ensure that the themes that have been developed follow the participants' perceptions and thoughts.

The next chapter will provide the findings that were discovered through the data analysis. This will include the themes that were identified. As well, relationship to the research questions will also be discussed.

CHAPTER 4: FINDINGS

The case study was used to gain a better understanding of the nurses' perceptions of their ability to precept after completing a blended learning preceptor development course. This study was guided by the following research questions:

RQ₁: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

RQ₂: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

RQ₃: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?

This chapter outlines the findings of the research questions using thematic analysis as a flexible process that provides a more detailed report of the data (Braun & Clarke, 2006). Data were collected through multiple layers of evidence, such as pre and post surveys, in class observations demonstrating the nurses' ability to apply knowledge, interviews, and focus groups from nurses who completed all components of the blended learning course, including online modules as well as the face-to-face classes to offer robust insights into the emergent interpretations. Findings from the analysis are defined in seven themes and 14 subthemes and are summarized in Table 6. They will be discussed in more detail throughout this chapter. The chapter is organized based on the guiding research questions to bring to light the nurses' reflections about their experiences in the blended learning preceptor training course.

Table 6*Themes and Subthemes by Research Question*

Research Question	Theme	Subtheme
RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?	Satisfaction with blended learning	<ul style="list-style-type: none"> • Benefits of online learning • Benefits of in person • Challenges
RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?	Understanding the role	<ul style="list-style-type: none"> • Personal journey • Comfort level • Use of tools and resources
	Implementing best practices	<ul style="list-style-type: none"> • Setting up for success • Orienting to clinical space • Improving communication
	Growth as a preceptor	<ul style="list-style-type: none"> • Confidence level • Understanding of the fundamentals
RQ3: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?	Support of the new hire	<ul style="list-style-type: none"> • Coaching • Limitations of the role • Ongoing preceptor development

RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

The use of blended learning is not often used when providing professional development at the organization where the study took place. Typically, courses were provided either through a completion of an online module or through a traditional classroom approach with the facilitator telling the participants what they feel the staff need to know to perform their role. Implementing a blended learning approach is supported by Mezirow's transformative learning theory as it demonstrates how adults are able to transform their day-to-day practice based on their interpretation of their new knowledge (Revell et al., 2021).

Blended learning provides the nurse with the ability to build their foundational knowledge regarding the topic at hand, in this case preceptor development, so that the time spent together in a classroom can be better spent applying the knowledge that is learned. This application phase is the added benefit for just doing online learning or just doing a traditional lecture. Having a safe space to practice knowledge gained provides the support the nurse needs to perform the role.

In order for the blended learning course to be successful, the preceptor must have the desire to be an educator and support staff, and have interest in developing their ability to teach all aspects of being a nurse in that clinical space. During the course observations, one participant began a discussion by recognizing that if the preceptor does not like precepting, they can negatively impact the new hire's ability to transition to practice. If the nurse does not want to learn or develop, then the method of education would not matter, and blended learning would not benefit this situation.

Overall Satisfaction with Using Blended Learning

The nurses who participated in the study overall enjoyed using the blended learning format with three of the participants specifically stating that they “actually really liked using blended learning.” One participant shared during an interview that their initial thoughts were that they would not like the program, however after completing the course they shared that “using that blended style was exactly what I needed.” Another shared during the first interview that the “whole course was very enlightening”. Additionally, one of the nurses being interviewed also stated that “this course really helped me and gave me a great foundation to develop on. I feel that I have the details to be successful.” The seven nurses who participated in the focus group described the blended learning course as “a really good class,” “a good experience,” and “a good

review.” Two participants specifically mentioned that they felt that they were supported by both the facilitators as well as the other participants. The first participant stated,

I didn’t think I would like doing that kind of stuff. Honestly, probably using that blended style was exactly what I needed. That kind of real life that can happen.

Let’s throw you in and see how you do, but in a safe and supportive way.

The course was a great experience with those being interviewed sharing that they had “a lot of fun” and that they “really enjoyed the process.” It was noted during the observations that the staff, while maybe hesitant at beginning of the in-person course, quickly stepped in and participated with the scenarios and then the debriefings that occurred after each person completed their role-play. They all provided each other with feedback based on how they performed and incorporated the knowledge gained from the online modules. One nurse shared that after the course was complete,

I went to my friends on the unit and shared my experience. They were like how is the preceptor class? Isn’t it like 4 hours? And I was like it is so much fun, it didn’t even seem like that long! They are all wanting to take it.

Blended Learning Components

The blended learning offerings incorporated the learner completing a series of online modules and then coming together in an in-person course to apply those skills. Participants shared their experiences with the online component during the observations, interviews, and focus group. While they stated that their favorite part was the in-person scenarios, they understood that they would not have been successful in those scenarios if they had not had the foundational knowledge gained by completing the online modules.

Four of the interview participants reported that the course itself was very helpful and able to bring all the resources together. This was also identified during the course observations as demonstrated by the course participant's sharing during their discussions that it was a "really helpful class where they were able to use the resources that they learned in the online learning to be able to work through the various scenarios." One interviewee responded that it was timed well with a good balance of online learning and face-to-face learning. This was further supported by one of the interviewees who mentioned,

I thought the in-person part was really good, and then just kind of being able to move through the modules at my own pace was pretty good, too, because I tried to do some while I was working or looking at my modules, for five minutes here and there, because when I'm not at work, I'm at home with the kids. So, it's a good mix for me.

Online Learning Component

The convenience of the on-line modules was recognized by one participant, "I like the blended learning because with the modules you can do that at your own pace on the days that work for you." Two of the participants who were interviewed shared "the online thing was super convenient for me to just get things" and "it's easy for me to do that on my time and still learn it and not have to dedicate more than four hours." Another participant stated that they were able to complete the modules by taking small breaks throughout their shift to complete. They also shared that "I can take my time reading, reviewing it, and getting the knowledge" that would later be used for the scenarios.

The modules provided a great review for content to be covered. One participant reflected on this during an interview sharing "I think the LMS modules are really helpful" and "it was a

great way to kind of refresh my knowledge around it, and make things fresh in my mind so I know what I'm talking about." Additionally, a participant shared that they "think the modules helped me prepare for those scenarios that we talked about. So, I kind of understood why these things are happening because of those modules what we completed." During an interview, a participant mentioned that modules are not always the best way for them to learn, but they appreciated this format. They shared,

If I'm being honest, and I know you know this too, like we have to do so many modules and CE (continuing education) credits to keep up with our nursing license and job in general. So, it's really easy to click through modules and just get it done because we're all smart enough to check the right answers, but this made us actually actively participate.

An interesting comment from another participant addressed that they had taken the modules a couple of weeks prior to class and had hoped to review the actual content more during the in-person session. But, as they continued to share their perceptions, they did reflect that "close to the class, kind of like reviewing that a little bit more doing before doing the in-person thing" was a helpful intervention. During the focus group, one other participant shared that they were late to sign up and they were concerned if they would be able to complete the modules in time. But, they were well timed out and they were able to complete without difficulty.

In-Person Component

"I loved the face-to-face" and the benefits of the face-to-face was shared by all 11 of those interviewed as well voiced by the participants to the in-person class. Participants provided positive feedback in regards to their perceptions of the live class and the role play scenarios, one

person sharing “in-person part that to me was hands down my favorite part.” When thinking about the live class component many of our participants stated that they did not mind the in-person component of education, “I loved the face-to-face and hands on part” and “I think it keeps my attention better. Another participant stated that they “seem to be more of a hands-on type of person rather than just reading about it. That was my favorite part.”

The face-to-face was set up in small groups and offered multiple times. One participant reflected that, “small group was also helpful as it gave us a chance to learn from each other. Didn’t feel like I need to run away.” The class also provided an opportunity for the participants to see the different reactions for different situations and was reported to be extremely helpful. This also provided an opportunity to give each other feedback during the debriefing. All 21 participants were able to participate in a discussion after each scenario, identifying what went well and what else to consider for each scenario. Another participant also shared that it was just great to actually be with people and be able to learn from each other. This further demonstrates Mezirow’s transformative learning theory, showing how our participants are able to transform their day-to-day practice based on their interpretation of their new knowledge (Revell et al., 2021).

Having a chance to practice applying the knowledge that was acquired during from the online modules was mentioned by four of the participants who were interviewed. When asked about the best aspect of the blended learning class, one participant replied,

Honestly, I just really like the in-person role play. I like real work applications.

We can talk about things all day long and the theories behind them. But, then to actually put it into practice can kind of be hard to translate. And so, seeing that, like during the class was nice.

Five participants shared that they learned a lot through the interactions with the other participants. “When I came to your class, seeing the other preceptors and seeing them in action with a patient and a student, seeing how they interacted, I learned a lot from that.” This was also identified “as the most beneficial part” by a participant. Another went on to share “coming in-person was really great to actually be with people and learn from each other.” This also provided an opportunity for discussion, “the in-person also allows for us to talk amongst ourselves and then that way I like having the feedback in-person as well.” Finally, a participant shared,

The class was super accurate, because you don’t really know how you’re going to act until you’re in that situation, and like see how other people would like deal with it. Kind of like “Help me” or how would I deal with it? So, I really enjoyed the in-person thing.

Challenges With Blended Learning

The challenges for blended learning that were identified by participants in the course were around the technology, self-limitations, and application of team building. It was identified during the interview of one participant that “the only struggle I had with blended learning was that I was having to repeat the modules with the technology troubles.” Ten course participants also discussed the technology challenges during the debrief sessions, all focusing on the ability to complete modules in system, but one participant stated “it won’t prevent me from doing blended learning in the future” and the rest of the group agreed. Two participants also shared that they were having trouble with some of the links to the resources that appeared to not be working. This was also mentioned in the focus group with a suggestion to include the web address in addition to the link for future issues.

Two of the 11 participants who were interviewed shared that they felt that the only challenges that they felt were self-limitations. During the interview, one shared that they realized after doing some of the scenarios that it “sort of made me kind of step out of my comfort zone and realize that I’m not prepared for this because I’ve never had to be prepared for it.” Another shared that while they felt that they were knowledgeable about nursing in general, they were fairly new to their clinical space and their only barrier would be “specific knowledge to the department I’m in,” which can then make it a challenge to be able to teach a new staff member.

It was identified through the debriefing sessions and using the observation tool that the scenarios did not always provide an opportunity for the participant to work on building team dynamics. While it was not observed during the scenarios, 10 of the participants mentioned in their interviews that their orientation plan would include introducing the new staff to the various members of the team that they would be working with. No one verbally identified this a challenge or a missed opportunity.

Another self-limitation would be the experience level. Two of the participants who were interviewed reported that maybe they were too new of nurses themselves to be able to precept a new hire. They expressed this during the class observations as well as during their interviews, but they were motivated stating that they were new but will do the best they can. During the interview they then shared that while they were nervous, after they finished, they felt more at ease with the experience. This was also discussed during the face-to-face course and strategies to help increase confidence levels were discussed with participants. Participants were apprehensive about how to train someone who might have more experience than them, or were more familiar about patient population than them.

