

What's the Principle? (Assesses Skill in Problem Solving)

Estimated level of time/energy required to prepare is MEDIUM

Estimated level to respond (students) and to analyze is LOW

Description: In problem solving, the first step is determining what the problem is. The second step is determining what principles to use to solve the problem. Students read problems or scenarios and decide what principle applies to each situation. This is a matching activity.

Purpose: Students can see more clearly the possible relevance of what they are learning.

Procedure:

- 1) Identify the basic principles in your course.
- 1) Find or create sample problems or short examples that illustrate the principles. Each example should illustrate only one principle.
- 2) Prepare a What's the Principle? form to be display-ready by writing it on the board, a transparency, or digitally projected. It could also be written on a half-sheet of paper and distributed to the students. It is important the prompts are presented in writing. Do not only read the question(s).
- 3) Your form should list the principles and specific problems or examples.
- 4) Hand out index cards or half-sheets of paper. It is best if students do not write their names, unless there is a very good reason to know who wrote which comments.
- 5) Consult with a colleague or graduate student about the level of difficulty and length of time to complete the form.

Example:

<http://fp.uni.edu/its/et/lt/faculty/assessment/cats/knowledge/problem/principle.htm>

Adaptations/Extensions:

- 1) After studying the principles, students list their own examples of application.
- 2) Students must recall the principles rather than matching them.
- 3) Students must justify their choices.

Suggestions: Responding to students' feedback may take longer than planning because questions lead to other questions. Set clear time limits. To temper expectations and disappointment, let students know you will not comment on everything.

References and Resources:

Angelo, T.A, and Cross, K.P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.