USING EVIDENCE-BASED TEACHING STRATEGIES IN TEACHING QSEN COMPETENCIES

Gail D. Wegner DNP, RN, PMHCNS-BC
Purdue University Calumet
PURPOSE

Discuss the implementation of course specific content and evidence-based teaching strategies related to quality and safety education
CLINICAL QUESTION

In a baccalaureate nursing program, what is the effect of educating prelicensure nursing students about select QSEN competencies on student knowledge compared with students who were not exposed?
SIGNIFICANCE FOR CHANGE

Transforming Nursing Education

IOM
- Safe
- Quality Care

QSEN
- Six Competencies
- KSAs

PUC
- NUR 488 Capstone Preparation Revision
INTEGRATIVE REVIEW OF LITERATURE

Key words:

Nursing Education
Nursing Students
QSEN
Quality Improvement

Educational Intervention
Research

Inclusion and Exclusion Criteria

261
35
10
8
SYNTHESIS OF EVIDENCE
(MELNYK & FINEOUT-OVERHOLT, 2005)

Level IV: Evidence from well-designed case-control and cohort studies - 1 article

Level VI: Evidence from a single descriptive or qualitative study - 5 articles

Level VII: Evidence from the opinion of authorities and/or reports of expert - 2 articles
SYNTHESIS OF EVIDENCE

- Study Designs: three pretest-posttest, one expert opinion, one Delphi study, three descriptive
- Sample: nursing students in all but one study
EVIDENCE SUPPORTED CONTENT

- Process and outcome indicators
- QI models such as root cause analysis, Plan-Do-Study-Act, and Six Sigma
- Working in teams
- Leveling safety and QI content in nursing curriculum
EVIDENCE SUPPORTED TEACHING STRATEGIES

- Brief lecture
- Small groups/teams
- Real-life problem analysis/case study
- Discussion
- Reflection
- Teacher role: Facilitation
APPLICATION TO THE PRE-CAPSTONE COURSE
COURSE PURPOSE

Prepare students with knowledge and skills necessary to collaborate with clinical agencies to plan and implement a team-driven evidence-based solution to existing quality improvement and patient safety challenges for the subsequent EBP project for the Capstone Course in Nursing.
CONTENT AND TEACHING METHODS USED IN THE COURSE

Content
- Safety
- Quality improvement
- Informatics (related to EBP information literacy)
- Teamwork and collaboration

Best Teaching Methods
- Brief lecture
- Small groups/teams
- Real-life problem analysis/case study
- Discussion
- Facilitation
COURSE STRUCTURE (each 2 weeks):

Mod. 1
• Teamwork and Collaboration
• Pre/Posttest

Mod. 2
• EBP and Safety
• Pre/Posttest

Mod. 3
• Quality Improvement
• Pre/Posttest

Mod. 4
• Project Management
MODULE ORGANIZATION

- Day 1:  - Pretest
  - Lecture/Discussion related to select QSEN competencies
  - In class Learning Assignments – group team activities/case study analysis
  - Homework: Assignment, or reading, or reflection
- Day 2:  - In class Group team work – case study
  - Post-test
MODULE 1: TEAMWORK AND COLLABORATION

- Formation of student teams
- Content:
  - QSEN definition and competencies
  - Communication skills
  - Team dynamics
  - Conflict negotiation
  - Consensus building in decision-making
- Student learning activities
MODULE 1: OBJECTIVES

At the end of the module, students will be able to:

• Describe necessary elements of effective teamwork and team leaders;
• Describe roles and functions of health care team;
• Describe strengths that various health professionals, bring to patient care;
• Share own strengths and limitations that they bring to the health care team;
MODULE 1: OBJECTIVES

• Utilize effective strategies in communicating and resolving conflict;

• Describe the impact of power/authority positions on teamwork and patient care issues and choice of communication styles;

• Discuss strategies that facilitate effective teamwork and collaboration;

• Examine strategies for improving systems to support team functioning.
STUDENT LEARNING EXAMPLE:

• What do you expect to see if everyone is working together?

• What would you expect to hear if everyone is working together?
STUDENT LEARNING EXAMPLE:
REFLECTIVE 5 MINUTE PAPER: WHAT SKILLS AND ROLES DO YOU BRING TO THE TEAM?

• On teams, I tend to be…
• My strengths that I bring to the team are…
• My limitations that I bring to the team are…
• One thing that I could do to become a more effective team member is…
TEAM LEARNING EXAMPLE: CASE STUDY

Case study adapted from the National Association for Healthcare Quality - Patient Safety: a case study in team building and interdisciplinary collaboration

Retrieved from:
http://www.nahq.org/journal/ce/article.html?article_id=171
MODULE 2: EBP AND SAFETY

• Sample Content:
  QSEN definition and competencies
  Processes used in analyzing causes of error
    i.e. Root Cause Analysis
  Sources of evidence/Information literacy

• Student learning activities
STUDENT LEARNING EXAMPLE: ROOT CAUSE ANALYSIS

- Cause and Effect Analysis (Cause Mapping)
  The Titanic sinking
  http://www.youtube.com/watch?v=GOVeO5_0qD0

- Fishbone Technique
  Selection and Application to a real-life clinical problem
  (example: medication error)
TEAM LEARNING EXAMPLE: EBP CASE STUDY

- Students work as a team to locate and appraise evidence
- Provided a real world problem/challenge and a literature summary table of evidence.
- Need to locate 2 new references and add to the summary table.
MODULE 3: QUALITY IMPROVEMENT

• Sample Content:
  QSEN definition and competencies
  Models used in Quality Improvement
    i.e. Plan-Do-Study-Act
  Processes and outcome indicators
    i.e. National Patient Safety Goals, National Database of Nursing Quality Indicators, Press Ganey scores, hospital reports

• Student learning activities
STUDENT LEARNING EXAMPLE: YOU COMPRIZE A PDSA TEAM ...

- Identify gaps in practice or patient care that you observed during one of your clinical day. These are process improvement opportunities.

- Identify one potential *process* issue needing improvement
  - why did your team select this problem?

- Identify one measurement *indicator* to track
  - is your problem linked to a quality or safety indicator?

Adapted from www.family.mcw.edu
STUDENT LEARNING EXAMPLE: YOU COMPRIZE A PDSA TEAM ...

• Recommend one improvement *strategy* to implement - how and where and who

• How will you measure change?

Adapted from www.family.mcw.edu
EVALUATION OF EFFECTIVENESS:

Sample (n = 43)

- Mean age: 24.50; Female: 39; Male: 4; Mean GPA: 3.37(4.0)

Outcome measures

- Module 1 Pre-posttest;
- Module 2 Pre-posttest
- Module 3 Pre-posttest

Descriptive statistics & t test for dependent samples
## DATA ANALYSIS: GROUP PRETEST-POSTTEST SCORES

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OUTCOMES

Students demonstrated increased knowledge of four QSEN competencies

- Teamwork and collaboration
- Safety
- Quality improvement
- EBP (information literacy)

- Students reported increased confidence in team communication, information literacy and advocacy
IMPLICATIONS FOR EDUCATION AND RESEARCH

• Reinforcement of knowledge and skills to help students feel prepared to perform all QSEN competencies upon graduation

• Follow the QSEN proposal to level the KSAs related to all competencies throughout the curriculum

• Course will be expanded to 3 credit hours
QUESTIONS?

• A good question is never answered. It is not a bolt to be tightened into place but a seed to be planted and to bear more seed toward the hope of greening the landscape of idea – John Ciardi

• Contact Information: Gail.Wegner@purduecal.edu