CHAPTER 3

The Essentials of the Doctor of Nursing Practice: A Philosophical Perspective

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Introduction

The American Association of Colleges of Nursing (AACN) recommends the Doctor of Nursing Practice (DNP) degree as the terminal practice-focused degree in nursing (American Association of Colleges of Nursing [AACN], 2004). Since its inception, the DNP degree has been met with both support and criticism (Burman et al., 2005; Chase & Pruitt, 2006; Dracup & Bryan-Brown, 2005; Hathaway et al., 2006). Despite the controversy associated with this innovative degree, approximately 357 DNP programs exist, with over 106 more currently in development (AACN, 2020). Because of the recommendations of the AACN (2004), as well as the growth in programs devoted to awarding this degree, it is necessary that graduate nursing students understand the definition and competencies of the DNP degree.

This chapter provides a history of the DNP degree. The AACN's *Essentials of Doctoral Education for Advanced Nursing Practice* (AACN, 2006b), which defines the competencies of the DNP degree, are discussed. The evolution from the 2006 *Essentials* to the current, reenvisioned *The Essentials: Core Competencies for Professional Nursing Education* (AACN, 2021) is detailed, with particular attention to philosophical inquiry regarding the nature of the discipline of nursing and nursing science. The chapter concludes with a description of the development of a middle-range theory to exemplify bridging theory with practice.

Overview of the DNP Degree

The DNP degree is defined as a practice-focused, terminal degree in nursing practice

(AACN, 2004). Nursing practice is defined as follows:

> Any form of nursing intervention that influences healthcare outcomes for individuals or populations, including the direct care of individual patients, management of care for individuals and populations, administration of nursing and healthcare organizations, and the development and implementation of health policy. (AACN, 2004, p. 1)

Historically, nursing has been concerned with the care of individuals. This more contemporary definition accurately describes care that focuses on the healthcare outcomes of populations, nursing from an organizational perspective, as well as nursing's impact on healthcare policy (Chism, 2016). These themes remain consistent throughout the competencies of DNP curricula, as well as being reflected in the AACN's 2006(b) essentials (see **Table 3-1**).

The DNP degree differs from the traditional doctor of philosophy (PhD) degree in both focus and content (see **Table 3-2**). The DNP is a *practice-focused* degree, whereas the PhD is a *research-focused* degree. Both degrees share the common goal of accomplishing a "scholarly approach to the discipline and commitment to the advancement of the profession" (AACN, 2006b, p. 3). However, the DNP emphasizes practice, while the PhD emphasizes theory and research methodology (AACN, 2004, 2006b). The DNP graduate is expected to demonstrate scholarly activity through a framework or theory-driven research project, often referred to a *doctoral project,* which translates evidence into practice.

Historical Perspectives

Doctoral education in nursing has indeed evolved over the past 40 years. In the 1960s, nurses' choices for doctoral education included a PhD in the basic sciences, such as biology, anatomy, or physiology, or an education doctorate (EdD) (Carpenter & Hudacek, 1996; Marriner-Tomey, 1990). As doctoral education in nursing evolved, more nursing-related doctoral degrees emerged.

Table 3-1 AACN's *Essentials of Doctoral Education for Advanced Nursing Practice*

Essential I	Scientific Underpinnings for Practice
Essential II	Organizational and Systems Leadership for Quality Improvement and Systems Thinking
Essential III	Clinical Scholarship and Analytical Methods for Evidenced-Based Practice
Essential IV	Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care
Essential V	Healthcare Policy for Advocacy in Health Care
Essential VI	Interprofessional Collaboration for Improving Patient and Population Health Outcomes
Essential VII	Clinical Prevention and Population Health for Improving the Nation's Health
Essential VIII	Advanced Nursing Practice

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Table 3-2 **Key Differences Between DNP and PhD/DNS/DNSc Programs**

	DNP	PhD/DNS/DNSc
Program of study	**Objectives**	**Objectives**
	Prepare nurse specialists at the highest level of advanced practice	Prepare nurse researchers
	Competencies	**Content**
	Based on AACN essentials of the DNP degree	Based on indicators of quality in research-focused doctoral programs in nursing
Students	Commitment to a practice career	Commitment to a research career
	Oriented toward improving outcomes of care	Oriented toward developing new knowledge
Program faculty	A practice doctorate and/or experience in the area of teaching	A research doctorate in nursing or a related field
	Leadership experience in the area of specialty practice	Leadership experience in the area of sustained research funding
	High level of expertise in specialty practice congruent with the focus of the academic program	High level of expertise in research congruent with the focus of the academic program
Resources	Mentors/preceptors in leadership positions across a variety of practice settings	Mentors/preceptors in research settings
	Access to diverse practice settings with appropriate resources for areas of practice	Access to research settings with appropriate resources
	Access to financial aid	Access to dissertation support dollars
	Access to information and patient care technology resources congruent with the areas of study	Access to information and research technology resources congruent with the program of research
	DNP	**PhD/DNS/DNSc**
Program assessment and evaluation	**Program Outcome**	**Program Outcome**
	Healthcare improvements and contributions via practice, policy change, and practice scholarship	Contributes to healthcare improvements via the development of new knowledge and other scholarly projects that provide the foundation for the advancement of nursing science
	Oriented by the institution's authorized bodies (i.e., graduate school) and regional accreditors Receives accreditation from a specialized nursing accreditor Graduates eligible for the national certification exam	Oriented by the institution's authorized bodies (i.e., graduate school) and regional accreditors

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The first nursing-related doctoral degree originated at Teachers College, Columbia University, in 1924. This degree was an EdD designed to prepare nurses to teach at the college level. It was unique in that it was the first doctoral degree in nursing to emphasize both nursing education and the needs of the profession (Carpenter & Hudacek, 1996). Later, in 1934, the first PhD in nursing was offered at New York University, followed by the introduction of a maternal–child nursing PhD program in the 1950s at the University of Pittsburgh (Carpenter & Hudacek, 1996). Importantly, the latter program was the first to recognize the importance of clinical research for the development of the discipline of nursing (Carpenter & Hudacek, 1996). Throughout the United States, other PhDs continued to focus on sociological fields such as psychology, sociology, and anthropology. Actual nursing PhDs did not become popular until the 1970s (Grace, 1978).

