



EDUCATION NEWS

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Doctoral Education: Which Degree to Pursue?

Doctoral education for nurse anesthetists is at the forefront of discussion within our community. The American Association of Colleges of Nursing (AACN), in 2004, set the stage for these discussions by recommending adoption of the doctor of nursing practice (DNP) as the entry to practice degree for advanced practice nursing. The American Association of Nurse Anesthetists (AANA) Board of Directors, in June 2007, approved a recommendation that entry to practice for nurse anesthetists move to the doctoral level by 2025. The AANA did not specify the type of doctoral degree. The actions of both the AANA and AACN will have a profound effect on future nurse anesthesia education.

As a result of the AACN's and AANA's actions,

many practicing nurse anesthetists are now considering pursuing doctoral education. There are a number of degree choices to consider, including the doctor of philosophy (PhD), doctor of education (EdD), doctor of nursing science (DNSc or DNS), doctor of nursing practice (DNP or DrNP), doctor of nurse anesthesia practice (DNAP), and doctor of management practice in nurse anesthesia (DMPNA). We examine the history of doctoral education and provide information about these degrees. The goal of this column is to provide background information to aid the CRNA in making a decision on the type of doctoral degree to pursue.

Keywords: Doctor of nursing practice, doctor of philosophy, education.

Introduction and Brief History of Doctorates in Nursing

For practicing nurse anesthetists, the question of which doctoral degree to pursue is daunting. The type of doctoral degree to pursue is an important and complex decision. Examples of these degrees include the doctor of philosophy (PhD), doctor of education (EdD), doctor of nursing practice (DNP or DrNP), doctor of nurse anesthesia practice (DNAP), and doctor of management practice in nurse anesthesia (DMPNA). Many issues should be considered during the decision making process, and the choice in degree type must be tailored to individual needs. This column will provide a summary of selected degree choices and present considerations for choosing the degree.

In order to begin to examine the decision for pursuing a particular type of doctoral education, it is useful to review the history of doctoral education in nursing. The discussion of the history will also be expounded upon throughout this column. The first doctoral degree for nurses was a EdD degree offered by Teachers College, Columbia University, New York, New York, in 1924.¹ The first PhD in nursing was offered in 1934 by New York University, New York, New York.¹ In the 1950s, Boston University, Boston, Massachusetts, began offering the doctor of nursing science (DNSc) degree. By the 1960s, the trend turned to obtaining PhDs in traditional scientific fields.¹ At that time there were 4 degrees that nurses could pursue for doctoral education including the PhD in

nursing, PhD in another field, the DNSc, and the EdD.¹

The idea of a practice doctorate for nursing is not a new concept. The doctor of nursing (ND) degree was first established by Case Western Reserve University, Cleveland, Ohio, in 1979.² By 2004, before the American Association of Colleges of Nursing (AACN) position statement on the practice doctorate, there were 4 ND programs: Case Western, Rush University, Chicago, Illinois; University of South Carolina, Columbia, South Carolina; and University of Colorado at Denver Health Science Center, Denver, Colorado. All of these programs have since converted to the DNP, and there are currently 78 DNP programs with an additional 50 in development.³

Why All This Talk About Doctorates Now?

Doctoral education of nurse anesthetists is at the forefront of discussions within the profession. The October 2004 recommendation to move advanced practice nursing education to the doctoral level by 2015 by the AACN caused our profession to closely examine the issues surrounding doctoral education. Additionally, the American Association of Nurse Anesthetists (AANA) Board of Directors, in June 2007, recommended that the entry to practice degree for nurse anesthetists be moved to the doctoral level by 2025.⁴ The AANA Board of Directors did not specify the type of doctoral degree. The actions of both the AACN and AANA will have a profound effect on the education of the nurse anesthetists. Additionally, it is recognized that in the future, nurse anesthetists may require additional knowledge to practice in a complex healthcare delivery system.⁵ The practice doctorate may be the answer to ever-increasing knowledge requirements.