Two participants did share that their challenge was being very nervous about having to participate in the actual role-playing simulations, one sharing “I was questioning, am I going to respond right?” The other participant shared, “I thought people were gonna say oh, no, she should have done this with this.” However, they went on to share that after watching the other participants their anxiety decreased and they actually were thankful that they had a chance to work through the scenarios to learn.

Only two participants responded that they had difficulty with scheduling, as three other nurses in the same clinical space were also wanting to participate in the course. These participants were able to negotiate their schedules so that the clinic was staffed and they were able to attend the course. Only one course participant was able to complete the online modules, but was not able to attend one of the face-to-face sessions, as her schedule would not allow it. All the others were able to manage their schedules as necessary to meet requirements of the course.

Focus group participants were asked if they would attend other blended learning offerings for future courses. The response was overwhelmingly positive. All seven agreed that they felt that they learned a lot and felt that they would be able to use what they learned as they began to precept. One person did share that probably would attend the course, depending on what the course was. It was identified that maybe not every course was appropriate for blended learning.

The overall perceptions of the nurses who attended the blended learning offering showed that they found the format not only user friendly, but it also provided a method to acquire the needed training and education to be able to develop further in their roles. Twenty of the participants were able to complete the modules online during work hours during down time. The one person who reported that they did not complete was based on personal preference, not

because they could not access. They found the modules easy to understand, were able to review what content they needed additional times, and then they were then able to apply that knowledge during the in-person sessions. The most beneficial component of the course, as reported by the participants, was the face-to-face course. Being able to apply, in a safe environment, was something that the participants really valued. There were few challenges mentioned that were related to slight technology challenges that were quickly fixed. Only one participant was not able to attend the in-person portion of the course due to staffing issues. A comment shared by one of the nurses during an interview provides an overview shared by many,

I like the blended learning because with the modules you can do that at your own pace on the days that work for you. And then, for instance, when you come together, if there was a question that you were not quite sure about when you were online, you could ask those questions. The in-person also allows for us to talk amongst ourselves and then that way I like having the feedback in-person as well.

RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in a blended-learning preceptor development course?

Initial feedback during the debriefing sessions of the face-to-face class as well as the follow up interviews concluded all 11 participants who were interviewed shared that they felt that the program provided them not only the foundational knowledge that they needed to be a preceptor, but they also felt that the application and practice during the face-to-face course gave them ability to be able to handle a variety of situations. During the debriefing scenarios all of the 21 participants who attended stated that the course made them more aware of the role and feeling

much more confident about taking on the role of a preceptor. Participants wished that they were able to do more practice,

Maybe after each of us has had a chance to practice, offer a follow up (the same day or later) for us to practice AGAIN. I think seeing and learning, by practicing a SECOND time I think it would be helpful and solidify the learning even more.

They also all agreed that they were not experts, but felt that they now have a much better understanding of what the role encompasses, where their resources are, and ideas of how to approach or respond to a situation. The themes for this research question revealed how the course prepared the nurse to precept.

A participant shared that they “felt prepared”. Another adding that they “knew where their opportunities for learning were, and when to ask for help.” The class observations revealed that they all agreed that the course gave them better insight to the role and that they felt prepared to proceed with precepting a new staff member. The data collected to support this question helped to address how the nurse felt prepared by using the themes of understanding the role using their personal journey, comfort level, and incorporating the tools and resources that were introduced. Participants also identified implementing best practices as a theme that was further supported by setting up for success, orienting to the clinical space, and improving communications. The final theme for this role spoke to the growth that occurred as they prepared for the role by having a stronger confidence level and better understanding of the role.

Understanding of the Role

Personal experiences with current unit preceptors as well as what they have observed in various work areas showed that without proper development, preceptors will not know how to effectively train staff. Each of the debriefing sessions with the 21 participants from the in-person

class involved conversations about how they all were able to identify current preceptors in their clinical space who were not interested in being a preceptor. “I know sometimes they (preceptor) got annoyed, or I felt like they were overwhelmed, or might have had the wrong tone at certain moments that would upset me.” The blended learning course provided a way for the participants to have a better understanding of the importance of the role and a way to respond to situations where they witness another preceptor not performing as they should.

The nurses also provided details about how the course itself helped to increase their comfort level to serve in the role and how well they feel prepared to be able to precept. All 21 course participants shared comments on the pre-assessment survey that focused on the desire to grow in the role and develop their skills, one wrote that they are seeking “deeper understanding of preceptorship, knowing more learning techniques and methods, and growing as a preceptor.” An additional comment that was shared stated that they wanted to know “how to be a preceptor that builds critical thinking and confidence in my new hire so they will be ready to be on their own by the end of orientation.”

Personal Journey

One theme that impacted the nurses' perceptions of being prepared for the role included being aware of their journey to get to the point where they were able to serve in the role of preceptor. Four of the participants interviewed reflected specifically about how their prior experiences have influenced their path of development, and the blended learning course provided a beneficial method to develop. One nurse shared that they felt they did not have a good example to follow, while another shared that their newly developed perspective of the role was not the same as what they witnessed. During an interview, both shared that when they reflect on their

time as a new hire, they “wish their preceptors would have done things differently to give them a better experience.”

This was also seen in the in-class observations as after one scenario, each of the 21 class participants discussed how they had seen certain situations handled compared to how they are now being taught to handle them. “I wish my preceptor had done this training” was mentioned by one of the participants after a scenario. The participant went on to say that this blended learning course has helped to prepare them and their personal experiences with the current unit preceptors as well as what they have observed in various work areas showed that without proper development, preceptors will not know how to effectively train staff. Each of the debriefing sessions that included the 21 participants from the in-person class involved conversations about how they all were able to identify current preceptors in their clinical space who were not interested in being a preceptor. “I know sometimes they (preceptor) got annoyed, or I felt like they were overwhelmed, or might have had the wrong tone at certain moments that would upset me.” The blended learning course provided a way for the participants to have a better understanding of the importance of the role and a way to respond to situations where they witness another preceptor not performing as they should.

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that builds critical thinking and confidence in my new hire so they will be ready to be on their own by the end of orientation.”

Two other interview participants reflected on the content that they received during the course and shared that they felt inadequate to serve in the role of the preceptor and the course has helped them to recognize that they had a lot of work to do to improve their teaching and communication techniques. One of the interviewees shared that their preceptor was very harsh when giving feedback and the constructive criticism techniques shared during the course is important,

You should share something like we all did this at first, and that is okay! But this is the best way to go about this, or the better way to handle a situation, and kind of just spinning it for the positive and letting them know you are on their side and want them to be successful.

Four of those interviewed explained that they had not fully comprehended, until participating in the blended learning course, that the preceptor should reflect on the needs of new staff and how they, as a preceptor, can adapt their way of communication or their style of teaching to be more in line with what the new staff member needed. During the in-person course, the participants were asked to practice providing feedback to their new hire after every scenario. An interview participant shared that,

I realized that how people may deal with a specific situation, basically just because I deal with it one way doesn't mean that it is the right way. It opens up to see how other people deal with it. We need to talk about it.

Additionally, one of the participants that was interviewed shared that while they felt that they had a good onboarding experience, after attending the blended learning course they realized that

they really did not have a good example to follow. “I don’t mean that I didn’t have great preceptors, they were just tired and didn’t share their knowledge with me” was how one participant responded. They went on to explain that they thought that their orientation was great, until they reviewed the course online modules and discovered all the things that they missed out on.

Comfort Level

Participants provided details about how they gained valuable knowledge through the blended learning course, having more confidence in their abilities. All 11 of the interviewees shared that the role play activities gave an opportunity to work through many different situations with one participant stating “the in-person role playing helped me a lot.” The role-playing provided clarity for participants as to what situations to prepare for as well as adding resources and knowledge to their tool belt to be better prepared to handle various situations that may arise. These scenarios also took them out of their comfort zones and challenged them to try something new, thus preparing them for situations that they may not have experienced before. This was evidenced by a comment from one participant from the focus group who stated,

Yea, when you said that we were going to be doing role-play, I was thinking great. I hate role play. But, it was a great review of what we learned and it was helpful to see how everyone kind of used the material with a different twist. You know sometimes I read something and I how I think about it might be different from how the next person thinks about it. It was good to see how they did their scenarios too.

It was stressed during the in-person component of the blended learning course that there is not a consistent process that will work for every situation, but the participants were able to

recognize that by having these conversations and knowing resources they felt that they would be able to handle many situations. Having this opportunity to talk with other preceptors and brainstorm solutions is the advantage of using a blended learning approach. The learner is better able to use the resources introduced during the modules to better prepare to handle a variety of situations.

While we attempted to find the most common challenging scenarios, the preceptor will face more challenging situations. The blended learning method helps the learner to adapt, “It gets you critically thinking about scenarios that you might not think about.” One of the participants who participated in the second interview stated that even though she was not in a typical clinical area, the “different scenarios provided a lot of insight, might not have been the exact thing, but was able to pull the important pieces that we went over to help” handle the situation.

Finally, one of the participants shared that the course also made them realize that they were okay to be “comfortable being uncomfortable.” The in-person course provided reassurance that the questions and apprehensions that they have as a new nurse preceptor is shared by many other nurse preceptors, and it is okay not knowing and seeking out answers. Another interview participant shared that it is uncomfortable to have to call someone out for something that they have done or said. They went on to share that the blended learning course provided them with a better understanding of when to go to the manager,

While it is an uncomfortable situation, I feel that I am able to go to my manager to be like this person is inflexible, isn’t teachable and like should they honestly be in this environment? It’s not safe for the patients. That is okay to communicate, because some people just aren’t going to fit into the job.

The blended learning course provided the groundwork, or foundation, that many of them needed to be able to function in the role and that this course would be valuable for all new preceptors.

Ten of those who participated had not received any on unit training as to what was the role of the preceptor, so using the real-life situations during the role play provided an opportunity for the participants to first “reflect on how they felt that they would have responded to the situation, and then to further learn from others on how they would respond to that situation.” Built into each role play scenario was a debriefing opportunity where the participants’ actions were reviewed for what everyone felt went well, what might have been handled differently, and then what resources can be identified to provide assistance.

Two other interview participants reflected on the content that they received during the course and shared that they felt inadequate to serve in the role of the preceptor and the course has helped them to recognize that they had a lot of work to do to improve their teaching and communication techniques. Four of those interviewed explained that they had not fully comprehended until participating in the blended learning course that the preceptor should reflect on the needs of new staff and how they, as a preceptor, can adapt their way of communication or their style of teaching to be more in line with what the new staff member needed. During the in-person course, the participants were asked to practice providing feedback to their new hire after every scenario. An interview participant shared that,

I realized that how people may deal with a specific situation, basically just because I deal with it one way doesn’t mean that it is the right way. It opens up to see how other people deal with it. We need to talk about it.

Use of Tools and Resources

Finding resources is an important component to support the preceptor feeling prepared in their role. One participant shared “I did struggle when I was looking for stuff (resources), so this has provided the clarity” that was needed as to how to find and access the resources. Our organization provides many resources, sometimes too many resources, and it can be difficult to navigate and use what might be helpful tools. During the module portion of the class, all of the 21 participants were asked to visit various sites and answer questions. Then during the face-to-face course, during the debrief session, those 21 participants were asked what resources would they use for that scenario and where would they find those resources.

