

DNP Shark Tank Deep Dive

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Abstract

- The DNP Shark Tank Deep Dive is a presentation of how one school of nursing transformed their DNP project model for the DNP Project.
- The goal of this presentation is to share how a business-framework guided the project change that resulted in collaboration with an international image consultant, health coaching, and our business, art and design, liberal arts, bioengineering, and informatics and computer science faculty and other partners.

Objectives

- Identify how one DNP Program reframed their DNP scholarly inquiry project into multiple immersive experiences based on Chief Nursing Executive interviews
- Discuss lessons learned from student and faculty perspective around immersive experience development
- Perform a stakeholder analysis to determine important key persons needed to create authentic immersive experiences for a DNP program
- Explore stakeholder analysis for a sample problem
- Identify potential toolkit elements helpful for crafting immersive experiences
- Investigate planning frameworks for potential problem solution



Challenges

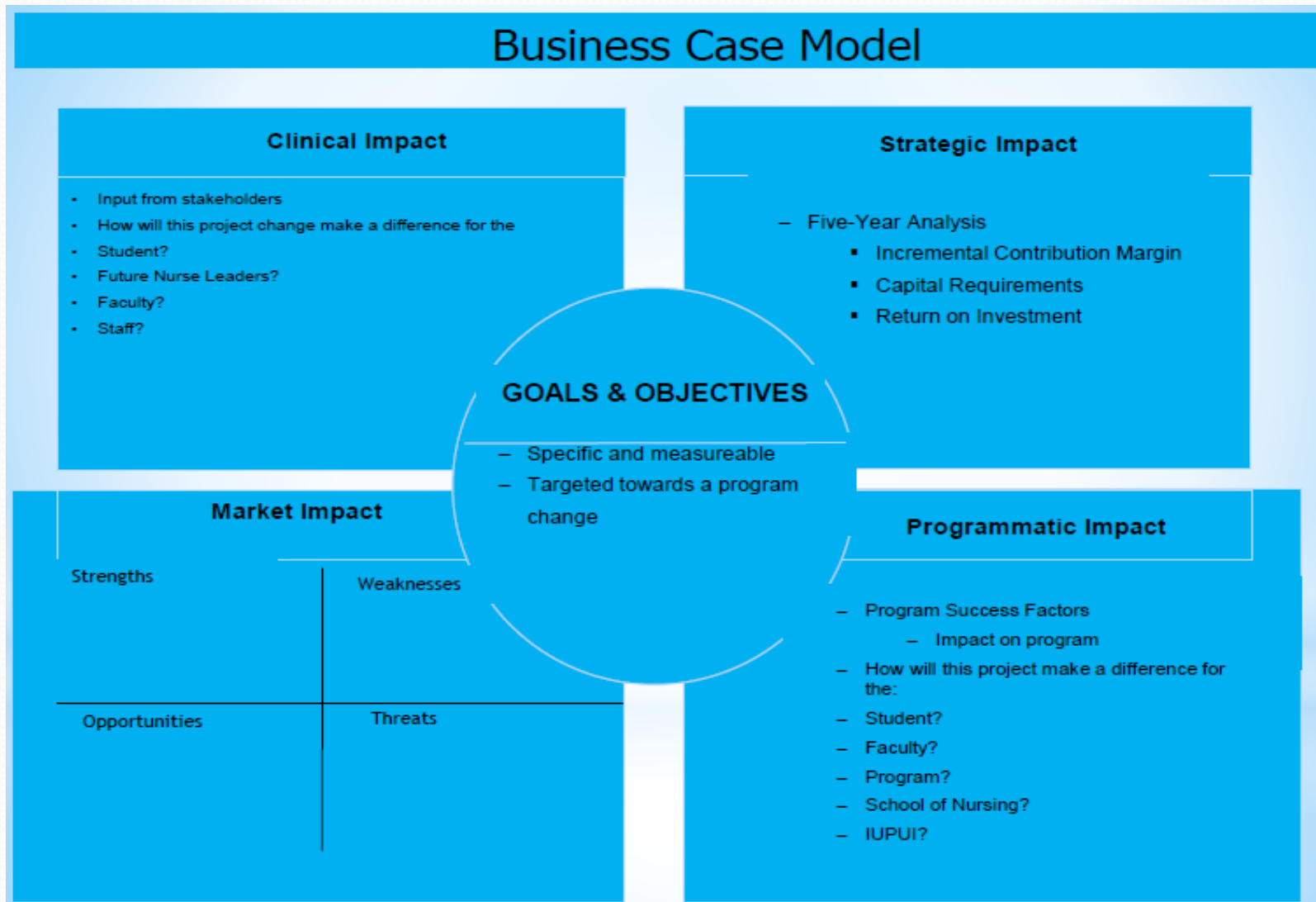
The passage of the Affordable Care Act set forth rapid change in healthcare with the need for commensurate changes in the preparation of DNP leaders:

