

Educational Psychology (EDP304)

Comprehensive Course Review

Research Methods

1. The discipline or field that studies learners, learning and teaching is?
 2. Explain the difference between external and internal validity
 3. Research that explores the degree to which two variables are related is called?
 4. If correlated, scores on an IQ test and grades would represent what kind of correlation?
 5. If you were to correlate the amount of money you give away with accumulated wealth what would the correlation be?
 6. What is the key word for the purpose of comparing different variables in a correlational study?
 7. This kind of experiment has high external validity but less control than a lab experiment
- REVIEW "MISCONCEPTIONS OF TEACHING" FROM NOTES
 - REVIEW 3 TYPES OF RESEARCH STUDIES

Development

- *HAVE AN UNDERSTANDING OF BOTH PIAGET'S & VYGOTSKY'S THEORY OF DEVELOPMENT – SOME IMPORTANT TERMS INCLUDE SCAFFOLDING, ZONE OF PROXIMAL DEVELOPMENT, EQUILIBRATION, DISEQUILIBRIUM, PIAGET'S STAGES OF DEVELOPMENT*

Types of Instruction

8. The term used to describe lessons in which the teacher provides information directly to students, structuring class time to reach a clearly defined set of objectives as efficiently as possible
 9. This word best describes the teacher's role within cooperative learning instruction
 10. This word best describes the role of the teacher within direct instruction
 11. This word best describes the role of the teacher within discovery learning
 12. The term that refers to a variety of ways of asking for brief student responses to lesson content
 13. What is the term for the length of time the teacher hesitates for a student to answer a question before giving the answer or going on to another student?
 14. Name two advantages to discovery learning
 15. Define scaffolding
 16. This method of cooperative learning breaks the lesson up into sections so that each member of the group can become an expert on a particular section
 17. Name two aspects of cooperative learning which increase the effectiveness of the lesson
 18. Which type of instruction is best for unfamiliar domains?
 19. Creativity and self-directedness is most emphasized by this type of instruction
- REVIEW CONSTRUCTIVISM

Cognitive Theories

20. An information processing storage system that can hold a limited amount of information for a few seconds
 21. The part of long term memory from which we try to recall personal experiences
 22. This happens when information gets mixed up with or pushed aside by other information
 23. The type of practice that occurs when newly learned information is practiced for shorter durations of time over many sessions
 24. The most important principle of this theory is that incoming information that fits into an existing framework is more easily understood
 25. The process of thinking about material to be learned in a way that connects the material to information or ideas already in the learner's mind
 26. Long term memory in humans corresponds to what part of the computer
 27. Name three things that can determine the capacity of one's working memory
 28. The ability to retrieve information from long-term memory depends on what?
 29. What is the purpose of chunking information?
 30. Why is automaticity crucial to effective learning?
 31. Understanding how much you know about former presidents is an example of what?
 32. Expert chess players can remember game situations better than novices because of the ability to do this:
 33. These are a general group of strategies that enhance your memory.
 34. What did the Gestalt researchers tell us about memory when using their closure tasks like the Dalmatian picture
 35. Give three additional names for short term memory
 36. Why is our working memory like a bottleneck?
 37. Remembering whom you talked to at your high school graduation is an example of what kind of memory?
 38. What is the more general name for the memory system that includes sensory, short term, & long term memory?
 39. Name three ways to increase our ability to effectively encode information in long-term memory
 40. Give two suggestions for teaching concepts effectively
 41. Explain "rule-example-rule"
- REVIEW AUTOMATICITY

Complex Cognitive Theories

42. Define metacognition
43. Knowing how well you are doing is an example of what?

44. Metacognition can be divided into two parts, name them
45. Planning, monitoring, and evaluation are part of what aspect of metacognition
46. Explain the difference between declarative and conditional knowledge
47. "Mission Control" is another name for this part of your memory system
48. Name the three levels of study strategies that we discussed in class.
49. Name three ways to increase transfer
50. The ability to evaluate conclusions by logically and systematically examining the problem, the evidence, and the solution
51. This becomes more probable when learning in many contexts, from many examples, and reflecting on your existing knowledge
52. World hunger is an example of what kind of problem?
53. Name two parts of the general problem solving model
54. Describe what a heuristic is and give an example

