Innovative Evidence-Based Strategies for BSN Education
Old Dominion University

- East Coast of USA in Norfolk, Virginia
- Doctoral research university
- 274 rigorous academic programs
- >24,500 students
- $2.6 billion annual contribution to VA economy
ODU School of Nursing

- Est. 1967
- Largest of 5 professional schools in College of Health Sciences
- BSN Program
  - pre-licensure accelerated track
  - post-licensure RN-BSN track
- Graduate Program
  - Certificate, MSN, DNP
Undergraduate Educational Strategies that Promote Handoff Effectiveness and Patient Safety: Connecting the Dots between the Senders and Receivers

Christine Sump, DNP, MSN, RN, CNE
Donna Rose, DNP, MSN, RN
Objectives

- Discuss patient safety issues in relationship to change-of-shift handoff.

- Describe evidence-based teaching strategies that promote nursing students' effective handoff delivery and reception.

- Discuss evaluative processes to assess students’ handoff delivery and reception.
Handoff Communication

- Purpose of patient handoff
- Communication breakdowns during handoff
  - Consequences
- The call for handoff education
Handoff Education

- Not typically taught in undergraduate nursing programs
- Handoff Instruction Literature (or lack there of)
- Handoff teaching and learning strategies at ODU SON
  - classroom, assessment lab, simulation, clinical
Evidenced Based Learning Strategies

- Flipped classroom
  - Case studies
  - Role play
  - Peer evaluation
- Health Assessment Lab
  - SBAR is the ticket out of lab
- Simulation
- Clinical
Student Handoff Evaluation
Procedure

- Assessment and intervention simulation
  - normal and abnormal data
  - SBAR template
- Students provide handoffs to non-faculty current medical/surgical RN’s
- Handoff evaluation using the Handoff CEX
Handoff CEX Evaluation Survey Tool (see handout)

- Setting
- Communication Skills
- Clinical Judgment
- Organization
- Professionalism
- Overall Competence
- Content
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Transmission of Accurate Handoff Information is Not Enough!

- Fundamentals Lab Practicum
  - Avatars

- Adult health I
  - Classroom
  - Clinical
  - Simulation
High-fidelity Simulation as an Educational Strategy to Teach Handoff

- **Control Group**
  - received patient handoff via traditional written case study

- **Experimental Group**
  - (increased fidelity) received handoff from a nurse, dressed in clinical attire, using an EMR at the patient's bedside

Following handoff students in both groups proceeded to care for the standardized patient.
Clinical competence was measured using the Crieghton Competency Evaluation Instrument (C-CEI©). (see handout)
# Pilot Study Results

## Table: Descriptive Statistics for Clinical Judgment & Clinical Competence based on Creighton Competency Evaluation Instrument

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Notes: IV= Independent Variable, n = number of participants, SD = Standard Deviation

*% score for category (out of 100%)
Discussion

- It is imperative that educators provide opportunities for students to practice patient handoff to help bridge the practice-education gap to improve patient safety.

- The question is how to best do this in fast-paced, technologically advanced, high-stakes healthcare environments.
Discussion

- Evidence supports simulation as an educational strategy and today's learner embraces active learning strategies such as HFS, which allows educators to teach with a sense of salience.

- Evaluation of handoff learning strategies discloses key information and identifies information that needs to be reviewed throughout the curriculum.
Using Service Learning to Enhance Cognitive Development of Nursing Research for Complex Social Issues

Linda K. Bennington, Ph.D, RN
Old Dominion University
At the end of this presentation, participants will be able to:

Define service learning and its process.

Identify a common goal of service learning for the BSN student.

Deliberate probable social issues and their project potential for the enhancement of understanding and application to nursing research.

Examine ways to evaluate cognitive development.
Service Learning

- **Definition**: Structured educational experience that links classroom knowledge to community engagement.

- At its best: Accommodates student growth via self-examination.

- At its worst: May stymie association with others.
Overall Objective: Lives of Others

- To serve as an initiation into the tangible world of the lives of others, i.e., those lives that are rarely encountered by the student nurse in his/her typical setting in order to provoke self-reflection, compassion, selflessness, social awareness and, above all, cognitive development and insight.
Succinct Substance of Service Learning

- Common goal: That the combination of the two, classroom knowledge and community engagement, adds value to each and transforms both.

