Narrowing the Research-Practice Gap: DNP-prepared faculty leading RN-to-BSN students to engage in Evidence-Based Practice

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Purpose

- To describe and share an innovative example of how one RN-to-BSN program's curriculum and academic-practice partnerships are preparing practicing nurses to engage in evidence-based practice (EBP).

WESTERN WASHINGTON UNIVERSITY

R N -TO- B S N   P R O G R A M

By 2020, **90%** of clinical decisions should be grounded in the latest clinical information and best available evidence.
(IOM Roundtable on Evidence-Based Medicine, 2006)

Western Washington University
Bellingham, WA

WWU RN-to-BSN Program Curriculum

Quarter 1.	Quarter 2.
• Information Literacy • Social Justice in Healthcare • Transitions in Professional Practice	• Translational Research for EBP (didactic & practicum) • Health Policy, Leadership, and U.S. Healthcare • Transitions in Professional Practice
Quarter 3.	**Quarter 4.**
• Community-Based Care for Vulnerable Populations (didactic & practicum) Organizational Change for Quality and Safety (didactic & practicum) • Transitions in Professional Practice	• Interdisciplinary Care Coordination (didactic & practicum) • Global Health • Transitions in Professional Practice

Strategies to teach EBP

Objective #1

- Describe possible strategies (i.e., exercises and approaches) for teaching RN-to-BSN students to:
  - Develop a clinical inquiry question,
  - Search for the best evidence,
  - Critically appraise the evidence, and
  - Propose feasible recommendations for evidence-based practice (EBP)

Theory + Practice

NURS 402 & NURS 403

NURS 402 (4 credit didactic)
- What is the difference between research and EBP?
- How do you generate and write a PICO question?
- How do you search for and appraise evidence?
- How do you synthesize evidence?
- What is a practice model?

NURS 403 (1 credit practicum)
- Agency staff identify a current clinical topic of interest
- Students complete a PICO project on the topic of interest:
- Conduct extensive literature reviews on topic & make evidence-based recommendations

Past PICO Topics—EXAMPLES	Partner agency
Geriatric nutritional interventions and pressure ulcer healing rates	Local hospital
Nurse education on non-pharmacological pain management strategies	Local hospital
Debriefing after Code Blue	Local hospital
Leadership and succession programs	Local hospital
Stock epinephrine auto injectors for school districts	Regional school district office
Best practices in Employee Wellness Programs	Local health department
Best practices for central line care in home care/hospice	Local home hospice agency
Caregiver education to promote sexual health for clients living with intellectual and developmental disabilities	Local agency serving clients with intellectual/developmental disabilities

Theory/Didactic course assignments

1. Synthesis skills: Weekly Double Entry Journal on assigned readings and articles
   - They say/I say *(What/So what?)*
2. Individual Source Evaluation Grid assignment
   - Analyze 4-6 peer-reviewed sources
   - One source should be a meta-analysis, meta-synthesis, or systematic review if possible

Source Evaluation Grid

Individual Source Evaluation Grid
Please complete the grid for 4-6 sources
(Boxes will expand as you type information into them)

Student name:
PICO Group Topic:
PICO Question:

Citation (APA)	Purpose	Design	Sample	Levels of Measurement (if applicable. See ch. 10)	Results/Conclusions	Level of Evidence per the Evidence Hierarchy

Theory/Didactic course assignments *continued*

3. In-class Exercises
  - Levels of Measurement individual and group quiz
  - Validity and Reliability exercise
  - Jigsaw and jeopardy on quantitative designs & evidence hierarchy

4. Individual Scholarly Paper
  - Two drafts reviewed by instructor, feedback given
  - Two peer reviews completed using peer feedback guide
  - Final draft with sections:
    - Intro/background, Purpose, Methods, Findings/Synthesis of Literature, Recommendations, Implications for Practice, Conclusion

Propose feasible recommendations

NURS 423 Organizational Change Practice Experience course (Quarter 3)

- CQI tools: PDSA cycles, process flowcharts, fishbone diagram
  - Institute for Healthcare Improvement Open School online modules
- Intro to implementation science
- Stakeholder analysis
- Donabedian's Framework: Structure-Process-Outcome
- Logic model
- Lewin's Force Field Analysis
- Change theories

Objective #2

- Describe skills to enhance student engagement in building strong teamwork, communication, leadership, and advocacy for organizational change for evidence-based practice.

Practice Experience course details

- 1 credit course = 30 practice hours
- Practice Experience mentors may or may not be nurses
- Each PICO project has 4-5 students assigned to the same topic
- Students are assigned to one of their top three topic choices to increase student interest and engagement

Students are also completing the Health Policy, Leadership, and U.S. Healthcare course

Progression of Topics & Assignments

Module	Didactic Course Topics (NURS 402, 4 credit course)	Practice Experience Assignments (NURS 403, 1 credit course)
1	Starting with a spirit of inquiry	
2	PICO Questions and linking theory, research, & practice	Project Work Plan & Contract; Preliminary PICO question
3	Finding sources of evidence	
4	Appraising evidence	
5	Quantitative designs	
6	Qualitative designs	(Individual Source Evaluation grid)
7	Interpreting data & synthesizing evidence	Group Source Evaluation grid & Selection criteria write-up
8	Practice models and planning for change	Draft poster
9	Evaluating outcomes	Stakeholder analysis
10	Translational Research for EBP	Poster presentation & Evaluation of contract & work plan

PICO Project Small Group Work

NURS 403 Translational Research for Evidence-Based Practice

Practice Experience

Slides authored by Mary A. Baroni, PhD, RN

Keeping Ourselves & Each Other Accountable
Negotiating the Process – PICO Project Contract

