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## An Educational Module on a Formalized CRNA Preceptorship Workshop to Enhance Teaching and Communication Skills

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An Educational Module on a Formalized CRNA Preceptorship Workshop to Enhance Teaching and Communication Skills

A DNP Project Presented to the Faculty of the  
Nicole Wertheim College of Nursing and Health Sciences

Florida International University

In partial fulfillment of the requirements  
For the Degree of Doctor of Nursing Practice

By

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## Abstract

### Background/Purpose/Question

*CRNA preceptors have minimal exposure to adult learning principles and educational theory and have not received instruction related to precepting. The clinical experience can have a direct impact on student development in self-awareness, critical thinking skills, and professionalism. In order to educate and train students, preceptors need to be knowledgeable about the various methods of supervision and learning processes. The goal of a formalized preceptor training program is to enhance existing precepting skills of experienced providers by providing evidence-based teaching principles. This evidenced based practice project aims to answer: will a formalized preceptorship workshop increase the knowledge, perception and attitude of the CRNA preceptor on teaching and learning strategies, effective communication and a positive preceptor-preceptee relationship?*

### Methods/Evidence Search

*The databases utilized in the search include: Pubmed, The Cumulative Index to Nursing and Allied Health Literature (CINAHL) and ProQuest. Inclusion criteria for the chosen studies include, studies that are written in English with full-text availability. All studies reviewed are related to a preceptorship within nursing or nurse anesthesia. Exclusion criteria includes studies greater than 20 years old and studies that are based on precepting in a different job field. The search keywords: preceptor, preceptee, preceptorship, nursing, nurse anesthesia, student registered nurse anesthesia, education and training were entered in varying combinations throughout the search process. Thirteen articles were chosen for this review based on the inclusion and exclusion criteria. The study designs of the articles are mixed methods studies, qualitative studies, and descriptive studies.*

### Synthesis of Literature/Results/Discussion

*There are four key themes formulated from the review of the articles. The first theme assesses the preceptors' perception of their role and their needs. Bengtsson and Carlson found that preceptors want concrete tools on effective teaching of students and an understanding of preceptorship. The second and third themes include teaching strategies and learning needs. Meyers et al evaluated the perception of new RNs and found that learning occurs from receiving feedback, having a nurturing relationship with their preceptor and a positive orientation environment. A study by Forneris and Peden-McAlpine determined that preceptors felt that their precepting skills were enhanced after the initiation of a contextual learning intervention. Effective communication is the fourth theme and was ranked by SRNAS as highly important. A preceptor should be knowledgeable in effective adult teaching strategies, have an understanding of the learning needs of students and have effective communication skills. It was found that factors that negatively effect students' education are a disempowering preceptor-student relationship, and not utilizing teaching strategies. Whether or not a preceptor training program increases preceptors' knowledge of teaching and learning strategies needs further explanation. Future research should focus on screening of preceptors, preparation and reward for preceptors.*

## **Conclusion/Recommendations for Practice**

*The role of the preceptor is to support the student during the transition from the classroom into clinical practice through enhancement of critical thinking and problem-solving skills. Preceptors are expected to provide an effective learning environment and facilitate a constructive clinical learning experience. An effective preceptor should possess the skills to provide constructive feedback, have knowledge about various teaching and learning principles and be able to evaluate student outcomes. The themes discussed in the articles can be used in the development of a formalized preceptorship workshop to help improve the preceptorship experience and assist in the preparation of preceptors. The standardization of a preceptor program will help new and experienced preceptors effectively transfer high quality patient care and patient safety skills to SRNAs.*

## Introduction

### Problem Identification

Certified registered nurse anesthetists (CRNAs) and physician anesthesiologists are responsible for precepting student registered nurse anesthetists (SRNAs) throughout their clinical experience.<sup>1</sup> A preceptor supports the student in the transition from the classroom setting into clinical practice by facilitating the development of knowledge and clinical skills and the enhancement of critical thinking and problem-solving skills.<sup>2</sup> The problem arises because most CRNAs have never received guidance related to their role as a preceptor, as well as, little practical experience in educational theory and adult learning principles.<sup>1</sup>

A study conducted by Elisha and Rutledge<sup>1</sup> described the clinical experiences and perceptions of SRNAs.<sup>1</sup> This study revealed that the dissatisfying factors reported by students included inconsistent feedback and evaluation, lack of interest from the preceptor, poor preceptor teaching skills, and inadequate or unprofessional communication including intimidation and harassment.<sup>1</sup> SRNAs reported that future improvement should address the lack of professional and constructive communication during instruction.<sup>1</sup> CRNAs have minimal time for preparation, with little to no support from administrators, yet are expected to help educate SRNAs without receiving training in the preceptor role themselves.<sup>1</sup> In a study conducted by McCarthy and Murphy, the majority of preceptors found the preceptor role to be stressful and burdensome, and did not feel adequately supported.<sup>2</sup> It is evident that inadequate time has been allotted to preceptor orientation and training; however, the formal preparation of preceptors has been shown to positively impact student learning and contributes to preceptors' professional growth.<sup>3</sup> The goal of this project is to increase the knowledge, perception and attitude of the CRNA preceptor

in terms of effective teaching and learning strategies, effective communication and a positive preceptor-preceptee relationship through a formalized preceptor workshop.

## **Background**

The clinical experience can have a direct impact on student development in self-awareness, critical thinking skills, psychomotor proficiency and professionalism.<sup>1</sup> Many studies have found that new nurses suffer from anxiety, stress, uncertainty and lack of confidence.<sup>4</sup> Preceptors are viewed as a key component in the growth and academic support of students by providing a positive clinical learning environment that can help students develop confidence and assist in the application of knowledge to practice.<sup>4</sup>

A preceptor is considered an experienced practitioner who instructs, supervises and serves as a role model for a student over a set period of time.<sup>3</sup> A preceptorship is a one-on-one reality based clinical experience where a student is taught by an experienced practitioner.<sup>3</sup> An effective preceptor should be able to apply role-modeling theory, provide constructive feedback, have knowledge about various teaching and learning principles and be able to evaluate student outcomes.<sup>3</sup> Research studies prove that new nurses trained by preceptors have a noticeably greater specialized knowledge and skills set, enhanced communication skills, provide greater quality of nursing care with an increase in patient satisfaction and show an increase in job satisfaction and a lower turnover rate.<sup>5</sup> The quality of learning in a preceptorship was examined and it was determined that inadequate communication was the root cause for most of the learner's perceived mistreatment and dissatisfaction.<sup>1</sup> According to Kanter's model of structural determinants of behavior in organizations, there would be an increase in the commitment to the preceptor role if preceptors have access to power such as, information, support, and resources



and access to opportunity such as, the chance to increase competence and skills, advancement, recognition of skills and rewards.<sup>2</sup>

The theory-practice gap is the idea that knowledge gained in the classroom does not translate easily into the practice.<sup>6</sup> The gap is created because there is a difference between the social and physical setting of universities and the clinical setting where knowledge is practiced.<sup>6</sup> The task of the preceptor is to help the student apply the classroom knowledge to actual clinical situations with the goal of narrowing the theory-practice gap. SRNAs are supervised through a progression of difficulty and responsibility in the clinical setting.<sup>7</sup> The responsibility of this progression is both on the clinical educator for the university and the preceptor in the clinical practice field.<sup>7</sup> Despite this responsibility, nurse anesthesia preceptors rarely have formal clinical supervision competence.<sup>7</sup>

A survey filled out by SRNAs and CRNAs regarding positive and negative learning experiences concluded that preceptors viewed positive learning experiences as when the student is motivated to learn and has the ability to correlate and apply didactic material to the clinical situation.<sup>8</sup> Students identified negative learning experiences when the preceptor fails to offer support when a problem occurs or when the preceptor berated a student's novice judgement.<sup>8</sup> Students feel that their learning outcomes and progression in the clinical setting is highly dependable on their relationship and interaction with their preceptor.<sup>7</sup> SRNAs reported that 'pimping' and series questioning were used significantly more than preceptors reported.<sup>9</sup> This discrepancy may be due to CRNAs not being fully aware that they incorporate these techniques, which suggests a need for education on learning methods.<sup>9</sup> Pimping is a technique which involves a series of in-depth questions which can increase stress for the SRNA in an already stressful clinical environment.<sup>9</sup> The preparation and support of experienced providers to become

preceptors is imperative in the clinical learning experience in order to meet the students' learning needs and outcomes.

### **Scope of the Problem**

There is a lack of education in preceptorship which leads to a negative learning environment for the student in the clinical setting. Patients, families and the workplace depend on providers prepared to competently provide safe and appropriate quality of care.<sup>3</sup> Preparing students for role transition from students to providers who can responsibly provide care has been a workplace challenge.<sup>3</sup> All around the world, educators are using staff nurses as preceptors and view them as an essential strategy to address programmatic and faculty limitations.<sup>3</sup> Preceptors are meant to help mitigate the reality shock of new graduates stepping out into the work field by helping to bridge the gap between academia and clinical practice.<sup>3</sup> In a survey based on CRNAs perception of precepting, CRNA preceptors believed that their communication with students was highly effective, provided constructive feedback on a regular basis and provided an environment that promotes learning; however, this was contradicted by what the students reported.<sup>1</sup> The discrepancy is due to a situation in which a preceptor believes that he or she is modeling effective communication and the student perceives the information differently.<sup>1</sup> Training on proper communication skills and teaching strategies can help the preceptor provide teaching in a way that is perceived accurately by the student. Formal preceptor education programs have been found to improve student outcomes and enhance teaching behaviors in preceptors.<sup>1</sup>

The high work load in the perioperative setting, and the unpredictable scenarios lead to a variety of challenges for students and preceptors.<sup>7</sup> In order to ensure safe care, the preceptor has the responsibility of introducing the student to technical skills, and non technical skills that include the collaboration with interdisciplinary teams during surgery, situational awareness, and

the practice of clear and closed loop communication to prevent unwanted incidents.<sup>10</sup> In order to educate and train students to have the skills to cope in the high-tech perioperative environment that is constantly changing, preceptors need to be knowledgeable about the various methods of supervision and learning processes that are suited to perioperative care.<sup>10</sup>

### **Consequences of the Problem**

The role of the preceptor is multifaceted and requires extensive support, and ongoing education and monitoring to ensure that the students learning outcomes are being met.<sup>3</sup> Nurses without interest in the preceptor role can have a detrimental effect on newly graduated nurses' development.<sup>11</sup> Preceptors who are inconsistent in their teaching or less experienced can lead to frustration and negativity in the student.<sup>11</sup> A study by Elisha and Rutledge<sup>1</sup> that included 2,673 SRNAs, reported that 69% of the participants had experienced some form of verbal abuse in the clinical setting. The main perpetrators of the verbal abuse were predominately the CRNA preceptor.<sup>1</sup> How the student perceives their clinical preceptors teaching style and attitude is a major factor that causes anxiety and affects the students ability to learn and perform safely and effectively.<sup>8</sup> The breakdown in communication between the preceptor and student can inhibit learning which can make human error more likely to occur and therefore, leads to an increased risk for the patient.<sup>1</sup> Cohesion between the preceptor and student leads to improved job satisfaction and greater patient satisfaction.<sup>11</sup> This means that an effort directed towards creating a successful preceptorship can contribute to nursing retention and improved quality of care.<sup>11</sup>