During the in-person course observations, all participants were able to not only identify what resources would be helpful in the various scenarios, but the participants were also able to demonstrate how they would use those resources. During the debrief session, the participants were then able to identify additional resources that might have been helpful that were not already provided and the group worked together to think about what would be helpful. Any resources that someone shared that they did not know how to access, there was a demonstration of how to access.

Both the online modules as well as the in-person session of the blended learning course addressed the resources that are available for the preceptors which are fundamental as they prepare for their new role. When asked if there were any particular resources that the participants found helpful in the role of a preceptor, one person answered “I can’t think of one specific resource, I think it was really helpful.” Other participants did identify specific resources that they found helpful.

Five of the participants stated that they will be sure to incorporate what they have learned about accessing policies and procedures. The tip sheet that “tells us how to access our policies”

was introduced during the online modules and was identified as a helpful tool to be able to quickly find a specific policy. This tip sheet was also reviewed during the course, reinforcing the foundational knowledge. Another participant shared “you guys showed us how to do like find the policy center” that appears to be a challenge for most who participated in the course. Two of the participants shared that they were able to then incorporate this into the orientation plan when working with new hires. A participant shared that,

If I’m explaining something, I know where to find it (in policy center), and I know if there’s anything that I have questions myself regarding precepting somebody. If I don’t know the policy or something, I can now easily access those.

The next resource that was identified through the blended learning course that was mentioned as being extremely helpful by four of the participants was the Lippincott Advisor and Procedures. During the debriefing observations participants were shown how to access the site and were able to see what was included in the resource. During the interviews two of the participants remarked that they had not realized until learning about the resources during the online modules that they even had access, while another shared “Lippincott would be valuable” to help train new staff. Participants had an understanding that if clinical topics came up that they were unsure of, Lippincott was a resource that could help prepare them for being able to support their new hire. During the focus group there was discussion around the fact that many had not realized that they had access to some of the resources, but since attending the blended learning course, they are now able to access those resources and implement them into practice.

The onboarding tools were also identified as helpful tools for the nurse to use to prepare to train the new hire orientation. These were introduced during the modules and participants were expected to review and interact with the tools so that they could then apply them during the

scenario applications. Two identified that the competency document was a good tool to validate what knowledge the new hire had and what competencies were still needing to be done. Two others identified that the maps and milestones were great tools as well. As a new to precepting, one participant shared that the milestones helped them to guide orientation,

You feel like you want to show them as much as you can during the orientation.

So, it (maps and milestones) gives you a guide. It gives a little time to take it as a good pace, you know it isn't going to happen in the first day or the first week, or whatever.

There were three other resources that individuals had identified as helpful during the interviews. Two participants identified that the Clinical Education website was a resource that they will now use. Two additional participants identified UpToDate as something that they were not very familiar with, but would investigate to get additional information. Only one person identified the people that they work with as a resource that they would include during orientation.

During the observations all 21 participants recognized that if they were in a situation where their new person was to be administering a medication, they would encourage them to use LexiComp based on their new understanding of how to apply the use of resources. Everyone that attended the course, because they were provided an opportunity to practice using the tools, was able to identify how to find and access the information during the in-person course. The participants also discussed using the orientation tools, policy and procedure, as well as bringing in their educators and managers to help with new hire orientation. All these resources were identified and discussed during the blended learning course.

Fifteen of the 21 participants who attended the course were not aware of all the documents to help guide orientation that were available, or how to access them. The participants were shown how to access the documents during the online module component of the course and then a review and discussion of how to apply and to implement was facilitated during the face-to-face course. This was reviewed to be sure all had the same understanding. One comment on the post-assessment survey did reflect that more incorporation of the actual hard copies of resources during role play would have been helpful.

The responses from the participants demonstrated how using the blended learning course for professional development allowed the participants to be able to review the tools and resources that are available by giving them an opportunity to access and review prior to having to use in their role. Many times, this type of information is discussed, but the staff do not get a chance to practice. The participants found value in being able to get into the sites and being able to review them so that they have a better understanding of how to apply in their role.

Implementing Preceptor Best Practices

The blended learning approach is a method that is able to introduce foundational best practices for nurses that they can then incorporate into their preceptor role, applying that new knowledge during the face-to-face course. For example, the orientation plan which is the onboarding process that includes a plan for how orientation should be mapped out to ensure that basics are reviewed and competency verified prior to advancing skills. Before participating in the blended learning course, many of the participants thought that the orientation just happened and you just provided care as you went forward. After attending the course, the participants were able to verbally map out what their new plan for orientation would look like incorporating all that has been discussed and reviewed through this course. During the role-play scenarios, the nurses were able to implement the orientation plans into their scenarios. The participants also

recognized that as the preceptor, they are able to customize to some extent the orientation plan based on the needs of their orientee.

Setting Up For Success and Preparing for Orientation

It was introduced during the modules that the goal of preparing for orientation is to have a plan so that you can help ease a new hire into practice. As one interviewee stated, “we want to do this together...ease them into it rather than just like being thrown into it. Day one baby nurse, not trying to overwhelm them.” This can be accomplished, as seven of the interview participants shared, by sitting down and having a conversation with the new hire. Seven participants also stated that this would be a priority for every day, as was stated by one interview participant,

Sitting down with that person at the start of the day, whether it’s my first day with them or it’s our third week together and say like hey, what are your goals for today? And then also let’s look at your CBO (competency document) and see where we’re kind of at with things. So that’s where I would start.

Of the seven interview participants who specifically identified the importance of the beginning of shift conversation, they were able to identify specific topics to be covered. All seven shared that it will be important that the new hire be introduced to the care team for the day, if they have not been introduced already. Additional topics include discussing reports, prioritizing care, and really trying to figure out where that new hire is with their progress. All seven also reported that they will use this time to ask the new hire what their goals are for the day as well, just to be sure all are on the same page. One participant shared that when they were new, their preceptor “would do her part and kind of formulate the plan, and then we would talk about what she decided” not allowing for a discussion to help create that critical thinking and prioritization.

Three of the interview participants also identified the importance of determining if the new staff member is a new grad or an experienced staff member who is just new to the area. One participant went on to say that they would then verify that the “new hire had the appropriate orientation plan based on their experience level” as it is mapped out differently for a new grad versus an experienced nurse. Regardless of if the new staff is a new grad or experienced, one participant shared during an interview that they would “ask them, honestly ask them, what they’re most nervous about so I can know how to make them more comfortable.” They were able to recognize that even with experience, a new clinical space can be scary and overwhelming.

Adult learning principles were also introduced during the modules with a focus on the importance of knowing the new staff member’s learning style, or preferred learning style, and three of the participants were able to confirm this. One shared that after completing the blended learning course, they now do a quick self-assessment to be sure that they are meeting the needs of the new hire, better matching their teaching style with the new hire learning style. Another shared knowing if they are “hands on or more watch and learn” can help guide how the day might progress.

Four of the interview participants mentioned the importance of checking in with the progress of the CBO to determine where the new hire is as far as validating their skills. This was found to be a helpful guide to determine where the needs are. From looking at the CBOs, three of the participants shared that they would then seek out learning opportunities for the new hires to help keep them on track to complete their orientation as mapped out.

Orienting to Clinical Space

Building teams often begins with the new hire being comfortable in their clinical space. The nurses who attended the training felt better prepared to begin this important team building

process. When thinking about the actual orientation to clinical space, the participants had some interesting ideas which supported the critical thinking that was developed by those attending the blended learning course. During one course observation, seven of the participants identified that they had noticed that many of their new hires have never actually been to their clinical area, and had no idea about the geographical set up of the space, the people who work there, or the patient populations that are cared for there. Many times the clinical areas have a general title such as heart step down or intermediate medicine, but do not specifically state all the patients that may be admitted. One of the class participants felt that this alone can cause great stress, “the unknown,” and makes the new hire overwhelmed.

When asked during an interview what the participant would include during the orientation plan, two participants responded that specific orientation to the clinical space would be one of the first things that they did. One went on to say that they would do this by using a scavenger hunt so that the new hire could become aware of where things were located on the unit such as supplies or emergency equipment.

Three of those interviewed also mentioned that orienting the new hires to the norms of the clinical space would also be important. One shared an example of a norm in her ambulatory area,

So, an example, we have a lab there. So, if a patient is in a wheelchair, our lab lady likes us to take them to the lab and let her know, she wants to know so she can go and help. It just helps the flow of the clinic a little bit better, and to just kind of be good team players.

It is important to provide an introduction to the culture of the unit. During observations, a group of seven participants had a discussion around how to support a new hire that may be a little shy

and not be able to acclimate on their own. They brainstormed how the preceptor can be that person to provide a gentle hand to support that new hire. All 21 observation participants, through various discussions, recognized that it is important to be a good resource for the new hire and help them as they learn the clinic norms and flow. During the observation debriefs, the participants were able to verbalize how they would apply the techniques that were discussed during the online modules to their practice for better outcomes.

Lastly, one person during an interview, also mentioned that it is important for the new hire to “probably get them oriented to like the different people that come into the unit,” not only know the people that they work with, but where the resource people are, such as pharmacy or physical therapy. If there was ever a need to consult another member of the healthcare team, it is important to know how to contact them or where to find them to provide assistance.

Communication

Communication is a component that many nurses are challenged with when serving in the role of a preceptor. Being prepared to incorporate communication best practices at the beginning of the first day and throughout the orientation of that new hire is a vital part of the on-boarding plan. Well-developed communication skills can support the learning no matter what phase of development they may be in. All 11 of the interview participants had identified some form of communication as important for the new hire training. One participant shared, "I want to touch base with the new hire and review the day-by-day schedule." This can help the preceptor start the conversation about what are the goals for the day and to be sure that everyone is on the same page. Another participant stated that this course made them more cautious of their tone and that they needed to remember that the words that are used matter, "new hires might be sensitive" and

those words can have a bigger impact than what was intended. Having conversations is important, but making sure that they are constructive conversations is more important.

Feedback is an important part of communication. Getting feedback and providing feedback is a required component of the process. Class discussions from the 21 participants included ideas on how to improve communication, not using phrases like “You’re wrong,” but to instead be “How could we have done that differently?” Another strategy is that after having a specific experience, asking that new hire “How do you feel about what happened?” or “How do you feel about how everything went?” This can help determine if the experience was the same for the new grad as it was for the participant. Providing constructive feedback after this conversation will prepare the new staff to be better prepared going forward. Participants “want to try to spin it for the positive” and let them know we are on their side. Using this strategy can also help with those who it might be more difficult to have a conversation, “I feel I am prepared for someone who has a unique personality.”

One communication situation that was not reviewed during the course was how to handle feedback from another preceptor about your new hire. However, because of what was learned through the course, the preceptor felt prepared to successfully manage the situation. They explained,

A situation that I did not feel prepared to handle was critique/complaint from a co-worker about my preceptee (new hire). This occurred when I was off for a week during PTO (paid time off), and the progress of the new grad hire was not effectively communicated so realistic expectations could have been established. The preceptee was not getting the help he needed and yelled at my co-worker for not helping. My co-worker then came to me about it when I returned to work. I

thanked them for telling me and said I would get the new hire's side of the story as well to discover the misunderstanding.