- Individual goals for outcome to consensus on negotiated shared goal
- Identified Task & Process roles needed
- Assessment of member skills and role preferences
- Agreed ground rules/processes for:
  - Leadership/Coordination – Single person or rotated responsibility
  - Decision-making/delegation
  - Monitoring progress – Oversight of Project Workplan
  - Managing missed meetings or target dates – Accountability plan
  - Monitoring for possible concerns/conflicts & plans for addressing conflict
- Frequency & venues for meeting
- Frequency & venues for communication b/t meetings

Possible PICO Project Roles

1. PICO Project Contract Coordinator (Co-Facilitator for Group)
2. PICO Work Plan Coordinator (Co-Facilitator for Group)
3. PICO Question & Tracking of Data Base Searches/KEY Words
4. PICO Group Source Evaluation Grid
5. PICO Poster Coordinator (s)
6. PICO Project Presentation Coordinator
7. PICO Liaison between Small Group, PICO Project Mentor & N403 Faculty

QUESTION: What types of skills are needed for these team roles?

PICO Project Self and Peer Evaluation

Name	
Please rate yourself/your peer on your/their small group participation this quarter using the following scale: *5=always 4=frequently 3=sometimes 4=rarely 1=never*	
This group member was prepared to contribute to the group and stayed on task	
This group member listened respectfully to other group members & encouraged others' participation	
This group member participated in group discussions and communicated in a timely manner	
What overall rating would you give this group member's performance? *5=excellent 4=very good 3= good 2=fair 1=poor*	
Additional comments:	

*Average of your Peer Evaluations score is worth up to 5 points for your N403 grade

Increasing student engagement

- Project work may result in tangible real-world practice changes that aim to improve patient and client outcomes!

- Partnership with local hospital on their journey to ANCC Magnet designation
  - Implemented projects initiated by our students through the pilot, replication, and adoption phases:
  1. Quiet zones for medication administration
  2. Evidence-based diversional activities for patients hospitalized with dementia to avoid using restraints and unnecessary medication.

Student Feedback

End-of-quarter course evaluations for NURS 402 & 403

What changes could be made to improve the teaching or content of the course?

- "Felt somewhat disconnected from the practice setting we were doing research for."
- "Maybe more hands on community work? Maybe this is spring quarter?"
- "Our PICO topic was rather difficult and broad and not one I would offer in future quarters."
- "Too many double entry journals! Maybe other ways to discuss and analyze the reading."
- "Slight increase in relation to our current practice?"

What aspects of the teaching or course content do you feel were especially good?

- "I am very glad we had time in class designated to expectations of the hierarchy of evidence. Without that, I would've been very lost so thank you!"
- "The writing assignment for EBP helped to enhance my knowledge of synthesis of information and review of literature."
- "The instructor gave us the tools and resources to develop a PICO question and to be able to present effectively."
- "I appreciated the flow and organization of the course. Double entry journals related to what phase of the writing assignment we were in."
- "While group projects have been a challenge for me in the past, I appreciated the devotion to a contract/clear expectations."
- "The community outreach part was interesting and enjoyable."

Objective #3

- Describe ways in which DNP-prepared nursing professionals can lead collaborative partnerships across settings (academic, administrative, clinical) and sectors (public health, human services, public education) to provide students learning opportunities to participate in initial steps of an EBP project.

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• Transitions in Professional Practice	• Transitions in Professional Practice

Practice Experience Topics (Two quarter projects)	Community Health & Organizational Change Student Projects
Stock epinephrine auto injectors (EAI) for school districts	Developed a toolkit containing example EAI protocols for tx of anaphylaxis symptoms
Best practices for vision screening among school-aged children	Surveyed school RNs about current vision screening practices and provided latest EBP
Caregiver education to promote sexual health for clients living with intellectual and developmental disabilities (IDD)	Provided background information to staff educators who will develop an approved continuing education module for agency staff
Staff education on therapeutic recreation interventions for clients with IDD	
Creating a coalition to prevent falls among community-dwelling seniors	Identified possible coalition participants and organized first meeting to be led by PE mentor
Peer counselors to support homeless clients living with substance abuse	Surveyed and interviewed staff and clients about their knowledge/awareness of peer counselors

DNP faculty leading collaborative cross-sector partnerships for EBP projects

- Clearly articulate the "value added" and unique skill set that RNs contribute

- Translate the goals and outcomes of a PICO project without using nursing-specific terminology

- Emphasize that the students are already licensed and practicing RNs

- Share concrete examples of past project work and set clear project scope and expectations

- Clearly articulate roles and responsibilities of agency mentor, students, and practice faculty

- Maintain consistent communication and availability to mentors

Student evaluations

End-of-quarter course evaluations on two-quarter project topics

NURS 403 & NURS 423/433

Practice Experience Mentor Feedback

End-of-quarter evaluation comments

NURS 423/433

Lessons learned

Lessons learned

- How to manage PE agency mentor/staff turnover?
  - Developed practice site recruitment document outlining our courses, project needs, expectations, etc.

- Structuring learning opportunities for program and systems-level projects.
  - Learning how to balance giving space for students to learn community/organizational assessment skills AND ensuring that their project scope is realistic, feasible, and meets course learning objectives.

Lessons learned *continued*

- How to support students when unexpected factors not identified in the PICO project/lit review phase arise during the assessment and planning for implementation phase?
  - Emphasize the art of translating research into practice!
  - Flexibility & adaptability are crucial for systems-level work

- How to motivate students to continue the project if the agency does not have the current capacity or resources to act on their recommendations?
  - Introduce students to **implementation science** concepts
  - The slow pace of system-level change
  - Building skills for resilience and patience is useful for leading practice change

An average of 17 years is required to translate new research into practice.

IOM, Crossing the Quality Chasm, 2001

(PartnerHealth, 2014)

Questions?

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