Inexperience and inability to deal with stressful or complicated situations has been shown to result in a 55%-61% turnover rate of new nurses in the first year of employment.<sup>5</sup> After the initiation of a preceptorship program, the turnover rate decreased by 46% from the previous year

and the turnover cost saved was \$186,102 during the six-month study period.<sup>5</sup> This proves that a well-designed preceptorship program could help to decrease the turnover rate among new staff.<sup>5</sup>

### **Knowledge Gaps**

Experts in healthcare education believe that preceptors should partake in formalized education to improve their teaching abilities as facilitators, yet there are currently no studies in the nurse anesthesia literature that discusses the effects of a formalized educational program centered around CRNAs.<sup>12</sup> The literature on nursing preceptorship evaluates preceptor training programs and participant satisfaction and the requirements of a successful preceptor training program for the transition of new nurses.<sup>13</sup> Whether or not a preceptor training program increases preceptors' knowledge of teaching and learning strategies needs further explanation.<sup>13</sup> Research studies have shown that problems arise when a preceptor is chosen solely because of availability and not because they have the appropriate skills for the roll.<sup>4</sup> It is suggested that future research should focus on screening of preceptors, and preparation and reward for preceptors.<sup>4</sup> A student that has completed an effective preceptorship will enter practice with more clinical experience and a solid knowledge base, therefore, supporting the notion that the selection of preceptors is critical to the success of a preceptorship.<sup>3</sup> Clinical preceptors should be carefully selected and oriented to ensure quality education of nursing students; however, there is little substantive data about the criteria for the selection of the clinical preceptor .<sup>3</sup>

### **Proposal Solution**

A survey filled about by CRNA preceptors at the University of Pittsburgh reported that only 62% of the CRNAs felt that training in preceptorship would be beneficial to them.<sup>9</sup> This is most likely due to the fact that many of the CRNAs have been precepting SRNAs this far without any training.<sup>9</sup> The goal of a formalized preceptor training program is to enhance the

existing precepting skills of experienced providers by providing practical advice on the use of theory and evidence-based teaching principles.<sup>9</sup> There is a steep learning curve during the transition from student to practitioner and a preceptorship is a method that has been found to be highly effective in helping new graduate nurses with the transition.<sup>11</sup> The preparation and support of preceptors is vital in the delivery of effective clinical learning experiences that meet the learning needs and outcomes of students.<sup>2</sup> A well-organized preceptor training program should address adult learning theory, teaching strategies, conflict management skills and evaluation of techniques.<sup>3</sup> In order to integrate the material learned in didactic to the patient care setting, training would require coordination between the academic and clinical faculty so that all educators are aware of the learning objectives and expectations for the students.<sup>1</sup> The standardization of a preceptor program will help new and experienced preceptors effectively transfer high quality patient care and patient safety skills to SRNAs.<sup>9</sup>

## **Literature Review**

### **Objective**

The goal of this literature review is to explore the various dynamics of a successful preceptor-preceptee relationship. This review also intends to identify and analyze available research studies relating to the aspects of proper education and training of preceptors. The common themes gathered from the articles reviewed include: positive preceptors' perception, teaching strategies, learning methods of the preceptee, and effective communication skills.

### **Eligibility Criteria**

Inclusion criteria for the chosen studies include studies that are written in English with full-text availability. All studies reviewed are related to a preceptorship within nursing or nurse

anesthesia. Exclusion criteria includes studies greater than 20 years old and studies that are based on precepting in a different job field.

### **Information Sources**

Florida International University library services was used to access the database sources. The search keywords: preceptor, preceptee, preceptorship, nursing, nurse anesthesia, student registered nurse anesthesia, education and training were entered in varying combinations throughout the search process. The databases utilized include Pubmed, The Cumulative Index to Nursing and Allied Health Literature (CINAHL) and ProQuest. Thirteen articles were chosen for this review based on the inclusion and exclusion criteria. The study designs of the articles are mixed methods studies, qualitative studies, and descriptive studies.

### **Study Characteristics**

Four key themes were formulated from the review of the articles. The first theme of the review is preceptors' perception. This concept was investigated by Muir et al<sup>4</sup> and Bengtsson and Carlson<sup>14</sup>. These two studies assessed preceptors' perception of their role and their needs as a preceptor in order to be successful. The second theme discussed is teaching strategies analyzed by, Forneris and Peden-McAlpine<sup>15</sup>, McSharry and Lathlean<sup>16</sup> and Easton et al<sup>9</sup>. These authors looked at effective teaching strategies for the adult learner in the clinical setting. The next theme of this literature review is learning needs discussed by Meyers et al<sup>17</sup>, Elisha<sup>12</sup>, Poradzisz et al<sup>18</sup> and Wilson et al<sup>19</sup>. Meyers et al<sup>17</sup> and Wilson et al<sup>19</sup> researched the learning needs of preceptees, where as, Elisha<sup>12</sup> discussed how preceptors preferred to learn. Poradzisz et al<sup>18</sup> researched how the various psychological types affect learning. The last theme of this review is effective communication, researched by Elisha and Rutledge<sup>1</sup>, Jans et al<sup>10</sup>, Averlid et al<sup>7</sup> and Kelly and

McAllister<sup>20</sup>. These authors researched effective communication skills between preceptors and preceptees.

### **Preceptors' Perception**

The studies conducted by Muir et al<sup>4</sup> and Bengtsson and Carlson<sup>14</sup> analyzed preceptors' perception of the role of a preceptor and showed that preceptors believe they have a positive impact on the student's education; however, there is a lack of preceptor education and a desire for knowledge. Through a mixed methods approach, Muir et al<sup>4</sup> examined preceptors' experiences in a preceptorship development program. A questionnaire and interviews were conducted to gather information from the 40 nurse preceptor participants<sup>4</sup>. The results of this study showed that preceptors believe to have a positive impact on the confidence and competence of the preceptees with the greatest impact on skills related to drug administration, health and safety and meeting patient's nutritional needs<sup>4</sup>. Preceptors also felt they helped with reducing the stress and anxiety level of the students<sup>4</sup>. Another finding is related to the impact that preceptorship has on the preceptor's own development. Participants expressed that the role a preceptor can be a burden at times; however, it can also have a positive impact on their own development. It was determined from this study that preceptors understand the important role they play in easing the transition from student to practitioner.

Bengtsson and Carlson<sup>14</sup> conducted a qualitative research study which examined and created a professional development course based off of preceptors' requests and educational needs. This study showed that preceptors wanted concrete tools and teaching strategies to aid in the difficulties of precepting<sup>14</sup>. The top requests from the participating preceptors included tools for effective teaching of students such as, knowledge on learning strategies and communication models and an in-depth knowledge and understanding of preceptorship in an academic setting<sup>14</sup>.

A professional development course was created based off the findings and included education on teaching and learning strategies, communication skills, reflective and critical thinking, and the role of the preceptor within a preceptorship.

### **Teaching Strategies**

Educators are faced with the challenge of balancing recall of content knowledge with a process of thinking<sup>15</sup>. Reflection, context, dialogue and time are 4 attributes of critical thinking that were developed using the work of educational theorists<sup>15</sup>. Forneris and Peden-McAlpine<sup>15</sup> conducted a qualitative instrumental case study design that aimed to determine the impact of the preceptor coaching component of a reflective contextual learning intervention on novice nurses critical thinking skills during their first 6 months of practice. Preceptors were provided with contextual learning interventions that focused on teaching structure to stimulate the novice nurses to engage in an intentional and reflective dialogue<sup>15</sup>. The results showed that prior to intervention, preceptors were not aware of the difference between coaching to enhance task management and coaching to enhancing thinking. Preceptors defined critical thinking as the ability to organize tasks and manage time with the main focus of tasks, routines and procedures<sup>15</sup>. After receiving teaching strategies, preceptors changed their idea of critical thinking from prioritizing and organizing tasks, to critical thinking as a dialogue to share and understand rationale<sup>15</sup>. The study determined that preceptors acknowledged that the contextual learning intervention enhanced their precepting skills by creating a more intentional and reflective form of thinking. An important theme from this article is that dialogue in the form of thinking out loud is an effective strategy to assist novice nurses with making learning connections. Thinking out loud enhances students' problem-solving ability and knowledge



transfer and it is important that preceptors move beyond questions to engaging in a dialogue on thinking<sup>15</sup>.

The qualitative design study conducted by McSharry and Lathlean<sup>16</sup> supported the concept of interactive dialogue. The researchers examined clinical teaching and learning within a preceptorship model in an acute care hospital based on the perception of both the preceptor and preceptee and found that interactive dialogue and coaching to be the main components of effective teaching and learning.<sup>16</sup> Preceptors talked through the how and why of their practice as they were performing a task, which allowed the student to ask questions to address deficits in knowledge. Problem solving questions such as “how”, “why” or “what if” were found to help the students build critical reasoning skills.<sup>16</sup> Cognitive apprenticeship theory suggests that articulation fosters this type of learning; however, many preceptors in this study use lower order questions that focus on procedural knowledge. Another important discovery from this study was that students learning was sequenced when they progressed from observation to taking part in small tasks within the routine to eventually managing the care on their own. This allows for the student to gain a conceptual map of the global skills prior to learning subsections of the tasks. Continuity was found to be the foundation of an effective teaching and learning relationship by encouraging a trusting relationship between the preceptor and student. Consistency allows for individualized tailored teaching and a more accurate student assessment.

Easton et al<sup>9</sup> created and evaluated an online, evidence based CRNA preceptor training tutorial. The participants included 24 CRNAs and 20 SRNAs. The themes that were found as highly valued by both groups included: debriefing, communication, introductory discussion at the beginning of each clinical day, sensitivity to student thoughts/needs and providing structure to the preceptorship.<sup>9</sup> The prequestionnaire showed that only 15% of CRNAs reported engaging

in a formal debriefing with SRNAs at the end of the clinical day.<sup>9</sup> Preceptors expressed difficulty in delivering constructive criticism and the development of a debriefing tool expressed the most interest.<sup>9</sup> SRNAs reported that most used teaching methods include modeling, case presentation, pinging and series questioning.<sup>9</sup> There were disagreements between the parties in terms of the use of some teaching methods.<sup>9</sup> It is suggested that equipping CRNA preceptors with tools to improve their communication and effectiveness with SRNAs is important.<sup>9</sup>

### **Learning Needs**

The themes found in the literature relating to the learning needs of the preceptees involve feedback and active learning. Meyers et al<sup>17</sup> conducted a qualitative research study that evaluated the perceptions of both new RNs and preceptors about the learning needs of new RNs. The participants of the study included 19 new to practice RNs with less than 1 year experience and 22 nurse preceptors. When asked about recommendations from the preceptors, RNs identified the importance of feedback, nurturing, and orientation. RNs reported an increase in stress level when feedback from the preceptor was not received. Preceptors' expressed concerns with new RNs who did not ask questions when unsure about something. This study pointed out the need to promote essential concepts such as critical thinking, prioritizing nursing care and delivery of safe nursing care.