- Through: First hand exposure to social injustices and cultural barriers that exist in local communities.
Structure of Service Learning in Nursing Education

1. Incorporated into BSN programs for >20 years with no standardization.

2. Student involvement ranges from rigorous community participation with close integration into academic study to 1 week intensives unrelated to classroom concepts.
ODU BSN Service Learning

Concept Implementation:

A. One year: two semester community health course
B. Student groups assigned to existing community organizations that range from:
   - a. Faith based
   - b. Drug Court
   - c. Assisted Living
   - d. Pregnant Teens, breastfeeding, prenatal education.
Each student group:
- A. Has a faculty resource.
- B. Assesses their aggregate
- C. Determines indicated diagnoses.
- D. Plans and implements their choices.
This process introduces students into communal regions of which they personally have little knowledge, i.e., addicts in drug court and pregnant teens.
Group Analysis and Outcomes

- The group: Loving Steps, state funded.
- The Background:
  - Measure of a community’s needs can be determined through infant mortality rate.
  - It reflects quality of prenatal and birth care available to both mother and children.
  - It is a critical indicator of the overall health and welfare of a nation.
Loving Steps

- Virginia’s infant mortality rate: 6.8/1000
- Our community’s rate: 9.1/1000
  - (VDH.gov (2015)).
- Introducing students to this culture and population served to:
  - Challenge their assumptions
  - Bring stereotypical preconceptions to the surface
Revelations

- Working with this group:
  - Presented alternative viewpoints of issues that conflicted with ‘expert’ knowledge.
  - Provided a stimulus to justify and compare observations with the literature.
  - Instilled a need to be politically and socially active.
  - Inspired ideas for their own research.
Key to Understanding

1. Ongoing oral logs as opposed to written.
2. Discussion of individual strengths and weaknesses (both student and aggregate).
3. Resolution of current crises (both student and aggregate).
4. Recognition of need for changes (both student and aggregate.)
Student Activity Development

1. Teaching prenatal classes at local clinic and city high schools.
2. Recognition of the need to change educational content.
3. Development of teen father educational and support groups.
4. Organization of community health fairs and safe sleep initiatives.
Relevance and Implications

- The students demonstrated a willingness to change and adjust together through our informal meetings, which led to a positive attitude toward civic engagement and a better understanding of complex social issues.
Cognitive Development Evaluation

- These students achieved the ability to analyze the complexity of a problem and devise solutions rather than focus on individual deficiencies, which resulted in cognitive development.
One Final Realization

- Its best: Self-examination to find those qualities within that enable a successful transition for the common good of a community.
- Its worst: Stymie association with others, be they student peers or members of a diverse culture within the community.
Final Realization

- To grasp the understanding that this is a group effort on both sides. We are there to bring an awareness to others of what they possess within themselves. There is no them or us—we are facilitators not rescuers. That recognition creates an acceptance on all sides.
Condition Mapping and Situational Awareness

Amy M. Wagner, MSN, RN, CNE
Amy Lee, DNP, MSN, RN
Karen Karlowicz, EdD, RN
Learning Objectives:

- Discuss Situational Awareness.
- Identify barriers to the effective development of Situational Awareness.
- Describe strategies to promote Situational Awareness in pre-licensure student nurses.
- Discuss application of Condition Mapping to pre-licensure clinical education
Situational Awareness

- Critical Thinking
- Situational Awareness
- Clinical Judgement
Situational Awareness

- The ability to identify, process, and comprehend what is happening and predict outcomes in an effort to mitigate adverse events.
Pre-Licensure Clinical Education

- Employers are requiring Advanced Beginners
- Basic tenets of Situational Awareness and Clinical Judgement are embedded.
- Educators must develop effective techniques to promote student learning and teach effective SA.
Barriers to the Development of Situational Awareness
Barriers

- No standardized Didactic Content
- Traditional Pre-Clinical Preparation
- Electronic Medical Record
Situational Awareness

- How do you teach an intuitive cognitive skill?
- How do you measure Situational Awareness?
- Clinical pre-planning the answer??
ODU Project

- No student EMR access in Adult Health II Spring
- Faculty decision no traditional pre-clinical prep
- Process defined with expectations to faculty and students
ODU Pre Clinical Preparation

- Demographics
- Patient History
- Pathophysiology of Primary Diagnosis
- Diagnostics/Lab data
- Medications/Inter Professional Interventions
- Patient Education/Discharge Planning.
Then the Care Plan ....

