



Fostering Evidence-Based Practice Competencies in Nurse Leaders: An Innovative Model

K. Renee Twibell, PhD, RN, CNE^{1, 2}, Cynthia Davisson, MSN, RN-BC, LDCP¹, S. Renee Gregg, DNP, FNP-C²

¹Indiana University Health Ball Memorial Hospital FMR, Muncie, IN, ²Ball State University, Muncie, IN



Introduction

Nursing leaders at all levels of health care organizations and academic institutions require skills in evaluating and using evidence in practice. Seven evidence-based practice (EBP) competencies for leaders include:

- Generating relevant inquiries that research can answer
- Engaging resources to address priority inquiries, including those related to governance and decision-making processes
- Searching for relevant literature effectively and efficiently
- Identifying the best levels of evidence
- Critiquing research studies relevant for leaders
- Appraising clusters of studies for readiness-to-use in practice
- Translating evidence into practice

Nurse leaders often express a lack of confidence and competence in research-related skills and admit to basing leadership decisions on personal experience or traditional ways of managing. As a means of enhancing leadership development in educational and practice settings, an innovative approach to elevating EBP skills was designed and trialed.

Purpose

The purpose of this presentation is to describe the development, implementation, and evaluation of a gaming strategy, based on the Flipped Learning Model, to enhance evidence-based practice skills among nurse leaders in academic and practice settings, including bedside clinical leaders.

Conceptual Frameworks

Constructivist Learning Theory (CLT) proposed that learning occurs first within learners and then through social interaction, as learners work collaboratively in groups, linking new learning with prior knowledge. The Flipped Learning Model draws on the CLT and engages learners to apply new knowledge through hands-on activities. This pedagogical method increases the development of clinical reasoning skills and knowledge retention.

Kirkpatrick's Model for evaluation of training and educational offerings proposed four levels of evaluation: learner satisfaction, recently expanded to include learner engagement; skill acquisition, recently expanded to include confidence and commitment; behavior change; and valued outcomes.

Methods and Materials

The teaching strategy tested in this project was a small group learning experience using a gaming approach, specifically a discussion map. Attendees self-selected to be in the project. Attendees prepared for the session through assigned reading.

The discussion map was titled "Puzzling About Evidence-based Practice: When the Pieces Fit." The small group activity took place in an educational classroom setting, with up to three small groups working concurrently in the same large room.

- Length of the single session was 3.5 hours.
- One primary facilitator, an expert in nursing research, education, and leadership, led the session.
- Support facilitators, specifically advanced practice nurses and nurse educators, served as evidence-based practice coaches.
- Attendees were assigned to small groups according to role and pre-reading assignment, e.g. current or potential nurse managers, undergraduate students, direct care nurse leaders.
- Map activities were specific to the research study assigned as pre-reading.



Implementation



Following an opening team-building exercise, the primary facilitator offered a series of mini-lectures lasting 4-10 minutes each, followed by small group application activities using the discussion map. The map activities addressed the seven EBP competencies, using a puzzle theme..

In order to answer the question, "Is this good research?", the critiquing activities emphasized the evaluation of:

- research design
- sampling plan
- data collection methods
- instrumentation
- protection of human subjects
- statistical analysis.

In answering the question, "Is this evidence ready to be used in practice?", session facilitators provided at-the-elbow coaching for the critiquing and appraising activities, so that learners could have questions answered quickly and could try out new ideas with immediate feedback.

Learners collected puzzle pieces as they moved through the content areas of the map. At the end of the activity, if all of the learning activities were completed accurately, the pieces fit together in a final, completed puzzle.

Evaluation

The discussion map has been trialed with over 175 nurses from all organizational levels and students. Selected target outcomes based on Kirkpatrick's Model were measured immediately following the session. On a four-point Likert scale, participants (n = 175) consistently and strongly agreed that the six learning objectives of the session were met, which reflected a self-assessment of their own knowledge and skills related to the EBP competencies. Participants reported that they were strongly satisfied with the educational session. Observations by facilitators reflected high learner engagement during the session. Additional future measurement of key outcomes is planned in a three-month follow-up to determine changes in practice based on the session and confidence in using the competencies in practice.



Conclusion

An innovative model effectively conveyed EBP competency skills to current and potential nurse leaders, using a discussion map approach through a Flipped Learning Model. Learner engagement and satisfaction were high.

References

- New World Kirkpatrick Model (2014). <http://www.kirkpatrickpartners.com/OurPhilosophy/TheNewWorldKirkpatrickModel>.
 - Piaget, J., Elkind, D., & Tenzer, A. (1967). *Six psychological studies*: Random House New York.
 - Baker, J. W. (2011). *The origins of "The Classroom Flip."* Department of Media & Applied Communications, Cedarville, OH: Cedarville University.
- For questions, contact Dr. Renee Twibell rtwibell@bsu.edu