Elisha<sup>12</sup> performed a study to determine if providing education for CRNA preceptors would positively change their beliefs about clinical education and adult learners. The teaching method used in this course was active learning which is a principle of adult learning. Active learning takes place when learners are encouraged to participate in the educational process. The results showed that the participants preferred the teaching methods that used active learning such as, case studies, class discussion, role playing and trigger film analysis rather than the traditional

lecture style. It was found that the 8-hour educational course positively modified the participants behaviors and knowledge towards education; however, results also showed that preceptors were not receptive to changing or individualizing their teaching practices to fit the needs of the student. Based on the results, it is recommended that the use of active learning when teaching adults will help to enhance the learner's ability to retain information.

Poradzisz et al<sup>18</sup> aimed to determine characteristics of the psychological type of new graduate nurses and preceptors as determined by the Myers-Briggs Type Indicator (MBTI). The MBTI was developed from Jung's theory that personality characteristics are based on preferences that develop early in life.<sup>18</sup> The MBTI measures opposing preferences on extroversion-introversion, sensing-intuition, thinking-feeling and judging-perceiving.<sup>18</sup> The sample included 195 new graduate nurse orientees and 143 preceptors.<sup>18</sup> The results showed that most of the participants demonstrate a preference for sensing, feeling and judging.<sup>18</sup> Preceptor led clinical orientation is interactive and kinesthetic; however this environment can be challenging or intimidating for "intuitive" "feeling" and "introverts" to be successful.<sup>18</sup> Psychological type has a strong influence on teaching and learning preferences and recognition of the differences can help to maximize the effectiveness of the orientation process.<sup>18</sup>

Wilson et al<sup>19</sup> addresses gaps in preceptor preparation and explores the effectiveness of incorporating simulation-based education into a preceptor workshop. The course was provided to registered nurses enrolled in the introductory preceptor workshop and included didactic presentations on the preceptor role, caring preceptor behaviors, standards-based evaluation and providing feedback. The simulation scenarios included creating a teaching plan, enacting the plan, and providing feedback to the preceptee. The results indicated a high satisfaction rate for the workshop and 76% of the participants believed that simulation-based learning was more

helpful than lecture alone. This study suggest that simulation is a beneficial addition to the learning strategies.

### **Effective Communication**

Effective communication between the preceptor and preceptee was found to be highly important for a successful preceptorship in many articles. Elisha and Rutledge<sup>1</sup> conducted a descriptive study using cross sectional survey methods with randomly selected SRNAs. The goal was to describe the experiences and perceptions of SRNAs regarding clinical instruction.<sup>1</sup> Of the 696 participating SRNAs, 69% reported experiencing verbal abuse and sexual harassment, physical abuse and racial discrimination were less than 15%.<sup>1</sup> The top 4 most important behaviors of clinical preceptors ranked by SRNAs included: calmness during stressful events, use of nonthreatening communication, clear communication and allows independent decision making. The results showed the top suggestion for improving the clinical educational environment is the need for constructive and professional communication. This study suggested that communication is highly important and if communication fails, both the student and preceptor may experience stress, anxiety and an increased risk of making mistakes.

A study conducted by Jans et al<sup>10</sup> supported the importance of effective communication. This study aimed to describe CRNAs reflections and strategies when precepting SRNAs in anesthetic care.<sup>10</sup> 12 CRNAs were interviewed on questions that covered the nurse anesthetists experience of clinical supervision, preparation for supervision and experiences in the supervisory role.<sup>10</sup> In this study, the CRNAs stated that SRNAs need to express their goals in order for the CRNA to plan teaching based on the students' goals and the formal goals of the clinical teaching.<sup>10</sup> Communication was perceived as the foundation of a functional relationship and lack of communication can create conflict.<sup>10</sup> The results determined that preceptors would like to

receive feedback from the student in order to promote their growth as a preceptor.<sup>10</sup> The participants expressed wanting to receive education and training in order to gain knowledge on how to handle different situations when precepting.<sup>10</sup> This article recommended that head supervisors should initiate meetings among preceptors in order to reflect how to approach students, discuss interpersonal processes between preceptors and the students and on what kinds of effects this factor may have on students' motivation.<sup>10</sup>

Averlid et al<sup>7</sup> through a qualitative design with two focus groups, examined which competencies mentors and SRNAs perceived as important in a clinical anesthesia education practice. The participants included 8 SRNAs and 7 CRNAs.<sup>7</sup> One important factor that was discovered by the study is the preceptor's knowledge of human relationships and learning strategies with the potential to influence the student's learning and self confidence.<sup>7</sup> The SRNAs described the most important mentoring skill as "suitability to supervise".<sup>7</sup> Preceptors expressed uncertainty about what students should know and would like to receive structured feedback from the students as well as updates about the curriculum from the educators.<sup>7</sup> Another important result of the study is that briefing and debriefing in close proximity to the case improved the student's sense of mastery and giving task related feedback helps the learning process.<sup>7</sup> Students emphasized a desire to know what was expected of them in each clinical placement and their self confidence is dependent on feedback from the mentor.<sup>7</sup>

Kelly and McAllister<sup>20</sup> performed a descriptive phenomenological study that explored graduate nurses' experiences of transitioning to professional practice. Sixty-five final semester students enrolled in a bachelor of nurse degree program were invited to participate; however, only 13 agreed to participate.<sup>20</sup> The 5 themes identified from the data included: confidence, friendliness, being thrown to the deep end, peer support and inadequate support. A majority of

students agreed that preceptors contribute significantly to the development or depletion of their confidence. Friendliness and being approachable was described as vital in a successful preceptorship experience. In the absence of an engaged preceptor, participants felt thrown into the deep end with no support. This study showed that the tradition of throwing students and new graduates into the deep end is continuing even though it is not beneficial. A collaborative model to support new graduate nurses that enforced preceptors and new graduates to meet and set up and review goals and learning needs would be beneficial.

Author(s)	Purpose	Methodology/ Research Design	Intervention(s)/ Measures/ Sampling/ Setting	Primary Results	Relevant Conclusions
<b>Preceptors' Perception</b>					
Muir et al (2013)	Aimed to examine the experiences of preceptors who were involved in a preceptorship development program.	Mixed methods evaluative research design	Survey questionnaire and interviews with preceptors  90 experienced nurses were invited to complete the questionnaire 40 questionnaires were received	<ul style="list-style-type: none"> <li>• Preceptors viewed role as having positive impact on preceptees</li> <li>• Preceptors viewed role as positive impact on personal development</li> <li>• Difficulty making time to meet with preceptees</li> </ul>	<ul style="list-style-type: none"> <li>• Preceptors view preceptorship as having a positive impact on preceptees' development on the organization and on the development of themselves</li> </ul>
Bengtsson & Carlson (2015)	To investigate and include preceptors' requests and educational needs when developing a credit-bearing professional development course	Qualitative research study	Online, the participants answered the question: "What further knowledge and skills do you need to develop as a preceptor?"  64 preceptors	<ul style="list-style-type: none"> <li>• Themes included:</li> <li>• Tools for effective precepting of students: knowledge about activities, clinical teaching and learning strategies, knowledge and skills about reflective and critical reasoning and knowledge about communication models</li> </ul>	<ul style="list-style-type: none"> <li>• A course was developed that included teaching and learning strategies, communication skills, reflective and critical thinking, the role of the preceptor and preceptorship</li> </ul>

				<ul style="list-style-type: none"> <li>• In depth knowledge and understanding of preceptor ship</li> </ul>	
<b>Teaching Strategies</b>					
Forneris & Peden-McAlpine (2009)	To determine the impact of the preceptor coaching component of a reflective contextual learning intervention on novice nurses' critical thinking skills during the first 6 months of their practice	Qualitative instrumental case study design	<p>2 preceptor instruction sessions were taped, transcribed and analyzed. Data collected in month 1 and month 6</p> <p>Preceptors were trained in coaching critical thinking. The learning goals were: to understand the content and process of critical thinking and to develop the preceptor role in enhancing novice nurses critical thinking in practice</p>	<ul style="list-style-type: none"> <li>• Power and culture affect critical thinking</li> <li>• Preceptors gained awareness of how the preceptor role and power affected novice nurses thinking</li> <li>• Through reflection and dialogue preceptors acknowledged a change in their precepting style and in novice nurses critical thinking</li> <li>• Thinking out loud help preceptors to assess novice nurse situational understanding, guide thinking processes, uncover novice nurses rationales for action and transform thinking by correcting misinformation</li> </ul>	<ul style="list-style-type: none"> <li>• Preceptors need to be engaged with the novice nurses so they are thinking and doing together</li> <li>• The importance of linking thinking and doing should be emphasized through the preceptor's use of context, reflection, dialogue and time</li> </ul>



			Nurse preceptors in an acute care facility in a major metropolitan area in the US		
McSharry & Lathlean (2017)	To explore the clinical teaching and learning within a preceptorship model	Qualitative research study	Semi-structured one-to-one audio recorded interviews  13 students and 13 preceptors	<ul style="list-style-type: none"> <li>• Continuity: foundation for an effective teaching and learning relationship</li> <li>• Talking through practice enhances performance and knowledge</li> <li>• Teach clinical reasoning through questions</li> </ul>	<ul style="list-style-type: none"> <li>• Suggested the needs for extensive educational preparation and organizational support for the preceptor role</li> </ul>
Easton et al (2017)	Aimed to develop and refine an online evidence based precepting training tutorial for CRNAs, evaluate the training tutorial content, establish a baseline of precepting behaviors and use gap analysis methods to identify areas for improvement in	Qualitative study	Face to face mentoring event and survey  24 CRNAs and 20 SRNAs attended the face-to-face event  A preceptorship survey was filled out by 97 CRNAs and 36 SRNAs	<ul style="list-style-type: none"> <li>• SRNAs and CRNAs in agreement of 3 frequently used teaching methods: coaching, open-ended questioning and cueing/ prompting</li> <li>• Largest disparity in opinions regarding the teaching method “pimping”</li> <li>• Disagreement with 2 actions: providing ongoing feedback and complete a written evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Debriefing and communication is valued and important to both parties</li> <li>• Both groups feel formal training would be beneficial</li> </ul>

	the precepting process			<ul style="list-style-type: none"> <li>62% of CRNAs and 94% SRNAs reported formal precepting training would be helpful</li> </ul>	
<b>Learning Needs</b>					
Myers et al (2010)	To explore the perceptions of both new to practice RNs and preceptors about the learning needs of new to practice RNs	Qualitative research	Interviews  22 Nurse preceptors and 19 new to practice RNs who had been in practice for less than 1 year	<ul style="list-style-type: none"> <li>Preceptors' concerns include new RNs unable to identify what they don't know</li> <li>The main learning needs are related to perceptions of uncertainty about technical aspects of nursing care</li> <li>Lack of critical thinking skills increased stress</li> <li>Preceptors who provided frequent feedback in a positive manner were rated as important in the developmental process</li> </ul>	<ul style="list-style-type: none"> <li>The main safety concerns were the new RNs critical thinking ability, their emphasis on tasks rather than a holistic approach and unfamiliarity with administering medications, encountering new technology and communication within the hospital system</li> </ul>
Elisha, S. et al 2008	To determine if providing an 8 hour education course modifies the perceived behaviors and the perceived knowledge of	Exploratory study	Questionnaire, cognitive interviews, trigger film analysis and assessment by an independent	<ul style="list-style-type: none"> <li>8 hour course positively modified the participants behavior and knowledge toward clinical education</li> <li>The most significant impact included adult learning principles,</li> </ul>	<ul style="list-style-type: none"> <li>The behaviors of the participants and a change in the perceived knowledge of CRNA clinical educators indicated a</li> </ul>