According to Murphy (1981), doctoral education in nursing developed in three phases. The focus of these phases included nursing doctorates that emphasized the development of (1) functional specialists, (2) nurse scientists, and (3) doctorates that were "in and of nursing" (p. 646). The first phase, which emphasized the development of functional specialists, focused on preparing nurses as teachers or administrators. Throughout the second phase—the development of nurse scientists—the following relevant questions emerged, which directly affected the third and final phase of nursing doctoral education:

- What is the essential nature of professional nursing?
- What is the substantive knowledge base of professional nursing?
- What kind of research is important for nursing? As a knowledge discipline? As a field of practice?
- How can the scientific base of nursing knowledge be identified and expanded? (p. 646)

These questions led to the development of nursing doctorates that were "in and of nursing" (p. 646), and they continue to influence nursing doctoral education today.

More recently, a fourth phase of doctoral education in nursing has evolved. This phase emphasizes nursing practice and initially began with the development of the doctor of nursing science (DNS) degree. The first DNS degree was made available at Boston University and "focused on the development of nursing theory for a practice discipline" (Marriner-Tomey, 1990, p. 135). The DNS was conceived as the first practice-focused doctorate. Cleland (1976) noted that the research doctorate should focus on contributions to nursing science and the practice doctorate should focus on expertise in clinical practice. Grace (1978) suggested that nurses be prepared as "social engineers," with attention being given to the clinical field (p. 26). Finally, Newman (1975) indicated that a practice doctorate would prepare nurses as "professional practitioners" for entry into practice (p. 705).

Although the DNS was developed to prepare nurses as practice experts, curricula in these programs over time began to resemble the PhD in nursing (AACN, 2006b; Apold, 2008; Marriner-Tomey, 1990). Given this development, the AACN has designated all DNS degrees as being research-focused (AACN, 2004). Hence, the challenge to develop a true practice doctorate remained.

Rozella Schlottfeldt (1978) pioneered the doctorate of nursing (ND) degree in 1979 at Case Western Reserve University in Cleveland, Ohio. Schlottfeldt believed a practice doctorate was necessary to address the following needs of nursing education:

- The need to reorient the existing system of health care toward services that enhance the health status of all people, while maintaining the existing services that focus primarily on detection and treatment of disease
- The need to reorient the nursing community in ways to hasten the emergence

of nursing as a scholarly discipline and a fully autonomous practice profession
- The need to reorient nursing's approach to preparing professionals with a view toward promptly augmenting the cadre of competent, independent, and accountable nursing practitioners (Schlottfeldt, 1978, p. 302)

Unfortunately, ND programs did not have the same popularity as DNS or PhD degrees. Also, the curricula for these programs lacked the uniformity needed to establish their credibility as practice doctorate programs (Marion et al., 2003). Interestingly, the needs outlined by Schlottfeldt (1978) are reflected in the curricula of current DNP programs.

Development of the Doctor of Nursing Practice

In 2002, a task force was formed by the AACN to evaluate the current status of practice doctorates in nursing, develop recommendations for a practice doctorate in nursing, and propose practice doctorate curriculum models. This work led to the development of the *AACN Position Statement on the Practice Doctorate in Nursing*, which was published in 2004. The position statement recommended that the DNP degree become the terminal practice-focused degree for nursing by 2015 (AACN, 2004).

The University of Kentucky's School of Nursing was the first to admit students to this program in 2001. Dr. Carolyn Williams, president of AACN (2000–2002) and dean emeritus of the University of Kentucky's School of Nursing, was an early proponent of the practice doctorate in nursing and, along with others, helped to facilitate the development of the DNP degree. In 2019, there were over 36,000 students enrolled in the country's 357 DNP programs (AACN, 2020).

Doctor of Nursing Practice Essentials

In 2006, the AACN developed the *The Essentials of Doctoral Education for Advanced Nursing Practice,* which "address the foundational competencies that are core to all advanced nursing practice roles" (AACN, 2006b, p. 8). Also in 2006, the National Organization of Nurse Practitioner Faculties published *Practice Doctorate Nurse Practitioner Entry-Level Competencies*, and in 2008, the National Association of Clinical Nurse Specialists published *Core Practice Doctorate Clinical Nurse Specialist Competencies*. Together, these documents provided the curriculum standards for all DNP programs. As a result of rapid changes in health care and higher education, in 2019 the AACN reenvisioned academic nursing to better prepare the nursing workforce. In April 2021, the AACN released *The Essentials: Core Competencies for Professional Nursing Education* to transition from the 2006 *Essentials* document. The 2021 *Essentials* combine the guides for both undergraduate and graduate programs in one document rather than dividing them into bachelor's degree essentials and DNP essentials.

In the new educational framework, four spheres of care are delineated, along with 10 domains and 8 featured concepts (AACN, 2021). The 10 domains, considered together, form a framework representing the practice of nursing and align with the concepts and spheres. Expected competencies and subcompetencies applicable for each domain are outlined in the document. The domains and their competencies are intended to guide both entry-level and advanced practice education, but variations are outlined based on educational level. The subcompetencies build from novice to expert practice (AACN, 2021). The relationships among the spheres, domains, competencies, and concepts are presented in **Figure 3-1**.

