Teaching Methods
Case Studies

Purpose
Case studies allow learners to apply what they are learning. The instructor presents "a real-life problem that has been addressed by researchers, scholars, and practitioners." Learners have to know relevant background information and facts in order to solve and present the case (Davis, 1993, 159).

Goal
The goal is for learners to analyze, discuss, and present the case by retracing and critiquing the steps taken by the key characters (Davis, 1993, 159). Learners integrate knowledge and skills needed for working through a case study.

Strengths
Case studies engage learners and offer opportunities for active learning. In a case study, questions of major importance can be discussed, without "lecturing or telling students the 'right' answers" (Davis, 1993, 164).

Case studies can be effective if learners are prepared to discuss the following (McKeachie, 2006, 225):

- What is the problem?
- What is the potential cause of the problem? What are the possible hypotheses?
- What data can be collected to either support or refute the hypotheses?
- What are the conclusions? What are the recommendations?

Experiential learning allows learners to reflect on past experiences and to apply and relate those experiences to the assessment of case studies. Using case studies as an instructional methodology encourages learners to evaluate, generalize, and make connections from their own experiences to solve a hypothetical situation. This enables learners to "construct coherent representations of a case, filter out irrelevant information, and make connections between the specifics of the case and generalizations derived from the literature and from experiences with other situations" (Irby, 1995, 951).

Weaknesses / Suggestions for Improvement
Cases often include a lot of detail at the beginning that might be difficult for learners to digest initially (McKeachie, 2006, 224). Learners need to be prepared to work on a case. Preparation includes knowing the content necessary to analyze the case and being able to plan and conduct a discussion about the case. The instructor should prepare a set of questions that provide learners with some direction about what aspects of the case are more important (Davis, 1993, 163).

Case Collections and Examples
State University of New York at Buffalo, The National Center for Case Study Teaching in Science: Case Collection (http://ublib.buffalo.edu/libraries/projects/cases/ubcase.htm#medicine)

University of Pittsburgh School of Medicine, Department of Pathology: Online Case Studies (http://path.upmc.edu/cases.html)

Penn State, College of Medicine (http://www.hmc.psu.edu/ume/fcmonline/index.htm)

University of Virginia Health System, Pathology Case Studies (http://www.healthsystem.virginia.edu/internet/pathology/CaseStudies/CaseStudiesHome.cfm)

University of Iowa Virtual Hospital, Patient Simulations/Virtual Patients (http://web.archive.org/web/20050331093252/www.vh.org/welcome/tour/patientsimulations.html)

University of Kansas Medical Center, Respiratory Care WEB ED, Continuing Education Program (http://classes.kumc.edu/cahe/respcared/program_menu.htm)

University of Missouri School of Health Professions, Virtual Health Care Team (http://www.vhct.org/studies.htm)

References

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

Irby, D. M. (1995). Three exemplary Models of Case-based Teaching. *Academic Medicine, 69*(12), 947–953.