Module 1: Using Science to Inform Classroom Practices

Test Bank

# Multiple Choice

1. A baby is born to Chinese parents in Asia and then adopted and raised by a White, middle-class family living in the rural Midwestern United States. Which most accurately describes the group status of this child?

A. Race is Asian, and ethnicity is Chinese.

B. Race is Caucasian, and ethnicity is Caucasian.

C. Race is Asian, and ethnicity is Caucasian.

D. Race is Asian, and ethnicity is Asian.

Ans: C

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Application

Answer Location: Addressing Diversity

Difficulty Level: Hard

2. Which is the most accurate statement about the terms sex and gender?

A. Sex refers to biology, while gender is a social definition.

B. Gender refers to biology, while sex refers to an individual’s orientation.

C. Sex refers to a social definition, while gender refers to biology.

D. There are no differences between these biological terms.

Ans: A

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

3. It is most accurate to say that the key characteristic that designates members of a minority group is that they \_\_\_\_\_\_ than the majority group.

A. are a smaller percentage of the population

B. get greater legal protection

C. have less power

D. speak a different language

Ans: C

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

4. What most accurately describes what socioeconomic status is based upon?

A. income of family members

B. educational level and income of family members

C. occupation and income of family members

D. education level and occupation of family members

Ans: D

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

5. Which best describes the difference between prejudice and discrimination?

A. Prejudice describes the way a person behaves, and discrimination describes the way a person thinks.

B. Discrimination describes negative beliefs about a group, while prejudice describes any irrational beliefs about a group, whether negative or positive.

C. Prejudice describes a belief, and discrimination describes differential treatment of people based upon this belief.

D. These terms can be used interchangeably because there is no difference between these terms.

Ans: C

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

6. Which best describes the field of educational psychology?

A. It primarily covers instructional methodologies that have been developed in different content areas.

B. It is a theory course whose content covers the main psychology theoreticians and the ideas they have expressed about teaching.

C. It describes the common-sense approaches to classroom management and instruction that have evolved over time.

D. It provides teachers with evidence-based knowledge from research and theory to support their daily decision-making.

Ans: D

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Knowledge

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Easy

7. Mrs. Abel believes that students from low-income families are poor readers. When some of her students from lower income families score well on a standardized reading achievement test, Mrs. Abel interprets their performance as due to luck because “poor students will be poor readers.” Her thinking can be best interpreted as \_\_\_\_\_\_.

A. prejudice feelings

B. confirmation bias

C. belief perseverance

D. discrimination

Ans: C

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Application

Answer Location: Addressing Diversity

Difficulty Level: Hard

8. The common-sense approach is not a recommended classroom practice because \_\_\_\_\_\_.

A. it utilizes research and theory from 30 years ago

B. it highlights group differences in the classroom

C. it is often found to be an ineffective and sometimes counterproductive approach to teaching

D. it specifies that all teachers must keep up with current educational psychology research

Ans: C

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Knowledge

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Easy

9. Which best describe the three key elements of every educational psychology research study?

A. protocols, variables, method

B. samples, measures, designs

C. hypotheses, evidence, conclusions

D. thesis, antithesis, synthesis

Ans: B

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Educational Psychology: The Science

Difficulty Level: Easy

10. Which most accurately describes the best method for ensuring a sample is representative?

A. use a structured sample

B. assure the sample is theoretically sound

C. use a random sample

D. use scientifically based research

Ans: C

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Samples

Difficulty Level: Easy

11. A researcher wants to know the effect of a new instructional program on language development of children with communication disabilities. She soon has dozens of eager families signed up to participate. The researcher is concerned that the set of individuals signed up for her study are different from the population in general. This concern is most accurately labeled as \_\_\_\_\_\_.

A. ethical concern

B. volunteer bias

C. flawed hypothesis

D. tainted analysis

Ans: B

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Samples

Difficulty Level: Hard

12. Which best exemplify measures used in educational psychology research?

A. observations, interviews, tests

B. variables, treatment, control

C. population, sample, random sample

D. descriptive, correlational, experimental

Ans: A

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Measures

Difficulty Level: Easy

13. A school administrator is interested in knowing the percentage of girls in school who are involved in sports this year. Which type of research design is the most likely to use?

A. experimental

B. correlational

C. longitudinal

D. descriptive

Ans: D

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Research Designs

Difficulty Level: Hard

14. A teacher is interested in knowing the connection between the number of hours students do homework each week and their college entrance exam scores. What type of research design is she most likely to use?

A. experimental

B. correlational

C. longitudinal

D. descriptive

Ans: B

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Research Designs

Difficulty Level: Hard

15. Which is most true about correlational designs?

A. They indicate the type and strength of the relationships between variables.

B. They provide basic information about variables without making connections between them.

C. They determine if one variable causes a change in another variable.

D. They require random assignment of participants to one or two groups.

Ans: A

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Comprehension

Answer Location: Research Designs

Difficulty Level: Medium

16. Which type of research is most likely to yield information that determines cause and effect?

A. descriptive

B. experimental

C. correlational

D. peer reviewed

Ans: B

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Research Designs

Difficulty Level: Easy

17. Assume that a well-designed correlational research study shows a very strong relationship between how much children recreationally read at home and grades. Which is the most accurate conclusion?