- **A curriculum revision** was required to meet the needs of our communities of practice. Our goal was to redesign our DNP Program to proactively address and meet the current and anticipated future demands for executive nursing leadership.
- **The entire context has changed:** DNP programs have proliferated and there was a need to differentiate the IUSON DNP Program by leveraging the diverse resources of the IUPUI campus and our partnership with the IU Health state-wide health system as well as other stakeholders.
- **Student experience:** Variability around student project outcomes was observed.
- **Resource constraints & workload issues:** Fewer faculty and the project model required 1:1 faculty hours. Twenty percent of the cost of the former program was 1:1 faculty advising expense.
- **Financial constraints:** The program was not breaking even financially partially offset by Health Resource Services Administration grant funding which was ending soon.

Processes

- Select Framework for Program Review
- CNE Interviews
- Determine categories of content from CNE interviews
- Course Mapping to American Organization of Nurse Executive Competencies, American Health Care Executive Competencies
- LEAN Project
- Course and Program Revision
- DNP C/SA Approval
- Faculty Council Approval-school
- Graduate Council Approval-campus

Business Case Model-4 Areas of Impact



Stakeholder Identification

- As a critical first step and guided by the impact framework, employers and potential employers of the university's DNP leadership graduates were identified
- CNEs were determined to be most knowledgeable about DNP students' needs for preparation in leadership in health care
- Institutional Review Board Approval was obtained
- Ten CNEs within a 20 mile radius of campus were invited and consented to be interviewed
- CNEs were also asked to identify current preparation gaps of current graduates seeking a DNP health care system-level leadership role.

CNE Perspective/Mapping

- During interviews, our CNEs identified content and experiences they perceived important for health care system-level DNPs
- Faculty categorized CNE perspectives
- Faculty interviewers identified similarity with the American Organization of Nurse Executives (2011) and American College of Health Care Competencies (2011) and Mapped the CNE identified categories and sub-categories with these competencies.



Large Categories & Sub Categories

Large Categories	Sub Categories within Each Large Category
1. Leadership	1a. Communication/Relationship Mgmt/Facilitation/Negotiation
	1b. Systems Thinking
	1c. Personal/Professional Development
2. Implementation Science/Evaluation & Translation of Evidence into Practice Methods	2a. Search/Evaluation of Evidence
	2b. Implementation Science
	2c. LEAN Six Sigma & Other QI Methods
3. Business	3a. Knowledge of Environment (Gov, Regs, Profess, Accred)
	3b. Finance/Reimbursement/Translation into Ops Decisions
	3c. Human Resource & Culture Mgmt
	3d. Strategic Planning/Project Management
4. Information & Technology Management	4a. Using Data Management & Methods to Support Dec Making
	4b. Charac of admin/clinical systems; implementa & planning
5. Policy/Ethics/Law	5a. Advocate in healthcare policy initiatives
	5b. Ethics in healthcare
	5c. Basics of corporate & healthcare law/risk mgmt

