

Voices of Chief Nursing Executives Informing a Doctor of Nursing Practice Program

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Abstract

The purpose of this article is to describe the business case framework used to guide doctor of nursing practice (DNP) program enhancements and to discuss methods used to gain chief nurse executives' (CNEs) perspectives for desired curricular and experiential content for doctor of nursing practice nurses in health care system executive roles. Principal results of CNE interview responses were closely aligned to the knowledge, skills and/or attitudes identified by the national leadership organizations. Major conclusions of this article are that curriculum change should include increased emphasis on leadership, implementation science, and translation of evidence into practice methods. Business, information and technology management, policy, and health care law content would also need to be re-balanced to facilitate DNP graduates' health care system level practice.

Introduction

Today's rapidly evolving health care environment and the proliferation of doctor of nursing practice (DNP) programs converging with local and national nursing faculty shortages initiated a call to action for faculty leaders teaching in the program. The educators identified the need to facilitate the development of resilient, flexible graduates of the DNP program to meet the current and future requirements of practice environments (Terhaar, Taylor & Sylvia, 2016). Concurrent challenges of high demand for nursing leaders and the increasing number of DNP programs amid a low supply of nursing faculty have the potential to compromise faculty's ability to maintain current and applicable program content needed to prepare DNP students for health care system-level leadership roles.

With ten DNP programs in the State at the time of this study and 264 DNP programs in the United States (AACN, 2015), it was important to assess the customer perspective of the DNP employer regarding relevance and differentiating value of the DNP program for those preparing for health care system leader roles. As the chief nurse executive typically hires system-level DNP graduates, we focused our efforts on determining the perspectives of these executives. While interdisciplinary partners provide input into post-employment competencies, identifying the DNP nurse leader competencies are typically in the purview of the chief nurse executive. In addition to the above concerns, program costs and a taxing one-to-one faculty workload for the students' scholarly projects motivated faculty leaders to re-examine DNP program improvement potential. Initially founded in 2010, with the support of Health Resource Services Administration grant funding, the post-master's DNP program was a doctoral-level leadership program for advanced practice registered nurses (APRNs).

School and faculty leaders recognized the need to provide a DNP program that would prepare graduates to not only meet national standards (American Association of Colleges of Nursing, 2011), but to also meet future system-level leadership requirements, align with faculty workload, and decrease variability in student progression and scholarly project completion. The initial DNP scholarly project extended over the length of the DNP program (three to six years). The DNP Program Team (DNP faculty), curriculum committee, school leaders and staff identified the following high-level aims: Develop DNP students' experiential learning opportunities to enhance real-world competence; align the program's resource usage; standardize the processes for

achievement of student learning outcomes, program outcomes, and student progression.

As a critical first step and guided by a business case framework actual and potential employers of the university's DNP leadership graduates were interviewed. The interviews included their perspectives regarding DNP graduate preparation, the leadership in healthcare skill sets needed, and preparation gaps present in current graduates seeking a DNP health care executive leadership role. The purpose of this article is to describe the business case framework used to guide the program enhancements and to discuss the essential methods used to gain perspectives of chief nurse executives about desired DNP curricular and experiential content for DNPs functioning in health care system executive roles.

Program Assessment Framework & Questions

To ensure that a highly relevant and current plan for the overall program and curricular improvement was developed, the initial needs assessment interviews were guided by a business case framework by Ellis, Embree, and Ellis (2014) that included four areas of impact. The first area of impact was strategic and involved DNP program financial status. This was the return on the investment and the cost/benefit of potential program changes. The second area followed a stakeholder analysis and considered education/practice impact. Following the analysis, stakeholders for the overall curriculum process were identified. The overall curriculum process changes are outside the scope of this article. Stakeholders included nurse leaders/practice partners, university administrators, faculty, recent DNP alumni, and staff. The market impact was the third area of the framework and considered strengths, weaknesses, opportunities,

and threats (SWOT) of the current DNP program versus other regional DNP programs. The final area was the program change impact and included input from students and the above listed stakeholders. The stakeholders affecting the program revisions included CNEs who typically hired DNP leaders.

The program change impact also included future program revisions based on area CNE interviews, and the comparison of the current program to the Essentials of Doctoral Education for Advanced Nursing Practice, the American Organization of Nurse Executives competencies, (AONE, 2011), and the American College of Health - Executives (ACHE, 2015) competencies. The AONE (2011) and ACHE (2015) competencies guide national certifications including the Nurse Executive Basic and Advanced Board Certification and the American College of Health Care Executives' Certification, which is employer expected national certifications for nurse executives and health care executives. The ACHE competencies are similar to the AONE competencies.