➤ REVIEW CREATIVITY & CRITICAL THINKING

Behavioral Theory/Behavior Management

55. The name of the process in Pavlov's experiment, where after the bell and the meat are presented together and the ringing of the bell alone causes the dog to salivate
56. When an act is followed by a satisfying change in the environment, the likelihood that the act will be repeated in similar situations increases refers to Thorndike's
57. The use of pleasant and unpleasant consequences to change behavior is often referred to as
58. Any consequence that strengthens (increases the frequency of) a behavior
59. Consequences that are not reinforcing, that is, that weaken behavior
60. When teachers guide students toward goals by reinforcing the many steps that lead to success the process is called
61. The process of weakening a response by withdrawing reinforcement is
62. Schedule of reinforcement in which the number of behaviors required for reinforcement is unpredictable
63. Having a pizza party the last day of every month that students behaved well during is an example of what kind of reinforcement schedule?
64. Playing a slot machine sets a person up on what type of reinforcement schedule?
65. A student does their homework and gets out of doing chores. This is an example of what?
66. Jane misbehaves numerous times in class one day and her teacher keeps her after school. This is an example of what?
67. This is a kind of observational learning in which one learns from the consequences of others' behaviors
68. This man applied Pavlov's theory of classical conditioning to human behavior

69. Attention, retention, reproduction, and motivation are included in Bandura's process of what?
 70. Explain generalization and discrimination as they apply to Behaviorism
 71. What was the conditioned stimulus in Pavlov's experiment with the dogs?
 72. What are the two major types of conditioning we talked about?
 73. Technically speaking, how do you know if something is a punisher or a reinforcer?
 74. What is the difference between modeling and vicarious learning?
 75. How do definitions of learning differ between cognitive and behavioral theories?
 76. A program that requires following a series of steps that proceed from the observation of the behavior through program implementation to program evaluation
 77. Define baseline data
 78. Name two major purposes of teaching applied behavior analysis in this class
 79. What is the general philosophy for classroom intervention to deal with behavior problems
 80. We talked about setting events, rules, and room arrangement as examples of these
 81. What are some suggestions for the appropriate use of reinforcement?
- REVIEW USE OF REWARDS AND USE OF REINFORCEMENT

Motivation

82. Name theorist behind Social Cognitive Theory who did the BoBo Doll experiment.
83. Rewards for learning that are not inherent in the material being learned. Rewards may range from praise to grades to recognition to prizes
84. Explain the difference between an entity and incremental theorist including what types of goals they adopt
85. Define self-efficacy
86. Name three tendencies of a highly efficacious person
87. Which types of goals lead one to be concerned with others' perceptions of one's ability
88. Incremental theorists typically chose these goals
89. Name three external factors that students may attribute their success or failure to
90. Name three ways to enhance intrinsic motivation
91. Name three recommendations for giving extrinsic rewards
92. This theorist devised a hierarchy of needs which holds that people need to satisfy basic deficiency needs before growth needs
93. Attribution theory is an explanation of motivation that focuses on how people explain the causes of their _____ and _____
94. Within attribution theory there are three dimensions for attributing success or failure including internal/external, stable/unstable

95. Explain what attribution theory is
96. Learners who have knowledge of effective learning strategies and how and when to use them are called?
 - REVIEW SOCIAL COGNITIVE THEORY / CLASSICAL & OPERANT CONDITIONING
 - REVIEW VICARIOUS LEARNING & PROCESS OF MODELING
 - REVIEW SELF-REGULATED LEARNING

Assessment/Standardized Tests

97. Measures that focus on comparisons of a student's scores to those of other students
98. Measures that focus on assessing students' mastery of specific skills
99. Name three advantages to writing objectives
100. Give a specific example of a standardized norm-referenced achievement test
101. Give a specific example of a standardized norm-referenced intelligence / aptitude test
102. Performance-based assessment is most closely linked to this type of assessment
103. Name two advantages of authentic assessment
104. Name two disadvantages of authentic assessment
105. How are IQ scores determined?
106. An approach to assessment often discussed along with authentic assessment is the collection of student work over an extended period
107. Identify 3 things you might analyze to determine whether a multiple choice item is a "good" item
108. Describe content validity
109. Describe construct validity
 - REVIEW ITEM DISCRIMINATION / ITEM ANALYSIS

Answer Key

1. educational psychology
2. if the results of a study are externally valid that means they are highly reflective of what also might be found in the "real world." If results are high in internal validity it means that you can confidently attribute your findings to your manipulations in the experiment because of the high degree of control that you had
3. correlational study
4. positive
5. negative
6. relationship
7. field experiment
8. direct instruction
9. mentor, collaborators
10. organizer, expert
11. facilitator
12. learning probe
13. wait time
14. arouses curiosity, encourages independent problem solving, increases critical thinking skills
15. assistance within the zone of prox. development from more capable peer or adult
16. jigsaw
17. individual accountability, structure, team goals and recognition, equal opportunity for success
18. direct
19. discovery
20. working memory
21. episodic
22. interference
23. distributed practice
24. schema theory
25. elaboration
26. hard drive
27. innate capacity, mnemonics and strategies, background knowledge