During the face-to-face class, each participant was asked to implement the techniques reviewed during the online modules into their scenarios. They were asked to demonstrate how they would go about having these conversations with the new staff member. Each of the 21 participants were able to use the role play to practice questioning techniques to determine how the new staff member would prefer to go through a situation based on their learning preference. A post-course assessment response stated, "I greatly appreciated this training!"

During an interview from a participant, who is currently training a new staff member, she shared that she is more aware now of how she is communicating, including the words she is using and how it is being said. She explained that it is easy to get caught up in the situation and forget that things need to be explained to the new staff member. Another participant shared that the course "helped me communicate in a more delicate way."

Growth as a Preceptor

During one of the interviews, a participant shared that the blended learning experience "made me reflect more about the role and understand the value of the professional development." This is further supported by another participant who stated "I care and really care about them doing it well." Two of the participants were "really excited" about what they have learned, actually sharing that it made them "more excited" to actually be a preceptor now. An additional participant shared that they enjoyed "working with the new nurses and molding them into their roles to be better nurses."

There were few challenges that were identified during the blended learning process. One participant shared that they did not realize how much they missed out with their own personal

orientation process until they recognized what the process should have been. They further shared that they did not necessarily have a bad experience, they really enjoyed their preceptor at the time, but now they realized how much better it could have been.

Another challenge that was brought up was that there were two participants who, based on the knowledge gained during course, realized that they feel that they were still so new in their role that they did not feel confident speaking to the specifics of the unit if questions were to come up. During the debriefing session seven class participants were able to recognize that they will not have all the answers, but through the blended learning course they are able to identify those resources on the unit that can help to get the answers. One participant from the course even mentioned that it shows greater credibility by recognizing one's own limitations and being willing to reach out for help as this role models that as nurses we are always learning and growing.

During the second interview, one of the new preceptors identified that there have been very few barriers for them to be a preceptor. It was more related to just knowing the clinical space itself. They shared,

I think my biggest challenge was that we have recently taken on more of a mixture of patient groups and I have only myself just learned some of the new things we implemented so teaching them to someone else was difficult.

Confidence Level

Even with building the baseline knowledge the participants also need to have the confidence to be able to serve in the role of the preceptor. The blended learning course was designed to provide the foundational knowledge, tools, and resources that are needed to begin in

the role. One participant explained, “This course really helped me and gave me a great foundation to develop on. I feel that I have the details I need to be successful.”

The post course assessment reflected that the overall ability to either have successful opportunities to function in role, or feeling comfortable in role had increased for those who attended the course. Table 7 demonstrates the increased perceptions of the nurse attending training in their ability to provide the core components. This was also identified during the interviews, as five preceptors shared that they felt that they felt they were better prepared, “I have a much better idea of what I need to do and how to go about it.”

Table 7

Pre-Course and Post Course Assessment Results

Questions	No familiarity, not sure I would use		Think I could		Successful opportunities or comfortable	
	Pre ^a	Post ^b	Pre ^a	Post ^b	Pre ^a	Post ^b
I feel that I can give valuable feedback to new nurse hires	0%	0%	10%	6%	90%	94%
I am able to use the orientation tools and resources to help guide orientation.	19%	0%	38%	25%	43%	75%
I can incorporate learning theories into my orientation plan.	29%	0%	24%	25%	48%	75%
I am able to develop critical thinking skills in a new hire.	5%	0%	20%	19%	75%	81%
I can incorporate the married state.	33%	0%	14%	13%	52%	88%

^a*n*= 21

^b*n*=16

Interview participants were asked if they feel they will be a better preceptor since attending the course, all 11 agreed with one stating “Oh, yeah, for sure. I’ve already noticed it. And also, it made me reflect more, which I think was the most important thing that I got from it”. Three participants felt that the role play was one of the most beneficial factors that attributed to their increased confidence in their ability to serve in the role. During another interview one shared,

I’d say I feel really well about the role, I think especially the in-person role playing helped me a lot because I got to learn from like other people’s methods of dealing with situations or teaching or communication techniques. I feel like that was super helpful.

Another interview participant commented,

But I really like that by being blended they can come together with everybody and see the role modeling. It even solidifies what they have learned, so they can actually see it in action instead of just writing it out. And when you read the content is one thing, but boy when we were talking about it and when they see it in action, it brings in more to reality.

Understanding of the Fundamentals

During the interviews, the 11 participants shared that they had developed a better understanding of the fundamentals of being a preceptor by attending the blended learning course. One of the interviewees reflected,

I had taken a class at my old organization that was back at the beginning of my nursing career. But the preceptor course I took there was kind of like, yeah, you’re gonna have trouble sometimes. Good Luck. That happens. And there was

like, really no solution or examples or any kind of like closure to it. So, it was wonderful to have these foundations to build on.

There were a few foundational components that stood out to a few of those being interviewed.

One of the participants shared,

Because I've never had to really think of it before, but I had no idea what the process looked like in terms of kind of going through a checklist with thinking about patient safety and kind of how to like form the day-by-day schedule based on that.

Five of the participants shared that they now have a better understanding of the need to change how they are precepting based on the need of the new hire, whether that be they are a new graduate or experience, or even their own comfort level. Three identified knowing the new staff members' learning style is important, determining "the way that adults learn" is important and can impact their success.

Four interview participants had also identified foundational resources as an important component that should be used from the beginning instead of an afterthought. Resources identified for foundational include the competency documents, maps, and milestones. These are the "go to documents" to be sure all are on the same page for how that new hire is trained.

In addition to using adult learning theory, the married state theory was also identified as important to set up as a foundation. Reflecting on the pre-course assessment results, we had seven of the 21 who completed the pre course assessment state that they had no knowledge or did not feel comfortable using the married state, three thought they could use it, eight have tried, and three felt comfortable. During the course it was observed that while the participants were able to define the married state as the preceptor and the new hire working side by side, they still

had some challenges with implementation during the role play. However, the 16 participants who completed the post course assessment showed that two participants felt they could do it, four had tried, and 10 felt comfortable.

The participants reported a better understanding that it does take some work to prepare to precept, if nothing by just to get "time to wrap my mind around what the next steps are." This course provided a better idea of what needs to be done and prepare for the role. During the observation, all 21 of the course participants were able to verbalize the importance of setting goals with the new hire to be sure that all are on the same page. The pre course and post course assessments provided an opportunity for the course participants to list the five basic steps in the right order. Table 8 reflects the improvement of the participants to list the steps of orientation correctly from baseline (pre course) compared to after education provided.

Table 8

Identifying the General Steps for Setting Up Orientation Day–Participants Answering Correctly

Step	Pre ^a	Post ^b
1. Determine which week of orientation this is for your new hire and what the milestones are.	69%	100%
2. Review what competencies are outstanding to be validated, based on the new hire's milestones and map.	6%	75%
3. Discuss with orientee the goal for today and what their personal goals are going to be.	13%	69%
4. Develop a plan for accomplishing the known patient care needs.	19%	88%
5. Provide feedback to the orientee about the care they provided and what will be some goals for next shift.	88%	100%

^a*n* = 21

^b*n* = 16

Using a blended learning course for staff development can provide the nurse with education that can improve their confidence levels. The pre course and post course assessments revealed an increase in confidence levels to perform key functions in the role of a preceptors. The participants reported that they feel better about serving in the role, they are more prepared for how to handle situations that, prior to the course, and they were not sure as to what to do. During observations the participants all displayed confidence in their ability to handle the scenario and were able to be flexible and work their way through the scenarios, adjusting their thoughts as needed. Blended learning also provided an opportunity to self-reflect and help the learner to identify where their learning opportunities are, and as previously noted what their limitations are.

RQ3: How do nurses who attend the blended-learning course describe their ability to be able to precept a new hire?

Understanding if the participants felt that the blended learning was an effective format to gain the knowledge is one part of the experience. It is also important that the participant can then apply that knowledge to their role as a preceptor. The major theme that emerged from the study that reflected the participants' perceptions of their ability to support the orientation of a new hire with three supporting subthemes. These subthemes included coaching the new hire, limitations of the onboarding, and finally what to do for ongoing professional development of the preceptor.

Support of the New Hire

One of the nurses who attended the course shared that "I care, and really care about them doing it well. I enjoy working with the new nurses and molding them into being the best that they can be." There was a lot of discussion in the in-person course about how to approach a new hire who may have a strong personality. The group identified that the goal should always be how

to effectively communicate and ensure that they are safe and the patient is safe. One participant stated that they “had to be honest when having to deal with that type of personality” and ensuring strong communication is key. The same participant said that they also struggle with taking those issues to upper management. But, by keeping the goal of safety, they felt more empowered to take the concerns forward. Following these guidelines another participant shared that they now “feel I am prepared for someone who has a unique personality.”

During one of the second interviews, a participant shared how they were able to use the knowledge and skills acquired during the blended learning course to be able to critically think through situations that they faced when serving in the role of a preceptor. Participants were asked during the interviews if there was something not covered during the blended learning offering that would have been helpful to have included, it was shared that “actually the different scenarios provided a lot of insight. Might not have been the exact thing, but was able to pull the important pieces that we went over to help in a different situation.”

Coaching the New Hire

All the participants were able to verbalize how they are able to coach their new hire including setting goals with the new hire to be sure that all are on the same page. It was identified that knowing what level the new hire is at will be the first step. This includes a new graduate or experienced new hire, and then what week of orientation are they in. This allows the preceptor to have a successful conversation to identify what needs to be accomplished, if possible, that day. The preceptor can also use this time to identify what the new hire would like to do and what they want to learn, so that if those things are appropriate, they can be included. The participants were able to identify that by doing this they were able to develop an individual precepting plan for that new hire, providing more meaningful coaching.

Limitations of the Role

During the debriefs, many of the participants had expressed that they thought with orientation the preceptor just tried to show the new hire everything that they possibly could, and prior to the course, did not understand the process of laying out the orientation. One of the nurses participating in the second interview shared that they now realize “you know, it’s not going to all happen in the first day or the first week.”

While trying to meet the needs of the new hire, the preceptor will also need to be aware of the patient assignment and be proactive whenever they may have a challenging patient assignment. One participant who attended the course realized that while you want to take advantage of learning opportunities, “sometimes there comes a time where you just have to take over and catch the new hire up later.” Not every situation will be appropriate for every learner. The focus should always remain as what needs to be done to ensure that the staff and the patient are safe. Another nurse participating in the second interview shared that “It is really hard, and then trying to have a positive attitude when dealing with the student or new hire. This is something that I have to work on.”

Ongoing Preceptor Development

This course showed the importance of development in this role, and it was stressed by both the facilitator as well as the staff that being a preceptor requires ongoing development and training. Participants provided ideas of what can be done to help them continue to develop in their role. Setting up office hours to be able to talk through situations or challenges in a safe space would be helpful as the participants work on their units. Many of the participants recognized that sometimes when you do stuff for a while you get stagnant. Being overworked

and burnout doesn't make it better, one participant shared that we “need to work to be a positive person to help train” our new staff to be able to develop strong members of the healthcare team.

While only six of those who participated in the blended learning course had an opportunity to work with a new hire, many felt confident that they had the ability to be an effective preceptor. They shared that this training gave them the foundational knowledge to have an understanding of the best practices, and the experience of seeing the various scenarios played out during the face-to-face course. Using the tools, resources, and lessons learned has prepared them well for the role.