The DNP Program team vision was to facilitate high-level aims that would lead to student experiential competence development, program resource alignment, student learning outcomes, program outcomes, and process standardization for student progression. Using the business model framework, strategic impact determination encompassed analyses of the finances or program and interview expenses, as well as potential program change expenses. Twenty percent of the DNP program cost was the one-to-one faculty advising expense for the scholarly inquiry project. Failing to "break even" was the program's reality, and a variety of factors impacted program fiscal viability, including student progression and faculty workload. DNP content and program

restructuring was based upon CNE interview content, program change expenses, and the current and projected program change.

The education/practice impact was stakeholder consideration-practice partners, administrators, faculty, and staff. A stakeholder analysis helped the team determine pertinent partners. The goal of the stakeholder analysis was to develop cooperation between stakeholders and the DNP Program Team. Types of stakeholders are typically primary (directly affected) or secondary (indirectly affected), and are key members or those having significant influence or importance. Steps in the analysis were to identify stakeholders, use brainstorming to determine how to best connect with identified persons, prioritize the value of those identified, and enhance relationships with high priority stakeholders to increase the leverage of their talent (Newcomer, Hatry, & Wholey, 2015). Other stakeholders were faculty teaching in the DNP program. Keeping stakeholders informed of the process of CNE interviews was key, as faculty is responsible for the curriculum.

The team identified questions to guide decision-making about additional important stakeholders to include as the DNP Program Team was broadened to receive the CNE interview results and framework analyses, and to redesign the DNP program (outside the scope of this article). The questions to guide selecting additional stakeholder input were:

1. Who are the individuals likely to be affected positively or negatively by the content or program changes?
2. What is the influence of these individuals or groups?
3. What is the degree of influence of these stakeholders on the DNP program?

4. What is the DNP program influence on clinical partners?

The market impact was the third area of the framework and considered strengths, weaknesses, opportunities, and threats of the current DNP program versus other DNP programs in the region. A nationwide market review of 138 DNP programs in the United States indicated that 36 programs or 26 percent were leadership-focused DNP programs (AACN, 2014). Important conclusions from this information were that first, there was an opportunity to significantly differentiate the DNP program regionally as a premier program preparing systems-level healthcare leaders, as nearly all of the regional DNP programs were APRN focused to gain deeper immersion into advanced practice roles. Second, our current fee structure was significantly below the market for leadership-focused programs. For us, this afforded ample evidence to support a simultaneous effort to propose a revised fee structure.

The final area was the program change impact, which included the students and everyone who would touch the student in the DNP program. The program change impact included how the program would be revised based on content extracted from stakeholder interviews, and comparison of the current program to the DNP Essentials (AACN, 2011), and the AONE (2015) and ACHE (2015) competencies.

Setting and CNE Interview Sample

The DNP Program Coordinator (a former business chief executive officer), the Associate Dean for Graduate Programs and the Master of Science in Nursing Leadership in Health Systems Coordinator (a former CNE) met to identify strategy, goals, and a plan to facilitate meaningful DNP program changes. These three DNP

faculty members conducted the initial needs assessment to guide DNP program change.

Given the project's aims, current and potential clinical partners were targeted for interview. Current clinical partners hiring our DNP graduates included three of our clinical partners. Our past DNP graduates included clinical nurse specialists, nurse practitioners, and nurse educators. Defining the stakeholders for interview helped to define the regional market and the desired sample of CNEs. The DNP Program market area and desired sample were identified as current or potential clinical partners- CNEs: the ten system CNEs within 20 miles of the University. At this point of time, DNP system leaders were typically hired in this region by the chief nurse executives for system-level positions. Of the CNEs within 20 miles of the university-40 percent were Doctorate of Philosophy (PhD) prepared, 40 percent were Masters of Science in Nursing (MSN) prepared, and 20 percent were DNP prepared. Coming from a variety of health care organizations, CNEs represented the following systems: a safety net health care system, the local veteran's system, a faith-based system, a large academic health center, a community health system and a comprehensive community health system. Half of the CNEs interviewed represented Magnet ® designated facilities.

Procedure

Prior to CNE interviews, the DNP Program team first gained the authors' University Institutional Review Board approval. The next step for the DNP Program Team was contacting the CNEs by telephone prior to inviting them for interviews, which helped to ascertain interest in assisting the DNP Program team. All ten CNEs approached consented to be interviewed by the DNP program team. Upon agreement to assist the

team, the CNEs were then contacted by email regarding potential dates for individual or group interviews. Coordination of dates and times that the interviews could occur were then determined. Targeted interviews were planned to assist in obtaining information about needed program content and skills that CNES felt that DNP graduates needed for system level health care roles. The methodology for this study consisted of structured interviews that lasted from two to three hours. The interviews with CNEs occurred over a four-month timeframe. Six CNEs were interviewed individually, and four CNEs were interviewed as a group as they were executives from several health care organizations in a large system.