	CRNA clinical educators		observer during instruction  33 CRNA clinical educators	establishing positive teacher-learner relationships, providing positive feedback and conducting student evaluations	statistically significant increase from the pre-course to 2-month follow up assessment
Poradzisz, M. et al 2012	To determine characteristics of psychological type as determined by the Myers-Briggs Type indicator	Descriptive study	Face to face interviews and participants filled out the MBTI  218 new nurse orientees and 174 preceptors	<ul style="list-style-type: none"> <li>• The most common psychological types were extroversion/ sensing/ feeling/ judging and introversion/ sensing/ feeling/ judging</li> <li>• A significantly higher percentage of orientees were extraverts than preceptors</li> </ul>	<ul style="list-style-type: none"> <li>• Psychological type strongly influences teaching-learning preferences</li> </ul>
Wilson, R. et al 2013	To explore the effectiveness of incorporating simulation-based education into an initial preceptor workshop	Qualitative research	Didactic presentation, simulation scenarios and a course evaluation  19 Registered nurses enrolled in the introductory preceptor workshop	<ul style="list-style-type: none"> <li>• 76% found simulation more helpful than didactic lecture</li> <li>• Preceptors felt weakest on establishing weekly goals with preceptee</li> </ul>	<ul style="list-style-type: none"> <li>• Participants experienced high satisfaction with the workshop and the majority believed that simulation-based learning was more helpful than lecture</li> </ul>
<b>Effective Communication</b>					

Elisha, S. and Rutledge, D. 2011	To describe the experiences and attitudes of student registered nurse anesthetists related to clinical instruction	Descriptive study using cross-sectional survey methods	Online 54 item questionnaire  696 SRNAs	<ul style="list-style-type: none"> <li>• Ranked behaviors of preceptors in terms of importance: calmness during stressful events, use of nonthreatening communication, clear communication and allows independent decision making</li> <li>• 69% reported verbal abuse</li> </ul>	<ul style="list-style-type: none"> <li>• SRNAs reported having frequent experiences with clinical educators who act as positive role models</li> <li>• Satisfaction of SRNA learners can be enhanced by an increase in learning or a reduction in mistreatment</li> </ul>
Jans, J. et al 2021	To describe CRNAs reflections and strategies when supervising SRNAs in anesthetic care	Descriptive study design and the data was generated using qualitative interviews	Semi structured interviews  12 CRNAs from one hospital	<ul style="list-style-type: none"> <li>• Key feature was receiving feedback from students</li> <li>• Communication is seen as the foundation of a functional relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Findings reveal that being a clinical supervisor entailed opportunities to guide students' development, and also develop their own role as a clinical supervisor</li> </ul>
Averlid, G. et al 2019	Examined which competencies mentors and SRNAs perceive as important in a clinical anesthesia education practice	Qualitative design	Focus group interviews  focus group 1: included 8 SRNAs  Focus group 2: included 7 CRNAs with	<ul style="list-style-type: none"> <li>• Important factor: mentors knowledge of human relationships and learning strategies due to potential to influence the student's learning and self-confidence</li> <li>• Ability to give constructive feedback</li> </ul>	<ul style="list-style-type: none"> <li>• The awareness of the students vulnerability and the mentors pedagogical competence and learning strategy are important factors</li> </ul>

			mentoring experience	<ul style="list-style-type: none"> <li>• Having awareness of ones own attitude</li> <li>• Mutual expectations must be clearly identified to facilitate planning</li> </ul>	
Kelly, J. and Mcallister, M. 2014	To explore and understand graduate nurses experience of transitioning to professional practice	Descriptive study	<p>First interview prior to employment, second interview 1 month post employment and final interview 6 months into employment</p> <p>13 new graduate nurses</p>	<ul style="list-style-type: none"> <li>• 5 themes: confidence, friendliness, being thrown into the deep end, peer support and inadequate support</li> <li>• Preceptors contribute to the development or depletion of confidence</li> <li>• Friendliness is seen as vital in a successful preceptorship</li> <li>• Being thrown in to the deep end is stressful and problematic</li> </ul>	<ul style="list-style-type: none"> <li>• The themes found that the role of a preceptor in relation to building confidence is valuable</li> <li>• The positive outcomes from peer support and relationships are often overlooked</li> </ul>

## Discussion

Four themes were developed from the literature that aimed to analyze relevant data relating to an effective preceptorship. After reviewing the research, it was found that an effective preceptor must encompass knowledge of teaching strategies, the understanding of different learning needs and effective communication skills. Preceptors' perception of the role of a preceptor was also included to help gain insight on how to better meet the needs of a preceptor and therefore enhance the preceptorship.

The responsibility of teaching can cause an increase in stress and lead to exhaustion in the preceptor.<sup>14</sup> Muir et al<sup>4</sup> conducted an important study which helped to create an understanding of the various challenges of the preceptor role in order to provide better support for preceptors. Muir et al<sup>4</sup> discovered that preceptors believe to have a positive outlook on their role; however, experience issues related to not having enough time to dedicate to the preceptee and role conflict. In the research conducted by Bengtsson & Carlson<sup>14</sup>, the requests and needs of preceptors were analyzed and used to create a professional development course. Preceptors showed interest in a preceptor preparation course that aimed at teaching communication skills, teaching and learning strategies, reflective and critical thinking, the role of the preceptor and preceptorship. Support and consideration for the preceptors needs when creating a preceptor training course can help to ensure a more successful implementation.

The lack of knowledge in proper teaching strategies is a common issue throughout the review. Easton et al<sup>9</sup> revealed that SRNAs reported pimping and series questioning to be happening at a higher rate than reported by CRNAs, suggesting that CRNAs are either not aware of using this teaching strategy or not willing to admit it. Competent practice requires more than just the ability to apply knowledge to a clinical situation and preceptors should be educated on

how to enhance thinking at a higher level.<sup>15</sup> Forneris and Peden-McAlpine<sup>15</sup> found the importance of linking thinking and doing through the preceptor's use of context, reflection, dialogue and time. The findings by McSharry and Lathlean<sup>16</sup> supported that idea by showing that clinical reasoning and performance were fostered when students were engaged in interactive dialogue and critical questioning. This study also discovered factors that have a negative effect on students' education. These factors include a disempowering preceptor-student relationship, a lack of understanding and use of teaching strategies, and insufficient time to teach due to preceptors' workload.

The learning needs of the student is an important consideration when assessing the various components of a preceptorship. Poradzisz et al<sup>18</sup> discussed the importance of how recognition of the different psychological types can result in an increased effectiveness of each stage of orientation. A clash in personality types can negatively affect the preceptorship outcome and matching of personalities can lead to greater satisfaction.<sup>18</sup> Meyers et al<sup>17</sup> assessed the learning needs of new RNs and found that learning occurs from receiving feedback, having a nurturing relationship with their preceptor and a positive orientation environment. The lack of preceptor's adaptation to the new RN's individual learning needs may be related to the clinical focus of preceptors which does not usually include teaching strategies.<sup>17</sup> This was further supported by the study conducted by Elisha<sup>12</sup> that showed that CRNAs were not receptive to individualizing their teaching methods based on the student's needs. However, this study also found that active learning techniques enhances the learner's ability to retain information. Active learning technique is supported by adult learning principles and can be integrated into a preceptor training course.<sup>12</sup> Wilson et al<sup>19</sup> aimed at teaching preceptors through a simulation-based education program that offered concrete experience followed by a structured debriefing. It

was found that simulation-based learning was more helpful than lecture-based learning. This concept supports the study by Forneris and Peden-McAlpine<sup>15</sup> which discusses idea that critical thinking should be taught as intentional reflective thinking.

Communication issues between the preceptor and preceptee is another recurring theme that was analyzed in many of the studies. Preceptees with a low self-esteem experience difficulty with communication.<sup>4</sup> A study by Elisha and Rutledge<sup>1</sup> found that SRNAs ranked effective communication as a highly desirable characteristic and emphasized the importance of the delivery of the message. Averlid et al<sup>7</sup> found that briefing and debriefing was seen as valuable by the students and that by giving immediate feedback helps the student to progress in the learning process. Also discovered by this study is briefing before a task by clearly communicating expectations can increase performance, predictability and safety.<sup>7</sup> Jans et al<sup>10</sup> found that preceptors wanted to receive feedback from students as well in order to reflect on their role. Precepting is an interactive process that includes relational aspects, therefore, the idea of a preceptee and preceptor being well suited for each other was found to be important.<sup>10</sup> Kelly and McAllister<sup>20</sup> discovered through research that friendliness and being approachable is vital for a successful preceptorship and if preceptors were taught how and encouraged to exercise friendliness, a vicious cycle of “nurses eating their young” could be stopped.<sup>20</sup> The preceptor-preceptee relationship benefits when empathy is expressed from preceptors to their preceptees.<sup>20</sup>

## **Conclusion**

This review discovered the various dynamics within a preceptorship relating to both the preceptor and preceptee. Throughout the 13 articles reviewed, it was found that a preceptor should be knowledgeable in effective adult teaching strategies, understand the learning needs of



students and have effective communication skills. A deeper understanding of these themes can help to improve the preceptorship experience and assist in the preparation of preceptors.

### **Primary DNP Project Goal**

Preceptorship is a dynamic educational process which involves the implementation of various learning strategies, evaluation, and assessment.<sup>14</sup> The role of the preceptor is to support the student during the transition from the classroom into clinical practice through enhancement of critical thinking and problem-solving skills.<sup>1</sup> Preceptors are expected to provide an effective learning environment and facilitate a constructive clinical learning experience.<sup>14</sup> If a preceptee is trained by a non-supportive unskilled preceptor, the preceptee's learning may be less than effective through lack of confidence, feedback and guidance.<sup>14</sup> An effective preceptor should possess the skills to provide constructive feedback, have knowledge about various teaching and learning principles and be able to evaluate student outcomes.<sup>3</sup> According to Warren et al<sup>3</sup>, clinical preceptors need to be carefully selected and oriented in order to ensure quality education of students. Currently, most CRNA preceptors have minimal exposure to adult learning principles and educational theory and have not received instruction related to their role as preceptors.<sup>1</sup> The primary goal for developing a formalized educational module on precepting is to increase the knowledge, perception and attitude of the CRNA preceptor in terms of effective teaching and learning strategies, effective communication and a positive preceptor-preceptee relationship.