Doctor of Nursing Practice Degree

As previously mentioned, the DNP degree has gained prominence in nursing education due largely to the actions of the AACN. The AACN in its position statement on the DNP recommended that entry to practice education for advanced practice nursing be moved to the DNP by 2015.² The primary justifications given by the AACN for moving advanced practice nursing education to the doctoral level were based on several reports issued by the Institute of Medicine including the 1999 report on medical errors.² Additionally, the increasing complexity of our healthcare system and the need to prepare nurses that understand the context of our healthcare delivery are used as justification for the DNP.²

The AACN approved the Essen-

tials for the DNP in October of 2006. The DNP Essentials delineate the desired content areas for DNP curricula. The DNP Essentials consists of 8 areas. These include the following: (1) scientific underpinnings for practice, (2) organizational and systems leadership for quality improvement and systems thinking, (3) clinical scholarship and analytical methods for evidence-based practice, (4) information systems/technology for the improvement and transformation of healthcare, (5) healthcare policy for advocacy in healthcare, (6) inter-professional collaboration for improving patient and population health outcomes, (7) clinical prevention and population health for improving the nation's health, and (8) advanced nursing practice.⁶

Other Practice Doctorates for Nurse Anesthetists

There are several clinical or practice doctorates that are similar to the DNP. The DrNP is a hybrid program combining aspects of the practice doctorate and the research doctorate, offered by Drexel University, Philadelphia, Pennsylvania. The DNAP is offered by Virginia Commonwealth University, Richmond, Virginia, and Texas Wesleyan University, Fort Worth, Texas. This practice doctorate has a clinical focus specific for nurse anesthesia. Additionally, Charleston Area Medical Center School of Nurse Anesthesia, Charleston, West Virginia, offers a DMPNA.⁷

It is worth noting that approximately 44% of nurse anesthesia programs are housed outside of schools and colleges of nursing.⁷ The type of degree that can be offered by these institutions may be affected by the school's association within the institution.

• *Considerations for Pursuing the Practice Doctorate.* Several factors should be considered when deciding on whether the practice doctorate is the right degree to pursue. The reason or purpose that the degree is

being sought is very important. The practice doctorate is designed to focus on clinical practice.⁸

The degree is ideal for those desiring to improve or increase their knowledge in an area of clinical practice, clinical leadership, or those desiring to be clinical faculty. One important consideration for individuals who desire university faculty positions is whether the degree will be eligible for tenure and whether it will be recognized as a terminal degree.⁸ The AACN in its recent statement on its vision for the preferred education level of the professorate indicated that the terminal degree in nursing should be either a practice-focused or research-focused doctorate (eg, DNP or PhD).⁹ However, it is probably prudent to determine whether the practice doctorate will be recognized as a terminal degree at each individual's desired university.

Other important factors to consider include practice doctorate program availability, method of delivery, as well as cost and length of program. Currently in existence are 78 DNP programs, 2 DNAP programs, 1 DrNP program, and 1 DMNAP program.^{3,7} These programs have different costs based on type of institution and length of program. There are different residency requirements, amounts of online or distance education components, and they vary in length from 12 to 36 months for CRNAs with master's degrees. Matching the program to individual professional needs, cost, location, delivery method, and time availability is of obvious importance.

In deciding on the practice doctorate as the degree to pursue, individuals must consider their future career goals. If these include clinical faculty positions at institutions recognizing the practice doctorate as a terminal degree or include leadership positions in the healthcare industry, the practice doctorate may be the degree to obtain.