Foundational Elements

The 2021 AACN *Essentials* and core competencies are centered around foundational elements

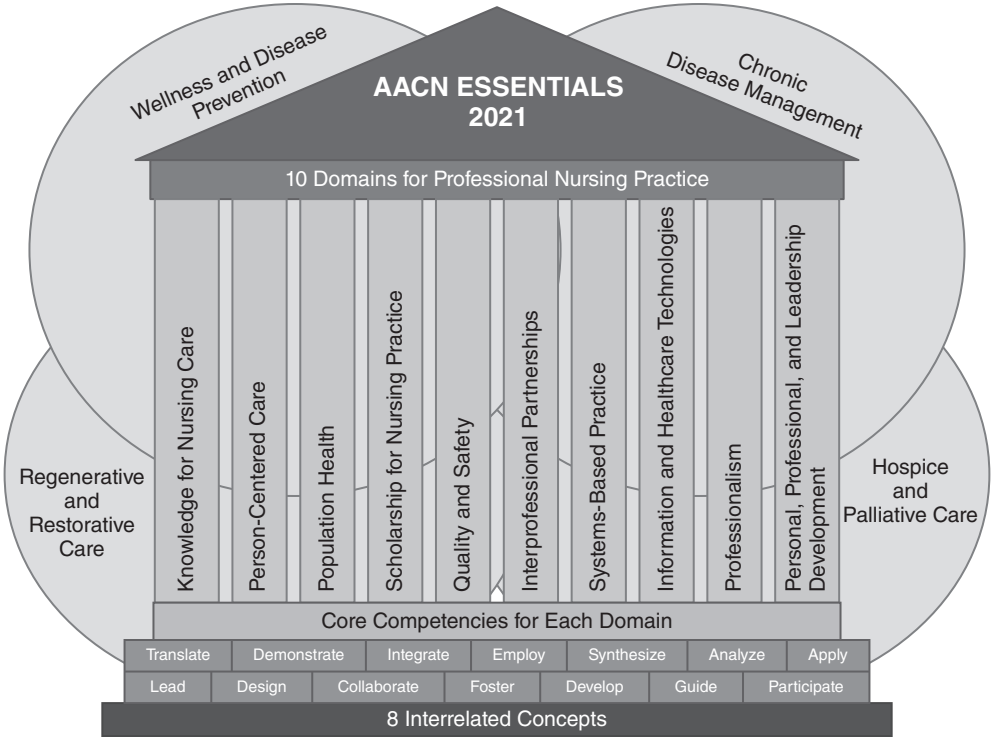

Figure 3-1 The 2021 AACN *Essentials* spheres, domains, competencies, and concepts.

Developed by Nina McLain.

critical to educating highly skilled nurses. The AACN described them as the foundation of nursing as a discipline, the foundation of a liberal education, and competency-based education. A combination of these elements differentiates nursing from other healthcare disciplines and serves to define the broad concept of nursing.

Nursing as a discipline, which is discussed in more detail later in this chapter, emerged in the 1970s–1980s after building on the works of early nurse leaders who envisioned nursing as a specialty separate from medicine. Since disciplines must have a distinct body of knowledge, nurses have advanced the discipline by defining and refining nursing science (AACN, 2021; Smith, 2019). To continue to make progress as a discipline, professional nurses must be educated to think theoretically and to develop and use a unique knowledge base while, at the same time, understanding that nursing also must include shared perspectives from other disciplines.

Having a liberal education is useful in the formation of a broad worldview and to successfully engage with people from diverse backgrounds. AACN (2021) proposed that a "liberal education is the key to understanding self and others" (p. 26). Therefore, biases may be diminished and opportunities for advocacy may be fostered. Certainly, there are many other benefits of a liberal education that contribute to the desired outcomes of safe and ethical practices and highly skilled nurse professionals.

Competency-based education focuses on students' progress in achieving expected performance levels for specific skills and mastering related knowledge. Faculty need to provide clear objectives and expectations,

often accompanied by a rubric, when presenting new information or when teaching a new skill. However, the onus is on students to be accountable and responsible for learning (AACN, 2021). Educators traditionally have tested students to measure knowledge retention as well as using practicum check-offs in an effort to ensure readiness for nursing practice at both basic and advanced practice levels. Today's advanced practice nursing students can expect to incorporate self-reflection exercises into their education and to experience multiple evaluation formats in addition to traditional testing methods. By using competency-based education, nurse educators can be more confident that their graduates' skills will result in safe, high-quality care.

Spheres of Care

Reenvisioning the AACN's earlier *Essentials* documents was required to alter the focus of nursing education from its traditional acute care concentration to one that would better incorporate current and future needs of U.S. healthcare consumers (AACN, 2021). Many traditional nursing roles have transitioned into specialty positions, and as such, the *Essentials* needed to be revised to incorporate basic aspects and training for these specialties into general nursing education. An acute nursing focus is still contained within the AACN's 2021 *Essentials* because students require foundations to build on to prepare them to provide quality care to populations in diverse settings. The four spheres of care are not mutually exclusive; overlap exists between them. The spheres include:

1. Disease prevention/promotion of health and well-being
2. Chronic disease care
3. Regenerative or restorative care
4. Hospice/palliative/supportive care (p. 6)

Health promotion and disease prevention are traditional nursing responsibilities. Patient education has long been a foundational part of nursing care taught in curricula across the country. An emphasis on patient education is predicated on the belief that if patients truly understand how to care for themselves and why they need to practice self-care, desirable changes in behavior will occur. In the reimagined *Essentials*, this is captured in the first sphere of care, through the promotion of patients' physical and mental health. This first sphere also incorporates management of intermittent and minor acute care nursing needs (AACN, 2021).

While disease prevention is a primary focus of the first sphere, managing chronic disease progression and prevention of negative sequelae is the aim of the second. As with the first sphere, patient education should take place to enable patient self-care practices. If chronic diseases are properly managed, negative sequelae often can be averted.

Complex, acute, and intensive care with a focus on regeneration and restoration of health is at the center of the third sphere. While this care most often takes place in large, "mega-acute care" facilities (AACN, 2021, p. 6), COVID-19 brought this sphere to smaller, less prepared facilities when the large hospitals and university-based medical centers filled to capacity. Nurses functioning in traditional acute care roles found themselves caring for unstable patients well outside their routine populations. The third sphere of care is the sphere most applicable to the pandemic situation. Based on nurses' experiences during the COVID-19 pandemic, it is apparent that a significant educational emphasis on the complex care of critically ill patients is optimal. The third sphere of care using a holistic perspective needs to be prominent in nursing curricula.