Summary

This chapter described the findings of the case study that looked at the course participant's perceptions of ability to perform the role after attending the course. There were a total of 21 participants who completed the pre-course survey, modules, and face-to-face class where the observations were collected, and then 16 participants completed the post-course survey. Of these 21 participants, 11 agreed to continue on with the study and participated in the post course interviews. The final interview only had six participants, as there was a delay in the ability of the participants to be able to precept a new staff member. Throughout all phases of this study the participants provided confirmation that the course was a valuable resource for them and their knowledge and confidence has grown since completing the course. Participants found the online portion of the course easy to navigate through and they were able to access the resources and links that will be able to provide a resource for them as they continue to develop in their role.

Adult learners should strive for lifelong learning; once again following Mezirow's Transformative Learning Theory of how one is able to use experiences to further make meaning and interpret lived experiences (Eschenbacker & Fleming, 2020). This was supported with the reports that the most beneficial component related to increase in confidence and ability was the

role play scenarios, making meanings of that knowledge gained during the modules. Actually, being able to apply what was learned, as well as being able to strategize responses for various situations, provided the participants with the ability to be able to critically think through situations. It was stressed that there is never one way to approach a situation, you need to develop what your approach will be. Reassurance and support from both the other participants and the facilitators allowed those who were completing their role-play scenarios to take advantage of a chance to practice how they would handle the situation. Participants recognized that role play can be uncomfortable, but it provides the best opportunity to practice.

Vagle (2018) explains that the researcher should use a bridled attitude when working through the research process. It is important for the researcher to keep an openness through the study and not be influenced by their own personal thoughts and experiences. Chapter 5 will provide an overview of how these findings relate to Mezirow's Transformative Learning theory as well as how what was found in this study compares to current literature. In addition, this study's limitations and implications for practice will be discussed.

CHAPTER 5: DISCUSSION

Nursing staff development is challenging with the current state of healthcare. There are many obstacles for staff to overcome in order to complete needed training that include complex schedules, short staffing, and just an inability to participate in traditional methods of staff development. Implementing a blended learning approach to staff development can provide an opportunity for staff to receive the needed training, despite the challenges posed by the shortages (Ashurst, 2011). Nurse preceptor development was chosen as a staff development initiative that would benefit from the blended learning process.

With the known nursing shortage, dating pre-COVID pandemic, there is a need to build strong nursing preceptors to be able to develop and train staff. The purpose of the study was to investigate the experiences of nurse preceptors in a blended learning nurse preceptor development course. This study provides evidence for the limited finding of literature to support the effectiveness of a blended learning nurse preceptor course. The following research questions guided this study:

RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

RQ3: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?

This chapter provides a summary of the study and the informative findings that were discovered. It will also include a discussion of how these results will impact future opportunities

for providing professional development of nursing staff using the blended learning approach. Finally, this chapter will also review recommendations for future research to provide more insight on the ability to use blended learning to provide professional development for both nursing staff and the other members of the healthcare team.

Summary of Findings

Using the case-study design, participants' perceptions were investigated by using a variety of strategies to gather data. A total of 21 new preceptors participated in the pre course assessment and then the observations, with 16 of those participants then completing the post course assessment. Of those who completed the course, 11 agreed to participate in the first interviews and then six of those provided further information during the second interview. Nurses were also invited to participate in a focus group to gather additional details.

The pre course assessments were completed electronically by the participants prior to beginning the online module component of the blended learning program followed by the post course assessment when the participants had completed the modules and the in-person component. The assessments demonstrated that by attending the blended learning course, they had improved perceptions of their ability and confidence to execute the key components of being a preceptor. Self-reflection showed improved perceptions with both "Haven't had a lot of experience, but I think I could do it" and "I am very comfortable doing this" for all five of the questions posed.

Mezirow's Transformative Learning Theory

The framework of Mezirow's transformative learning theory guided this blended learning study on the premise of the definition of the theory, humans understand the meanings of their experiences (Mezirow, 1997). There are ten phases that help define the theory and were

displayed in this study. Phase one, disorienting dilemma, was addressed when the gap in education was identified, which for this particular study was knowledge of the role of a preceptor. One of the participants shared that they had thought that precepting just involved having the orientee shadow them, and the nurse preceptor would just educate as they go. It was evident to them, after starting the modules, that this was not the case.

Phases two and three provide an opportunity for self-reflection from the preceptors, allowing the nurse preceptor to discover that they did not have a solid understanding of their role and challenging them to identify if they have the skills to be able to do the role. These two phases would be accomplished through using the online learning component of the blended learning experience. The learners were able to review foundational knowledge at a pace that worked well for them to have an understanding of the content. One of the nurse preceptors who participated in the initial interview discovered that while she thought she was ready to precept, after completing the online modules and in person session, they were not ready for the role and needed to pause their preceptor development so that they can focus on becoming a stronger nurse themselves.

The next phases, four through seven, included the preceptors participating in the course where they were able to use the group activity, identify their goals with being a preceptor, and knowing and locating the resources they have available to them. Working together to debrief scenarios allowed the nurse preceptors to network and develop a better group understanding of the process. The role-playing scenarios helped them to apply what they have learned and develop critical thinking strategies to adapt to a variety of scenarios, phases eight and nine. It was stated that the role play not only challenged them to develop critical thinking, but seeing how others handled the scenarios provided a new perspective that they were able to learn from. These steps,

four through nine, are addressed during the face-to-face component of the blended learning class. The final phase, phase ten, is where they are currently at by becoming expert preceptors and role modeling the transformative learning process with their peers.

The blended learning preceptor course was designed to improve the performance of the new preceptors and share best practices. While there have been studies that demonstrated the importance of preceptor development, using blended learning is an area that needs further discovery. During the role play debriefings the participants were encouraged to share their experiences, thoughts, and ideas of how they will be able to apply their new knowledge as they function in the role of a preceptor. They were able to use the scenarios to have a robust discussion about experiences that they have had prior to the course, and how they will now address similar scenarios going forward. This further demonstrated phase eight and nine, how the participants were able to use their experiences and their new knowledge to transform their practice to be better preceptors (Revell et al., 2021). By reflecting on their personal experiences along with the discussions of best practices that they learned about during the course, they were able to implement the knowledge gained and adapt their practice and have more confidence in their ability to precept (van Schalkwyk et al., 2019).

The observations provided an opportunity to gather additional data for a better understanding of the application of knowledge learned, even though in a simulated experience. Critical thinking skills were developed using the blended learning approach by allowing the educator to be in a role where they are not required to know everything, but instead, to facilitate the identification of reliable resources and ask critical questions (Dickerson, 2012). In this sense, the educator becomes both the coach and the facilitator for the learner (Billings et al., 2006; Naeem & Khan, 2019). When questions were posed to the facilitators, instead of providing what

the answer should be, discussion amongst the group was encouraged to continue to support that critical thinking ability. Participants were encouraged to reflect back to the module part of the course to determine what they may be able to identify that can help determine a solution. Facilitators helped to fill in gaps, but for the most part the participants were able to effectively work through the questions and develop appropriate resolutions. Using this process, the participants were able to better learn from each other and recognize that using each other to help handle situations in the clinical space is a valuable resource in itself.

Although some verbalized that they were nervous about having to participate in a role-play simulation, participants expressed that the exercise was exactly what they needed to have a better understanding of how to approach a given situation. Those who were observing the scenarios unfold also stated that they were able to learn and develop a better plan for what they would do if they were in that situation. The blended learning approach for this staff development contributed to building of the nurse's confidence levels and ensuring that they were approaching the situation in a manner that was supportive and welcoming, but also providing safe practice when providing care.

RQ1: What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

Results revealed that the nurses found the blended learning method for training a positive experience. Using a format of self-paced online modules to be completed as scheduled and then adding the face-to-face course provided the nurse with an opportunity to apply that new knowledge was a format that the preceptor appreciated as they developed in their role. With the challenges with scheduling and short staffing, using a blended approach gave a well-rounded staff development offering that the participants were able to participate in.

While the nurse who is looking for staff development has a slightly different focus than a formal nursing student, the principles of developing that foundation and then applying the new knowledge is still an important component. Additionally, this study also supports that blended learning courses can provide the needed knowledge to increase role satisfaction and meet the diverse needs of the learners (Renda et al., 2022; Santiago, 2017; Wu et al., 2020). Blended learning has been indicated as an educational strategy that provides a learner-driven and interactive process that helps the staff member better learn skills to support a complex work environment (Darcy, 2020; Glover et al., 2017; Kang & Kim, 2021).

The trajectory of the development of the course provided a guide that allowed nurses to review theory and the foundational knowledge that was needed to then be able to focus on application when attending the in-person class, allowing for development of advanced critical thinking skills. The self-paced online learning that used multiple modalities followed by challenging simulation experiences allowed the nurses to work with their peers to problem solve and provide a stronger educational experience. Blended learning allowed participants to review online topics that they did not fully understand, with the ability to view as many times as necessary for retention and mastery (Benson, 2004; Hailey et al., 2017; Scott et al., 2017).

While there were no recommendations in current literature for length of modules for staff development, the online component of the course was purposefully developed to be short modules that could be completed during down time while the participants were working. With the complex staffing needs of healthcare organizations, it is important to consider the same format for the online component going forward. Researchers suggest that using blended learning for preceptor training can provide the education and support that is needed to be a quality preceptor (Bradley et al., 2007; Lee et al., 2017; Senyk & Staffileno, 2017; Wu et al., 2020).

The role-play provided an opportunity for the participants to practice how to manage situations and also how to provide feedback to new hires. Reviewing current recommendations for working with adult learners, communication techniques, and improving critical thinking were topics that were reviewed during the modules. The in-person course provided the nurses with a chance to then practice applying these skills in a safe environment. This is often missed with a traditional staff development offering as time is not typically available for staff to apply their knowledge.

The participants were able to work through their scenarios effectively, and the debriefing provided even more opportunity to discuss and develop those critical thinking strategies that will be important for the new preceptor to have when they are serving in the role. Using questioning techniques to challenge the participants to think about the what-if situations provided an opportunity for a robust conversation around how they would handle specific situations in their clinical space.

One of the participants had made the comment that they knew, at times, it was easy to just click through online learning and not really pay attention to the content on the screen. However, they shared that the way these modules were created, it made them pay attention to the content and be an active participant in the learning. This was further supported by the participants being able to use the knowledge gained during the online portions of the blended learning to the in-person application scenarios. The nurses would also bring up sites or resources that were discussed during the modules and ask for further information from the facilitators, and in some cases they were asking the other nurses in class how they implement or use those resources. This takes advantage of the benefit that blended learning offers, to be able to network and learn from each other.

There were no negative experiences from the blended learning course itself as reported by the participants. The course layout, time commitments, modules and in-person class were all well received and reported to be very helpful. There were a few technical challenges around being able to access links and the modules showing as complete in the LMS that were related to pop-up blockers and the browser that was used. Once these challenges were identified and addressed, there were no additional problems. They reported that the online content was easy to understand and provided a good foundation that the participants were able to use as they worked through the role-play scenarios during the in-person course. Benefits for using the blended learning approach to provide a preceptor development course were similar to what Njie-Carr et al. (2017) and Santiago (2017) reported that participants were satisfied with the course, improved staff performance, and high in-class participation.

