

**Enhancing Critical Thinking and Diagnostic Reasoning:
An Innovative Approach to Teaching Advanced Health Assessment**

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Challenge

- Graduate nursing faculty are challenged to prepare advanced practice nurses who are proficient in critical thinking and diagnostic reasoning. As more and more nursing courses are offered online, it is crucial that faculty use innovative teaching strategies to help students synthesize and apply new knowledge.

Purpose

- Present an innovative approach to teaching an online advanced health assessment course.

Teaching Strategy

Problem-based learning assists students to become active processors of information through problem-solving, such as symptom analysis.

- Five learning modules organized by body systems
- Case studies posted in a discussion forum
- Discussions guided by faculty
- Symptoms presented within the case studies were brief and abstract to enhance diagnostic reasoning and critical thinking

Teaching Strategy

- Students posted history questions based on the patient's symptoms in the discussion board
- Students delineated three diagnoses for each case study in a written assignment, including physical assessment findings, pathophysiology, and diagnostic tests that would support each diagnosis

Discussion Forum Format

- Mr. Smith is a 56 year-old farmer. His complaint is "I have been coughing and I can't stop".
- Student: "How long have you had this cough?"
- Faculty: "I've had this cough for 5 days."
- Student: "Are you coughing up any sputum?"
- Faculty: "Yes, I'm coughing up thick yellow stuff."
- Student: "Have you had any fever or chills?"

Written Assignment

- Students delineated three diagnoses for the case study based on the information gathered from the discussion forum
- Included physical assessment findings for each diagnosis
- Included the pathophysiology of each diagnosis
- Included diagnostic tests and results that differentiated each diagnosis

SYMPTOM ANALYSIS	
A.	Delineate 3 hypotheses that could support the patient's symptoms in relation to the pertinent questions and answers provided in the discussion forum.
	1. _____
	2. _____
	3. _____
B.	What physical findings, using the inspection, palpation, percussion, auscultation would be associated with each listed hypothesis above: What subjective data might the patient report?
	Hypothesis 1: _____
	Hypothesis 2: _____
	Hypothesis 3: _____
C.	What is the pathophysiology associated with each hypothesis?
	Hypothesis 1: _____
	Hypothesis 2: _____
	Hypothesis 3: _____
E.	What diagnostic tests would you order?
	Hypothesis 1: _____
	Hypothesis 2: _____
	Hypothesis 3: _____
F.	What results would differentiate each diagnosis?
	Hypothesis 1: _____
	Hypothesis 2: _____
	Hypothesis 3: _____
G.	References

Evaluation

- Students reported a positive learning experience using problem-based learning.
- *"This type of learning enabled me to process the information more effectively, rather than just 'memorizing' it."*
- *"I was able to think through the patient's symptoms and make the appropriate clinical decisions."*
- *"This course has been phenomenal! I feel so much more prepared for my clinical practicum."*

Reference

Zunkel, G. M., Cesarotti, E. L., Rosdahl, D.,
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