Developing Nursing Student’s Critical Thinking Ability Through Concept Mapping

**OBJECTIVES**
The learner will be able to:

- understand how concept mapping may be implemented within their institution
- apply the steps of concept mapping to further student critical thinking

**WHY CONCEPT MAPPING?**

- Fosters utilization of previous knowledge
- Encourages creative outlets of thinking
- Student centered learning
- Incorporates multiple learning styles
- Promotes communication

**HOW TO BUILD A CONCEPT MAP?**

1. **Identify a problem, issue, or knowledge domain**
2. **Identify related concepts**
3. **Rank the concepts**
4. **Add concepts as needed**
5. **Build map with most inclusive concepts highlighted**
6. **Add sub-concepts**
7. **Connect concepts**
8. **Restructure map as needed**
9. **Cross link concepts**
10. **Concept map changes with understanding of concepts**

**PROCESS OF CONCEPT MAPPING**

1. **Assessment**
2. **Determine Components**
3. **Interventions**
4. **Develop Relationships**
5. **Evaluate**
6. **Provide Subjective & Objective Evidence**

**STUDENT CONCEPT MAP**

- **CONCEPT:** Sleep Pattern Disturbance/Ineffective Management of Therapeutic Regimen
  - **SUPPORTING DATA:** Patient (child, 2nd grade) did not receive 0700 and 1045 respiratory therapy scheduled treatment due to refusal and sleeping pattern.
  - **ECO:** By end of shift, patient and caregiver will verbalize a plan of home therapeutic management and a reward program to encourage therapy goals on time daily.
  - **INTERVENTION:** Develop with patient and caregiver a system of rewards and treatment regimen, by end of shift.
  - **EVALUATION:** Unsuccessful

- **CONCEPT:** Self Care Deficit (feeding, bathing/hygiene, dressing/grooming)
  - **SUPPORTING DATA:** Patient showed resistance to bathing, brushing hair and teeth, allowing nurse access to g-tube for meals.
  - **ECO:** By end of shift, patient will cooperate with bath and hygiene.
  - **INTERVENTION:** Negotiated a time with child to perform these needed tasks.
  - **EVALUATION:** Unsuccessful

- **CONCEPT:** Parental Role Conflict/Caregiver Role Strain r/t Family
  - **SUPPORTING DATA:** Upon interview of patient and grandmother, discovered grandmother is main caregiver. Mother is not supportive of patient’s care.
  - **ECO:** Patient will be proficient in using effective airway clearance therapies to clear secretions, as evidenced by clearer lung sounds by end of shift.
  - **INTERVENTION:** Use play distraction during respiratory therapy treatment to ensure positive compliance and encourage productive coughs throughout shift.
  - **EVALUATION:** Productive coughing occurred throughout day. Clearer lung sounds were present on left side upon afternoon respiratory assessment.

- **CONCEPT:** At Risk for Skin Integrity
  - **SUPPORTING DATA:** Poor nutrition, immobility, PICC line, g-tube, Port-A-Cath. Patient diaphoretic at rest.
  - **ECO:** Skin remains intact as evidenced by no redness, edema, moisture, bleeding, or signs of infection during shift.
  - **INTERVENTION:** Maintain clean, dry, and moist skin. Lotion applied to bony prominences, hips, arms, elbows, shoulders, and legs tid. Discussed/g-tube site home care.
  - **EVALUATION:** Maintained skin integrity throughout shift.

**IMPROVING STUDENT CRITICAL THINKING**

- **Engagement Activities**
  - Observations
  - Clinical Judgement
  - Outcome Criteria
  - Interventions

**TEACHING AND EVALUATION**

- **Teaching Skills**
  - Categorizing priorities
  - Prompting
  - Questioning

- **Evaluation Methods**
  - Group Discussion
  - Priority Problem
  - Interventions
  - Outcomes
  - Reflection
  - Student & faculty feedback

**CONCLUSION**

**EVALUATION OF STUDENT’S CRITICAL THINKING OCCURRED THROUGH REFLECTIVE ACTIVITIES AND STUDENT, FACULTY, AND CLINICAL SITE FEEDBACK. STUDENT ENGAGEMENT AND CRITICAL THINKING, UTILIZING THE USE OF CONCEPT MAPPING, ENHANCED STUDENT PROGRESSION THROUGH THE NURSING PROGRAM.**