- Nursing Diagnoses (4)
  - Supported with Data
  - Prioritized

- Goal for patient care and planned outcomes

- Discuss/Establish 5 patient specific interventions with rationales
Pre-clinical Preparation

- Inefficient/Ineffective use of time.

- Minimizes Inductive and Deductive Reasoning
Electronic Medical Record Affect Learning?

- Availability
- Accessibility
Condition Mapping…

Is it the answer?
Condition

Pathophysiology

Diagnostics (Labs/Radiology/Others)

Treatment

Patient Education

Discharge Planning

Mapping

Sigma Theta Tau
Epsilon Chi Chapter
Clinical Day

- Demographics
- Patient History
- Pathophysiology of Primary Diagnosis
- Diagnostics/Lab data
- Medications/Inter Professional Interventions
- Patient Education/Discharge Planning.
Patient Specific Care Plan

- Four Nursing Diagnoses
  - Supported with Data
- Goal for patient care and planned outcomes
- Prioritize Diagnoses
- Establish 5 patient specific interventions with rationales
Facilitating Effective Situational Awareness

Experiential Learning

SA

Reflective Thinking
Condition Mapping

- Condition mapping to teach situational awareness
- Informal Feedback & Observations
- Student nurses and faculty
Observations & Feedback

Nurse Educators

- Textbook Scenario
- Correlation of Real Time Data
- Individualized Patient Care
- Self-Directed Learning
- Collaboration with Interdisciplinary Team
Observations & Feedback: Students

Integration into the Healthcare Team

Facilitation of EMR Usefulness

More Effective Pre-Clinical Prep

SNs Better Prepared for Clinical


Discussion

- Effective preclinical preparation methodology
- Promotes organization and prioritization
- Attaches to internal motivators for each student

- Addresses time laden TPP and EMR accessibility
- Offers a sense of structure for gathering patient data while allowing for individuality relative to patient care management.
Conclusion

Condition Mapping

- Facilitates reflective thinking
- Cultivates Clinical Judgement
- Cultivates Situational Awareness
- Resulting in effective skills allowing for effective and safe patient care
Innovative pedagogical approaches to undergraduate nursing research: Avoiding the cursory critique

Jamela M Martin, PhD, RN, CPNP
Purpose

- Discuss the success of a project-focused evidence-based education strategy:
  - Undergraduate & RN-BSN nursing research courses
  - Experiential learning
  - Product development
  - Less intimidating
Learner Objectives

- Discuss components of AACN BSN Essential III: Scholarship for Evidence-based Practice.
- Compare AACN expected outcomes of EBP-implementation to actual progress towards that goal.
- Recognize the pitfalls of the typical nursing pedagogy regarding research and EBP.
- Identify three benefits of employing experiential learning strategies in research courses.
Problem

- Translation of evidence into improved QOC remains substantial obstacle
- 17-20 years lag time
- 27 projects
- Help accelerate the impact of health services research on patient care
- Partnerships between health care orgs & researchers
The Big Myth...

- Advanced-practice nursing is the appropriate beginning level for EBP & Research implementation

- Essentials of Baccalaureate Education for Professional Nursing Practice (AACN, 2008)

- “Professional nursing practice is grounded in the translation of current evidence into one’s practice.”
Traditional Approach

- Content delivery
- Basic research process knowledge
- Content memorization with quizzes & exams
- Focus only on skills needed to locate & critique research reports
Bloom’s Taxonomy

create
- Produce new or original work
  - Design, assemble, construct, conjecture, develop, formulate, author, investigate

evaluate
- Justify a stand or decision
  - Appraise, argue, defend, judge, select, support, value, critique, weigh

analyze
- Draw connections among ideas
  - Differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

apply
- Use information in new situations
  - Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

understand
- Explain ideas or concepts
  - Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

remember
- Recall facts and basic concepts
  - Define, duplicate, list, memorize, repeat, state

(Anderson & Krathwol, 2001; Bloom, 1956)
Innovative Approach

- Constructionist approach
- Deeper involvement when constructing
- Comprehensive teaching of research methods
  - Project-focused
  - Tangible output of research proposal
  - Relevant, current topics
  - Build knowledge through creation
Innovative Strategy Goals

- Hybrid (flipped) class design
- Engagement with steps of the research process → think like an expert
- Use constructionist approach to create a useful product
- Collaboratively engage in teamwork
- Polish academic writing skills
- Prepare new graduates nurses to critically analyze and implement evidence with confidence
Brainstorming Phase

