Can Concept Mapping Be Used as a Strategy to Engage Learners in Nursing Education?

Colleges of Nursing

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Background

Challenges in the Classroom; Engaging Students in Active Learning

- Balance of content vs. comprehension and cognitive skills
- Students must be engaged in active learning.
- Create strategies which engage different areas of the brain by mixing activities.
- Learners must move beyond basic knowledge (recall) to higher levels of learning application and synthesis.
- Consider learner styles and generational characteristics (Millennials, Gen X, Y).

Theoretical Framework:

Concept Mapping

- A Graphical Display of Concepts - handwritten or computer
- Create circles/boxes displaying main concepts
- Hierarchy or importance of concepts can display student’s critical thinking
- The links between concepts (prepositions) provides evidence of the student’s understanding of the relationships
- Cross links between the concepts indicates a higher level of critical thinking
- Concepts can be one or two words and can also be emphasized by colors, symbols or graphics which engages the right and left brain for deeper learning
- The act of creating a concept map results in active learning
- Challenge students with the question “what is the worst case that could happen, and what would be your first action?” Asking this question requires application, synthesis and creating ‘what if’ questions promotes critical thinking

Purpose:
The purpose of the project was to evaluate if nurse educators would embrace concept mapping as a method to engage audience in active learning by providing a group activity involving concept mapping.

Approach

Method

- During an educational workshop, nurse educators completed a pre-survey (N=21) to gather demographic information and current familiarization of concept mapping as a teaching and learning strategy. The survey participation was anonymous and voluntary.
- Participants were provided with a brief outline of the use of concept mapping as a teaching and learning strategy in a variety of courses.
  - Pathophysiology and specialty areas
  - Concept-based curriculum
  - Pharmacology
  - Nursing Process
- Participants were placed into groups of five to create a concept map, using a diabetic case study of an elderly gentleman.

Each participant was given a notecard with part of the nursing process (assessment, diagnosis, planning, intervention, and evaluation) to summarize the key components of the case study.

Following the concept mapping activity, a post survey (n=19) was administered. The post survey used a 5-point Likert scale regarding the faculties’ perceptions about concept mapping as a method to engage and promote thinking skills

Results

- Prior to the group activity the majority of participants agreed that keeping students engaged in the classroom can be difficult.
- After participating in the group activity the majority of faculty agreed that concept mapping is a valuable teaching and learning strategy which promotes critical thinking.
- The group also reported that they found that completing the concept maps as a group activity engaged their attention.
- Concept maps can be a valuable tool to promote critical thinking, can be a visual display of information which links the nursing process

Conclusion

References