Entry-level and advanced nursing curricula include end-of-life care education but have typically focused on caring for patients and their loved ones when patients are at the terminal phase of life. The fourth sphere was designed to also include caring for people with chronic diseases who are not at the end of life

(AACN, 2021). This sphere has expanded this type of care to include extended care and rehabilitative care. Patients' quality of life can be affected by improving their activity of daily living function, as happens in rehabilitation facilities.

Overlap may exist between the various spheres, and this may serve to enhance the patient experience when this occurs. For example, while in a regenerative or restorative clinical setting (third sphere), a patient is likely to need prevention of other illnesses or care for a chronic illness that require nurses to pull from knowledge from the first and second spheres of care.

The four spheres of care encompass comprehensive learning experiences in professional nursing programs and offer opportunities for in-depth exploration of students' preferred areas of practice. Badges, certificates, and immersion experiences can be created based in one or more spheres, and students might be able to select a defined pathway within their education, especially in DNP programs.

Domains and Competencies

The four spheres encompass 10 broad domains of competence that provide a "descriptive framework" for nursing practice when the domains are considered together (AACN, 2021, p. 9). The *Essentials* document indicates that the domains are based on "the interprofessional work initiated by Englander (2013)" and were adapted for nursing (p. 10). Englander and colleagues (2013) developed a taxonomy of competency domains for health professions. While the domains are distinguishable, nursing practice requires the integration of multiple domains in care delivery and is very situation specific, not unlike the crossover that occurred with the AACN's 2006 edition of the *Essentials* and patient care.

The competencies were intentionally developed broadly as they cover entry-level through advanced practice nursing and are applicable across all areas of nursing. The competencies take into consideration multiple elements, including internal factors such as education, experience, and knowledge, and external factors such as learning experiences and autonomy. AACN (2021) affirmed that knowledge alone does not translate into validation of competence, and so the competencies were developed. For the purposes of this chapter, the discussion centers around the advanced nursing-level competencies for the DNP.

Advanced nursing level education (ANLE) competencies build on those of the entry-level professional nursing education (ELPNE). The table of competencies located in the *Essentials* (AACN, 2021) clarifies the perspectives for each level. The competencies are broad, and yet distinguishable enough to provide clear definitions for each area. For example, Domain 1, "Knowledge for Nursing Practice," is broad and encompasses a liberal arts education and natural sciences general foundation, and yet it is inclusive of the integration and application of that knowledge into nursing practice. The advance practice nurse is expected to use this knowledge in clinical judgment and care for the patient. The domains from AACN's 2021 *Essentials* are summarized briefly next.

Domain 1: Knowledge for Nursing Practice

The focus of this domain is on nursing knowledge and its distinction from other disciplines. Nursing education includes liberal arts and the natural and social sciences, and yet it combines this content with critical thinking developed across the nursing curricula. From this, clinical judgment and innovation evolves.

Domain 2: Person-Centered Care

This domain aims to focus directly on the patient, family, and other people who are important to the patient. The competencies within this holistic domain are centered on

respectful and compassionate care and are expected to be demonstrated in all areas of nursing and specialties.

Domain 3: Population Health

The AACN's 2006(b) *Essentials* document (VI, VII) included a population health focus in the form of wellness promotion and disease prevention to improve patient outcomes. These highly valuable foci broadened the scope of nursing education from a spotlight on acute care to a holistic population-centered approach. Newly reenvisioned in the 2021 document, a specific domain was included to broaden nursing curricula to include equitable population health outcomes across multiple entities.

Domain 4: Scholarship for Nursing Practice

The clinical focus of the DNP differentiates it from the research focus of the PhD, and as such, a domain specific to BSN and DNP nursing needed to be addressed. Historically, requirements for implementation of a capstone project hindered many DNP programs and students. The focus of leading change for improvement in care resulted in multiple quality improvement or change projects. In trying to complete these projects, students encountered significant resistance from clinical sites hosting students. Many of these agencies were overwhelmed with change. DNP programs and project chairs had to become creative to help students develop a robust, meaningful project while maneuvering among restrictions from clinical practice partners. The broad approach taken by Domain 4 appears to rectify these issues, while still allowing for robust, meaningful projects that can ultimately improve patient outcomes.

Domain 5: Quality and Safety

At the heart of every quality nursing program is the credo to do no harm (known as *nonmaleficence*). Domain 5 was designed to include known and yet to be determined safety principles, with a focus on continual improvement. Ultimately, enhancing personal performance and improving institutional effectiveness can improve the quality of health care.

Domain 6: Interprofessional Partnerships

Collaboration is required in most aspects of nursing to provide quality care. Whether in terms of communication, case-based interactions, decision making, or education, nurses interact with patients and families, as well as many other stakeholders, to provide necessary care. Domain 6 focuses on optimizing patient care through interpersonal partnerships to improve patient and population outcomes while providing positive healthcare experiences.

Domain 7: Systems-Based Practice

While organizational skill and critical thinking are not listed as skills in the descriptors of Domain 7, both are required to navigate patient care effectively through complex system-based practice. These skills can certainly ease navigation through the intricate networks within a system. The focus of this domain is safe, high-quality, and equitable care for all patients in a collaborative fashion.

Domain 8: Information and Healthcare Technologies

Technology use in health care has grown exponentially over the past few decades. At the center of its use is communication and availability of patient information for easy access and sharing among providers and stakeholders. The move to electronic medical records and the resultant regulatory requirements were intended to facilitate the transfer of patient information across disciplines to include reimbursement, research, and decision making. The ultimate focus of Domain 8 is to improve

the delivery of safe, high-quality care in a technological environment.

Domain 9: Professionalism

Professional nursing has been associated with possessing a baccalaureate education; however, Domain 9 focuses on professionalism as a noun, or skill. It is intended here as the state of practicing this skill as a reflection of a nursing identity. Nurses need to be continually socialized to exhibit integrity and other virtues integral to the profession. The conduct of the nurse, therefore, should demonstrate an approach to care that is inclusive of accountability and ethics.

