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Adult Learning Theory Applied to Small Group Teaching by Garth Miller, MD FACS

1. Humanist Orientation:

The learner recognizes that learning is a personal act necessary to achieve his/her full potential.

a. Adults learn best when they know why they need to learn.

Example: "As a physician you will see patients who are dyspneic and will need to know how to care for them. What do you do when your patient is short of breath?"

b. The stimulus for learning is internal rather than external.

Example: "You will become a better physician if you know how to evaluate and manage dyspnea." Internal response: "I want to become a better physician, so I will learn how to care for the dyspneic patient."

c. The learning involves real-life situations.

Example: Use problem based learning: "You are on call for surgery. A 65 year old woman with morbid obesity who is 2 days s/p open cholecystectomy for severe acute calculous cholecystitis gets out of bed to ambulate and becomes acutely dyspneic with a resp rate of 24 and pulse of 110. Her O2 saturation is 86% on room air. What is her most likely diagnosis? How is it confirmed, and how is it best managed?"

2. Cognitivist Orientation:

The learner uses cognitive tools (memory, insight, perception, information processing) to create a structure upon which meaning is assigned.

a. Provide a conceptual framework for the learners.

Example: Didactic on causes of dyspnea in postoperative patients including pathophysiology, signs and symptoms, relevant lab & imaging studies, differential diagnosis, and treatment options.

3. Social Learning Orientation:

The learner uses observation and modeling and interactions with others to assimilate new information.

a. Collaborative/cooperative learning in small groups.

Example: Ask questions to encourage critical thinking (Socratic Method), e.g. "Why do you think these symptoms suggest a diagnosis of pulmonary embolus? What is your reasoning? Do others agree?"

b. Teaching with case studies

Example: "Jenny, what do you think is the most likely cause of this patient's respiratory distress, and why? Are there any other possible etiologies?" "Valerie, do you agree with Jenny? Why or why not?"

Reference: Torre D, Daley B, Sebastian J, Elnicki M. Overview of Current Learning Theory for Medical Educators. *Am J Med.* 2006; 119(10):903-907. doi:10.1016/j.amjmed.2006.06.037