• *Education and Research Doctorate.* The education doctorate (EdD) was the first doctoral program for nurses and was offered by Teachers College, Columbia University, in 1924.¹⁰ While nurses earned other doctoral degrees, the EdD served as the principle doctoral level degree earned by nurses from the 1920s to the late 1950s.¹⁰ Grace, as noted by Murphy,¹⁰ labeled this early period as one of “functional” specialists. In this case, the function of this specialized degree served to prepare nurses as specialists in education and administration.¹¹

The role of the EdD-prepared nurse was more aligned with that of the teacher or scholar rather than that of the research scientist, a role more closely associated with PhD preparation. These roles seem to continue today; however, establishing a clear line of demarcation between the roles of the EdD-prepared nurse and the PhD-prepared nurse is not easy and in practice may be futile. Typically, doctoral graduate students’ dissertation topics form the basis of their areas of specialization. If graduate students in an EdD program evaluate the outcomes of an innovative pedagogical method for their dissertations, are they education specialists because they have created new methods of teaching (ie, a role more closely associated with teaching), or are they methodological specialists because they have designed studies with both an interventional component and analysis component (ie, a role more aligned with basic science)? Ultimately when considering an EdD program, CRNAs must clearly identify their professional goals and then consider whether or not that particular program will assist in preparing them to accomplish those goals. If a CRNA has as his or her professional goal teaching, and especially if he or she is specifically seeking advanced research into the principles of teaching, then the EdD should be near the top of the list of degrees worth pur-

suing. On the other hand, if a CRNA is interested in the subject matter per se of the profession (eg, pain research, prevention of postoperative nausea and vomiting, etc), then the PhD may be a better choice.

The research doctorate (PhD) is designed to advance the state of the science within a discipline.¹ Having been first granted in the United States by Yale University, New Haven, Connecticut, in 1861, it was not until 1927 that the first nurse, Edith Bryan, earned a PhD from Johns Hopkins University, Baltimore, Maryland. It should be noted that this PhD was not in nursing but was in psychology.¹² The awarding of this PhD in psychology foreshadowed what has been described as the second phase of nursing doctoral education, that of the nurse scientist. It was during this period in the 1960s and early 1970s that nurses began earning PhDs in disciplines related to nursing such as sociology, anthropology, and psychology.¹ By the late 1970s and early 1980s, a third era in doctoral education for nurses began—the era of doctorate in and of nursing. During the 1970s, 16 doctoral programs were created in nursing.¹⁰

It was during this period that nontraditional research oriented doctoral degrees developed in parallel to the PhD including the doctor of nursing science (DNSc or DNS). While this degree by some accounts was developed to emphasize advanced clinical practice, many, in fact, contained a strong clinical research base.¹ For example, Rush University’s DNSc program, after being in existence for more than 2 decades, and after appropriate administrative review, made addendums to all graduates’ transcripts officially recognizing the Rush DNSc as equivalent to the PhD. Alumni have the option of referring to their degree as either the DNSc or the PhD. It should be noted, however, that some DNSc and DNS programs were more similar to prac-

tice doctorates (eg, DNP) than to a research degree.

In summary, the EdD, DNSc, and DNS are typically viewed as equivalent to the PhD, but some programs that have offered these degrees may have had more of an education or practice focus than the research focus of the PhD. It should also be noted that while the research focus of either of these doctorates typically form the basis of one’s area of expertise, it does not necessarily tie that individual to a particular area of study for the remainder of a career. One has to consider that the degree is ultimately a single credential. An individual’s interests and capabilities are probably greater factors in determining one’s success than the particular research degree he or she possesses.