Domain 10: Personal, Professional, and Leadership Development

This domain is nurse-centered, focusing on lifelong growth of the nursing identity. It aims to build upon the professional aspects and self-care concepts introduced in nursing education, and to further elicit the leadership and professional aspects that come with experience.

Concepts

Important areas of knowledge for professional nursing practice are integrated within the *Essentials* as eight featured concepts (AACN, 2021). Derived from nursing literature, the multiple concepts are woven throughout the domains, competencies, and subcompetencies. Not every concept is represented in each domain or competency, and each domain may include multiple concepts. However, in the aggregate, the concepts represent the practice of nursing.

The concepts presented are suggested to function as a "hub for transferable knowledge" and offer opportunities for learners to make connections to additional information as their comprehension grows (AACN, 2021, p. 12). The concepts should be integrated across didactic and clinical experiences because they are foundational to the learner's education. Each concept incorporates scaffolding of knowledge from entry-level through advanced nursing practice. The concepts included in the 2021 AACN *Essentials* and a brief summary of each one are listed here:

- *Clinical judgment:* Foundational to safe, competent care is appropriate clinical judgment. Knowledge from the liberal arts and sciences serves to build the essential framework from which sound clinical judgment can take place. An expectation of professional nursing is the development of critical thinking built from foundational knowledge and experiences in education that culminates in sound clinical judgment. For example, ELNE introduces chemistry-based electrolyte abnormalities. Pharmacology courses contain drug management for specific electrolyte imbalances. Professional nursing education introduces theories or frameworks related to patient care, as well as clinical experiences of caring for patients who have imbalances. Patient education about self-care is included in higher-level professional nursing education and ANLE may be based on Irwin Rosentock's health belief model, developed in the 1950s (Luger, 2013). Scaffolding the knowledge learned from each course and level of education, along with clinical experiences, should provide a pathway that fosters critical thinking, resulting in sound clinical judgment.
- *Communication:* Each level of nursing care requires appropriate communication between stakeholders. Whether the nurse is providing patient or family education, planning care on an interprofessional level, or simply communicating with coworkers, effective communication is necessary to ensure the highest level of quality care. This is true for verbal,

electronic, or written communication. Entry-level nurse education centers on basic effective communication and clarification skills through clinical experiences. Students refine their communication abilities as they navigate through the multidisciplinary team approach to care. The exchange of information and thoughts is central to providing quality care in an interprofessional environment.

- *Compassionate care:* The nurse meaningfully interacting with other human beings while understanding their circumstances forms the basis for compassionate care. Respect and empathy are necessary to have compassion, and they are translated into individualized, person-centered care, including care at the population level. Patient satisfaction is closely associated with these attributes of compassionate care.
- *Diversity, equity, and inclusion (DEI):* The concepts of diversity, equity, and inclusion (DEI) are presented as a collective group because of the interrelationships among them. However, understanding each of the concepts individually can enhance understanding of them collectively. A brief look at these individual concepts is presented here:
    - Diversity should be viewed as a broad scope of characteristics from individual, social, or population perspectives. This concept is inclusive of common characteristics such as age, gender, ethnicity, and race, but it also refers to physical, genetic, family structure, or heritage characteristics and religious or moral beliefs. Socioeconomic circumstances and persons with disabilities or impairments must be considered when adopting a diverse perspective. The DEI concept aims to ensure that every patient is treated equitably and is welcomed, respected, and acknowledged without bias.
    - Equity is defined by the AACN as the "ability to recognize differences in the resources or knowledge needed to allow individuals to fully participate in society, including access to higher education, with the goal of overcoming obstacles to ensure fairness" (AACN. 2021, p. 65). The premise that all persons should be treated fairly without bias is central to this concept. Equitable care being provided to all patients, regardless of their circumstances or beliefs, can improve their satisfaction with healthcare experiences.
    - *Inclusion* refers to the willingness of members of a culture to accept others as they are and intentionally embrace differences rather than focus on them. Both organizational and environmental cultures are influenced by the actions of nurses who work within them, and the reenvisioned *Essentials* aim for students to embrace inclusion to positively affect health care. Nurses are educated to be leaders of change, and by incorporating inclusion as a specific concept of the *Essentials*, the profession positions nurses to be advocates for all.
- *Ethics:* While the concept of ethics is not new to nursing, it is explicitly delineated as a concept within the revised *Essentials*. Nursing practice historically has been viewed as being centered around ethical behavior, and subconcepts of ethics have been taught during entry-level and advanced nursing education. The expectation that a nurse will do no harm, be honest, and treat people fairly is expected by the public and can be identified in requirements by many boards of nursing.
- *Evidence-based practice (EBP):* The incorporation of relevant science, patients' preferences, and provider expertise into

patient care is representative of evidence-based practice (EBP). EBP does not depend on one research study or following a "We've always done it that way" type of philosophy. Using EBP is a key part of what makes nursing a profession.

- *Health policy:* This concept is closely tied to advocacy. Although health policy is taught in baccalaureate nursing programs, it is particularly emphasized in DNP education. Its roots begin with advocacy for individual patients and builds to include advocacy for populations at the local, state, and federal levels. In advanced nursing curricula, the process of influencing health policy is investigated, and opportunities to affect health care through the collective voice of nurses are explored. Nurse leaders have the potential to be advocates for policy changes at many levels and influencers of health policy at local, state, and national levels.
- *Social determinants of health:* This concept is inclusive of the factors that affect health and illness. These factors can be remembered by the acronym *BIG GEMS:* behavior, infections, genetics, geography, environment, medical access, and socioeconomic-cultural (Riegelman & Kirkwood, 2019). Healthcare disparities and inequities are frequently tied to one or more of these factors. For example, persons with a low socioeconomic status or people who do not have health insurance, such as undocumented immigrants, are at greater risk for disease and negative sequalae. The AACN's revised *Essentials* include the social determinants of health as a major concept, and it is interwoven among other concepts, such as diversity, inclusion, equity, and health policy. The intention seems aimed at grooming nurses to be advocates for all patients and populations, regardless of their social position and circumstances.

