

Teaching Methods

Simulation (Role Playing)

Purpose

Simulation or role playing is a form of problem-based learning that allows learners to apply what they are learning or have learned in a controlled environment. Students learn through participating in a hypothetical, but realistic (fidelity) scenario by improvising actions and dialogues appropriate for the situation (Davis, 1993, 159).

Goal

Simulations reflect real-life situations and encourage learners to apply decision-making skills (out loud) (McKeachie, 2006, 226) to solve specific tasks or problems within an environment that models reality. The goal is to maintain as much realism or fidelity within the simulation as possible, so that the learner is able to apply the principles learned in the simulation to situations in the real world (Hertel & Millis, 2002, 15).

Strengths

In simulations learners are active participants rather than passive observers. Learners must problem-solve, make decisions appropriate for the situation, and learn to adapt to changes in the situation that have resulted from their decision-making. Simulation provides a layer of security as learners are able to make decisions, right or wrong, in a controlled environment, and receive feedback about the decisions they have made. This can be helpful in demonstrating to the learners that they have the ability to make decisions; it outlines strengths and weaknesses in thought; and it helps challenge their thought process (McKeachie, 2006, 226). The effectiveness of simulation depends on the degree of instructional support or structure (i.e. specifying teaching objectives and planning that highlights those objectives) (McKeachie, 2006, 226). In a simulation, instructors are required to modify traditional roles; they become facilitators of the action. It is the instructor's responsibility to determine what and how learning will take place. Instructors should create stimulations "through which students will explore substantive content, develop discipline-specific skills, and apply what they know to real-world issues" (Hertel & Millis, 2002, 19).

Weaknesses / Suggestions for Improvement

Simulation works best when learners are assigned meaningful and realistic situations (Davis, 1993, 160). Effective simulations require careful design and planning, as simulations can be too simple or too complex to achieve the generalization of concepts or principles. Often logistical considerations are barriers to the use of simulations (finding a simulation that fits the time and facilities of typical classes) (McKeachie, 2006, 227). Inexperienced learners need detailed instruction and a more structured situation in order to succeed (Davis, 1993, 160). Simulation is only part of the learning experience; a follow-up discussion emphasizing key issues completes the task (Davis, 1993, 160).

Considerations when teaching using simulation (Hertel & Millis, 2002, 20–31):

- How will the simulation work?
- What roles will learners assume?
- How will the action get started?

- How much should the instructor be involved?
- How much autonomy should learners be given?
- How much guidance should learners be given toward the objective?
- How should various roles be distributed (number of learners in the course vs. number of learners the simulation requires)?

References

Davis, B. G. (1993). *Tools for teaching*. San Francisco, CA: Jossey-Bass.

Hertel, J. P., & Millis, B. J. (2002). *Using Simulations to Promote Learning in Higher Education: An Introduction*. Sterling, Va: Stylus Pub.

McKeachie, W. J., & Svinicki, M. (2006). *McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers*. Boston: Houghton Mifflin.