RQ2: How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

All who participated in the interviews felt not only that they were better prepared for the role of a preceptor, but they also were more confident in their abilities to onboard new hires. They went on to report that they were able to have more control of their learning and able to progress at a pace that was convenient for them. This aligned with current literature that blended learning is a viable method to provide formal education in a nursing program as it can enhance the knowledge, problem-solving abilities, and learning satisfaction of nursing students (Kang & Kim, 2021).

The post course interviews allowed the participants to share how they will use the knowledge that they obtained during the course, both the online modules and the face-to-face

course. The participants also identified that they had a new found appreciation for preceptor training and have a better understanding of the importance of training. While it has been shown that providing a nurse preceptor development course can have a positive impact on the knowledge, skills, and attitudes of a preceptor, at times staff do not appreciate that until after the fact (Kamolo et al., 2017; Wu et al., 2018). Through observations and conversations, the preceptors demonstrated that they were able to critically think through difficult scenarios and develop a plan of how to handle additional situations that may arise, as they are precepting.

One area that was identified as potentially needing additional support was onboarding experienced nurses. This was briefly discussed in the online modules and there was one scenario for the in-person portion. However, there appears to be a greater need for additional information around this topic. The new preceptors who have less overall nursing experience were nervous and unsure as to how to work with experienced nurses. Strategies were shared and specific situations reviewed, but during the post course interviews (two months after course) it was still identified that they felt they needed more support for this situation.

The nurse preceptors had perceived that after attending the blended learning preceptor course that they felt that they were better prepared to be able to guide successful onboarding of a new staff member. The pre course assessment and post course assessment demonstrated an increase in their levels of comfort and awareness of the role and what actions that they were to complete. During the role-play observation debriefings, many of the 21 who attended had not realized the actual role of the preceptor and how vital their actions were. The post course interviews showed that 10 of the 11 were better prepared and ready to progress with the role, with only one of the 11 participants sharing that now that they had a better understanding of the

role, they did not feel that they were in a place in their career that they were ready to be a preceptor.

Kennedy's (2019) study on traditional facilitator driven staff development showed that nurses who received formal training felt more prepared to function in the role of a preceptor, as it helps to develop teaching strategies, critical thinking skills, and communication skills (Bengtsson & Carlson, 2015; Panzavecchia & Pearce, 2014). This study supports that the blended learning approach provides the ability for nursing staff to better accommodate this learning with nurses having the challenges of scheduling, short staffing, and limited ability to participate in continuing education. While initially it was thought that all that attend the blended learning course would then go on to be preceptors, the ability of the blended learning course to be able to clearly demonstrate what the role was had allowed this nurse to realize that they were not ready. This remark from the participant made me aware that it is also important to recognize not only when you are ready, but more importantly who might not be ready for the role.

Nurses who participated in the study were committed to learning as much as they could and took advantage of the ability to view and then review the material so that they had a better understanding of the material. This further showed that they understood the value of professional development, and in particular the role and how it will impact the organization as a whole by providing the support that our new hires need so that those new members will be retained at the organization. This was reflected in many of the comments that participants made in both of the follow up interviews. During observation debriefs, the participants developed the ability to provide constructive feedback focused on patient safety. Using the modules on effective communication, and then participating in the role-play, allowed the participants to practice (apply) what they learned in a realistic scenario. Participants felt that it made it easier, less

feeling like a personal attack, when able to frame feedback around what we have to do to keep the patient safe. During traditional offerings, this opportunity is not always available.

The nurses who completed this blended learning course felt that they could serve in the role and be better prepared for a variety of situations. The online component provided the tools and resources needed and the in-person course provided the application. This supports the basic understanding that nurses who participate in professional learning offerings can increase their confidence level and provide a foundation to promote safe patient care (Hailey et al., 2017). A traditional approach may provide some of the components, but by using a blended learning approach, learners will be able to better apply what they are learning into their practice (Santiago, 2017; Smyth et al., 2012; Wu et al., 2020; Wu et al., 2022).

During the post scenario observation debriefs, the nurses shared that they had a better understanding of the preceptor role and how to map out the orientation process so as to not overwhelm the new hire and ensure a strong foundation was developed. They were also able to identify resources that were available for them to use, as they are working with new hires. One participant shared that even if they forgot how to get to the resource, they would know it was there and will ask for help to find it.

Oftentimes the nurse struggles with communication. While the hope is that every new hire does amazing, and the preceptor will only have to give positive feedback, there are many times that the preceptor has to provide constructive feedback to correct behaviors. This is closely tied to developing critical thinking skills about how to best handle the situation, developing a plan for next steps, and when to bring in leadership. This was demonstrated by the participants implementing what they had learned in the on-line modules during the face-to-face class. The nurse had the ability to use strategies, such as questioning, to gain an understanding of the why

behind a behavior and then how to proceed with providing the needed feedback to address without impacting confidence levels.

The pre course and post course assessments also demonstrated that there was knowledge gained during the blended learning course. This further supports that this training is vital, as preceptors who have not received this training do not have the knowledge and competency to be able to help transition staff into their new role (Kennedy, 2019). During the second round of interviews, those who had been able to precept a new hire after the course shared that they were able to use what they learned to develop a better onboarding process that was able to provide that support needed to the new hire. They were able to implement communication strategies, use the onboarding tools, and access the resources that were needed to onboard the new staff member.

RQ3: How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?

After attending the blended learning course, nurses felt that they had the ability to serve better in the role of a preceptor. They had developed the foundation and knowledge needed to be able to precept a new hire. The nurses felt that they were able to support the new hire with improved coaching skills. These include being able to set realistic goals and expectations and providing effective feedback. Additionally, these nurses were able to know the limitations and the importance of ongoing development. They felt confident in their ability, felt that they were organized, and participants had a better understanding of the importance of the role of the nurse preceptor. These findings are consistent with those of Bradley et al.'s (2007) study that showed that 94% of preceptors that attended the blended learning training reported an improvement of knowledge or roles and responsibilities.

While not all of the participants were not able to work with a new hire post course, all those being interviewed were able to verbalize how they would proceed with the orientation plan. This training led to a better understanding of how blended learning can support the success of onboarding new nursing staff (McKinney & Aguilar, 2020; Nelson et al., 2019) and in turn develop a highly-skilled nursing workforce to provide quality patient care (O'Brien et al., 2018; Wu et al., 2020). Hew and Lo (2018) also found an increase in learner performance who attended a blended learning offering when compared to just the traditional in-person learning.

Using the blended learning approach has shown to be an effective method to provide staff development. Results revealed that nurses were able to use the tools, resources, and lessons learned has prepared them well for the role. Similar results were found in a study with Kang and Kim (2021) that revealed the use of blended learning to provide education in a nursing program demonstrated enhanced knowledge, problem solving abilities, and learning satisfaction. Although this was not a staff development offering, the participants had the same results. These results verify the importance of blended learning course for preparing nurse for their nurse preceptor roles (Billings et al., 2006; McCutcheon, et al., 2018; Santiago, 2017; Wu et al., 2020; Wu et al, 2022).

Limitations of the Study

A few limitations were identified with this study that may have potential to impact the study results. First it was identified that the participants to this study, while recommended by their leadership team, ultimately had to volunteer to participate. All the participants were very motivated and ready to participate in a blended learning course. Going forward there may be participants to the course that are not as motivated to use a blended learning format that can then

impact the success of the program. For future courses, careful evaluation and follow up of participants will be instrumental to help these participants to be successful.

Second, while all of the participants were volunteers, participation for this study may have been influenced by the current preceptor organizational requirement. Current guidelines state that nursing staff who precept for the organization's new staff hires are required to attend a formal preceptor development course in order to receive their preceptor pay. However, at the time of this study, the participants had the ability to choose whether they wanted to attend the traditional course or participate in the blended learning course.

Another limitation that is worth mentioning is that my current role in the organization is the administrative director for the staff development department that is responsible for the creation and management of the preceptor course as well as all professional development created for the organization staff. In my role, I often discuss development concerns with the managers and leaders through organization. There could be concern that, with my position, participants might consider providing the information that they think we want to hear instead of their true feelings. While this could potentially create bias towards the feedback provided by the staff, I am not certain that those who participated recognized my position. The organization is big and the participants interact with so many different people, therefore, I do not think that this interfered with the data received. Each in-person course started with reassurance that what was discussed or shared during the course would stay confidential and would not be shared with anyone else. I also explained that anything that might be included in the study reports would be de-identified so that it could not be traced back to any one participant. I felt that the participants openly shared during class and during the interviews, not appearing to hold back information.

Implications for Staff Development

This study was intended to help address the gap in literature involving the use of blended learning for staff development in healthcare professional development. While this study focused on using blended learning for preceptor development, the use of blended learning can be applied to many staff development initiatives. Participants found the blended learning method easy to navigate. They were able to complete the modules in a way that they preferred, most being able to do the online learning while at work since the modules were short and quick to complete. Only two of the participants were not able to attend the in-class portion of the blended learning; this is because of the limited offerings based on it being a pilot program. Typical staff development in person courses would be scheduled for ongoing education being scheduled on a variety of dates and times to meet the needs of the learner. Even with the pilot, there was one clinical area that was able to negotiate coverage for different days by spreading out when their staff participated in the pilot.

The course also provided an opportunity for the participants to apply what they learned in a safe simulated space. This supported the application and development of critical thinking skills that is a goal of staff development. They were able to learn by not only applying what they had learned through the modules, but also were able to observe how the other participants handled their scenarios. This allowed for broadening of their knowledge base and a better understanding that there is more than one way to handle a situation. The small groups for the in-person course helped to facilitate group discussion that provided a great opportunity to network and talk about the struggles that they have witnessed and how they would handle difficult scenarios if they were in the same situation. Having small groups is beneficial for the learner, but can make it more challenging for the facilitator with the large groups that might require the education. Finding a

number that allows for adequate discussion, but helps to be efficient with facilitator time will be essential.

Using blended learning for other staff development needs can be beneficial, especially when wanting to build a strong foundation of knowledge and then have them be able to practice applying their knowledge in a safe environment. For example, courses that are around decompensating patients or caring for a patient who is having an adverse reaction would be great courses to use this format. This allows for time to apply what they have learned and correct any misconceptions or address challenges before they may have to use that skill on a real patient. Plans need to be in place for the process to determine which staff development should use blended learning compared to other teaching methods, such as just a module, so that the teaching modality better meets the educational need. For example, if there is a policy update and small changes have occurred with the process, a blended learning class may not be as effective as just a module or an information sheet.

Creating the blended learning course is something that should be carefully planned. For this study, we had focus groups to help identify what it was that our preceptors needed to know and what were some common challenges that are recognized with the preceptors. This helped determine the best content to be as helpful as able with the course. Both the online modules and the scenarios for the face-to-face course were created from the information identified through the focus groups. Modules were purposefully kept to no more than 15–20 min so that the participants could complete on their break or during down time. Modules were also created to be interactive and provide learning checks throughout to help facilitate the learning process. Keeping modules interactive can increase learner satisfaction and increase knowledge retention.