Tenure

In a recent study of 187 schools of nursing and 75 schools of allied health (with whom nearly half of nurse anesthesia programs are associated), trends regarding the relative influence of the traditional criteria of teaching, research, and service on academic tenure policies were examined.¹³ Seventy-seven percent of respondents considered teaching the dominant criterion for tenure consideration. In contrast, only 19% of nursing deans and 22% of allied health deans ranked research as their most significant criterion for tenure. Finally, only 4% of nursing deans and 1% of allied health deans ranked service as their number one criterion for tenure. Additionally, 68% of nursing deans and 72% of allied health deans indicated that a doctoral degree (of unspecified type) was required for tenure.¹³

With this information in mind, any CRNA considering an academic career, be it in the more traditional role (eg, didactic education, research) or the clinical role (eg, clinical instructor) should strongly consider doctoral preparation. However, a CRNA may be misled by the previ-

Degree	Type	Description of degree focus
PhD – doctor of philosophy	Research	Discipline specific research
DNSc – doctor of nursing science	Research	Nursing science research
DNS – doctor of nursing science	Research	Nursing science research
EdD – doctor of education	Research	Research in education
DNP – doctor of nursing practice	Practice	Nursing practice focus covering 8 Essentials
DrNP – doctor of nursing practice	Hybrid–practice and research	Clinical research and practice
DNAP – doctor of nurse anesthesia practice	Practice	Nurse anesthesia practice
DMPNA – doctor of management practice in nurse anesthesia	Practice	Entry to practice degree, focus is nurse anesthesia and leadership/management

Table. Options of Doctoral Study

ous study's findings regarding the overwhelming propensity of nursing and allied health deans to emphasize teaching over research into believing that the EdD or DNP may be preferred over the PhD, DNSc, or DNS. The CRNA must keep in mind that the DNP is positioned to become the entry-to-practice degree, and, as a result, will lead to many new faculty entering academia with doctoral preparation. Over time, faculty will eventually be saturated with DNP-prepared CRNAs, which, while fully prepared to teach, may not have the research background or experience to conduct research—a role strongly associated with academia and tenure in other disciplines. Perhaps the upcoming predominance of the DNP-prepared instructor will advance the need for research-prepared CRNAs.

Availability of Resources

The decision to begin doctoral education is a significant choice in a CRNA's professional development. Once this decision is made, financing the education may be a concern. The first step in obtaining funds for school should include filing a Free Application for Federal Student Aid. This application will allow eligibility for federally funded grants and loans. Additionally, there are pre-

doctoral fellowships and scholarships available through the AANA Foundation and predoctoral fellowships through the National Institutes of Health. Veterans may be eligible for the new GI bill, and there are state, university, and private sources of doctoral education funding that may be available. The key to obtaining funding for doctoral education is to vigilantly search and apply for funds and to keep in mind that a combination of sources may be needed to assist in funding doctoral education.

The Decision Making Process

The goal of this column is to assist the CRNA in deciding which program of doctoral study is the best choice. The first step in this process is to understand the goals and focus of each degree (Table). The CRNA must then match the focus of the degree to personal and career goals (Figure). The considerations of program length and availability, cost, financing, and method of delivery are important in the decision process, as well. Doctoral education is clearly the wave of the future for nurse anesthetists, and the choice of degree to pursue is complex; however, we hope that this column will provide a good starting point for

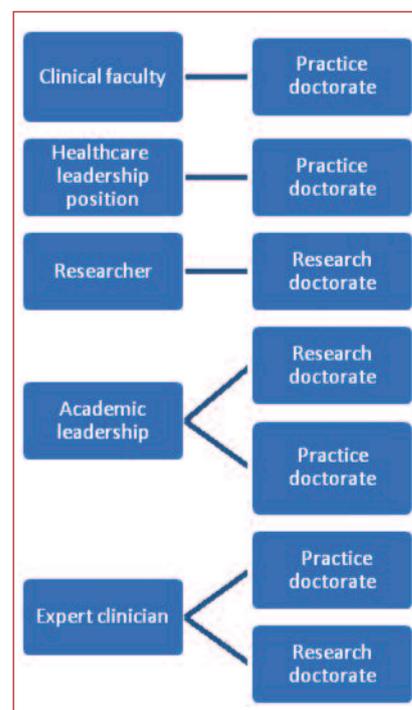


Figure. Suggested Degree Choice Based on Career Goals

your decision making regarding future doctoral study.

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