Scientific Underpinnings for Practice

The scientific underpinnings of practice provide the basis of knowledge for advanced nursing practice. These scientific underpinnings include sciences such as biology, physiology, psychology, ethics, and nursing. Although the basic sciences often are accepted as the basis of knowledge for nursing practice, the role of nursing science may not be as readily understood. Nursing science has expanded the discipline of nursing to include the development of middle-range nursing theories and concepts to guide practice (AACN, 2006a). Graduates of DNP programs play a pertinent role in the implementation of middle-range nursing theories to guide nursing practice. Hence, understanding the scientific underpinnings for nursing practice is essential for all DNP graduates.

Basic Sciences

It often is accepted that advanced practice nursing borrows from the social and basic sciences—much as medicine does—to build a scientific basis for practice. These sciences frequently include biology, physiology, psychology, and ethics. According to Webber (2008), nurse practitioners "rely on medical research to support their practice because not enough advanced practice research and researchers exist" (p. 466). Concerns have been raised that advanced practice nurses "adopt the practice values of medicine rather than identifying and adopting knowledge, skills, values, meanings, and experiences unique to this nursing specialty" (p. 466). This point may be well taken; however, without the basic understanding of diseases, how will nurses develop an understanding of the human responses to disease? Gortner (1980) noted this paradox as well, suggesting that if nursing rejects the medical model, it also rejects the body of knowledge that describes and

explains the pathology that leads patients to seek nurses' care. Through the development of an understanding of the fundamentals of the sciences that predict and explain disease processes, nursing can build a basis for understanding how best to care for those affected by disease. Donaldson and Crowley (1978) described professional disciplines such as nursing as "emerging *along with* rather than *from* academic disciplines" (p. 116).

The Discipline of Nursing

A discipline is characterized by a "unique perspective, a distinct way of viewing all phenomena, which ultimately defines the limits and nature of its inquiry" (Donaldson & Crowley, 1978, p. 113). The discipline of nursing has been defined in the AACN *Essentials* (2006b, p. 9) as the body of knowledge concerned with the following aspects of care:

- The principles and laws that govern all life processes, well-being, and optimal functioning of human beings, sick or well;
- The patterning of human behavior in interaction with the environment in normal life events and critical life situations;
- The nursing action or processes by which positive changes in health status are affected; and
- The wholeness of health of human beings, recognizing that they are in continuous interaction with their environments (Donaldson & Crowley, 1978; Fawcett, 2005; Gortner, 1980)

Nursing is concerned "with the whole human, with lifestyles and with health behavior" (Gortner, 1980, p. 181) and looks beyond the biological and physiological perspectives of disease. In doing so, nursing seeks to explain and predict responses to therapy, improvement in health status, and wellness (Gortner, 1980).

Nursing Science

The definition of nursing science may be somewhat more difficult to elucidate. Nursing science has been described as both a body of theoretical knowledge and the methods of reproducible modes of inquiry (Gortner, 1980; Jacobs & Huether, 1978; Jacox, 1974). Gortner (1980) defined it as "the base of knowledge underlying human behavior and social interaction under normal and stressful conditions across the lifespan" (p. 180). Interestingly, Jacobs and Huether (1978) defined nursing science as "the process, and the result, of ordering and patterning the events and phenomena of concern to nursing" (p. 65). Thus, nursing science may be understood as the "methods of inquiry specific to the discipline of nursing—the process—as well as the outcomes of that inquiry—the result" (Jacobs & Huether, 1978, p. 65). Nursing research has been differentiated from nursing science as "the systematic inquiry into problems associated with illness, health, and care" (Gortner, 1980, p. 180).

Nursing Theory

Nursing theory has been described as the product of nursing science (Jacobs & Huether, 1978; Kerlinger, 1973). Specifically, Jacobs and Huether (1978) described the dual purposes of nursing science as "to define common goals and guide the practice of nursing" (p. 64)—hence, the development of nursing theory. A *theory* is defined as a relationship between two or more concepts, whereas the term *concept* describes objects, properties, or events and indicates the subject matter of the theory (Jacox, 1974). The concepts within a theory are related by propositions that describe the relationships between two or more concepts (Jacox, 1974). In essence, then, nursing theory attempts to describe, predict, or explain phenomena consistent with nursing's perspective (Donaldson & Crowley, 1978).

Middle-Range Theory

Nursing's body of knowledge, or discipline, includes both grand and middle-range

theories (Fawcett, 2005). Grand theories are more abstract and are broader in type, whereas middle-range theories are more concrete and are narrower in type (Fawcett, 2005). For this reason, middle-range theories are more applicable to clinical practice (Lenz, 1998). Further, clinicians may use middle-range theory "situationally," or to help "direct their assessment, decision-making, and nursing interventions when cued by a particular kind of situation rather than practicing consistently according to the tenets of a given theory" (Lenz, 1998, p. 63).

Reconsidering the Development of Nursing Knowledge

Hoeck and Delmar (2018) expanded on the epistemology of nursing knowledge and theory and proposed a dialogue for further evaluation of how nursing knowledge is developed. These authors questioned the current process of knowledge development in nursing and suggested that rather than the traditional Socratic method of developing knowledge, an alternative method should be used, whereby theory and practice are guided by a philosophy of care. To preface their argument for this alternative method of knowledge development, Hoeck and Delmar (2018) asserted that disagreement still exists on the focus of nursing and pose the question of whether this focus involves the "self-providing patient that society needs in order to keep healthcare costs at a minimum or is it the not-so-active patient who needs society's/nurses' help to live with his/her illness" (p. 1). These authors also asserted that there is disagreement on the philosophical foundation of the discipline—should nursing focus on self-care or caring?

The development of nursing knowledge has traditionally been driven by the development of theory—grand and more recently middle-range, and the scientific testing of interventions within theory—to explain and predict outcomes. Hoeck and Delmar (2018) pointed out that with the advent of evidence-based practice, nursing was challenged further to develop concrete nursing interventions and therapeutics. These authors posited that a pure evidence-based approach, with value exclusively in traditional randomized controlled trials (RCTs), there is no consideration for qualitative support that may further expand nursing's knowledge base (Hoeck & Delmar, 2018). Therefore, outcomes involving the patient's perspectives, such as the experience of being ill, are frequently not considered and not incorporated into traditional evidence-based care.