Interview questions were crafted to reflect future needs and to capture CNEs views of essential knowledge, skills, and abilities needed to fulfill systems-level health care leadership roles. Eight major questions were asked of each interview subject. The following questions guided the CNE interviews:

1. What do you believe nursing will look like in the next five years?
2. What will nursing's biggest challenge be in the next two years?
3. What knowledge, skills, and abilities are required to best integrate DNP prepared nurse leaders in your organization?
4. Talk about what a successful DNP would look like in your organization?
5. What is the biggest challenge for a DNP nurse in your organization?
6. Why would you not hire a DNP nurse in your organization?
7. What are the skills that future health care leaders need?
8. What was missing in your educational preparation that you need in your role?

Additional questions were asked of the CNEs that were based on responses to the above major questions. The additional questions helped the team gain clarity around CNE responses and to assure that the DNP Program team understood the intent of the CNEs' responses. Two team members recorded responses to assure that content was well captured. The CNEs' interview responses were first combined by two team members to identify discrepancies and clarify responses. Categorization of the interview responses by two of the program team members occurred over an eight-hour time-period. Interview responses were aggregated into 5 major categories and 15 subcategories. The category and sub-category groupings were then reviewed by the third team member who did not revise the responses.

Interview Results with Chief Nurse Executives

Chief Nurse Executive interview responses to some of the questions are provided in the below narrative. Most of the responses were aggregated into smaller and larger categories that were reflective of the AONE Nurse Executive Competencies. The categories were then compared to the DNP Essentials, and the AONE and ACHE Competencies as well as the current DNP curriculum in the School of Nursing.

In response to question: What do you believe nursing will look like in the next five years? One CNE indicated that in the future they would want all of the nursing directors to be DNP prepared. Regarding the focus of nursing in the next five years, two CNEs noted that population health would be the biggest focus. One CNE identified DNPs leading Accountable Care Organizations and system-level quality for health care organizations. One CNE spoke to DNP Nurse Leaders leading culture change.

In response to the question: What will nursing's biggest challenge be in the next two years? Nursing's biggest challenge in the next two years was identified by five CNEs as business challenges such as strategy as well as meeting the Institute of Medicine's goals of increasing the number of nurses prepared initially at the baccalaureate level and at all graduate levels. Seven CNEs described specifically the challenges of keeping up and understanding healthcare reimbursement. Six CNEs indicated that developing DNP nurse leaders personally was critical to their success. Four CNEs specifically discussed the importance of DNP nurse leaders' ability to build relationships.

All CNEs would hire a DNP nurse leader in their organizations. Comments included two CNEs who would only hire DNPs at the system level in their organizations, while another would want all of their directors to be DNP leader prepared, and other CNEs discussed hiring DNP Leaders in system-level roles, such as Accountable Care Organizations and Quality.

The following questions resulted in aggregated information that DNP faculty leaders compared to the DNP Essentials, the AONE and ACHE Competencies, and the current School of Nursing DNP Curriculum (Table 1).

- What knowledge, skills, and abilities are required to best integrate DNP prepared nurse leaders in your organization?
- Talk about what a successful DNP would look like in your organization.
- What is the biggest challenge for a DNP nurse in your organization?
- Why would you not hire a DNP nurse in your organization?
- What are the skills that future health care leaders need?

- What was missing in your educational preparation that you need in your role?

As previously stated, the CNE interview notes were aggregated into major categories and sub-categories. The major categories were identified as 1) leadership, 2) implementation science/evaluation and translation of evidence into practice methods, 3) business, 4) information and technology management, and 5) policy/ethics/law. Sub-categories were also identified from the interviews (Table 1).

The sub-categories were then rank ordered by how many times the topic in the category was identified by the CNEs in the interviews. The leadership category included the subcategories of personal/professional development, communication/relationship management/facilitation/negotiation, and systems thinking. Subcategories included knowledge of the business environment, finance/reimbursement/translation, human resources and culture management, strategic planning, and project management.

The CNEs indicated that current DNP graduates typically take about two years post-graduation working in in health care organizations to be adequately prepared for system-level practice. Also of concern from the CNEs' perspective was DNP leaders' ability to understand finance/reimbursement and translate financial metrics into operational decisions. Ethics in relation to health care was not expressed by interviewees as a gap, and only three CNEs spoke about the need for health care policy initiatives.

The DNP Program Team Members identified that CNE interview responses were closely aligned to the knowledge, skills, and/or attitudes also identified by the AONE (AONE, 2011) and the ACHE (ACHE, 2015) competencies. Identified categories were compared to the existing DNP program curriculum, the DNP Essentials (AACN, 2011),

and the AONE and ACHE categories to map similarities and differences. Items that were missing from the DNP curriculum were items found under the AONE Foundational Thinking Skills and included personal and professional development.

