5 Step Approach to Teaching Skills/Procedures

Based on Peyton's Four Step Approach (Proficiency Practice was added)

For a similar approach, see Teaching on the run tips 5: teaching a skill

Before reading, this make sure you have a clear understanding of the Learning Cycle.

Step 1 Role Model Patient-Centered Medicine (Demonstration)

An expert provides a complete demonstration of the skill at normal speed while talking to the patient. Little or no explanation is given to the learner, while the preceptor models explaining the procedure to the patient. This step gives the learner an idea of how long the skill or procedure normally takes, it role models patient interaction and it provides a holistic example. Also the simplified version of the procedure given to most patients is a good starting out point for the student.

Step 2 Provide Instruction (Deconstruction)

Pre-planning: Remember that you do the skill automatically and may have forgotten how you learned the skill. It’s important for the instructor to break down the number of steps required to complete ahead of time. If there are more than seven steps, break the process of learning into stages, where learners complete one stage at minimal competence before moving onto the next. A written checklist will improve retention of complex steps. See: BMJ Learning module on evidence based learning.

The instructor provides repetition of the skill with full explanation, encouraging the learner to ask questions. Counting out the number of steps as you do them is very important; don’t assume that if you say there are six steps, that the students know what those six steps are.

If a patient isn't available, you may choose to do this step on a simulation dummy. This step could also involve students watching a video or an animated simulation. Other guides and video examples can be found in the Self Directed Learning or The Discipline Specific Resources section of this site.

Step 3 Rehearsal for Patient Safety (Comprehension)

The demonstrator performs the skill for a third time with the learner providing the explanation of each step and being questioned on key issues. The demonstrator provides necessary corrections. This step may need to be repeated until the demonstrator is satisfied that the learner fully understands the skill. This step is a very important safety check before the student works with a patient. If a patient isn't available, ask the learner to verbally recite the steps.

Step 4 Supervised Practice (Performance)

The learner now carries out the skill under close supervision describing each step before it is taken. If a patient isn't available or if it is risky or embarrassing, you might want to use a simulator or standardized patient. You may need to guide the student's hands to help them transfer the knowledge from their brains into their hands (adapted from Peyton 1998, 174-77). The more guided practice the student has, the more proficient they will be. See one, do one may not be a useful adage when trying to develop proficiency.

Step 5 Proficiency Practice

The learner practices under loose supervision until they have reached an appropriate level of skill to perform independently (consciously or unconsciously competent depending on the skill).

NOTE: People frequently raise the issue that they don't have 5 patients with similar needs to complete this process with. Patients are essential for Step 1 and at the point where the learner has to perform the skill or procedure to be certified competent, but alternatives such as video or practicing on other students can be used for all the other steps.

Articles

KeyLIME podcast - Effective teaching of technical skills requires more than "see one, do one."

Peyton's Four-step approach for teaching complex spinal manipulation techniques

Effects of Peyton's Four-Step Approach on Objective Performance Measures in Technical Skills Training

Questioning to assist in Supervision Levels and Entrustable Professional Activities (EPAs) (Harvard Macy Institute Community Blog)