

## Simulation

Simulations are very similar to role-plays, however the simulations are usually longer and less spontaneous. During a simulation the students typically act out a scripted scene or scenes based on a specific set of ideas. The simulation is designed to spark discussion and offer different perspectives on the idea.

**Appropriate Student Level:** Any

**Suggested Class Size:** 3 – 100+

**Ease of Use Rating:** Difficult

### Activity Description:

Simulations are typically structured presentations that are designed to involve students in a specific situation; they are usually longer and less spontaneous than role-plays. Instructors should assign the roles days or weeks prior to the event to allow students to research the character. Simulations, like role-plays, can be particularly effective in forcing students to examine their attitudes toward other people and controversial subjects; for example, using a simulated debate, students may present opposing sides to a given topic, thus demanding a wider view of the issues.

Simulations should be written by the instructor to mirror real life issues that students may encounter in their field of study. They are usually presented in small groups requiring problem solving skills and social interaction between group members. Unlike the spontaneous role-plays, simulations may have costumes and props to enhance the dramatic effect, although they are not necessary.

The instructor's responsibility during a role-play may vary.

- Provide a script or scenario with background details and specific information about the character or the setting to help create the scene
  - In an example offered by Nathan L Linsk and Kathleen Tunney in “Learning to care: Use of practice simulation to train health social workers”, a detailed script was presented to a ‘simulator’ (the person who would act as the client/patient) and a less detailed brief scenario was given to the student. The simulator would participate in the activity to guide students to meet the objectives.
- Discuss the goals and objectives of the activity to involve the audience and motivate the viewers by creating the need to learn. The involvement may be participatory or could the instructor may simply ask them to critique, assess or comment on the simulation in relationship to the goals and objectives.
- Facilitate and direct the simulation to assure the goals are being met
- Help the audience (students) evaluate and summarize the major factors of the simulation

You can assess simulations in a number of ways. You can evaluate students on their participation in the simulations and subsequent discussion—how effectively they state their position; how well they demonstrate background knowledge, how well they ensure the accuracy of information; and how effectively they defend their position.



For more information on forming and working with groups see: “*Some suggestions for forming groups*”.

### **References:**

- Baillie, Caroline (2000) “A study of present use and usefulness of computer-based learning at a technical university” European Journal of Engineering Education, 25(1); p. 33
- Ball, Sheryl B.; (1999) “Pareto optimality in negotiation: a classroom exercise for achieving active learning” Journal of Education for Business, 74(6); p. 341
- Bonwell, Charles C. and Eison, James A. (1991) Active Learning: Creating excitement in the Classroom. ASHE-ERIC Higher Education Report No.1.
- DeNeve, Kristina M. (1997) “Role play simulations: the assessment of an active learning technique and comparisons with traditional lectures” Innovative Higher Education, 21; p. 231
- Green, Forrest B. (2000) “Creating a college and business partnership that works: Simulation in a manufacturing environment” Journal of Education for Business, 75(3); p. 164
- Halpern, Daine F. Changing College Classrooms, (1994) Jossey-Bass, San Francisco
- Linsk, Nathan L; Tunney, Kathleen (1997) “Learning to care: use of practice simulation to train health social workers” Journal of Social Work Education, 33, p. 473
- Meyers, Chet and Jones, Thomas B. (1993) Promoting Active Learning: Strategies for the College Classroom. Jossey-Bass, San Francisco
- Truscott, Michael H (2000) “Enhancing the macroeconomics course: an experiential learning approach” The Journal of Economic Education, 31(1), p. 60
- Walters, Bruce A.; Coalter, Terry M.; Rasheed, Abdul M. A. (1997) “Simulation games in business policy courses: Is there value for students?” Journal of Education for Business, 72(3), pp.170-174
- Ziv., Amitai (2000) “Patient Safety and simulation-based medical education” Medical Teacher, 22(5), p. 489

### **The Core Competencies are:**

1. Writing, speaking and/or other forms of self-expression
2. Information gathering, such as the use of the library, computer/electronic resources, and experimentation or observation
3. Synthesis and analysis in problem solving and critical thinking, including, where appropriate, the application of reasoning and interpretive methods, and quantitative thinking
4. Collaborative learning and teamwork
5. Activities that promote and advance intercultural and/or international understanding
6. Activities that promote the understanding of issues pertaining to social behavior, scholarly conduct, and community responsibility
7. A significant alternative competency for active learning designed for and appropriate to a specific course