
**Why We Chose It**

When managing patients we base what we do on best evidence in the literature. We should do the same in our teaching. Teaching, like clinical medicine, is both an art and a science. Therefore focusing on both the theoretical underpinnings of learning as well as guiding principles on how to teach learners derived from these theories, we should improve the effectiveness of learning.

**Main Learning Points**

Several theories are associated with learning, some of the more relevant ones are; Adult Learning Theory (Knowles), Self-Directed Learning (Candy), Self-Efficacy (Bandura), Constructivism, and Reflective Practice (Schön).

Knowles seven principles of adult learning are:
- Establish an effective learning climate, where learners feel safe and comfortable expressing themselves
- Involve learners in mutual planning of relevant methods and curricular content
- Involve learners in diagnosing their own needs – this will help to trigger internal motivation
- Encourage learners to formulate their own learning objectives – this gives them more control of their learning
- Encourage learners to identify resources and devise strategies for using the resources to achieve their objectives
- Support learners in carrying out their learning plans
- Involve learners in evaluating their own learning – this can develop their skills of critical reflection

Self-efficacy (whether or not I think I can or can’t) arises from 4 main information’s sources (in decreasing order); performance attainments, observations of other people, verbal persuasion, and physiological state.

The authors state “the primary idea of constructivism is that learners “construct” their own knowledge on the basis of what they already know. This theory posits that learning is active rather than passive, with learners making judgments about when and how to modify their knowledge.”

**How it Can Be Applied to CME**

1. Give learners the opportunities to ask questions (all learners should identify what questions they have about the topic prior to teaching so as to focus their attention on bridging this gap), critically appraise new information, identify their own knowledge and skill gaps (one method is by testing), and reflect critically on their learning process and outcomes (How can I apply this to my own practice)
2. Set learners up for success. Start with easier cases and progress to more difficult ones as the session continues.
3. Provide opportunities for practice with feedback and giving learners the time to reflect on what they have learned. Self-assessment should also be included as well as feedback from peers.
4. Provide opportunities for learners to observe similar learners performing the task successfully
5. Provide examples of inconsistencies between learners’ current understandings and their new experiences. For example learners should have the opportunity to reflect on their practice; this involves analyzing and assessing their own performance and developing new perspectives and options.