



# Rapid Curricular Innovation Using LEAN Methodology

Jennifer L. Embree, DNP, RN, NE-BC, CCNS

Indiana University School of Nursing, Indianapolis, Indiana

## Introduction

Nursing faculty face constant challenges from the rapidly evolving healthcare environment to maintain an updated nursing curriculum. To meet current and future demands for executive nursing leaders who are well-prepared to work in the enhanced healthcare system, the nursing faculty at the Indiana University School of Nursing (IUSON) chose the LEAN methodology to improve the doctor of nursing practice (DNP) curriculum. LEAN focuses on maximizing customer value while minimizing waste and decreasing resource use. It also reduces defects and variability (Gatt, 2014). Nursing faculty at IUSON felt an obligation to create an academic-practice collaborative experience for students to provide authentic real-world problem-based learning opportunities. This presentation describes the curriculum innovation for a DNP program with a focus on leadership using the LEAN methodology.

## Objectives

- Describe a LEAN process to execute innovative curriculum change.
- Identify how to leverage resources to improve curriculum.
- Describe ways to enhance student experience and outcomes.

## Methods

- Chief Nurse Executives Curriculum Perspective
- Stakeholder analysis.
- Project team assembly.
- Agenda identification.
- Determining foundation for success.
- Determining goals.
- Creating course sequence.
- Content identification for courses.
- Identifying items for all faculty review.
- Evaluation of LEAN Project.

## Problems to Solve

- Student capstone experiences variable.
- Student enrollment does not sustain financial viability of program.
- Students are not prepared to function as system level leaders who solve complex problems.
- Students need deep-dive thinking, system-level solution development.
- 1 on 1 faculty advising is unsustainable.
- Agile decision-making and broad collaboration with key stakeholders.
- Program model standardization.
- Program content rebalancing needed more leadership content, more business content, less implementation science, less informatics, and more policy and law.

## Project Metrics

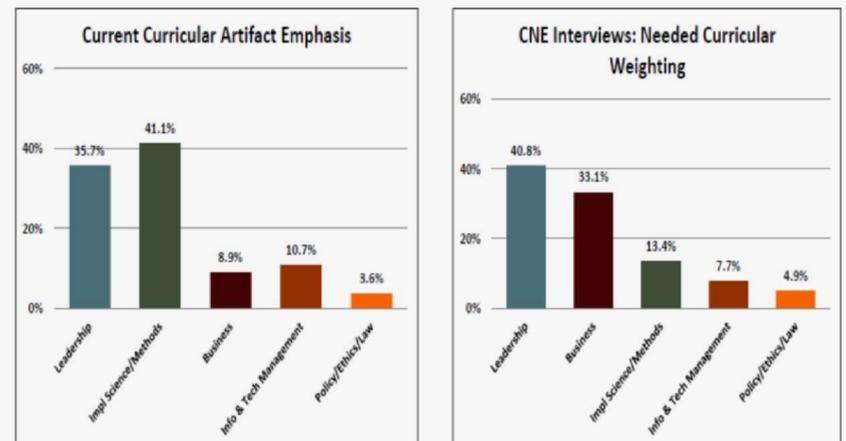
1. Budget neutrality of DNP Program.
2. Student & Faculty clarity of the DNP Program Model.
3. Reduce student delays in progression.
4. Increase student, faculty and preceptor satisfaction.
5. Reduce faculty resources.
6. Standardize essential program components.
7. Increase number of applicants.
8. Graduates hired for leadership roles.
9. Evidence of graduates achieving leadership and LEAN certifications.

## Outcomes

- Enhanced curriculum-rebalanced areas were adjusted and program project model design was completed.
- Teams were assigned to lead course development.
- Team satisfaction with process.
- LEAN methodology was effective for curriculum change.
- Implementing LEAN revealed the need for transparency and open communication in a variety of ways to enable effective changes in curriculum.

## Program Gaps

### Gap Analysis: CNEs vs. Current Curriculum



## New Project Model

Fall-I	D749: Leadership-I Immersion Experience
Spring-I	D749: Leadership-II Immersive Experience D749: On-Campus Integrative Experience-I
Summer	D749: At-Student-Option Immersive Experience
Fall-II	D749: On-Campus Integrative Experience-II
Spring-II	D749: On-Campus Integrative Experience-II D749: At-Student-Option Immersive Experience

## Conclusions

Through the LEAN methodology, the DNP project model evolved from a single inquiry project to a series of courses including leadership, integrated, and immersive experiences. Enhancing the topics of leadership, business, policy and law as well as decreasing implementation science and informatics are proposed for future faculty meetings.

## Key References

Gatt, E. (2014). Lean Six Sigma & A3 Thinking Workbook. A Review of Basic Concepts with Exercises, Checklists, and Learning Guides. V 10.1