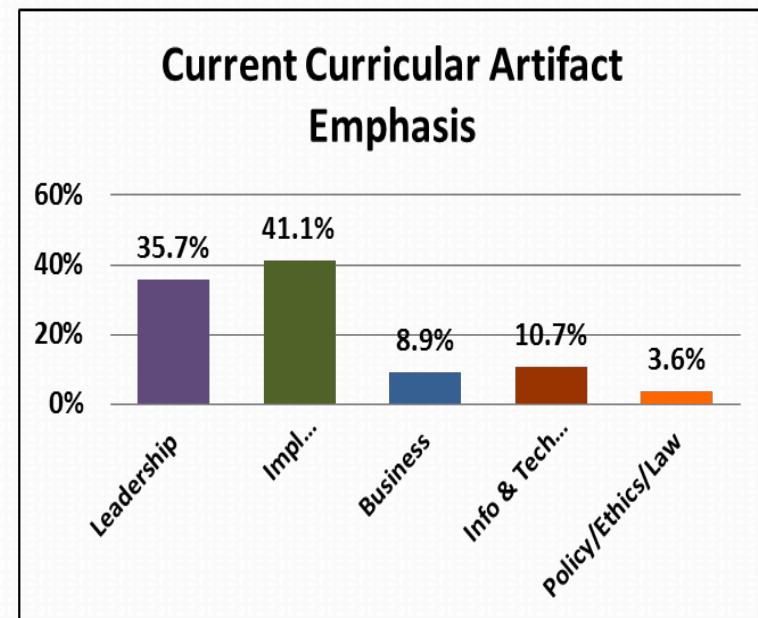
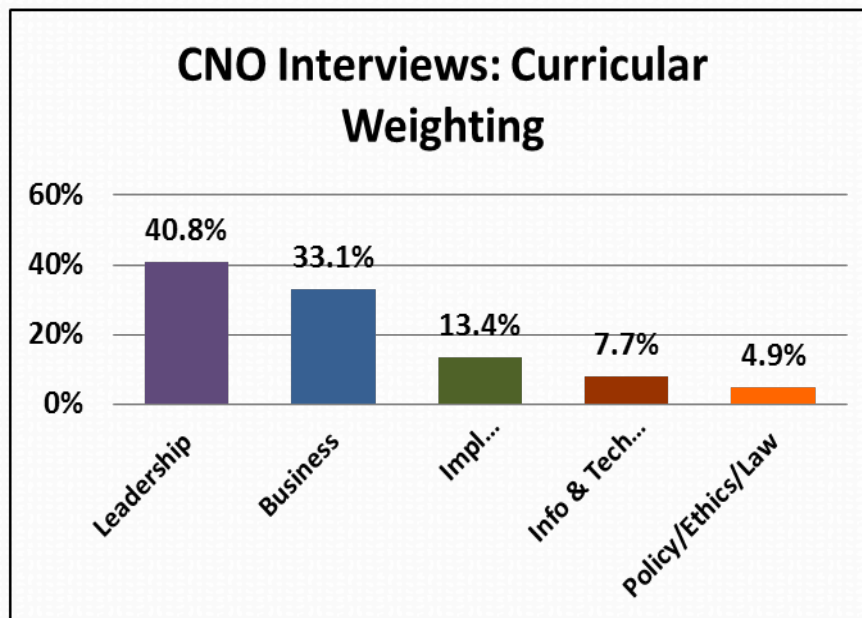
CNE Interviews – Rank Order of Sub-Themes

Major Categories	Sub-Categories	Rank Order
Leadership	Personal/Professional Development	22
	Communication/Relationship Management/Facilitation/ Negotiation	21
	Systems Thinking	21
		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

Gaps/Curriculum Enhancement

- A gap analysis of our curriculum post CNE interviews
 - course enhancement around leadership
 - implementation science/evaluation
 - translation of evidence into practice methods
 - business
 - information and technology management
 - policy and health care law.
- Problem/opportunity-based learning shared teaching value and strategy across the initial collaborating schools
- As faculty, obligation to create academic-practice collaborative experiences that would provide students with authentic real-world problem-based learning opportunities

Gap Analysis: CNEs vs. Current State



Curricular Focus	CNO	Current	Gap
Leadership	40.8	35.7	5.1
Business	33.1	8.9	24.2
Impl Science/Meth.	13.4	41.1	-27.7
Info & Tech Mgmt	7.7	10.7	-3.0
Policy/Ethics/Law	4.9	3.6	1.3

Team Identified Questions

- To guide decision-making about additional important stakeholders
 - DNP Program Team was broadened
 - to receive the CNE interview results and framework analyses
 - to redesign the DNP program
- The questions to guide selecting additional stakeholder input were:
 - Who are the individuals likely to be affected positively or negatively by content or program changes?
 - What is the influence of these individuals or groups?
 - What is the degree of influence of these stakeholders on the DNP program?
 - What is the DNP program influence on clinical partners?