In addition, Hoeck and Delmar (2018) noted that the emphasis on evidence-based care has led to an emphasis on the development of clinical guidelines. They believed that this may be counterintuitive to nursing's concern for the individual patient. Therefore, not only is exclusively using this approach atheoretical, it illustrates the disconnect between knowledge that is simply intervention based and knowledge that is deeply rooted in human relationships and the patient (Hoeck & Delmar, 2018).

These authors challenged nursing to be reminded of the importance of the development and understanding of nursing theories. Thoughtful consideration should be given to understanding when to borrow from other disciplines, such as the medical model, and when to draw from a broad understanding of nursing theories. Although medical conditions require specific treatments or interventions, interactions between nurses and patients require evaluating patients and caring for them as individuals. The interaction and human connection defines the function of nursing.

Doctor of Nursing Practice Graduates and Nursing Theory

Nursing has traditionally struggled to close the theory–practice gap—that is, the lack of use of theory in practice or the inability of nurses to use theory in practice (Kenney,

2006). Reasons for this shortcoming include lack of knowledge, understanding, belief, or applicability of nursing theory as a guide for practice (McKenna, 1997). Further, the use of medical knowledge, especially in advanced practice nursing roles, has prevailed as a guide for nursing practice (Meleis, 1993).

Because of the limited, narrower, and more applicable scope of middle-range theories, the understanding and application of such theories may be vital to closing the theory–practice gap. As a practice discipline, when nursing theories prove useful in the real world and are "logical and consistent with other validated theories, they may provide a rationale for nursing actions that lead to predictable client outcomes" (Kenney, 2006, p. 297). For this reason, DNP graduates must have an understanding of middle-range theories, as well as the skills necessary to apply those theories in practice.

In a book chapter titled "Expectations for Theory, Research, and Scholarship," Magnan (2016) suggested that it was more important for DNP students to acquire the skills needed to apply theory to practice than to simply be exposed to a number of middle-range theories. Further, Magnan noted that these skills should be "transferable" and apply to the application of other middle-range theories to practice (p. 120). To achieve this goal, DNP students need to meet the following criteria:

- Have a foundation in the language of theory (e.g., concepts, relational statements)
- Learn how to distinguish modifiable from nonmodifiable predictors and understand the meaning that they have for planning theory-based interventions
- Understand how to interpret the research literature to determine the level of empirical support for relationships between theoretical concepts (Magnan, 2016, p. 120)

As experts in the application of theory, and specifically in middle-range theory, DNP graduates are well positioned to close the theory–practice gap (Magnan, 2016). Such nurses are practice experts who combine their clinical expertise with a doctoral-level understanding of nursing science and theory. This combination prepares the DNP graduate to clearly articulate for others the importance of theory in practice. DNP graduates are ideal role models to increase the use and understanding of theory-guided practice.

Doctor of Nursing Practice Graduates and Use of Other Theories

Essential I of the *The Essentials of Doctoral Education for Advanced Nursing Practice* (AACN, 2006b) and the reenvisioned *Essentials* (AACN, 2021) clearly recommend that DNP graduates garner an understanding of the scientific underpinnings of nursing practice. It is well understood that these scientific underpinnings include other sciences such as biology, physiology, psychology, and ethics. DNP graduates must apply middle-range theories to practice in an effort to provide patient-centered care. As Meleis (1997) noted, because nurses study many disciplines as a foundation for practice, nursing theory tends to reflect a broad range of perspectives and premises.

Donaldson and Crowley (1978) asserted that nursing is—importantly—a practice-oriented discipline. In a book chapter titled "Nursing Science for Nursing Practice," Donaldson (1995) thoughtfully emphasized the point that nursing practice, as well as society's need for nursing services, has shaped the discipline of nursing. Because of nursing's interest in societal needs and desired patient outcomes, the discipline of nursing may include many theories, and the most appropriate theory selection will depend on the patient or societal situation. Donaldson (1995) described the nurse pragmatist as a nurse who will use the most practical theory to accomplish the desired patient outcome. Further, nursing science will be a source of theory to the nurse

pragmatist only if that theory fits the desired patient outcome.

DNP graduates, therefore, not only have a responsibility to exemplify the application of nursing theory to practice, but they must also be "nurse pragmatists" (Donaldson, 1995, p. 6) and apply various theories from other sciences to practice. The role of the DNP graduate in theory evaluation and selection may well be one of the most valuable roles that such a person fills. Hence, DNP graduates become the knowledge appliers and exhibit expertise in evaluating, applying, and supporting theory-based interventions to ensure patient-centered care.

Dilution of the Discipline of Nursing: Philosophical Considerations for DNP Graduates

Although applying and integrating theories from various disciplines may add to the knowledge base considered to be part of the discipline of nursing, some practitioners have expressed concerns that this trend dilutes the discipline of nursing (Cody, 1996; McKenna, 1997). McKenna (1997) expressed concerns that combining other theories with nursing theories compromises the context of the original nursing concepts. In addition, if theories are constantly borrowed and incorporated into the discipline, it may become difficult to differentiate nursing as its own discipline (Cody, 1996). Johnson (1968) pointedly discussed this dilemma, stating that if nursing "continues to observe behavior from the perspective of the sciences such as sociology and psychology, if we continue to study disease with the aim of elucidating etiologies, properties, or life cycles, . . . we may be serving the cause of science, but not necessarily the cause of nursing" (pp. 207–208).

Many people who fill advanced practice nursing roles identify very closely with a medical model and may be viewed as junior doctors (Meleis, 1993). According to Fawcett (1997), nurses are often unaware of their discrete knowledge and instead glean fragmented information from a medical model. Moreover, DNP graduates are expected to understand the scientific underpinnings of practice, including the basic sciences—sciences that are traditionally associated with the medical model. An interesting question then arises: How do DNP graduates understand and contribute to the discipline of nursing through application of knowledge if this knowledge base has been infused with theories borrowed from other disciplines, specifically the basic sciences?