A. Increased recreational reading of children causes better grades.

B. Better grades cause children to enjoy academics more and therefore read more.

C. An unidentified variable such as parental involvement has caused both the good grades and recreational reading.

D. None of the above can be concluded.

Ans: D

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Research Designs

Difficulty Level: Hard

18. In which instance would a researcher be most likely to use a quasi-experimental design?

A. Mr. Shijo wants to do an in-depth case study to describe which factors are present for a student with reading problems.

B. Ms. Morris wants to infer whether being from an abusive home causes students to have poorer reading scores.

C. Mr. Cox wants to know what percentage of students in the senior honors program belongs to minority groups.

D. Ms. Ramirez decides to adopt a new math curriculum for half his students selected at random, wanting to know whether it causes those students to have better applied problem-solving skills.

Ans: B

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Research Designs

Difficulty Level: Hard

19. A researcher who wants to examine the same group of people repeatedly over time to know how earlier events can be connected to later events can be most accurately described as doing \_\_\_\_\_\_ research.

A. longitudinal

B. ethnographic

C. cross-sectional

D. descriptive

Ans: A

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Research Designs

Difficulty Level: Easy

20. Ms. Flores wants to know whether a new conditioning program improves the speed of the athletes she coaches. So with half of her students she uses the new program, and with the other half she trains them as usual. She then measures their speed to determine if the new program caused a difference in speed. The design can most accurately be classified as \_\_\_\_\_\_.

A. correlational

B. descriptive

C. experimental

D. observational

Ans: C

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Application

Answer Location: Research Designs

Difficulty Level: Hard

21. Mrs. Kelly found a recent journal article that provided evidence supporting the use of “brain breaks” between lectures to promote student engagement and retention. Mrs. Kelly used what teaching approach?

A. common-sense

B. knowledgeable

C. behavioral

D. research-based

Ans: D

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Application

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Medium

22. Two students in Mr. Patterson’s class have not been getting along for most of the semester. Mr. Patterson assumes that if he has the two students sit at opposite ends of the classroom, the issue between them will resolve. What kind of teaching approach is Mr. Patterson using?

A. common-sense

B. knowledgeable

C. behavioral

D. research-based

Ans: A

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Application

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Hard

23. To fully take advantage of what educational psychology has to offer, it is important for teachers to \_\_\_\_\_\_.

A. evaluate how much common sense they have and apply it to their teaching style

B. understand scientific research and how they can incorporate it into their classroom practices

C. follow their instincts when faced with issues that arise in the classroom

D. develop classroom practices based on old established theories

Ans: B

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Comprehension

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Medium

24. \_\_\_\_\_\_ are classroom strategies derived from scientific research.

A. Best practices

B. Common-sense practices

C. Evaluative practices

D. Educational practices

Ans: A

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Knowledge

Answer Location: Best Practices

Difficulty Level: Easy

25. Why are best practices constantly changing?

A. Teachers cannot decide which strategy in the classroom is best.

B. Best practices are not constantly changing.

C. Best practices change as new research findings present teachers with more effective strategies.

D. Students will get bored if they experience the same strategies every year.

Ans: C

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Comprehension

Answer Location: Best Practices

Difficulty Level: Medium

26. Common Core provides teachers with information on \_\_\_\_\_\_.

A. how to teach their students

B. academic standards students need to meet

C. the best practices that are most often used in education

D. what material they should use to teach their students

Ans: B

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Knowledge

Answer Location: Best Practices

Difficulty Level: Easy

27. Which of the following is an example of an individual or group characteristic researchers commonly use to assess diversity among participants?

A. SAT score

B. disabilities

C. weight

D. eye color

Ans: B

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

28. When do SES differences have the biggest impact on math achievement?

A. around the middle school transition

B. during early childhood

C. during the transition to high school

D. at the end of the first year of school

Ans: A

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

29. What kind of programs have been implemented to help train individuals to close the achievement gap due to SES differences?

A. education for the poor

B. first-class education

C. blue-collar education

D. urban education

Ans: D

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

30. Which of the following is considered to be a source of group differences?

A. sexual orientation

B. disability

C. gender

D. malnutrition

Ans: D

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

31. Romantic and sexual attraction one has to others of the same gender, opposite gender, both genders, and/or neither gender refers to

A. gender identity

B. cisgender

C. sexual orientation

D. sexual expression

Ans: C

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

32. At what age do prejudice feelings typically peak among White children?

A. ages 4–6

B. ages 5–7

C. ages 6–8

D. ages 10–12

Ans: B

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

33. Which of the following is an example of a quasi-experimental design commonly used in research?

A. cross-sectional study

B. case study

C. ethnographic study

D. cause-and-effect study

Ans: A

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Comprehension

Answer Location: Research Designs

Difficulty Level: Medium

34. Which of the following describes an individual who seeks information to confirm what they already believe to be true, rather than searching for facts that might refute their beliefs.