- Write PICO Question
  - (Problem, Intervention, Comparison, Outcome)
- Brainstorm Concept Map
- Create Literature Review Table
- Develop Conceptual Framework for proposal
- Determine research question, hypothesis & variables
Assignment #1

- 10-12 page research proposal
  - Abstract
  - Background
  - Significance
  - Theoretical Framework
  - Methods
  - Sampling Plan
  - Data Collection Procedures
  - Data Analysis Plan
  - Human Subjects Protection
# Assignment #2

The Effect of an Interprofessional Registered Nurse-Physical Therapist Team on Reducing Prescribed Opioid Dependence in Patients with Chronic Lower Back Pain

## Abstract

- **Proposed Interprofessional Team:**
  - Registered nurse (RN)
  - Physical therapist (PT)
  - Occupational therapist (OT)
  - Social worker (SW)
  - Physician

- **Positive outcomes:**
  - Increased pain reduction at rest and with exercise
  - Prompt recovery, thus reducing the likelihood of opioid dependence.

## Hypothesis

- Number of All Fatal Drug* Overdoses in Virginia Cities and Counties, CY2007-2014

## Methods and Materials

**Design:**
- Pre and Post Evaluation Test Questionnaire
- Further assessments
- Quantitative and qualitative outcomes
- Intervention plan
- Posttest

**Sample:**
- Initial assessment
- Follow-up evaluations
- Interventions

**Procedure:**
- Education
- Pain management
- Rehabilitation
- Social support

**Instruments:**
- Pre and Post Evaluation Test Questionnaire
- Further assessments
- Quantitative and qualitative outcomes
- Intervention plan
- Posttest

## Discussion / Conclusions

- Reduction in pain
- Increase in neuroscience knowledge
- Reduction in opioid dosage
- Decreased opioid dependence

## Acknowledgments

Special thanks to:
- [List of acknowledgments]

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*Opioids*
Outcomes

- Improved group work skills
- Improved oral & written communication
- Tangible product for portfolio
- Prepared to critically analyze research
- Translation of evidence with increased confidence
- Active engagement in research post-graduation
Outcomes

- UG student conference presentations
  - National Conference on Undergraduate Research
  - Quality and Safety Education for Nurses
  - Virginia Nurses Association
  - STTI Biennial Conference
- Aligns ODU SON with national push for more UG research
- Pride in their accomplishments
“The assignments in this class were very demanding in that we needed to know the course material and be able to apply it in order to complete the assignment appropriately.”
“The fact that we were able to choose our own topics to research made the projects more interesting. In addition, the fact that [what] we were researching will be completely applicable to our future nursing practice made the class better.”
Using evidence-based educational practices to improve graduation rates for RN-BSN students from disadvantaged backgrounds

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Lynn L. Wiles, PhD, MSN, BSN, RN, CEN
Karen A. Karlowicz, EdD, RN
Kimberly Adams Tufts, ND, RN, WHNP-BC, FAAN

*Funded by a HRSA NWD Grant in Partnership with Old Dominion University and Riverside Shore Memorial
The purpose of this presentation is to describe an educational model using evidence-based practices to improve graduation rates for RN-BSN students from socially and economically disadvantaged backgrounds.
Learning Objectives

- Describe barriers to BSN degree completion for nurses from socially and economically disadvantaged backgrounds.
- Identify evidence-based educational strategies to improve student success for nurses from socially and economically disadvantaged backgrounds.
- Describe the components of an evidence-based educational model designed to promote nursing workforce diversity.
Background

- Link between BSN and patient outcomes
- Goal of 80% BSN by 2020
- Rural areas are particularly challenged to meet this goal
Barriers to BSN completion

- Personal, professional, and academic factors (Altmann, 2011)
- Environmental, institutional, personal, college facilities and friend support (Jeffreys 2007, 2012)
- Academia, employer, and individual (Duffy et al, 2014)
Educational Model

- Structural
- Evidence-based educational strategies
- Social
- Environmental
Structural Support

- Cohort Model
- Individualized Advising
- Flexible Scheduling
- Tuition Assistance
- Academic Support
Environmental Support

- Hospital Library
- Study Space
- Computer Access
- Faculty Office
Social Support

- Faculty Mentor
- Peer Mentor
- Single Cohort Schedule
Conclusion

Increased enrollments

Retention

Culture shift

BSN
Questions & Discussion
(references available upon request)

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