There were a couple in-person scenarios that were developed based on the feedback from the group. It will be important that when doing staff development to do frequent reviews to ensure that the content being covered is current and there are no gaps. Updates and adjustments should occur as needed to keep the course relevant.

The blended learning course showed that it can create confidence and build competency for staff to be more effective in the complex environments that they work. This format is able to help develop the critical thinking skills needed for the participants to be able to adapt how they handle various situations based on what facts they are given. It is not always going to follow a textbook; the participants need to be able to adjust their thinking based on what they have. Having a better idea of what they are able to do and how to do it can build that needed confidence for them to be successful. Even identifying what they do not know can be just as helpful, as this provides them with an opportunity to seek out the answers so that they are ready to handle that situation in the future.

Recommendation for Future Research

Further research on using blended learning methods for staff development should occur to have a better understanding of the limitations that this method may have. As mentioned previously, the participants in this study were highly motivated and were able to attend small group in-person courses. Additional research can help determine if this format would be as effective for learners who are slow to participate or do not take the online modules as seriously as this study group did. Also, review of using blended learning for larger groups would have to be reviewed to gain a better understanding of how a large group may impact the ability of the group to apply their knowledge and then have an opportunity to debrief and discuss what was

learned. Strategies to evaluate large group in-person courses can provide the ability of using blended learning more frequently for more staff development opportunities.

Additional studies using blended learning for a variety of topics should also be considered. As recognized through the focus group discussion, there may be some courses that are more appropriate for a blended learning approach. Identifying additional topics to address may be helpful to determine which courses may be more appropriate for blended learning than others.

A longitudinal study may be beneficial to determine if the participants to a blended learning course are able to retain and build knowledge over time compared to a traditional course approach. While this study showed that the participants had perceived confidence in their role, additional follow up can demonstrate if this method truly builds a strong foundation that the learner can continue to develop. This can be done with a six-month to one year post course re-assessment to determine if knowledge remained and potentially a case study to define how they would handle a complex situation.

Conclusion

This study provides additional support for the limited research that is currently available. Blended learning can be an effective method to provide a variety of topics in healthcare staff development (Ashurst, 2011; Benson, 2004; Kang & Kim, 2021). Most studies are through academia and not healthcare staff development. The findings for this study demonstrate that a blended learning staff development opportunity can provide the nurse preceptors with the knowledge and support that they need in a manner that supports their preference for how to participate in their continuing education (Clark, 2002; Rowe et al., 2012; Santiago, 2017).

As learned in this study, thoughtfulness will need to be put into the development and execution of the blended learning offering. Online learning, or learning modules, should be developed to be interactive, short in duration, and able to be completed by the learner during down time. The modules should focus on the foundational components in a way that is easy to navigate. Ability to be able to access and re-access to be reviewed as needed by the learner is important. The in-person component should be offered at a variety of dates and times, once again to try to overcome the challenges of complex schedules and short staffing.

Participants recognized that the blended learning course gave them an opportunity to learn in a way that helped them to develop a strong foundation, through online modules, and then develop the critical thinking skills in person. With the current staffing challenges that healthcare organizations are facing, using blended learning is a method that allows the participant to do part of their learning on their own and then a shorter in-person time to apply that knowledge. Using the few current studies that have been published, healthcare educators should consider using blended learning approach to develop the confidence and competency that is needed for nursing staff to be successful (Billings et al., 2006; McCutcheon, et al., 2018; Santiago, 2017; Tebbs et al., 2021; Wu et al., 2020; Wu et al, 2022).

Nurses were able to demonstrate that they were able to gain knowledge, increased ability to problem solve, and were happy with the course as a whole. This is similar to the results of the study by Kang & Kim (2021) that used blended learning for undergraduate formal health education. The pre course and post course assessments further provided evidence that the blended learning format can increase knowledge (Liu et al, 2016) and the blended learning course can develop critical thinking skills (Lee et al., 2017; Swaminathan et al., 2020).

Using blended learning is a format that was easy for the nurses to navigate and had minimal issues with ability to complete the course. Historically, technology seemed to be a factor. However, with improvements to learning platforms this seems to have been corrected allowing the modules to be more accessible and convenient for learners. Participants were able to complete the course at a time that was most convenient to them and their schedules (Ashurst, 2011; Benson, 2004; Boyer, 1999; Haggerty et al., 2012; Rouse, 2000; Santiago, 2017).

Healthcare educators should consider blended learning a viable option for ongoing staff development. It is a method that meets the needs of the learner, educator, and organization. Blended learning helps to overcome the challenges with schedules and staffing that many traditional staff development offerings are limited in their flexibility. Blended learning can provide the needed method for educators to be able to provide the staff development needed to keep the staff up to date to provide safe patient care.

Reflection

This study was very helpful for not only me and my staff, but I feel it will also help other staff development departments. Most healthcare organizations face the same challenges and finding best practices is so important for continued success. Knowing that blended learning is a viable option provides a great resource for educators.

While I still do not know everything, I do have a better idea of what it is that I do not know. It is hard at times to get constructive feedback, but I do appreciate all the guidance and recommendations to improve my work. I would strongly recommend to anyone to take advantage of those experts that we get to interact with and really take an opportunity to develop and learn. Seek out and develop those relationships, they were helpful for the whole process.

The one big thing that I think I would have done differently is around the development of my research questions. While they seemed to make perfect sense when I developed them, what I was thinking I was asking did not really come through in the questions entirety. It was confusing to more than one person as to what was it that I was attempting to ask. I would have articulated clearer and earlier as to what I was attempting to discover to ensure that the questions were appropriate and made sense.

I feel my data collection methods were solid, however I do know now that I should have had a more discussions with the researcher to help with the data analysis process. I feel that I ended up doing rework that could have been prevented had I a better relationship with the researcher. I got really good feedback and suggestions, it would have been better if I had discussed sooner.

Finally, I cannot stress enough the importance of using the writing resources. The writing groups provided such great feedback and helped to have a better understanding of what did not flow right or if there was something that was confusing. Also using a formatter or an editor all along can also help provide a better writing process. It is easier to build on a strong document instead of waiting until the end and then try to fix everything. You can have the best study and wonderful results, but if you cannot articulate it in your writings, it is hard to be able to share that.

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APPENDIX A

Verbal Consent for Interviews

Study: NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE PRECEPTOR DEVELOPMENT

This is a quality improvement project to understand your perceptions of newly developed blended-learning preceptor development program you recently completed.

You will be one of up to 20 participants should you choose to participate. By agreeing to participate, you will complete this interview via Zoom. This interview will last no longer than 1 hour. This interview will be recorded for data collection, transcription, and analysis purposes.

Although your responses will be recorded, your name will not appear in any published documents. The recording will be deleted after transcription has occurred. There are minimal risks associated with participating in this study, which may include: concerns of vulnerability when sharing your experiences. We will protect your confidentiality by not sharing your participation in the interview.

I will provide you a copy of this letter for your records. If you have any questions regarding the research, contact Katrina Green at (919) 919-684-3944 or Deborah 'hutch' Allen at 919-883-7002 (cell) or 919-681-4719 (office). If you have any questions regarding your rights as a research subject, please contact the IRB Administrator of the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.

Your participation in the interview is voluntary. You may refuse to participate, or stop participating in the interview at any time with no penalty. By participating in the interview, you are indicating your consent to participate.

APPENDIX B

Verbal Consent for Focus Group

Study: NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE PRECEPTOR DEVELOPMENT

This is a quality improvement project to understand your perceptions of newly developed blended-learning preceptor development program you recently completed.

You will be one of up to 20 participants should you choose to participate. By agreeing to participate, you will complete a focus group session via Zoom. This focus group will last no longer than 1 hour. This session will be recorded for data collection, transcription, and analysis purposes.

Although your responses will be recorded, your name will not appear in any published documents. The recording will be deleted after transcription has occurred. There are minimal risks associated with participating in this study, which may include: concerns of vulnerability when sharing your experiences. We will protect your confidentiality by not sharing your participation in the interview process.

I will provide you a copy of this letter for your records. If you have any questions regarding the research, contact Katrina Green at (919) 919-684-3944 or Deborah 'hutch' Allen at 919-883-7002 (cell) or 919-681-4719 (office). If you have any questions regarding your rights as a research subject, please contact the IRB Administrator of the Duke University Health System Institutional Review Board (IRB) Office at (919) 668-5111.

Your participation in the focus group session is voluntary. You may refuse to participate, or stop participating in the session at any time with no penalty. By participating in the session, you are indicating your consent to participate.

APPENDIX C

Preceptor Pre-Assessment

On a scale of 1–5 (One being no familiarity and 5 I feel very comfortable) rate how you feel about the following statements:

(Likert Scale, 0 points, 1 attempt permitted)

Statement	No familiarity	I have been exposed to this, but not sure I use it	Haven't had a lot of experience, but I think I could do it	I have had a few very successful opportunities doing this	I am very comfortable doing this
I feel that I can give valuable feedback to new nurse hires.					
I am able to use the orientation tools and resources to help guide orientation.					
I can incorporate learning theories into my orientation plan.					
I am able to develop critically thinking skills in a new hire.					
I can incorporate the married state process for effective orientation.					

You are orienting a new hire today– put the following in order as to how you would prepare for your day:

(Ranking Drop-down, 0 points, 1 attempt permitted)

Choice
Determine which week of orientation this is for your new hire and what the milestones are.
Review what competencies are outstanding to be validated, based on the orientees milestones and map.
Discuss with orientee the goal for today and what their personal goals are going to be.
Develop a plan for accomplishing the known patient care needs.
Provide feedback to the orientee about the care they provided and what will be some goals for next shift.

Please share with us the one thing that you are hoping to learn from this course.

(Essay, 0 points, 1 attempt permitted)

APPENDIX D

Preceptor Post-Assessment

On a scale of 1-5 (One being no familiarity and 5 I feel very comfortable) rate how you feel about the following statements:

(Likert Scale, 0 points, 1 attempt permitted)

Statement	No familiarity	I have been exposed to this, but not sure I use it	Haven't had a lot of experience, but I think I could do it	I have had a few very successful opportunities doing this	I am very comfortable doing this
I feel that I can give valuable feedback to new nurse hires.					
I am able to use the orientation tools and resources to help guide orientation.					
I can incorporate learning theories into my orientation plan.					
I am able to develop critically thinking skills in a new hire.					
I can incorporate the married state process for effective orientation.					

You are orienting a new hire today—put the following in order as to how you would prepare for your day:

(Ranking Drop-down, 0 points, 1 attempt permitted)

Choice
Determine which week of orientation this is for your new hire and what the milestones are.
Review what competencies are outstanding to be validated, based on the orientee's milestones and map.
Discuss with orientee the goal for today and what their personal goals are going to be.
Develop a plan for accomplishing the known patient care needs.
Provide feedback to the orientee about the care they provided and what will be some goals for next shift.

Please share with us what would have been helpful to include in training that would have helped you to begin your role:

(Essay, 0 points, 1 attempt permitted)

APPENDIX E

OBSERVATION PROTOCOL

This observation protocol can help provide guidance when collecting data during the simulation experiences to gain a better understanding of how the nurse preceptor is able to provide their knowledge in a simulated experience.

