Johnson, Educational Research 6th Edition SAGE Publishing © 2017
Chapter 1 Test Bank

Chapter 1: Introduction to Educational Research

Learning Objectives
1. Explain the importance of educational research.
2. List at least five areas of educational research.
3. Explain the difference between basic and applied research.
4. Describe evaluation research, action research, and orientational research.
5. Discuss the different sources of knowledge.
6. Explain the scientific approach to knowledge generation.
7. Explain how to determine the quality of a theory or explanation.
8. List the six objectives of educational research and provide an example of each.

Multiple Choice

1. Basic research:

      a. Addresses practical questions
      b. Produces immediate solutions
      c. Investigates current problems in education
      d. Creates knowledge
      Ans: d
      Learning Objective: 2,3
      Cognitive Domain: Knowledge
      Answer Location: General Kinds of Research
      Difficulty Level: Medium

2. Knowledge of educational research:

      a. Helps with people's math skills
      b. Develops students' critical thinking skills
      c. Does not help one become a better consumer of research
      d. Does not have an impact on one's performance as a professional
      Ans: b
      Learning Objective: 1
      Cognitive Domain: Comprehension
      Answer Location: Why Study Educational Research
      Difficulty Level: medium

3. Applied research has as its primary focus:

      a. Basic learning processes
      b. Theory testing
      c. Practical questions
      d. Fundamental knowledge

Ans: c
Learning Objective: 2,3
Cognitive Domain: Comprehension
Answer Location: General Kinds of Research
Difficulty Level: Medium

4. Basic research has as its primary focus:

a. Current educational interventions
b. Immediate solutions
c. Practical questions
d. Fundamental knowledge
Ans: d
Learning Objective: 2,3
Cognitive Domain: Knowledge
Answer Location: General kinds of research
Difficulty Level: medium

5. According to the text, basic and applied research should be viewed as:

a. The poles on a single continuum
b. Distinct categories
c. Logical categories
d. The same type of research
Ans: a
Learning Objective: 3
Cognitive Domain: Knowledge
Answer Location: General Kinds of Research
Difficulty Level: Easy

6. Action research:

a. Is a form of basic research
b. Is a form of applied research
c. Is a form of research that deals with fundamental knowledge
d. Uses only qualitative methods
Ans: b
Learning Objective: 2, 3, 4
Cognitive Domain: Knowledge
Answer Location: Action Research
Difficulty Level: Easy

7. What general type of research is focused on solving specific problems that local practitioners face in their schools and communities?

a. Evaluation research
b. Basic research
c. Action research
d. Orientational research
Ans: c
Learning Objective: 2,3,4
Cognitive Domain: Knowledge
Answer Location: Action Research
Difficulty Level: Easy

8. What general type of research is focused on collecting information to help a researcher advance an ideological or political position?

a. Evaluation research
b. Basic research
c. Action research
d. Orientational research
Ans: d
Learning Objective: 2,3,4
Cognitive Domain: Knowledge
Answer Location: Action Research
Difficulty Level: easy

9. What type of evaluation is focused on improving an educational program?

a. Formative
b. Summative
c. Evaluative
d. Cost analysis
Ans: a
Learning Objective: 4
Cognitive Domain: Comprehension
Answer Location: Evaluation Research
Difficulty Level: Medium

10. Which position says that knowledge comes from experience?

a. Rationalism
b. Empiricism
c. Innatisim
d. Nativism
Ans: b
Learning Objective: 5
Cognitive Domain: Knowledge

Answer Location: Experience
Difficulty Level: Easy

11. Which approach to reasoning goes "from the particular to the general"?

a. Deductive
b. Inductive
c. Abductive
d. Retroductive
Ans: b
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Reasoning
Difficulty Level: Medium

12. The theory *testing* approach to science is called:

a. The parsimony principle
b. The exploratory method
c. The inductive method
d. The confirmatory method
Ans: d
Learning Objective: 5
Cognitive Domain: Application
Answer Location: Reasoning
Difficulty Level: Hard

13. The theory *generation* approach to science is called:

a. The parsimony principle
b. The exploratory method
c. The deductive method
d. The confirmatory method
Ans: b
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Scientific Methods
Difficulty Level: Medium

14. At the end of the school year, students in Head Start are tested to see what gains have been made during the year. This is an example of:

a. Formative assessment

       b. Summative assessment

       c. Theory assessment

       d. Efficiency assessment

       Ans: b

       Learning Objective: 4

       Cognitive Domain: Application

       Answer Location: Evaluation Research

       Difficulty Level: Medium

15. Which of the following is <u>not</u> a basic assumption of science?

       a. Science cannot provide answers to all questions

       b. It is possible to distinguish between more plausible and less plausible claims

       c. Researchers should follow certain agreed upon norms and practices

       d. Science can solve value conflicts, such as whether abortion is immoral

       Ans: d

       Learning Objective: 6

       Cognitive Domain: Basic Assumptions of Science

       Answer Location: Analysis

       Difficulty Level: Hard

16. The rule of parsimony suggests that scientists should:

       a. Use the most complex theory

       b. Use an inductive method

       c. Use experimental designs

       d. Prefer the simplest theory that works

       Ans: d

       Learning Objective: 6

       Cognitive Domain: Application

       Answer Location: Scientific Method

       Difficulty Level: Medium

17. Popper's criterion of falsifiability suggests that:

       a. Good theories are, in principle, refutable

       b. Good theories are complex

       c. Good theories are never falsifiable

       d. Good theories are based on inductive logic

       Ans: a

       Learning Objective: 6

       Cognitive Domain: Comprehension

       Answer Location: Theory

       Difficulty Level: Medium

18. Which of the following is a characteristic of a good theory or explanation?

    a. It is very complex
    b. It is testable
    c. It is very specific and only applies to one place, situation, or person
    d. It is only observed by specific researchers
    Ans: b
    Learning Objective: 7
    Cognitive Domain: Analysis
    Answer Location: Theory
    Difficulty Level: Hard

