

EPSY 2020 - Preparation for the Midterm Exam

In the past few weeks, we have studied three major groups of theories about how and why people learn. Although there is considerable overlap between the theories, they could be classified as follows:

Behaviorist theory, including classical conditioning, operant conditioning, and Bandura's modeling theory

Cognitive theory, including information processing and Anderson's schema theory

Constructivist theory, including Piaget's individual constructivism, Vygotsky's social constructivism, and the cognitive apprenticeship model

The following three scenarios describe common kinds of learning problems in real-life situations.

Scenario A: You are a beginning middle school science teacher, teaching a unit in chemistry to your sixth grade students. You are worried because your students seem to have trouble settling down in class; there is a lot of chatter and off-task behavior. They also have trouble following directions; for example, many of their experiments do not "turn out" correctly due to mismeasurement of material, incorrect timing, or incomplete results. Students did not do well on the first quiz, and you suspect they are not reading the textbook, if their homework record is any guide. You feel that middle-school is a crucial time for science teaching, since what is learned in middle school about science so often influences the number and types of science classes students take in high school, which in turn open or closes doors to many potential college studies and future careers. What can you do?

Scenario B: You have just taught a unit on African history for the first time in your high school junior-year world history class, and you are quite disappointed in the results of the unit test. Many students seemed unable to remember the basic facts necessary to answer the multiple-choice questions and hardly any were able to answer the general essay question about significant contributions made by different African civilizations. Yet you had provided your students with a list of the important people and events you wanted them to remember from the chapter, and in your lectures you had tried to emphasize elements of our current culture which originated in Africa. Since your students didn't seem to get much out of the unit, you wonder if you should just go back to teaching mainly European history next year, or if there is some way you could improve your teaching so that students would learn better in this area.

Scenario C: You are the homeroom and math teacher for Eric, an 12-year-old boy who transferred this year into the seventh grade at your school, a fairly traditional middle school. Eric is getting into a lot of trouble. He is not turning in much homework and often seems unprepared for tests. He is frequently off-task in the classroom, particularly during math and literature instruction. During these off-task moments, he is rarely disruptive, but very obviously disengaged--reading comics or playing with paper clips or rubber bands. He hardly ever participates in class discussions or small group work, and responds with irritation or apathy to your corrections or classmates' comments, which are becoming increasingly negative. He doesn't seem to have many friends, in class or out. You have tried talking with him about his behavior, but he just says, "Leave me alone!" You are going to be meeting with your team and Eric's parents to try to figure out how to help Eric.

To get ready for the exam, prepare to answer the following questions for EACH SCENARIO.

Based on behaviorist theory:

1. Describe one cause for the learning problem in this scenario that would be suggested by a *behaviorist*. Explain which aspect(s) of *behaviorist theory* would support the possibility of this cause.
2. Describe one strategy a *behaviorist* would suggest to remedy this learning problem and explain how some aspect(s) of *behaviorist theory* would support this strategy as being useful.

Based on cognitive theory:

3. Describe one cause for the learning problem in this scenario that would be suggested by a *cognitive theorist*. Explain which aspect(s) of *cognitive theory* would support the possibility of this cause.
4. Describe one strategy a *cognitive theorist* would suggest to remedy this learning problem and explain how some aspect(s) of *cognitive theory* would support this strategy as being useful.

Based on constructivist theory:

5. Describe one cause for the learning problem in this scenario that would be suggested by a *constructivist*. Explain which aspect(s) of constructivist theory would support the possibility of this cause.
6. Describe one strategy a *constructivist* would suggest to remedy this learning problem and explain how some aspect(s) of *constructivist theory* would support this strategy as being useful.

CONDITIONS OF THE EXAM:

The exam will be given Thursday, February 18, in class. Although you have been asked to prepare answers to 18 questions (6 for each scenario), only 6 of these questions will be asked on the actual exam, so each question will be worth 10 points (3 points for proposing a reasonable explanation based on the theory chosen, 3 more for the clarity and detail included and 4 points for the support offered from the class material). Bluebooks will be provided for you to write your answers in. The exam is only one class hour long, so you should plan to write a concise paragraph in answer to each question. You may begin writing as early as 9:20, and you will have until 10:55 in this room to finish. If someone simply does not have enough time, I will make arrangements for you to have more time to write, possibly in another location.

You will be allowed to bring in and refer to your textbook and any of your annotated readings or handouts that you think will be helpful. You will also be allowed to bring in ONE sheet of personally written notes (standard 8 x 11.5 paper, one side only, writing as small as you wish or can). You may not write out all your answers on this page and then copy them into the bluebooks, but otherwise you may use this page of notes in any way you want. Personally, I would use this page to make brief notes of the answers I had planned out, with appropriate support.

You are *encouraged* to talk with your fellow students about these questions. Please feel free to share ideas, since the exam will not be graded on a curve. However, you will write your actual test answers individually. Your answers will be evaluated on content alone--form and mechanics will not count unless they get in the way of my understanding what you are trying to say. What will count is the **quality** of your ideas, the **specificity** of your explanations, and the **evidence** you produce to support them.

HINTS FOR SUCCESS:

Take into account both the age and probable experiences of the students in framing your answers.

Make sure that your causes and solutions are based on the theory you are talking about at the time. In your answers, give enough detail so I can tell really understand you are suggesting and offer evidence from the readings and/or class discussions to support what you say. The biggest mistake people make on this kind of test is to come up with good ideas but forget to support them with evidence from the readings and discussions.

When you refer to (especially quote) the text or articles, it often helps me if you can give a page number, in case I didn't see what you saw in a particular explanation.