Demonstration of....	Was this observed?	Were they implementing/handling situation appropriately?	NOTES:
Use of tools	YES NO	YES NO	
Use of resources	YES NO	YES NO	
Confidence in handling situation	YES NO	YES NO	
Ask for help appropriately	YES NO	YES NO	
Good process for conflict management	YES NO	YES NO	
Able to apply adult learning theory	YES NO	YES NO	
Able to apply married state	YES NO	YES NO	
Able to apply Benner's model	YES NO	YES NO	
Is able to build team/ strong team work skills, good team dynamics	YES NO	YES NO	
Was approachable and kind	YES NO	YES NO	

Additional Observations to Note:

APPENDIX F

INTERVIEW 1 PROTOCOL–WITHIN ONE WEEK OF COURSE COMPLETION

Interview Protocol #1 (*within one week of completion of course*): NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE PRECEPTOR DEVELOPMENT

Introductory Protocol

To facilitate our note-taking, we would like to audio record our conversations today. For your information, only researchers on the project will be privy to the recordings which will be deleted after they are transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this consent states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm. Thank you for your agreeing to participate.

We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you to push ahead and complete this line of questioning.

Introduction

My name is Katrina Green and I am a doctoral candidate in the EdD Leadership Program with a focus on LDT at the University of North Carolina Charlotte. I have been a nurse for 23 years with my current focus on the professional development of nurses. I am interested in implementing blended learning for staff development, focusing on the preceptor development program. You have been asked to participate in this study because you meet the following criteria:

- Have not attended formal preceptor training through Duke University Health System or at a previous work location

Interviewee Background (*get to know each other a little*)

- How long have you been a nurse?
- Please share with me how long have you been on your current unit?
- How long have you worked for DUHS?
- What is your highest degree and do you currently hold any certifications?

Role of a Preceptor (*Would like to know if the interviewee has a desire to precept, or was this something assigned to the nurse by the nurse leader. May influence how preceptor views the classes*)

- What interests you about the role of the preceptor?

Experiences with Course (*What are the experiences of nurse preceptors who attended the blended learning preceptor development course?*)

- Can you provide me with details of what you learned in the course?
- What are your perceptions of using a blended learning format for this course?
- What was the best aspect and the most challenging aspect of attending this course?

Prepared to Preceptor (*How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?*)

- As a new preceptor, how has this course prepared you to precept new staff?
- When thinking about the challenges of being a preceptor, how do you think this class has prepared you to serve in the role?
- What content was not covered in class that you are concerned about going forward in this role?
- After attending this course, what would be your orientation plan when working with new hires?
- Can you tell me what resources are in place to help support you in your role?

End of interview

- Is there anything that you want to share with me that we have not already addressed in the previous questions?

Thank you for your time. If additional questions arise, will it be okay to contact you for additional information or clarity?

APPENDIX G

INTERVIEW 2 PROTOCOL–2 MONTHS AFTER PROGRAM

Interview Protocol #2 *(two months after the completion of first interview)*: NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE PRECEPTOR DEVELOPMENT

Introductory Protocol

To facilitate our note-taking, we would like to audio record our conversations today. For your information, only researchers on the project will be privy to the recordings which will be deleted after they are transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this consent states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) we do not intend to inflict any harm. Thank you for your agreeing to participate.

We have planned this interview to last no longer than one hour. During this time, we have several questions that we would like to cover. If time begins to run short, it may be necessary to interrupt you to push ahead and complete this line of questioning.

Introduction

As a reminder, my name is Katrina Green and I am a doctoral candidate in the EdD Leadership Program with a focus on LDT at the University of North Carolina Charlotte. I have been a nurse for 23 years with my current focus on the professional development of nurses. I am interested in implementing blended learning for staff development, focusing on the preceptor development program. You have been asked to participate in this study because you meet the following criteria:

- Have not attended formal preceptor training through Duke University Health System or at a previous work location

Role of a Preceptor: *(How do nurses who attended the blended learning course describe their ability to be able to precept a new hire?)*

Now that it has been 2 months since you attended the preceptor development course, I wanted to check in with you to see how your precepting is going.

- How many new hires have you precepted since attending the preceptor course?
- Can you tell me what your orientation plan was with that new hire-how did you progress training, how did you use the resources?
- How were you able to use the knowledge gained during the class in your role as precepting?
- What was your biggest challenge with orienting a new hire?
- What was a situation where you felt that you weren't prepared to handle the situation and what resources did you use to work through it?
- What was missing from the foundation class that would have been helpful for you to have?

End of interview

- Is there anything that you want to share with me that we have not already addressed in the previous questions?

Thank you for your time. If additional questions arise, will it be okay to contact you for additional information or clarity?

APPENDIX H

Focus Group Protocol: NURSES' EXPERIENCES IN A BLENDED LEARNING COURSE FOR NURSE PRECEPTOR DEVELOPMENT

Review Verbal Consent

Interviewee Background

Let's get to know each other so we gain perspective of our preceptor experiences

- Please provide a brief 1-minute introduction by stating your first/preferred name and your work area

Experiences with Course

What are the experiences of nurse preceptors who attended the blended learning preceptor development course?

- During the interviews we performed recently, it was shared that there were common themes regarding what you learned in the preceptor course (*provide the top 2-3 common themes regarding "learned in the course"*). Now that you have had additional time to consider the details, is there additional information that you would like to share?
 - Do you agree with the consensus – if so, why?
 - If not, what were your thoughts?
- We also learned that there were a few challenges within the program (*review top 2-3 challenges of course*). What additional information can you provide that either support or counter these challenges.
 - Have you thought of any additional challenges? If so, what are they?

Prepared to Preceptor

How do nurse preceptors perceive their level of preparedness in being able to successfully train and onboard new nursing staff after attendance in the blended learning preceptor development course?

- Many of the participants shared that the course helped prepare them (*share the top 2-3 themes*).
 - What additional information can you share that would support these themes?
 - Is there anything that you can think of that counters this?
- One of the questions that I asked during the interview was what content was not covered that you thought would be needed. The group shared these thoughts (*provide top 2-3 themes*).
 - Are there any additional thoughts you have about the content?
 - Can you identify any content covered, but not in a manner that you felt to be helpful?
- During the interviews, we talked about resources. What resources have you accessed since completing the course?
 - Are there resources that you are having trouble finding?

End of focus group session

- Is there anything that you want to share with me that we have not already addressed in the previous questions?

Thank you for your time. If additional questions arise, will it be okay to contact you for additional information or clarity? Yes No

APPENDIX I

In person role-play scenarios. Guide for setting up and providing details for participant to work through situations that may occur during their role as a preceptor. Use observation guide as a tool to record how participant applied learned knowledge.

Scenario	Script	Supplies	Target
1. Alaris	O: rushes to program and mis-programs, doesn't unclamp tubing, rushes around and leaves	Alaris pump, bag/label, mannequin, flush, ETOH pad	Errors with pump, talking through how to do a skill
2. Prioritizing Care	O: given 4 patients (Pain, Difficulty breathing, lab draw, assistance to bathroom). Which order to start.	Just report	Time managing/Prioritizing care
3. Ping Ponging	O: jumping from one task to the next and not completing.	Blood tubes, patient supplies, foley, etc...	Not focusing
4. Medication Administration	O: administering medications and skips steps	Medication, scanner, "chart,"	Competency Validation –can preceptor address what was wrong, why, and how to fix
5. Patient with PEA	O: goes in to care for patient and has hard time finding pulse, but monitor shows brady. Orienteer just allows patient to rest.	Mannequin, Monitor,	Not recognizing symptoms
6. Confused and Agitated patient	O: nervous, not comfortable caring for this patient	Mannequin, meds (maybe?)	How to work with BH patients
7. Working with experience orientee	O: everything "where I used to work" or "this is how we did it"		How to work with experienced staff who try to do things the previous organization way
8. Working through a critical situation	O: focusing on immediate and not big picture (critical thinking)		How to help improve critical thinking situation

<ul style="list-style-type: none"> • Mannequin • Monitor • Blood tubes • Foley bag 	<ul style="list-style-type: none"> • Cup for pills • Report summary for the discussion • Pills 	<ul style="list-style-type: none"> • Syringe • IV bag (Wonder Drug) • Etoh Wipes • Cup for water 	<ul style="list-style-type: none"> • Med Scanner • Arm Band for Patient
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Supplies needed:

SCENARIO 1 BACKGROUND: WEEK _____

You and your orientee are going into the patient's room to program administration of "wonder drug." The orientee has pulled up the order and it reads that the medication is for Mr. Jones, MRN 12345. Wonder drug to be given as a continuous infusion of 1mg/hour continuous.

O: Rush through, errors with pump, didn't flush, etc...

P: looking to see if the preceptor is able to identify that the pump errors, the rushing, etc...and how it can be addressed

SCENARIO 2 BACKGROUND: WEEK _____

You have 4 patients that you are currently working with. Patient 1 is a 46 yo man who is reporting pain 7 out of 10 and appears to be very uncomfortable. Patient 2 is a 32 yo female who has an history of asthma who now has c/o flu like symptoms and is having difficulty catching her breath. Patient 3 is a 26 yo man who needs to have a complete blood count and chemical panel drawn prior to them being able to go home and the last patient is a 82 female who is unsteady on their feet and states she really has to use the bathroom.

O: Decides to help old lady to bathroom, give pain meds, etc... doing the difficulty breathing last so that she can spend extra time with them.

P: Have the orientee rationalize why they chose the order and help to guide their critical thinking

SCENARIO 3 BACKGROUND: WEEK _____

Your patient has a lot going on. The orientee has just drawn labs, labeled them and needs to send them to the lab

O: Very disorganized care, jumping from one issue to the other all while the patients baseline vitals are dropping and patient not doing well

P: Try to get orientee to refocus and determine how to help them organize care, follow through

SCENARIO 4 BACKGROUND: WEEK _____

The patient is due to receive their daily meds. The orientee has reviewed the meds at the med cart and enters the room to give.

O: Rushing to give meds, doesn't follow policy. Maybe give wrong meds (OOPS I pulled for Ms. Smith)

P: Can they recognize that the process is wrong and what should be done. Do we fill out an SRS?

SCENARIO 5 BACKGROUND: WEEK _____

You and your orientee are rounding and go in to check on patient who appears to be sleeping.

O: can't really find a pulse, but monitor is showing bradycardia. Orientee straightens blankets and tells preceptor that the patient is comfortable and sleeping so soundly that he won't wake up.

P: questions about what is going on with patient-recognize that no pulse, no breathing, etc...
Patient in PEA.

SCENARIO 6 BACKGROUND: WEEK _____

Your patient is confused and agitated and seems to be getting more and more worked up.

O: I am nervous and scared to take care of this patient

P: help the orientee work through this situation

SCENARIO 7 BACKGROUND: WEEK _____

Your new orientee is experienced from an organization outside of DUHS.

O: respond to everything “how my other organization did it” or “how I do this is”

P: redirect and keep them on track for DUHS

SCENARIO 8 BACKGROUND: WEEK _____

Your orientee just initiated the first unit of two PRBCs that were ordered for the patient. Within the first 5 minutes the patient starts to complain of some itching and SOB.

O: Focus on putting oxygen and making patient comfortable.

P: work through r/o transfusion reaction.