The Implementation Science/Evaluation category needed enhancement of Translation of Evidence into Practice Methods, implementation science and the early introduction into quality improvement methodology, safety, population health management, and big data management. The Leadership category needed enhancement or addition of relationship management, conflict resolution, and negotiation. In the Policy/Ethics/Law category, emphasis needed to be placed on corporate and health care law and risk management. The Business category needed additional content around government and professional regulations and accreditation standards. Under the category of Information Technology, curriculum enhancements needed to include using data management and methods to support decision-making and implementation and planning of administrative and clinical information systems.

Discussion and Implications for Program Revision

Following analysis of the categories identified from CNE interviews, a gap analysis was performed between the current state of the DNP program curriculum and the future state curriculum as guided by national standards (AACN, 2011; AONE, 2011; ACHE, 2015) and results from the CNE interviews. Identified gaps in the current DNP curriculum to meet CNE and future health care needs indicated that re-balancing the curriculum would need to occur (Table 2). Curriculum change should include increased emphasis on leadership, implementation science, and translation of evidence into practice methods. Business, information and technology management, policy, and

health care law content would also need to be re-balanced to facilitate DNP graduates health care system level practice. These curriculum enhancements would also prepare DNP graduates for the American Nurses Credentialing Center's, AONEs, ACHEs, leadership certifications and LEAN certification.

The DNP Program Team presented the program gaps to the DNP Curriculum and Student Affairs Committee (faculty governance committee) to discuss next steps in relation to gaps. Engagement of current DNP and school of nursing faculty in discussions about current program content, and CNE categories were prioritized. Multiple faculty group and individual meetings were held. The DNP Curriculum and Student Affairs Committee selected LEAN Manufacturing techniques (LEAN, 1999) for revision of program and curricular content in light of the need for a rapid change event.

LEAN focuses on constantly eliminating waste and non-value added activities to enhance workflow (Catt, 2013). Creating a culture and practices of continual improvement by all people at all level organizations is defined as "LEAN Thinking" (Catt, 2013). Clear specification of all work activities, defining pathways, decreasing ambiguity, and continuous improvement is established using LEAN rules (Spear & Bowen, 1999). The goal of the DNP curriculum content and program revisions will be to provide DNP student learning environments that facilitate system-level health care leadership development to function successfully in the complex existing and future health care environment.

Conclusion

Using the voice of CNEs to guide program revision can assist faculty in content and program adjustment to meet current and future healthcare environments' needs. Using the business model framework for DNP program revision provided a broad perspective to assure that elements necessary for change-strategic, education/practice, market, and program change impact are considered. The business case framework helped identify CNEs' needs for DNP leaders and is a useful technique for gathering the voices of customers who hire DNP health care leaders. This technique can be effectively used by faculty and leaders to guide nursing graduate program change.

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Table 1. Major Categories and Sub Categories Identified by CNE Interviews

Major Categories	Sub-Categories	Rank Order
Leadership	Personal/Professional Development	22
	Communication/Relationship	21
	Management/Facilitation/Negotiation	21
	Systems Thinking	16
Implementation Science/Evaluation & Translation of Evidence into Practice Methods	LEAN Six Sigma & Other Quality Improvement Methods	8
	Search/Evaluation of Evidence	6
	Implementation Science	6
Business	Strategic Planning/Project Management	16
	Human Resource and Culture Management	13
	Knowledge of Environment (Government, Regulations, Professionalism, Accreditation)	9
	Finance/Reimbursement/Translation into Operations Decisions	6
Information & Technology Management	Using Data Management and Methods to Support Decision-Making	6
	Characteristics of Administrative/Clinical Systems; Implementation and planning	5
Policy/Ethics/Law	Basics of Corporate and Health Care Law/Risk Management	4
	Advocate in Health Care Policy Initiatives	3
	Ethics in Health Care	0

Table 2. Current Percentage Gap in DNP Curriculum Based on Chief Nurse Executive Aggregated Interviews.

Categories	Current State of Content Percentage Evident	Future State of Content Needed Based on CNE Interviews Percentage Needed	Current Content Gap from Ideal CNE Perspective Percentage Gap
Leadership	36	41	5
Implementation Science/Evaluation & Translation of Evidence into Practice Methods	9	33	24
Business	41	13	-28
Information & Technology Management	11	8	-3
Policy/Ethics/Law	4	5	1

Highlights

- Doctor of Nursing Practice educators need to facilitate development of resilient, flexible nurse leaders to meet current and future practice requirements.
- The initial program needs assessment was guided by a business case framework that included four areas of impact.
- Using the voice of chief nurse executives to guide Doctor of Nursing Practice program revision can assist faculty in content and program adjustment to meet current and future health care environments' needs