A. confirmation bias

B. belief preservation

C. discrimination

D. prejudice feelings

Ans: A

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

# True/False

1. The terms ethnic group and racial group are interchangeable, as they have the same meaning.

Ans: F

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

2. The traditional gender binary refers to two sex categories, male and female, whereas now gender is increasingly seen as nonbinary.

A: T

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

2. In order to treat all students equally, effective teachers disregard the possible causes of differences among groups.

Ans: F

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Knowledge

Answer Location: Addressing Diversity

Difficulty Level: Easy

3. The main advantage to correlational research is that it allows one to determine cause and effect.

Ans: F

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Knowledge

Answer Location: Research Designs

Difficulty Level: Easy

4. The most important characteristic of a philosophy of teaching is that it reflects opinions and perspectives attained by the teacher in the classroom.

Ans: F

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Knowledge

Answer Location: Best Practices

Difficulty Level: Easy

5. Two variables with a correlational coefficient of −1.0 is considered a strong relationship.

Ans: T

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Application

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Easy

# Essay

1. Describe four diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Ans: The answers should indicate ethnicity/race, sex/gender, SES, and disability and indicate that teachers need to understand group differences and their own biases so they can best meet the individual needs of learners.

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

2. Explain how educational psychology is an important resource for teachers.

Ans: The answers should recognize that educational psychology provides theory and research linking science of psychology to educational practice, helping provide teachers evidence-based knowledge they will use in day-to-day decision-making.

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Comprehension

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Medium

3. Explain three elements of research studies that help determine which studies are worthy of consideration.

Ans: The answers should indicate samples which are representative, measures that answer the research question, and designs that are accurately interpreted.

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Comprehension

Answer Location: Educational Psychology: The Science

Difficulty Level: Medium

4. Describe a descriptive, a correlational, and an experimental study that might be done in a school. For each study design, state the research question that the researcher is interested in.

Ans: The answers should indicate descriptive as having no inference of cause/effect or connection of variables, correlational as measuring strength and direction of variable relationships, and experimental as involving treatment and allowing cause/effect inferences.

Learning Objective: 1-2: Describe three elements of research studies that help determine which studies are worthy of consideration.

Cognitive Domain: Comprehension

Answer Location: Educational Psychology: The Science

Difficulty Level: Medium

5. Define best practices and why it is important for teachers to develop them to be effective educators.

Ans: The answers should express that best practices are evidence-based strategies determined by science to help inform decision. Teachers are given academic standards that their students need to meet but are not informed about what to teach or how to meet the standards. Best practices help teachers develop the skills they need to make the best decisions for classroom management, instruction, and assessment.

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Comprehension

Answer Location: Best Practices

Difficulty Level: Medium

6. What is the difference between the common-sense and research-based approach to teaching?

Ans: The answers should indicate that the common-sense approach is based on the teacher’s intuition, past experience, and possible hearsay as opposed to the research-based approach that uses the scientific method to produce evidence that supports particular teaching practices that will lead to desired outcomes.

Learning Objective: 1-1: Explain why educational psychology is an important resource for teachers.

Cognitive Domain: Comprehension

Answer Location: Educational Psychology: A Resource for Teachers

Difficulty Level: Medium

7. Best practices are continuously changing as research finds new teaching strategies that are more effective. Can you think of an example of a teaching strategy that is different today than when you were in grade school or high school?

Ans: Varies based on personal experience. Some examples may include physical punishment or the use of technology now as opposed to the past.

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Analysis

Answer Location: Best Practices

Difficulty Level: Hard

8. Define prejudice feelings, confirmation bias, belief perseverance, and discrimination. Explain why these concepts can lead to ineffective teaching strategies.

Ans: The answers should state that prejudice feelings are irrational generalizations about a group of people; confirmation bias is when a person looks for evidence that supports their own beliefs; belief perseverance is when a person discredits evidence that contradicts their own beliefs; discrimination is when a person acts on their prejudice beliefs by treating that person or group differently. Teachers who have these biases or act on them are not facilitating a successful learning environment and may cause psychological harm to diverse classrooms.

Learning Objective: 1-4: Describe five diversity characteristics that can define an individual’s group membership, and explain why teachers need to understand differences between groups.

Cognitive Domain: Comprehension

Answer Location: Addressing Diversity

Difficulty Level: Medium

9. Imagine that you are a teacher in charge of your own classroom. What are some best practices that you would exercise in your classroom based on your current knowledge of educational psychology research?

Ans: The answers could include a range of answers from the whole module including evidence-based practice, diversity, best practices, and so on.

Learning Objective: 1-3: Define best practices and explain why it is important for teachers to base them on scientific evidence.

Cognitive Domain: Analysis

Answer Location: Best Practices

Difficulty Level: Hard