

Teach Procedural Skills

Compliments of CORE Faculty Development

- I. 3 Steps in Teaching Procedures (Whitman, N. & Lawrence, P. (1991). *Surgical teaching: practice makes perfect*. Salt Lake City, Utah: University of Utah School of Medicine)
- Step 1. Introductory Phase
- Introduce the objective of the teaching and the expected performance outcome.
 - Explain the rationale for learning the skill along with the indications/contraindications and potential complications of performing the skill.
 - Familiarize the trainee with the equipment needed to perform the skill.
 - Demonstrate the sequential steps of the procedure, explaining how each is correctly performed.
- Step 2. Practice Phase
- Give specific instructions for practicing the skill.
 - Verbally and physically guide the initial attempts of each trainee to perform the steps of the skill.
 - Provide informational feedback.
 - Allow a period of independent practice time.
- Step 3. Perfecting Phase
- Provide for continued practice under realistic clinical conditions.
 - Evaluate the acquisition of the skill under actual performance conditions.
- II. Principles that Guide Effective Teaching of Manual Skills (Bartholomew, D. (2001). Teaching manual skills in Hudson, A. & Watson, D. (Eds.). *The clinical teaching handbook*. Columbus, Ohio: The Ohio State University College of Medicine and Public Health)
- Establish objectives and provide clear expectations
 - Performance assessment criteria should be provided at the beginning
 - Demonstrate the entire task from beginning to end
 - Instructor example is only effective in small groups
 - Videotaping a “master” at work is very useful
 - Dissect the skills down to the basic sequence of steps
 - Equipment and assistance needs must be anticipated
 - Patient preparation
 - Demonstrate each step in sequence
 - Trainee verbalization of each step of the procedure to the instructor will allow an opportunity to clarify misconceptions prior to practice
 - Teaching tools
 - Patients are the most expensive and time consuming option, requiring one to one supervision
 - Models can be very expensive

- Practice, Practice, and more Practice
- Small group practice is an effective and manageable technique to allow trainees to benefit from and teach each other
- Supervised practice
- Feedback is the most important factor in teaching manual skills
- Self-assessment
- Performance checklists
- Instructor feedback must be immediate with corrective insight provided
- Stimulate provocative thought
- Instructor critique

References

Bartholomew, D. (2001). Teaching manual skills in Hudson, A. & Watson, D. (Eds.) *The clinical teaching handbook*. Columbus, Ohio: The Ohio State University College of Medicine and Public Health.

Whitman, N. & Lawrence, P. (1991). *Surgical teaching: practice makes perfect*. Salt Lake City, Utah: University of Utah School of Medicine.