### **Goals and Outcomes**

The development of the goals and outcomes were created using specific, measurable, achievable, relevant, and timely objectives.

### **Specific**

The formalized educational module will provide anesthesia preceptors with strategies that can be used to create a positive preceptor-preceptee relationship and a successful learning experience for the student.

### **Measurable**

A questionnaire consisting of a pre, and post survey will be provided to the participants before and after the Zoom educational module in order to assess the knowledge and a paradigm shift in attitude towards the practice change. The outcomes will be measured by evaluating the difference in the CRNA's knowledge and attitude towards effective communication, debriefing and learning strategies pre- and post-intervention.

### **Achievable**

The educational module will be available online to allow for the participants to complete the pre and post survey along with the Zoom educational module. The email link will be encrypted to protect the identity of all participants. Institutional Review Board will be obtained by Florida International University and Mt. Sinai Medical Center in obtaining the sample of anesthesia participants.

### **Relevant**

The educational module will include current evidence-based practice research information on effective teaching, communication and learning strategies for the CRNA preceptor to utilize when working with a student.

### **Time**

After the educational module has been sent out to the participants, a specific time frame will be set for responses. The time frame for completion will give the participants enough time to complete the pre- and post-questionnaire and the educational module.

## **Program Structure**

The strengths, weaknesses, opportunities, and threats (SWOT) analysis will be conducted to evaluate the effectiveness of the proposed preceptorship educational program. The development of the educational module will be based on current research that focuses on the various aspects of a successful preceptor-preceptee relationship. First, the participants will be provided with a questionnaire that measures their current knowledge on effective teaching and communication strategies. Once the questionnaire is completed, the participants will be provided with an online educational module that provides guidance related to the role as a preceptor and emphasizes best practices in precepting. The participants will then complete a post intervention questionnaire to assess for a variation in their knowledge and attitude towards creating an effective preceptorship.

### **Strengths**

Currently, most CRNAs in the United States who serve as preceptors have not received instruction or education related to their role as a preceptor.<sup>1</sup> Clinical preceptors teaching style and attitude towards the student is a major factor causing anxiety among students, which in turn negatively effects the student's ability to learn and perform safely.<sup>8</sup> The initiation of a formalized preceptorship educational module has the ability to create a supportive learning environment for students and provide positive outcomes for all stakeholders. It has been reported that preceptors experienced increased professional development and felt more confident and comfortable following formal preceptor preparation.<sup>21</sup>

Bengtsson and Carlson<sup>14</sup> found that preceptors want to be provided with strategies to aid in the difficulties of precepting. This project will aim to educate preceptors on teaching and learning strategies, principles of adult education, communication skills and the delivery of

effective criticism. The development of a formalized educational program based on current evidence-based teaching principles will help to enhance the existing precepting skills of experienced providers.<sup>9</sup> A strong program has the capability to provide a framework to prepare preceptors on how to teach students clinical skills and offers a structure for learning about mentoring and leadership.<sup>3</sup>

### **Weaknesses**

It is possible that the method of an online delivery of this quality improvement project will decrease the effectiveness it has on the participants. The participants in the study conducted by Elisha<sup>12</sup> appreciated the opportunity to discuss their opinions amongst each other and were engaged the most during the discussion of the application of the course material as it related to their practice. The participants also valued participating in scenarios because it allowed them to be active in the discussion.<sup>12</sup> Information is better retained through active learning techniques because it is more applicable to practice.<sup>12</sup> The results of a study conducted by Wilson et al<sup>19</sup>, also showed that the participants were highly satisfied with a simulation-based workshop and believed it was more helpful than learning from lecture alone. The formalized preceptor educational course for this quality improvement project will be conducted through an online module that participants can complete on their own time. It is difficult to incorporate active learning strategies into an online course; therefore, information might not be retained as well as if the information was provided through an in-person course.

### **Opportunities**

It has been shown that formal preparation of preceptors can have a positive impact on student learning and contribute to professional growth of the preceptor.<sup>3</sup> The implementation of a formalized preceptor educational program can lead to enhanced teaching and learning

opportunities, personal and professional development and a positive relationship between the preceptor and preceptee.<sup>3</sup> A well-prepared preceptor possess self-confidence in teaching roles and has the ability to facilitate student's learning about the delivery of safe and quality care.<sup>3</sup>

Research recommends that schools engage in formal preceptor training by providing workshops for first-time preceptors and refresher courses for experienced preceptors.<sup>3</sup> The implementation of this project will provide preceptors with the knowledge needed to create a successful learning experience for the student, as well as, provide preceptors with clear roles and expectations. The SRNA clinical coordinator at the specific clinical site will be responsible for approval of the educational module and can contribute any feedback prior to initiating the training. The school providing a training course to the preceptors can help to build a strong relationship between the faculty and preceptors. Preceptors need to know that the faculty member is available for assistance when problems arise as they jointly commit to student's success.<sup>3</sup> Regular contact between the faculty and preceptors can increase support of the preceptor and lead to a successful learning experience.

### **Threats**

Multiple factors threaten the effectiveness of a formalized preceptor educational module and the preceptor-preceptee relationship. Lack of time creates a challenge for preceptors to find an opportunity to reflect with the student.<sup>10</sup> The preceptor educational module aims to provide effective communication and debriefing strategies; however, preceptors are forced to find time to manage their usual workload on top of the additional demands of the preceptorship.<sup>10</sup> The lack of understanding and support from the organization can lead to a lower level of commitment to the preceptor role.<sup>11</sup> The time for guidance and learning becomes compromised due to the constant production and efficiency pressures.<sup>7</sup> Another threat to the relationship between a preceptor and

preceptee is the lack of continuity. Nondedicated and short-term mentors causes the student to feel a sense of setback with each change in preceptor.<sup>7</sup> Continuity gives the preceptor the ability to provide a more tailored plan as the relationship grows between the preceptor and preceptee.<sup>7</sup> This can be difficult to accomplish due to scheduling conflicts and the number of students compared to adequately trained and dedicated preceptors; however, keeping the number of mentors per student to a minimum was perceived as a huge benefit.<sup>7</sup>

The level of dedication of preceptors to their role can greatly threaten the effectiveness of the educational module. In the study conducted by Easton<sup>9</sup>, only 62% of CRNAs felt that formal preceptor training would be beneficial. Elisha<sup>12</sup> found that CRNA preceptors were not open to individualizing their teaching practices to better meet the needs of the student.<sup>12</sup> It was also found that preceptors were not willing to change their teaching strategies based on evaluations of their performance by students.<sup>12</sup> To ensure quality education in the clinical setting of the student, a preceptor should be carefully selected. This creates a challenge though because the availability of willing preceptors may not equal experienced nurses who meet the criteria for the role of preceptor.<sup>3</sup> In order to overcome the threat of lack of interest in participation, it will be important that employers show support through encouraging participation and recognizing the workload issues.<sup>3</sup>

### **Organizational Factors**

The implementation of the educational module will take place after approval is received from the Institutional Review Board at FIU and Mt. Sinai Medical Center. The educational module will be provided to the coordinator for review, and any site-specific changes will be made based off of feedback received. The final formalized training module will include information from current research, and input from faculty and the clinical site coordinator. Prior

to participation in the training, the participants will fill out a questionnaire to assess current knowledge and attitude related to precepting. The participants will then be sent the educational module to complete on their own, followed by a post questionnaire. The pre- and post-questionnaire will then be evaluated for variations and a summary of findings will be created. The final report will include a clear description of the project, interventions, and methods used. Unexpected outcomes and limitations will be discussed and recommendations for improvement of the project will be provided.

### **Definition of Terms**

#### **Preceptor**

A preceptor is defined as an experienced practitioner who teaches, instructs, supervises, and serves as a role model for a student over a set period of time.<sup>3</sup> The role of the preceptor is multifaceted and requires extensive support, ongoing education and monitoring to ensure that the students education needs are met.<sup>3</sup>

#### **Preceptorship**

Preceptorship is an effective teaching and learning model that is the mainstay of undergraduate and graduate clinical education.<sup>9</sup> It is considered a short-term relationship between a student and an experienced and competent role model that focuses on orientation to the clinical environment, teaching of clinical skills and the growth and development of students professional capacities.<sup>6</sup>

### **Theoretical framework**

The theoretical framework of this project is based on adult learning and educational theory. The focus is on how to better apply educational theory to form a model for successful preceptorship. Bloom's taxonomy has 3 domains: cognitive, psychomotor and affective and

within each domain are subcategories that progress from basic to advanced.<sup>9</sup> The goal is to provide preceptors with knowledge in educational theory so that they can help the SRNA move from the basic subcategories to the advanced ones.<sup>9</sup> In order to progress, students must learn critical thinking skills. Forneris and Peden-McAlpine<sup>15</sup> explained that teaching critical thinking as intentional, reflective thinking to preceptors will influence critical thinking in the preceptee. Kolb's (1984) theory of experiential learning demonstrates that reflective thought is vital to develop critical thinking and improve comprehension and performance.<sup>19</sup> Active learning is a principle of adult learning theory and encourages students to take a participative role in the education.<sup>12</sup> Active learning introduces concepts in a contextual manner that is easily applied to real life situations.<sup>12</sup> The application of these theories into the educational module will provide preceptors with a deeper knowledge of how to improve the critical thinking skills of students and create a successful learning experience.

Bandura's social cognitive theory is important because it explains preceptees' and preceptors' ability to handle different situations and difficult tasks successfully. This theory describes the impact of self-efficacy, such as, the individual's self-confidence and belief that he/she can achieve a specific goal.<sup>10</sup> This is an important theory to integrate into the training of preceptors because an individual who believes in themselves and their ability will view tasks as challenges rather than as obstacles.<sup>10</sup> When a student doubts their own ability, it can become a challenge for the preceptor. The relationship between the preceptor and preceptee is important for incorporating social, behavioral, cognitive, and emotional skills to support the individual student's self-efficacy.<sup>10</sup>

## **Methodology**



To successfully implement this quality improvement project, a series of actions will be conducted. Each section of the methodology is important to determine the outcomes of the preceptor educational module.

### **Setting and Participants**

This study will take place in a hospital operating room setting where CRNAs are responsible for precepting SRNAs. The chosen hospital will be in South Florida and has SRNAs from at least 3 different universities that rotate through for clinical training in various specialties. The study participants will include only CRNAs who currently precept or are interested in becoming a preceptor. The demographic of the participating CRNAs will be of all different ages and experience levels. All CRNAs at the study location will be emailed the link for the preceptor educational module; however, participation will be on a voluntary basis.