Meetings

- Multiple meetings were held with campus faculty and leaders to discuss what was being done for leadership preparation in other programs. (Integrative Experience Task Force Meetings)



Background/Rationale for Change

- What business problem were we trying to solve?
 - **Competencies:** According to key stakeholders (employers who hire DNP students) the students are not prepared to function as nurse executive leaders regarding complex problem solving with system-level implications; yet that is where graduates are most needed. A new vision was identified to create a contemporary DNP Program to meet the needs of the current healthcare environment.
 - **Alignment with Environment:** The business environment the students are being asked to function in requires different tools, such as deep-dive thinking, solution development at the system level, agility in decision making, and broad collaboration with key stakeholders.
 - **Standardization:** A structured model was needed to decrease variation so key components of the DNP student experience are standardized to ensure consistent learning outcomes.
 - **Student Progression:** Self directed topic selection caused delays in DNP student progression and time investments of faculty members that exceed their availability.

Goal of Larger Faculty Work in Courses & Program

- Create an interprofessional learning laboratory rooted in real-life innovation, discovery, and collaboration

Project Team-Enhanced Curriculum and New DNP Project Model

- Review goals
- Review LEAN Rapid Improvement Event & Integrative Experience Task Force meeting results; answer questions
- Review results of course mapping against AONE/ACHE competencies; discuss gaps & areas of redundancy to finalize content locations
- Discuss/finalize course sequencing based on pre-retreat results & discussion of where pre-work indicates differences
- Review results & discuss using 8 week course blocks/finalize decision
- Discuss concept of creating student progression floor & ceiling timelines; how to schedule/use electives to help students keep on track with required courses
- Discuss remaining questions, ideas, concerns; evaluate day and determine next steps

Project Team-Enhanced Curriculum and New Project Model

Team Name	New Project Model & Enhanced Curriculum	Charter Date:
Location	School of Nursing	Version:
Timeline	Start Date:	Target End Date:
TEAM MEMBERS	Name/Role	Name/Role
Executive Sponsor(s)	Associate Professor & Associate Graduate Dean	
Process Owner(s)	DNP Faculty DNP Program Coordinator	
Project Facilitator	Adjunct Faculty	
Team Members	Admin. Support	Instructional Designer, Center for Teaching & Learning
	Faculty, DNP C/SA Chair	Faculty, MSN Leadership Coordinator
	Faculty, DNP Graduate	Faculty, DNP C/SA Co-Chair
	Assistant Dean of Operations	Faculty, Nursing Education Coordinator
	DNP Student Advisor	Marketing
	DNP Faculty	Director of Nursing Practice and Quality
	DNP Faculty	Assistant Chair
Key Stakeholders	Local Chief Nurse Executive	

Team Rules

- Practice active listening. No side conversations or use of mobile devices.
- Honor everyone's contribution. Stay open to creative visioning.
- Establish relationships based on trust and transparency.
- Participate fully, authentically, and respectfully during team discussions.
- Engage in “healthy conflict” behaviors when discussing different views & ideas.
- Share your thoughts openly with the team, including any questions or concerns.
- Keep the discussion aligned with high level goals (avoid getting “into the weeds”).



Background: Goals

1. Define the new DNP Project and needed curricular enhancements
2. Create the course sequence and which courses are best suited for the needed content
3. Develop a list of items for review at the faculty retreat

AIM Statements

- **What were we trying to accomplish?**
 - We developed a program to “*prepare transformative healthcare leaders who bring the value of a “nursing lens” to their work*”
 - Focused toward the outcome of “transformative healthcare leader” using methods that are congruent with the IUSON strategic plan and budget
 - Contemporary, responsive, and robust
 - The strength of the new program model will attract aspiring system-leader DNP students
 - A set of learning experiences, when combined facilitate the students’ attainment of the DNP Essentials outcomes and the additional competencies expected by employers of DNP graduates

AIM Statement Summary



Quality & Value

A DNP Program
focused on
preparing
transformative
healthcare leaders



Service & Satisfaction

Achieve high
satisfaction for
students, faculty,
staff, and key
stakeholders



Academic Achievement

Ensure students
achieve clearly
defined outcomes
& develop essential
competencies



Finance & Growth

Utilize resources
efficiently to
achieve sustained
financial viability

Problem Recognition

- School and faculty leaders recognized the need to provide a DNP program that would prepare graduates to not only meet national standards (Doctor of Nursing Practice Essentials, AACN, 2015), but to also meet future system-level leadership requirements, be aligned with faculty workload, and decrease variability in student progression and scholarly project completion.
- The initial DNP scholarly project or practicum project extended over the length of the DNP program (three to six years).
- DNP Program Team (DNP faculty), school leaders and staff, and the DNP Curriculum and Student Affairs Committee identified the following high level aims:
 - Develop DNP students' experiential learning opportunities to enhance experiential competence; align the program's resource usage; standardize the processes for achievement of student learning outcomes, terminal degree program outcomes, and student progression.

