Diagnostic Reasoning: A Unique Project for ACNP Students

A Selph, J Anne

Citation

Abstract

Critical thinking skills are the hallmark of expert clinicians (Facione & Facione, 1996).

The purpose of this presentation is to describe the development of a creative educational strategy that focuses on incorporating critical thinking skills in a simulated patient encounter.
TEACHING CRITICAL THINKING SKILLS

- Critical thinking is an internal process
- Students and teachers need mechanisms to externalize the process
- Faculty need to identify evaluation methods

PROJECT POSSIBILITIES?

- Traditional methods already employed
- Standardized patients costly
  - $20-$50 per hour

CRITERIA

- Develop critical thinking and diagnostic reasoning skills
- Safe environment for novice practitioners
- Creative mechanism to further evaluate these skills
- Develop group consensus building skills

ROLE PLAYING PROJECT: A Play

- Structured, faculty directed role playing project
- Student groups play 3 parts
  - Client and family (presenting group)
  - Health care team lead by the nurse practitioner (critical thinking group)
  - Critique team
- Faculty selected clinical problems

OPTIONS

- Computer assisted cases
- Interactive video cases
- Complex case study presentations
- Grand rounds in clinical settings
- Clinical presentations of diagnostic work-ups

SETTING THE STAGE: Project Design

- Small groups
- 3-4 students in each group
- Group members chosen based on levels of expertise
- Project conducted in 2 Acts - 4 hours each
- One week intermission between Acts
THE FIRST DRAFT OF THE SCRIPT: Assignments

- General patient profile
  - Age, gender, race
  - Significant past medical history
  - Diagnosis
- CONFIDENTIAL
- Many holes left

THE SCRIPT Continued

- Laboratory values
- Diagnostic study results
- List of differential diagnoses
- Diagnostic workup plan
- Problem list
- Admission orders
- Plan of care

CREATING ACT I

The presenting group fully develops the health condition scenario and creates Act I including the script, the actors, and the props.

ACTORS

- Students in the presenting group play the roles of patient, family members or significant others, and ancillary personnel.
- Students in the critical thinking group share the role of the nurse practitioner assigned to assess, diagnose, and treat the patient.

THE SCRIPT

- Presenting group members develop details of the patient
  - Full History
  - Current Illness
  - Physical Exam

PROPS

- Costumes
- X-rays, tapes, and models
- Body fluid samples
- Various skin manifestations
- Patient possessions
- Equipment
**ACT I SCENE 1**
**Patient Arrives**
- The presenting group patient arrives in the mock ER
- The critical thinking group is assigned to work up the patient
- The critical thinking group has 75 minutes to complete the work up

**ACT I SCENE 2**
**Critical Thinking Group**
- Complete history & physical
- Formulate differentials
- Order diagnostic studies
- Interpret findings
- Select most probable diagnoses
- Develop initial problem list & plan
- Write admission orders

**ACT I SCENE 3**
**Audience Participation**
- Faculty observe & critique
- Critique team observes and gives feedback to the critical thinking group

**ACT II SCENE 1**
**Grand Rounds**
- The critical thinking group presents the patient
- Grand Rounds
  - Interpretation of data
  - Orders & plan
  - Rationale
  - Current literature

**ACT II SCENE 2**
**Comparative Analysis**
- Discussion
  - Script serves as the benchmark for comparison
  - Discussion of alternatives
  - Debate alternatives
Figure 23

**ACT II SCENE 3: The Reviews Are In**

- Critical thinking group is critiqued by:
  - Faculty
  - Presenting Group
  - Critique team
- Presenting group is critiqued by:
  - Faculty
  - Critical thinking group
  - Critique team

Figure 24

**DIRECTOR’S NOTES**

- Observed students in the act of critical thinking/diagnostic reasoning
- Team building
- Collaboration
- Time management
- Improved test scores

Figure 25

**MORE DIRECTOR’S NOTES**

- Multiple perspectives
- Reflection
  - Self monitoring
  - Self evaluating
  - Self correcting

Figure 26

**THE CAST AND CREW SPEAK**

- Enhance clinical & reasoning skills
- Pulling it all together
- Challenging & fun
- Realism

Figure 27

**THE END!**

Figure 28

**REFERENCES**

Author Information

A. Selph, MN, RN, CS-ACNP, CCRN
Department of Administrative and Clinical Nursing, College of Nursing, The University of South Carolina

J. Anne, PhD, RN
Department of Administrative and Clinical Nursing, College of Nursing, The University of South Carolina