### **Description of Approach and Project Procedures**

The approach to implementing this quality improvement project will be through a Zoom educational module on precepting. The module will focus on providing preceptors with clear roles and expectations of a preceptor, various teaching methods for the adult learner, effective communication and debriefing strategies and the importance of constructive feedback. The first phase of the quality improvement project will include an online pre-assessment survey that will gauge CRNAs current knowledge and attitude on being an effective preceptor. The preassessment will also collect information regarding the level of experience of the CRNA, as well as, if they have ever participated in prior education on precepting. Next, the link for the Zoom module will be emailed out to the CRNAs that completed the pre-assessment survey. After the completion of the module, the participants will be provided with a post-assessment survey. The post-assessment survey will identify providers learned knowledge of the quality

improvement project and their willingness to apply it to their current practice when precepting. This information will provide feedback on the impact of the educational module and can be used to determine how to best move forward in the continuation of training CRNAs in the preceptor role. Feedback on the program can also be used to make any changes to the module in order to enhance effectiveness in the future.

### **Protection of Human Subjects**

All CRNAs and MDs at Miami Beach Anesthesia Associates at Mt. Sinai Hospital will be invited to participate via email. The email link will be encrypted to protect the identity of the participants. No identifiable data will be collected during this study. It is possible for indirect identifiers to occur due to the small sample size of the participants. There will be no penalty for the CRNAs who wish to not participate. Benefits of participation will include increased provider knowledge of creating an effective preceptor-preceptee relationship.

### **Data Collection**

The data that will be collected regarding the participants personal information will include gender and the number of years they have been a practicing CRNA. Each participant will also be asked whether they have received any previous training or direction on precepting. The primary data collection instruments that will be used include a pre- and post-assessment survey. Each survey will consist of 10-20 questions and will be conducted through an online survey database. The instrument reliability and validity will be measured in accordance with the intervention and its effectiveness for the providers. The data collected will be confidential and will not include subject identifiers.

### **Data Management and Analysis Plan**

Data will be stored in an electronic database and only the DNP student and advisor will have access to the results. The responses to each question will be measured and recorded to identify the variations in knowledge and attitude before and after the intervention. The impact of the intervention will be based upon the comparison of the results of the pre- and post- assessment survey.

## Results

### Demographics

The demographics of the participants are shown below in Table 1.

**Table 1**

<b>Demographic</b>	<b>n (%)</b>
Total Participants	5 (100%)
<b>Gender</b>	
Male	4 (80%)
Female	1 (20%)
<b>Ethnicity</b>	
Caucasian	2 (40%)
Hispanic	2 (40%)
Other	1 (20%)
<b>Education</b>	
Masters	1 (20%)
Doctoral	3 (60%)
Other	1 (20%)
<b>Position/Title</b>	
CRNA	2 (40%)
MD	1 (20%)
Other	2 (40%)
<b>Years of Precepting Experience</b>	
Less than 1 year	1 (20%)
1 to 5 years	2 (40%)
6 to 10 years	2 (40%)

There was a total of 5 participants. All participants participated in the pre-test and post-test. Most of the participants were male (n=4, 80%), as opposed to female (n=1, 20%). The

ethnicities of the participants included Caucasian (n=2, 40%), Hispanic (n=2, 40%) and other (n=1, 20%). The education level of the participants ranged from master's degree (n=1, 20%), doctoral degree including DNP, DNAP, MD and EdD (n=3, 60%), and other (n=1, 20%). The positions of the participants included CRNA (n=2, 40%), MD (n=1, 20%), and other (n=2, 40%). The participants were also asked about their years of precepting experience which ranged from less than 1 year (n=1, 20%), 1 to 5 years (n=2, 40%), and 6 to 10 years (n=2, 40%). Table 2 shows that all the participants (n=5, 100%) reported never receiving previous education on precepting.

**Table 2**

<b>Have you received any previous training or education on precepting?</b>	
Yes	0 (0%)
No	5 (100%)

### **Pre-test Knowledge Based Questions**

Prior to receiving the educational module, the participants were asked a series of questions to gather a baseline assessment on current knowledge. 40% (n=2) of participants were able to identify the attributes of critical thinking. Most of the participants (n=4, 80%) acknowledged that preceptees experience an increase in stress level when feedback from their preceptor is not received. All of the participants (n=5, 100%) were able to identify what active learning is. "Pimping" was seen as not being an effective teaching strategy by 60% (n=3) of the participants. Over half of the participants (n=4, 80%) were able to identify that dialogue in the form of thinking out loud allows the preceptor to guide the thinking process and recognition of different psychological types can increase the effectiveness of each stage of orientation. One hundred percent (n=5) of the participants acknowledged that if communication fails, the student

and preceptor may experience an increased risk of making mistakes and stress. Eighty percent (n=4) of participants believed that formal preparation of preceptors leads to the preceptor feeling an increased sense of professional growth.

### **Pre-test Attitude and Perception Based Questions**

When asked how much you agree with the statement: behaviors of preceptors have been found to influence students' perceptions and learning of appropriate clinical knowledge and skills, 80% (n=4), selected "very much agree" and 20% (n=1) selected "not at all". 40% (n=2) of participants selected having a positive attitude toward creating a positive preceptor-preceptee relationship and 60% (n=3) selected having a very positive attitude. All participants reported being open to implementing new teaching and communication methods into their precepting practice.

### **Post-test Knowledge Based Questions**

The post-test questions included the same questions from the pre-test to gauge if knowledge was gained from the educational module. Only 40% (n=2) of the participants were able to identify that reflection, context, dialogue, and time are the attributes of critical thinking. All participants (100%, n=5) answered that preceptees experience an increase in stress level when feedback from their preceptor is not received. Active learning was identified as occurring when a student is encouraged to participate, such as in a discussion by more than half of the participants (80%, n=4). One Hundred percent (n=5) answered that "pimping" is not an effective teaching strategy. Many of the participants (80%, n=4), were able to identify that dialogue in the form of thinking out loud allows the preceptor to guide the thinking process. Eighty percent of participants also identified that recognition of different psychological types can result in an increased effectiveness of orientation. All the participants (100%, n=5) identified that a failure in

communication leads to an increased risk of making mistakes and increased stress in the student and preceptor. 100% of the participants reported that the formal preparation of preceptors leads to an increased sense of professional growth in the preceptor.

**Table 3**

*Difference in pre-test and post-test knowledge-based questions*

<b>True Responses</b>	Pre-test	Post-test	Difference
Attributes of critical thinking include: reflection, context, dialogue and time	2 (40%)	2 (40%)	0%
Preceptees experience an increase in stress level when feedback from their preceptor is not received	4 (80%)	5 (100%)	20%
Active learning occurs when a student is encouraged to participate, such as in a discussion.	5 (100%)	4 (80%)	-20%
“Pimping” or series questioning is not an effective teaching strategy	3 (60%)	5 (100%)	40%
Dialogue in the form of thinking out loud allows the preceptor to guide the thinking process.	4 (80%)	4 (80%)	0%
Recognition of different psychological types can result in an increased effectiveness of each stage of orientation.	4 (80%)	4 (80%)	0%
If communication fails the student and preceptor may experience increased risk of making mistakes and stress.	5 (100%)	5 (100%)	0%
Formal preparation of preceptors leads to the preceptor feeling an increased sense of professional growth.	4 (80%)	5 (100%)	20%

Table 3 shows that there is not much of a difference between the pre-test and post-test results. In 4 out of 8 questions, there is a 0% increase in knowledge; however, the majority of the participants were able to answer the questions correctly prior to participating in the educational module.

**Post-test Attitude and Perceptions Based Questions**

To gain if there was a change in attitude and perception after the educational module, the same post-test included the same questions from the pre-test. Twenty percent (n=1) of the

participants reported to “somewhat agree” and 80% (n=4) of the participants reported to “very much agree” that behaviors in the preceptors has been found to influence students perceptions and learning of appropriate clinical knowledge and skills. When asked what your attitude is toward creating a positive preceptor-preceptee relationship, 20% (n=1) of participants reported having a positive attitude and 80% (n=2) reported having a very positive attitude. Eighty percent (n=4) of the participants reported to be “very likely” to implement new teaching and communication methods into their precepting practice and 20% (n=1) reported to be “likely” to implement.

**Table 4**

*Difference in pre-test and post-test attitude and perception-based questions*

	Pre-Test	Post Test
<b>How much do you agree with the statement: behaviors of preceptors have been found to influence students’ perceptions and learning of appropriate clinical knowledge and skills?</b>		
Not at all	1 (20%)	
Somewhat Agree		1 (20%)
Very Much agree	4 (80%)	4 (80%)
<b>What is your attitude toward creating a positive preceptor-preceptee relationship?</b>		
Positive	2 (40%)	1 (20%)
Very Positive	3 (60%)	4 (80%)
<b>How likely are you to implement new teaching and communication methods into your precepting practice?</b>		
Likely	1 (20%)	1 (20%)
Very likely	4 (80%)	4 (80%)

Table 4 shows that the participants had a positive attitude prior to participating in the educational module. There was a very minimal increase in attitude between the pre-test and post-test.

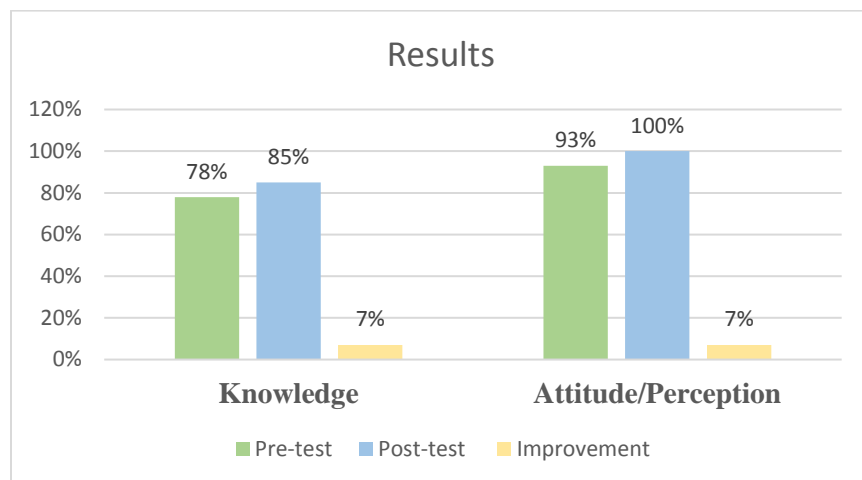
## Discussion

### Summary

All 5 participants reported never receiving prior training or education in precepting, yet 80% of the participants have at least 1 year of precepting experience. The same knowledge-based questions were asked on the pre-test and post-test to gauge if the participants enhanced their knowledge after the educational module. Most of the pre-test questions were answered correctly by more than 50% of the participants. Table 5 shows that the overall knowledge was 78% on the pre-test and 85% on the post-test, resulting in a 7% knowledge increase.