Project Metrics – Current State & Goals

Performance Measures	Current State	Goal	% Change
Budget neutrality of the DNP Program			
Student & faculty clarity re: the DNP Program Model			
Reduction of delays in student progression			
Increased student, faculty, and mentors' satisfaction			
Reduction in the number of faculty resources required			
Standardization of essential key Program components			
Increase in the number of out-of-state applicants			
Evidence that graduates are hired for leadership roles			

Three opportunities for involvement & scholarship development

Task Forces:

- Integrative Experience Task Force: *To design, develop, implement and evaluate IE's I, II and III (3 credits)*
- Leadership Experience Task Force: *To design, develop, implement and evaluate leadership-focused IE credits (2 credits)*
- DNP Evaluation Sub-Committee: *To execute DNP program & curricular evaluation strategies & advise DNP C/SA & faculty on needed actions*

Faculty:

- Faculty co-leads
- First meeting held May 1: Outcomes Identified & strategy ideas generated; next meeting set within 1 month for design facilitation
- One faculty lead
- One faculty approved as Chair

Meeting Summary – Day 1



- What went well today?
- What could have been done better or differently?
- Lessons learned or recommendations for future meetings?

Key enhancements

- Though current curriculum held up very well, curriculum was re-balanced & mapped to AONE, ACHE, and Lean Six Sigma competencies; then designed to close gaps in content developed by faculty
- Cohort model vs part-time students
- Project model change from single Inquiry Project to D749 course becoming a series of advanced topics including leadership, integrated and immersive experiences
- Nationwide student recruitment efforts vs. local/regional

Key Results

- Enhanced curricular gap analysis, design completed & approved in 5 months
- HRSA No-Cost Extension
- New student orientation packet and 2 Day Boot Camp Designed
- Course changes designed & submitted
- Fee increase proposal underway for subsequent year
- Huge efforts to ensure the success of the first On-Campus IE in March; high visibility with Center for Interprofessional education

Approval Process Steps

Steps:

- LEAN team drafts new project model & curricular sequence
- Wider DNP faculty/advisor group discusses, garners consensus, approves new plan of study
- Change of plan of study document goes to Graduate Office
- In parallel, tweaks to course names/objectives forms go to Graduate Curriculum Committee as change forms
- Graduate Affairs Committee meets to approve new plan of study

Due Dates:

- April
- May
- May
- May
- May

All steps per meetings with Director of Graduate Office

D749 Course Sequence

Fall-I	D736: Evidence-based Research & Translation Science D751: Knowledge Complexity D749: Leadership-I
Spring-I	D743: Health Policy D751: Relationship Centered Leadership D749: Leadership II D749: On-Campus Integrative Experience-I
Summer	I630: Informatics Student Elective D749: At-Student-Option Immersive Experience
Fall-II	D615: Health Outcomes D735: Population Health Surveillance & Management D749: On-Campus Integrative Experience-II
Spring-II	D744: Strategic Human/Financial Resource Management Student Elective D749: On-Campus Integrative Experience-III D749: At-Student-Option Immersive Experience

Practicum 7 Credits minimum for students bring in at least 500 Master's in Nursing	Practicum Hours	
Boot Camp	16 practicum hours	
<i>D 749 I Leadership First Fall Semester</i>	1 credit hour=75 practicum hours	
<i>D 749 II Leadership First Spring Semester</i>	1 credit hour= 75 practicum hours	150 Practicum hours
<u>D 749 Integrative Experience First Spring</u>	1 credit= 75 practicum hours	
<u>D 749 Integrative Experience Second Fall</u>	1 credit= 75 practicum hours	225 Practicum hours
<u>D 749 Integrative Experience Second Spring</u>	1 credit=75 practicum hours	
D 749 At-Student Option First Spring	1 credit=75 practicum hours (can be 1-3 credit hours)	150 Practicum hours
D 749 At-Student-Option First Summer 1	1 credit=75 practicum hours (can be 1-3 credit hours)	