28. how well the information was organized when it was encoded
29. package information to fit it through the working memory bottleneck
30. consumes less of our limited resources, less likely that info will decay, process info more quickly
31. metacognition
32. chunk information into meaningful patterns
33. mnemonics
34. we fill in the gaps
35. bottleneck, workbench, scratchpad, working memory
36. limited amount of space
37. episodic
38. information processing system
39. learn in depth, use mnemonics, build schemas, focus on organization, activity, and elaboration, learn in many contexts, be strategic about deliberate practice, block out interference
40. give many examples, first similar examples then diverse, point out essential features, explain circumstances when students might use their knowledge, teach students to reflect, teach something in many contexts
41. Describe a concept, give example, then redescribe
42. knowledge of cognition and regulation of cognition--knowing the extent of your knowledge and how to plan, monitor, and evaluate what you are doing
43. metacognitive monitoring
44. knowledge of cognition, regulation of cognition
45. regulation of cognition
46. declarative is knowing that/factual information; conditional is knowing when and where/knowledge of strategies
47. metacognition or executive system
48. basic strategies such as notetaking and underlining, comprehension monitoring, develop critical thinking
49. use many examples, concept maps/organizers, rule-example-rule, teach most familiar to least familiar, confront misconceptions
50. critical thinking
51. transfer
52. Ill-defined
53. Identify problem, represent problem, select strategy, implement strategy, evaluate results

54. Widely applicable strategy similar to a "rule-of-thumb"; trial and error, means end analysis, analogy, working backwards
55. classical conditioning
56. Law of Effect
57. operant conditioning
58. reinforcer
59. punishers
60. shaping
61. extinction
62. variable ratio
63. fixed interval
64. variable ratio
65. negative reinforcement
66. presentation punishment
67. vicarious learning
68. Watson
69. Modeling
70. when you generalize you extend your responses to stimuli that are similar; when you discriminate you recognize differences in stimuli
71. bell/tone
72. operant and classical
73. reinforcer will increase the frequency of a behavior; punisher will decrease frequency of a behavior
74. vicarious learning involves someone learning by watching another being punished or reinforced
75. cognitive theories emphasize the changes that go on in one's mental structures or level of thinking whereas behaviorists emphasize changes in outward/observable behavior
76. applied behavior analysis
77. initial data showing frequency of target behavior
78. work with school psychologists, process of systematically altering behavior
79. Use simplest intervention that will work/principle of least intervention
80. Antecedents
81. reinforce immediately after desired behavior, use least tangible or elaborate reinforcer that will work, utilize the PreMack principle, make it informational, try before punishment, use shaping techniques

82. Bandura
83. extrinsic incentives
84. entity theorists more or less ascribe to the theory that ability is fixed while incremental theorists focus on how ability is gained over time through effort; entity theorists adopt performance goals whereas incremental theorists adopt learning/mastery goals
85. judgment of one's ability to perform a task within a specific domain
86. become less frustrated, more likely to engage in difficult task, more persistence
87. performance goals
88. mastery/learning
89. luck, test difficulty, character of the teacher, room conditions
90. maintain curiosity, give choices, use a variety of presentation modes, have students set goals
91. make informational, unexpected, avoid tangible rewards for something the student already likes, require a standard to be met
92. Maslow
93. successes and failures
94. controllable/not controllable
95. the study of what factors individuals attribute as being the cause of their successes and failures
96. self-regulated
97. norm-referenced
98. criterion-referenced
99. master plan, backward planning, test at many levels
100. ITBS, CAT, ACT, GRE, SAT
101. WAIS, Stanford-Binet
102. authentic assessment
103. teach to "real life," increased external validity, increase motivation, increase understanding higher costs, more materials, often contrived assessments, difficult to score reliably, more things to consider for
104. classroom management
105. normed score--score is based upon relative performance to others of the same age taking the test
106. portfolio
107. Analyze how the item was written, overall percent correct, effectiveness of distracters, item discrimination
108. The degree of overlap between what is taught (or what should be taught) and what is tested

109. How well does a test measure a meaningful characteristic or quality; how well the test is measuring what it is supposed to test