The pre-test and post-test also assessed if the educational module enhanced the participants attitude and perception of the precepting role. The results from the pre-test showed that all participants already had a positive attitude towards the precepting role prior to the educational module. A positive attitude and perception on precepting were counted if the participant selected at least a likely or positive answer on the questions. The pre-test showed a 93% positive attitude and perception which was increased to 100% on the post-test, resulting in a 7% increase. One important consideration to consider is that all of the participants reported being open to implementing new teaching and communication methods into their precepting practice.



**Table 5**

### Limitations

One limitation was the small sample size. An email was sent out to all members of an anesthesia group; however, only 5 responses were received. A larger sample size would allow for a more accurate assessment on improvement in knowledge, attitude, and perception. Time was another limitation. The pre-test and post-test were only open for two weeks after being sent out. If more time was allotted, then possibly more responses would have been received. The delivery method also caused limitations. The email was sent out only one time making it easy for recipients to forget to respond. A reminder email could have helped to gain more participants.

### Implications to Advanced Nursing Practice

Many positive results can arise from the success of this quality improvement project. First, the effectiveness of the educational module would indicate that an educational intervention can result in improved student learning outcomes through the enhancement of teaching and communication skills of preceptors. Preceptors play a vital role in the success of the student's clinical experience and the growth of their precepting skills will allow for a successful learning environment for the student. Ideally, if a preceptor can apply the learned teaching and

communication skills into their practice when precepting a student, the student will be able to develop a higher level of confidence and have a positive clinical experience. A CRNA preceptor that embodies various teaching and learning techniques can help ease the transition of the student into their new role as an advanced practice nurse.

The effectiveness of this quality improvement project can also demonstrate that the initiation of an educational model can positively impact the preceptors own professional growth and development. Preceptors will gain a positive outlook on their role as a preceptor when they see that they are actively helping the student succeed. The creation of a positive preceptor-preceptee relationship and a healthy learning environment can help to increase preceptors' dedication to the role as preceptor and decrease stress and anxiety in both the preceptor and preceptee. This study can also enhance the current literature that is lacking in preceptor educational programs that are specifically developed for CRNAs. The DNP Anesthesiology Nursing Program is physically, mentally and emotionally demanding on the students, with the clinical portion being one of the most stressful aspects. The success of this intervention can help to alleviate some of the stress of the SRNAs by educating CRNAs on effective precepting methods.

### **Conclusion**

The overall goal for developing a formalized educational module on precepting is to increase the knowledge, perception, and attitude of the CRNA preceptor in terms of effective teaching and learning strategies, effective communication and a positive preceptor-preceptee relationship. Even though this study did not produce significant results, the results still showed that there was an increase in knowledge, perception, and attitude of the participants. The most important factors that the results showed were that none of the participants had previously

received precepting education and that all of the participants are open to implementing new teaching and communication strategies into their practice. A formalized preceptorship workshop can provide the education to create a positive and successful preceptor-preceptee relationship by increasing the knowledge, perception, and attitude of the CRNA preceptor on effective teaching, learning, and communication strategies.

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## Appendices

### Appendix A

#### IRB Approval



Office of Research Integrity  
Research Compliance, MARC 414

#### MEMORANDUM

**To:** Dr. Ann B. Miller  
**CC:** Lindsay Schafer  
**From:** Maria Melendez-Vargas, MIBA, IRB Coordinator *W*  
**Date:** April 27, 2022  
**Protocol Title:** “An Educational Module on a Formalized CRNA Preceptorship Workshop to Enhance Teaching and Communication Skills”

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the **Exempt Review** process.

**IRB Protocol Exemption #:** IRB-22-0175      **IRB Exemption Date:** 04/27/22  
**TOPAZ Reference #:** 111499

As a requirement of IRB Exemption you are required to:

- 1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
- 2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
- 3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

**Special Conditions:** N/A

For further information, you may visit the IRB website at <http://research.fiu.edu/irb>.

MMV/em

## Appendix B

### Letter of Support



## Miami Beach Anesthesiology Associates, Inc.

*Mount Sinai Medical Center • Division of Anesthesia*

**S. Howard Wittels MD**  
Chairman

**Hector Davila MSS, MD**  
Executive Director

**Guillermo Garcia MD**  
Vice Chairman

**Rick Hasty MD**

**Sebastian Baquero MD**

**Christopher Bauer MD**

**Vicente Behrens MD**

**Jayanand D'Mello MD**  
Research Coordinator

**Laura Foster MD**

**Pablo Fumero MD**

**Pedro Garcia MD**

**Howard Goldman MD**  
Obstetrics Chief

**Jason Hoyos DO**  
Residency Program  
Co-Assistant Director

**Flor Marin MD**

**Gerald Rosen MD**  
Residency Program  
Director

**Jason Wigley MD**  
Residency Program  
Co-Assistant Director

**Alexander Voisky MD**

**Jennifer Wright MD**

**J.P. Mato DNP, CRNA**  
CRNA Director & SRNA  
Coordinator

**Paula Schultz DNP, CRNA**  
OB-Chief CRNA

February 1, 2022

Dr. Ann Miller, DNP, CRNA, APRN  
Associate Professor  
Department of Nurse Anesthesiology  
Florida International University

Dr. Miller,

Thank you for inviting Mount Sinai Medical Center to participate in Doctor of Nursing Practice (DNP) project conducted by Lindsay Schafer entitled "An educational module on a formalized CRNA preceptorship workshop to enhance teaching and communication skills" in the Nicole Wertheim College of Nursing and Health Sciences, Department of Nurse Anesthesiology at Florida International University. I have given the student permission to conduct the project using our providers.

Evidence-based practice's primary aim is to yield the best outcomes for patients by selecting interventions supported by the evidence. This proposed quality improvement project seeks to investigate and synthesize the latest evidence.

We understand that participation in the study is voluntary and carries no overt risk. All Division of Anesthesia providers are free to participate or withdraw from the study at any time. The educational intervention will be conveyed by a 15-minute virtual PowerPoint presentation, with a pretest and posttest questionnaire delivered by a URL link electronically via Qualtrics, an online survey product. Responses to pretest and posttest surveys are not linked to any participant. The collected information is reported as an aggregate, and there is no monetary compensation for participation. All collected material will be kept confidential, stored in a password encrypted digital cloud, and only be accessible to the investigators of this study: Lindsay Schafer and Dr. Miller.

Once the Institutional Review Board's approval is achieved, this scholarly project's execution will occur over two weeks. Lindsay Schafer will behave professionally, follow standards of care, and not impede hospital performance. We support the participation of our Division of Anesthesia providers in this project and look forward to working with you.

Respectfully,

Jampierre (J.P.) Mato, DNP, CRNA, APRN  
Executive CRNA Director  
SRNA Coordinator/Supervisor  
Electronic Mail: [Jampierre@bellsouth.net](mailto:Jampierre@bellsouth.net)  
Mobile Phone: 954-668-6080



Appendix C  
Proposed Method for Data Collection  
Pretest and Posttest Questionnaire

## INTRODUCTION

The primary aim of this educational module on a formalized preceptorship workshop is to provide effective communication, teaching and learning strategies in order to increase the knowledge, perception and attitude of the CRNA preceptor in creating a positive preceptor-preceptee relationship.

Please answer the questions below to the best of your ability. The questions include demographic information and current attitude and knowledge of precepting a SRNA. Questions are either in true or false, multiple choice or likert style format and are meant to measure the CRNAs knowledge of effective precepting strategies.

## PERSONAL INFORMATION:

1. **Gender:** Male    Female    Other\_\_\_\_\_

2. **Ethnicity:**

Hispanic    Caucasian    African American    Other \_\_\_\_\_

3. **Position/Title:** \_\_\_\_\_

4. **Level of Education:**

Associates    Bachelors    Masters    Doctoral (DNP, DNAP, MD, EdD)

5. **How many years have you been a preceptor?**

- a. Less than 1 year
- b. 1 to 5 years
- c. 6 to 10 years

- d. More than 10 years

## **QUESTIONNAIRE**

### **6. Have you received any previous training or education on precepting?**

- a. Yes
- b. No

### **7. What are attributes of critical thinking?**

- a. Prioritizing, organizing tasks and time
- b. Reflection, context, dialogue and time
- c. Tasks, routines, procedures
- d. Observation and trial and error

### **8. Preceptees experience an increase in stress level when feedback from their preceptor is not received.**

- a. True
- b. False

### **9. Active learning occurs when a student:**

- a. Will listen and read the material, then reflect internally without further reflection back or reviewing
- b. Listens to a podcast or watches a YouTube video
- c. Is encouraged to participate, such as in a discussion
- d. Answers a question correctly

### **10. “Pimping” or series questioning is an effective teaching strategy**

- a. True
- b. False

**11. Dialogue in the form of thinking out loud:**

- a. Is not an appropriate teaching method
- b. Involves the preceptor asking multiple knowledge-based questions
- c. Allows the preceptor to guide the thinking process
- d. Is when the preceptor provides immediate constructive criticism to the student

**12. Which statement is true regarding how to improve the learning process:**

- a. Briefing before a task will decrease performance and safety
- b. A person's psychological type does not have a strong influence on their teaching & learning preferences
- c. Recognition of the different psychological types can result in an increased effectiveness of each stage of orientation
- d. Giving immediate feedback does not help the student to progress in the learning process

**13. If communication fails, the student and preceptor may experience: (Select 2)**

- a. Increased risk of making mistakes
- b. A positive learning environment
- c. Stress
- d. Successful preceptor-preceptee relationship

**14. Formal preparation of preceptors leads to the preceptor feeling:**

- a. Stressed
- b. An increased sense of professional growth
- c. Not adequately supported
- d. Uninterested in the precepting role

**15. How much do you agree with the statement: behaviors of preceptors have been found to influence students' perceptions and learning of appropriate clinical knowledge and skills?**

- a. Not at all
- b. Somewhat agree
- c. Mostly agree
- d. Very much agree

**16. What is your attitude toward creating a positive preceptor-preceptee relationship?**

- a. Very Positive
- b. Positive
- c. Neutral
- d. Negative
- e. Very negative

**17. How likely are you to implement new teaching and communication methods into your precepting practice?**

- a. Very likely
- b. Likely
- c. Unsure
- d. Unlikely
- e. Very unlikely

# Appendix D

## Educational Module

### An Educational Module on a Formalized CRNA Preceptorship Workshop to Enhance Teaching and Communication Skills

London A. O'Neil, DNP, RN  
Ann B. Sibley, DNP, CRNA, APRN



### Learning Outcomes

- Describe effective teaching and learning methods
- Describe effective communication strategies
- Describe the benefits of preceptor training
- Describe positive and negative behavior traits of the preceptor



### Preceptor

**Preceptor**  
An experienced practitioner who instructs, supervises & evaluates a less experienced practitioner for a defined period of time.

**Effective Preceptor**  
The ability to apply the preceptorship model & various teaching & learning principles to provide constructive feedback & evaluate student outcomes.