D 749 Leadership I & II



Description

- Provide opportunities for students to tailor learning and deep immersion into areas aligned with their personal/professional leadership goals
- Apply knowledge and skills gained in didactic coursework to advance their leadership development across selected practice settings
- Enable students to synthesize and integrate knowledge about:
 - Leadership
 - Methods of inquiry
 - Leading evidence translation into practice
 - Business
 - Law
 - Ethics
 - Policy
 - Information/technology management while developing clinical and leadership expertise in selected practice settings

D 749 I & II Objectives

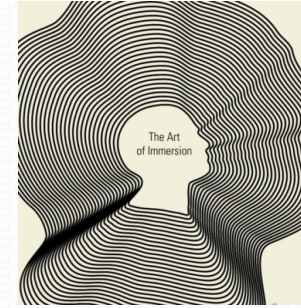


- Professional leadership development plans
- Assess personal lifestyle, image, health and wellness, and life balance
- Construct oral and written narratives/resumes reflective of professional identity that highlight personal strengths and skills and describe professional goals
- Distinguish characteristics of selected leadership models and use acquired understanding to create a professional strategy combining previously identified leadership virtues (personal talents, expertise, and skills), with healthcare settings/circumstances
- Plan and begin creating a professional community/network; selectively engage in professional organizations
- Identify complimentary talents and describe strategies that will allow enhancement of personal and professional leadership development/potential

D:749 At-Student- Option Immersion Experiences (ASO)



D749: ASO Immersion



Practica Advanced Topic Description:

- At the completion of ASO-IEs, students will be able to:
- Demonstrate successful negotiation of the immersion experience with the practice setting by articulating a detailed, DNP- and practice setting-approved proposal per the written proposal requirements.
- Demonstrate with oral and/or written deliverables, how the immersion experience integrates with didactic coursework, and
- Reflect upon and summarize how the experience promoted the achievement of D749 overall course objectives, selected professional competencies, and selected DNP program-level outcomes.

D749: ASO Proposal



Requirements:

- Proposal form included in packet; project must be tied to DNP Essentials/AONE competencies
- You may sign up for 1-3 credits/semester, 75 hrs/credit hour is required
- Projects may be continued across semesters, however, each semester will require a proposal for activities for that semester. Each semester's proposal must be able to stand alone in terms of planning, implementation, evaluating project, and deliverables for the semester's project. A reflective paper is also required each semester.



D749 ASO Proposal

- Proposals are submitted by mid-April for summer, by mid-July for fall, by mid-November for spring
- Completed proposals go to faculty for approval; if questions, may go to DNP C/SA for approval
- Students will complete their proposals under the guidance of a pre-approved preceptor in the practice setting or agency. Preceptor selection guidelines will be provided in the ASO course.
- Faculty of record supports students/provides grades/feedback for all ASO credits

D749: Practicum Hour Tracking Spreadsheet

Requirements:

- ✓ The Practicum Hour Tracking Spreadsheet is included on thumb drive in the orientation packet
- ✓ All required practicum hours are to be recorded and 1000 hours must be documented to graduate

D749: On-Campus Integrative Experiences DNP Deep Dive Shark Tank!



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Course Description

- Initial Participating Schools
 - Nursing
 - Engineering
 - Informatics & Computing
 - Herron School of Art & Design
 - Liberal Arts
 - Public Health
 - Business

Course Description

- Initially 1 credit/semester course with **bound** interprofessional teams across 3 semesters over 1 ½ years
- Thematic metanarrative tied together all three problems: “Healthcare where people live, work, and play”
- Healthcare real-world problems increase in complexity and scope
- Students “work the problem” the first 7 weeks, then come to campus for 2 ½ days for intensive integrative experience (competition)

Course Description

- Faculty act as coaches throughout the course
- Stakeholders and faculty evaluate the final deliverables/solutions in a Healthcare Revolution Challenge
- Focus on teamwork process and outcome (front stage and back stage) and social learning inherent in the on-campus portion of the course

<https://vimeo.com/126173046>

Real World Problem Examples

- World Health Organization-new WHO policy document and b) a global advocacy campaign. The main objectives will be to:
 - Adapt and consolidate results achieved by WHO's SIGN network in the immunization field over the last decade;
 - Prevent unsafe therapeutic injections through the use of safety engineered injection devices and healthcare worker training; and
 - Avoid unnecessary injections
- Medical Device-vision for MedRegister™ was to improve medication compliance and to lower the cost of healthcare delivery by introducing improved technology and processes
- Veterans Affairs-lung cancer screening by low-dose Computed Tomography (LDCT) scans would be offered to veterans in the VA system-over 50% patients in service area would meet criteria for LDCT lung-cancer screening, representing approximately 20,000-30,000 patients