This dilemma may be resolved by DNP graduates developing a good understanding of nursing as a profession, a science, and a discipline. Nursing is a practice profession whose science and body of knowledge depend on its perspective. Further, if this understanding is developed, DNP graduates will integrate the necessary knowledge from a nursing perspective, understanding what nursing is and what it is *not*. While the basis of knowledge may include knowledge borrowed from various sciences to explain and predict disease, nursing is concerned with the laws and principles that govern the life processes, well-being, and optimal functioning of human beings; the human behavioral responses to disease; and the processes by which a positive health status is effected (Donaldson & Crowley, 1978). The ability to elucidate what defines nursing practice, while employing various "pragmatic" (Donaldson, 1995, p. 6) scientific underpinnings from a nursing perspective, may be what truly differentiates the DNP-prepared nurse.

Moreover, an earlier discussion regarding reevaluating the development of nursing knowledge elucidated the need for nursing to continually consider societal needs and the needs of the individual patient (Hoeck & Delmar, 2018). These authors posits that DNP graduates continue this quest to thoughtfully

contribute to the discipline of nursing by merging science with societal and patient needs. Importantly, the DNP-prepared graduate has the responsibility to exhibit agility with regard to various nursing theories and the provision of patient care. Although one may need to borrow from a medical model to treat a condition, one should also have a broad understanding of the scientific underpinnings for practice, including various nursing theories, and apply that knowledge accordingly. Patient interactions, not merely interventions, define one's working nursing knowledge and understanding of nursing theory.

Summary

The AACN recommended that the DNP become the terminal practice-focused degree for nursing by 2015 (AACN, 2004). Adoption of this recommendation has implications for the advancement of nursing as a profession, a science, and a discipline. Expanding their understanding of the scientific underpinnings for practice is perhaps the most essential expectation for DNP graduates. Through the process of gaining this understanding, DNP graduates will gain expertise in the differentiation and application of nursing knowledge. Moreover, as the practice experts and knowledge appliers, DNP graduates will be in an ideal position to bridge the theory–practice gap, an enduring ambition of nursing.

Exemplar

The following discussion is a case scenario in which one of the chapter authors (Lisa Chism) developed, tested, and applied a nursing middle-range theory, thereby bridging theory and practice:

> During my doctoral study at Oakland University in Rochester, Michigan, Dr. Morris Magnan charged the advanced theory class with writing a middle-range theory paper. I had only recently been introduced to middle-range theory and was struggling to develop an understanding of nursing as a science and a discipline. However, applying middle-range theory to an actual patient scenario helped me to develop a broader understanding of nursing.
>
> Dr. Magnan and I were having a telephone meeting one evening to discuss which middle-range theory I would use for my theory paper. My research interest was spiritual care in nursing. I was drawn to Olson's empathic process theory (Olson, 1995) as the theoretical guide for my ideas. Dr. Magnan urged me to describe in more detail why I believed that this middle-range theory applied to spiritual care in nursing.
>
> I explained that I had recently cared for a patient whose son had attempted suicide and was now in an intensive care unit (ICU), clinging to life. My patient was struggling with what to pray for: death or healing. She was disturbed also by how she was approached by a rabbi in the ICU who whispered to her in Hebrew and touched her knee when he spoke to her. She related, "Just because I am Jewish, it doesn't mean that I speak Hebrew. And furthermore, I don't want anybody whispering to me and touching me. I will pray in my own way and on my own terms." I replied to my patient, "So, you felt that instead of asking you how you pray, or what your spiritual need was, the rabbi assumed what you needed and made you even more anxious." She immediately relaxed in the chair and exclaimed, "Yes! That's exactly how I feel." Her body language clearly exhibited an openness to further spiritual discussion. I added, "Why don't you pray for peace?" She agreed: "Yes, that's what I will pray for—peace."

I will never forget the night I shared this story with Dr. Magnan. When I had finished, he replied, "Well, I believe you have a middle-range theory here."

With Dr. Magnan's guidance, we developed my ideas into Chism's middle-range theory of spiritual empathy (MTSE; Chism, 2007). The MTSE was deductively derived from Olson's (1995) empathic process theory (middle-range theory) and Orlando's (1990) dynamic nursing process theory (grand theory). The MTSE purports that nurses' spiritual care perspectives—that is, nurses' attitudes and beliefs about spiritual care (Taylor, 2002)—will influence nurses' expression of spiritual empathy—that is, the nurse's expression of verbal understanding of a patient's spiritual concern (Chism, 2007; Chism & Magnan, 2009; Olson, 1995). Expression of spiritual empathy will then increase the patient's perception of empathy—patients feeling that they are understood by nurses (Olson, 1995). Spiritual distress—impairments in a sense of connectedness to self and others, faith and belief system, sense of purpose, inner peace, and inner strength (Villagomeza, 2005)—will then decrease. The final concept, spiritual well-being—a sense of inner peace and contentment resulting from one's perceived sense of connection to self or others (Chism, 2007)—is purported to increase at this point.

One portion of the MTSE was tested as my capstone project: the relationship between nurses' spiritual care perspectives and their expressions of spiritual empathy. The MTSE has been presented in two poster presentations, and findings from the theory testing study have been published (Chism & Magnan, 2009).

The development and testing of the MTSE during doctoral study in a DNP program was somewhat industrious and not a customary expectation of a DNP research project. This rewarding experience not only challenged me to develop my scholarship, but also exemplified the use of theory (specifically, middle-range theory) to guide practice. As a DNP graduate and APN, I have a responsibility to understand, from a nursing perspective, the scientific underpinnings of disease processes and the care of my patients. Moreover, the development and testing of the MTSE reinforced for me the idea that the discipline of nursing truly guides nursing practice.

Acknowledgment From Dr. Lisa Chism

I would like to acknowledge Dr. Morris Magnan for his expert guidance and mentorship throughout my doctoral study and beyond. He is an exemplary nurse, scholar, mentor, and friend who continues to inspire me every day.

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