**Preceptorship**  
A structured learning experience where a student is taught by an experienced practitioner.



### Role of a Preceptor

- Share the clinical practice
- Facilitate the development of knowledge & clinical skills
- Help the student develop confidence
- Enhancement of role of teaching & preceptor teaching skills
- Provide clear and concise feedback



### Background

Research has shown that teaching outcomes & progression in the clinical setting is dependent on the relationship with their preceptor.

CRNAs are expected to help educate others with little or no support of education related to the preceptor role.

The responsibility of teaching can cause an increase in stress and burnout related to the preceptor.

The preparation & support of preceptor candidates is a way in order to meet the student's learning needs.

Based on the impact, the impact & needs of preceptors, we created & used to create a preceptor educational course.



### Scope of the Problem

**Studies**

- Most of other preceptors that preceptorship training would be beneficial.
- CRNAs receive only a brief course in the role of preceptorship from coursework & training to an educational institution.
- Further, we are asked to fill the void of a preceptorship program.

**Problems**

- Preceptors are not prepared for the preceptorship role & lack the necessary skills to perform this role.
- There is a lack of communication between the preceptor & student on what is being taught & how to be an effective preceptor.
- There is a lack of communication between the preceptor & student on what is being taught & how to be an effective preceptor.

**Goal**

- Develop a comprehensive program of preceptorship training that will provide the necessary skills to be an effective preceptor.



### Benefits of Preceptor Education

Former preceptor education programs have been found to improve student outcomes & enhance teaching behaviors in preceptors.

Formal Preceptor Education Programs

- Preceptor
- Opportunity

Preceptorship is a structured learning experience where a student is taught by an experienced practitioner.



### Preceptor Behavior

Identifying preceptor behaviors reported by CRNAs

- Increased feedback & evaluation
- Lack of interest from the preceptor
- Weakness in interpersonal communication skills (intentional & nonverbal)
- Poor preceptor teaching skills

Top 3 most important behaviors reported by CRNAs

- Address during clinical visits
- Use of questioning & explanation
- Clear communication
- Allow independent decision making



### Perception of Preceptors

Preceptor perception of the preceptorship

- Indicates one has been trained in preceptorship education & training
- Beneficial, sometimes, not adequately supported
- This was contradicted by what the students reported
- The discrepancy is due to the preceptor believing that they are providing effective communication, but the student perceives information differently
- Preceptorship impact student learning
- Contribute to preceptor's professional growth



### Teaching Strategies: Four Attributes of Critical Thinking

Critical Thinking: Intellectual, reflective thinking

- Thinking and lead to enhance knowledge
- Encourage learning
- Discussion of teaching to understand individual or multiple perspectives
- Understanding the big picture
- Considerations should consider learning content to provide a reflective conversation
- The use of past experiences to discuss change over time

Reflection, Critical, Dialogue, Time



### Teaching Strategies

Thinking and lead

- Thinking and lead to enhance knowledge
- Thinking and lead to enhance knowledge
- Thinking and lead to enhance knowledge
- Thinking and lead to enhance knowledge

"Pressing" or direct questioning

- The preceptor should address the student's question in the period of time of the preceptorship
- The "art of listening"
- Not a student-friendly teaching method



### Learning Needs

CRNAs perceived an increase in stress level when feedback from the preceptor was not received

- A preceptorship program is needed to provide the necessary skills to be an effective preceptor
- Preceptorship is a structured learning experience where a student is taught by an experienced practitioner
- Preceptorship is a structured learning experience where a student is taught by an experienced practitioner



### Communication

Communication skills: the preceptor and the student

- Active listening
- Effective use of verbal & nonverbal communication
- Communication & professional behavior: the preceptor and the student
- Communication & professional behavior: the preceptor and the student



### Communication Strategies

Communication strategies: the preceptor and the student

- Communication strategies: the preceptor and the student
- Communication strategies: the preceptor and the student
- Communication strategies: the preceptor and the student



### Summary

Teaching, Learning, Communication

- Teaching: Critical thinking, intellectual, reflective thinking
- Learning: The preceptor should address the student's question in the period of time of the preceptorship
- Communication: Communication & professional behavior: the preceptor and the student




### References

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## Appendix E


## AANA Poster Presentation



## An Educational Module for a Formalized CRNA Preceptorship Workshop to Enhance Teaching and Communication Skills

Lindsay Schafer BSN, RN; Ann B. Miller, DNP, CRNA, APRN, Jampierre Mato, DNP, CRNA, APRN





Nicole Wertheim College of Nursing & Health Sciences  
FLORIDA INTERNATIONAL UNIVERSITY

### Introduction

A preceptor is an experienced practitioner who teaches, supervises and acts as a role model for students during clinical practice.<sup>1</sup> The role of the preceptor is to support the student during the transition from the classroom into clinical practice by facilitating the development of knowledge and clinical skills and the enhancement of critical thinking and problem-solving skills.<sup>1</sup>

### Purpose

Analyze literature on the efficacy of preceptorship workshops and training to improve providers knowledge, perception and attitude towards the use of effective teaching, learning, and communication strategies, for a positive preceptor-ceptee relationship.

### Clinical Significance

- Students feel that their learning outcomes and progression in the clinical setting is highly dependant on their relationship and interaction with their preceptor.<sup>1</sup>
- Most CRNA preceptors have minimal exposure to adult learning principles and educational theory.<sup>1</sup>
- **Dissatisfying preceptor factors observed by SRNAs:<sup>1</sup>**
  - Inconsistent feedback and evaluation
  - Poor teaching skills
  - Unprofessional communication including intimidation and harassment
- **Responsibilities of preceptors:<sup>2</sup>**
  - Apply classroom knowledge to actual clinical situations
  - Develop clinical skills, critical thinking and confidence

A formalized preceptor workshop can lead to enhanced teaching and learning opportunities, personal and professional development and a positive preceptor-ceptee relationship.<sup>1</sup>

### Methodology

Research articles were obtained by searching the following databases: CINAHL, Pubmed and ProQuest.  
**Keywords:** preceptor, preceptee, preceptorship, nursing, nurse anesthesia, student registered nurse anesthesia, education  
**Inclusion criteria:**



- Studies related to a preceptorship within nursing or nurse anesthesia
- Articles published in English and within 20 years

**Exclusion criteria:**

- Research greater than 20 years old
- Not available in English
- Did not address primary research

**Study Designs:**

- Descriptive studies, mixed methods and qualitative studies
- N=13
- IRB exempt

PICO Question

**(P) In anesthesia providers (I) does an educational module on preceptorship training (C) compared to no preceptor training from a formalized preceptor workshop (O) increase the knowledge, perception and attitude on effective teaching, learning, communication strategies, and a positive preceptor-ceptee relationship?**

### Literature Review

Author	Design and Objectives	Conclusion
Bengtsson & Carlson 2015	The aim of this qualitative study was to investigate preceptors' requests and educational needs when developing a preceptor professional development course. 64 Preceptors in the healthcare field and were asked to answer "what further knowledge and skills do you need to develop as a preceptor?"	The two main themes requested by the preceptors included: tools for effective precepting of students and in depth knowledge and understanding of preceptorship in an academic setting. A course was developed that included teaching and learning strategies, communication skills, reflective and critical thinking and the role of the preceptor.
Forness and Pedersen-Mohajee 2009	A qualitative instrumental case study to determine the impact of the preceptor coaching component of a reflective contextual learning intervention on new nurses critical thinking skills during their first 6 months of practice.	Attributes of critical thinking: reflection, context, dialogue and time. Preceptors acknowledged a change in their precepting style by creating a more intentional and reflective form of thinking. Teaching critical thinking as intentional, reflective thinking to preceptors will influence critical thinking in the preceptee.
Easton et al. 2017	A qualitative study that created and evaluated an online, evidence based CRNA preceptor training tutorial. Established a baseline of precepting behaviors to identify areas needing improvement. The participants included twenty-four CRNAs and twenty SRNAs.	It was found that both CRNAs and SRNAs highly value debriefing, communication, introductory discussion at the beginning of each clinical day, and providing structure to the preceptorship. 62% of CRNAs reported formal precepting training would be helpful. It is suggested that equipping CRNA preceptors with tools to improve their communication with SRNAs is important.
Elsha et al. 2008	This study used questionnaires, cognitive interviews, trigger film analysis and assessment by an independent observer during instruction to collect data. It aimed to determine if providing an 8-hour educational course would modify the perceived behaviors and the perceived knowledge of CRNA clinical educators.	The 8 hour course positively modified the participants behavior and knowledge toward clinical education. The most significant impact included adult learning principles, establishing positive teacher-learner relationships and providing positive feedback.
Elsha et al. 2011	Descriptive study using cross-sectional survey methods to describe the experiences and attitudes of SRNAs related to clinical instruction.	This study showed that 60% of SRNAs reported verbal abuse in the clinical setting. Satisfaction of SRNAs can be enhanced by either a perceived increase in learning or a reduction in perceived mistreatment. SRNAs ranked behaviors of preceptors in terms of importance, nonthreatening and clear communication, and allows independent decision making.

### Effective Precepting Skills

**Teaching Strategies:**

- Critical thinking, intentional, reflective thinking<sup>15</sup>
- Ask "how?", "why" or "what if" questions<sup>15</sup>
- "Pinging" or series questioning is not an effective teaching method and can increase the student's stress<sup>9</sup>

**Learning Strategies:**

- Active learning is a principle of adult learning & takes place when learners are encouraging to participate<sup>12</sup>
- Recognition of different psychological types can result in an increased effectiveness of orientation<sup>18</sup>

**Communication Strategies:**

- Briefing and debriefing in close proximity to the case improves the student's sense of mastery<sup>7</sup>
- Student's self confidence is dependent on feedback from the preceptor<sup>7</sup>
- Friendliness & being approachable leads to a successful preceptorship<sup>20</sup>

### Benefits of a Preceptorship Workshop

- Identifies the roles of a preceptor<sup>3</sup>
- Decreases turnover rate<sup>1</sup>
- Enhances professional growth<sup>1</sup>
- Enhances existing precepting skill<sup>10</sup>
- Positively changes preceptor's behavior and knowledge towards education<sup>12</sup>
- Provides concrete tools and teaching strategies to aid in the difficulties of precepting<sup>14</sup>
- Increases quality of care<sup>8</sup>
- Increases student's learning outcomes<sup>3</sup>
- Enhances critical thinking skills in the students<sup>15</sup>

### Conclusion

- The role of the preceptor is to support the student during the transition from the classroom into clinical practice through enhancement of critical thinking and problem-solving skills.<sup>1</sup>
- An effective preceptor should possess the skills to provide constructive feedback, have knowledge about various teaching and learning principles and be able to evaluate student outcomes.<sup>1</sup>
- A formalized preceptor training program would enhance the existing precepting skills of experienced providers by providing practical advice on the use of theory and evidence-based teaching principles.<sup>1</sup>

### References

References available upon request

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