DNP Shark Tank Experience

- Faculty build the problem for study based upon context from the partnering organization
- Nursing faculty develops course
- Faculty develop discipline specific assignment
- Faculty outside of nursing sign up for independent study course (schools keep own students tuition)
- Nursing faculty groups students
- Students have 1-2 coaches for solution development
 - Meetings with coaches 1-2 times per semester via videoconferencing that can be recorded

DNP Shark Tank Experience

- Other students enroll during any semester
- Video-Student's perspective

Course development: Facilitators & Barriers

Facilitators

- Filled authentic need for students to experience this type of learning to function upon graduation
- Nursing program wanted and invited others, realizing the same need for all
- The Center for Interprofessional Practice Health Education Program (CIPHEP) leadership donated time and resources for initial immersion

Barriers

- Money and University Model
- Scheduling, on-campus days, faculty planning meetings, on-campus days placement within semester
- Faculty workload for course leaders
- Faculty coaches unclear about responsibilities
- Different cultural expectations by discipline among faculty and students

Results thus far...

- Student feedback- mostly process comments
 - need for more time to work first day
 - one coach versus 2 coaches
 - video dress rehearsal presentations for review
- Faculty feedback regarding change in evaluation methods, creating a discipline-specific assignment, using videos as student learning assignments



Interprofessional Collaborator Assessment Rubric (ICAR) Results

- Pre/Post Interprofessional Collaborator Assessment Rubric demonstrated statistically significant improvement for total scale and all Scale: Minimal (1), Developing (2), Competent (3), Mastery (4)



Summary Statistics of 6 Sub-Scales & Total Scale 2015-2016

Results:

- There was a significant increase in mean *Communication* skills from baseline to one year, from day 2 to one year, from month 6 to one year.
- There was a significant increase in mean *Collaboration*, mean *Roles and Responsibilities*, mean *Team Functioning* and mean *Conflict Management/Resolution* skills from baseline to 6 months and to one year.
- Mean *Collaborative Stakeholder Centered Approach* significantly increased from baseline to 6 months from day 2 to 6 months, from baseline to one year and from day 2 to one year.
- Each broad subscale and the total score shows a slight but statistically significant increase from baseline.



Campus-Level Impact

- Hosted community-wide design session with area healthcare executives facilitated by our launch speaker
- Launch presentation became all-campus and health care executive event

The launch speaker, Dr. Zubin Damania (Dr. Zdogg) of Turntable Health in Las Vegas, NV catalyzed and propelled the build of a new primary care IPE clinic that came directly out of the events surrounding this course



Lessons Learned

- Overwhelmingly positive students and faculty perspective
- The courses prototype for interprofessional learning across the health science schools
- CIPHEP continues to support resources for event planning function
- Faculty coach expectations now written & communicated



Lessons Learned

- The voice of the customer played a key role in our curricular redesign efforts
- It is possible to rapidly improve curriculum using Lean methods in ways that build consensus and achieve overall aims
- We were successful in that we encouraged “healthy conflict”, yet kept the process moving forward



Encouraging Feedback

Student Comments

- Another CNO Interview round conducted 1 year post program reveals “spot-on”
 - Although a bit early to say, applicant interest seems earlier & higher
 - Faculty continue to be enthusiastic & highly engaged
- Segoe: “After hearing them speak tonight about their experiences it made me feel grateful for the faculty at IU for all they do to make the DNP program what it is. Always keeping the customer in mind when designing programs is what makes your program work. So thank you! .”
 - Sprague: “I really feel like the readings in all 3 classes [in this first semester] complimented each other nicely. I see how everything fit. I see it as a Complex Adaptive System with interconnected parts!”

Documents for Integrated Experiences

- Syllabus
- Toolkit-IE
- Toolkit-Logistics
- Evaluations
- Faculty Coaching Toolkit
- Marketing to other school's faculty and students

Deep Dive Practice

- Stakeholder Analysis
 - Explore stakeholders insight into problem selection
- Identify toolkit items to assist in IE development
- Select a planning framework for program development
- Use example-American Red Cross Volunteer Culture Deep Dive



Questions?

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