19. Which of the following is an objective of educational research?

    a. Tenure
    b. Exploitation
    c. Prediction
    d. Demarcation
    Ans: c
    Learning Objective: 8
    Cognitive Domain: Knowledge
    Answer Location: Objectives of Educational Research
    Difficulty Level: Easy

20. A researcher wants to know the effectiveness of early intervention programs on preventing developmental delay in children. She hopes that the results of the work will have implications for state and national policies concerning early intervention. In this case, the main purpose of the study was:

    a. Exploration
    b. Description
    c. Influence
    d. Prediction
    Ans: c
    Learning Objective: 8
    Cognitive Domain: Application
    Answer Location: Objectives of Educational Research
    Difficulty Level: Hard

21. A researcher designs an experiment to test how variables interact to influence how well children learn spelling words. In this case, the main purpose of the study was:

    a. Explanation
    b. Description
    c. Influence

     d. Prediction
     Ans: a
     Learning Objective: 8
     Cognitive Domain: Application
     Answer Location: Objectives of Educational Research
     Difficulty Level: Medium

22. There is a set of churches in the U.S. where part of the service involves snake handling. The researcher wants to find out why the people attending these churches do this and find out how they feel and think about it. In this case, the primary purpose of the study is:

     a. Exploration
     b. Control
     c. Influence
     d. Prediction
     Ans: a
     Learning Objective: 8
     Cognitive Domain: Application
     Answer Location: Objectives of Educational Research
     Difficulty Level: Medium

23. A state school supervisor wants to know who is more likely to skip school, male or female students, so the researcher obtains graduation records which will show the male and female students' graduation rates. In this case, the primary purpose of the study is:

     a. Influence
     b. Description
     c. Prediction
     d. Control
     Ans: b
     Learning Objective: 8
     Cognitive Domain: Application
     Answer Location: Objectives of Educational Research
     Difficulty Level: Medium

24. A(n) _____ is a brief summary of what is in an article.

     a. Research evaluation
     b. Abstract
     c. Project description
     d. Article review
     Ans: b
     Learning Objective: 8
     Cognitive Domain: Knowledge
     Answer Location: Examples of Educational Research

Difficulty Level: Easy

25. A research study aimed at determining whether the Saxon Math or the Harcourt Math program causes higher math achievement in third-grade students.

a. Explanatory research
b. Predictive research
c. Descriptive research
d. Basic research
Ans: a
Learning Objective: 8
Cognitive Domain: Application
Answer Location: Objectives of Educational Research
Difficulty Level: Medium

26. Applied research that is focused on solving local problems is also known as which of the following?

a. Orientational research
b. Action research
c. Basic research
d. Predictive research
Ans: b
Learning Objective: 4
Cognitive Domain: Knowledge
Answer Location: Action Research
Difficulty Level: Easy

27. Research that is focused on reducing some form of inequality in a society is known as which of the following?

a. Orientational research
b. Experimental research
c. Theoretical research
d. Grounded research
Ans: a
Learning Objective: 4
Cognitive Domain: Knowledge
Answer Location: Orientational Research
Difficulty Level: Easy

28. Determining the worth, merit, or quality of an evaluation object is known as which of the following?

a. Action research
b. Explanatory research

     c. Evaluation
     d. Descriptive research
     Ans: c
     Learning Objective: 2,4
     Cognitive Domain: Knowledge
     Answer Location: Evaluation Research
     Difficulty Level: Easy

29. A researcher makes a judgment of how well the finished product of Toyota's new Hybrid car performs, and based on that judgment, consumers will have the information needed to know if they want to purchase this car. What type of evaluation would this be?

     a. Formative evaluation
     b. Summative evaluation
     c. Needs evaluation
     d. Efficiency evaluation
     Ans: b
     Learning Objective: 4
     Cognitive Domain: Application
     Answer Location: Evaluation Judgment
     Difficulty Level: Medium

30. Which of the following concepts specifically refers to the idea that knowledge comes from experience?

     a. Epistemology
     b. Empiricism
     c. Rationalism
     d. Materialism
     Ans: b
     Learning Objective: 5
     Cognitive Domain: Knowledge
     Answer Location: Experience
     Difficulty Level: Easy

31. Which of the following terms refers to the idea that knowledge comes from reasoning?

     a. Epistemology
     b. Empiricism
     c. Rationalism
     d. Materialism
     Ans: c
     Learning Objective: 5
     Cognitive Domain: Knowledge
     Answer Location: Experience

    Difficulty Level: Easy

32. "Dr. Smith has parked in the same parking space for over a year now. Most likely, she will be parking there again tomorrow." This statement is an example of:

    a. Deductive reasoning
    b. Inductive reasoning
    c. Rationalistic reasoning
    d. Essentialist reasoning
    Ans: b
    Learning Objective: 5
    Cognitive Domain: Application
    Answer Location: Reasoning
    Difficulty Level: Medium

33. The key difference between <u>deductive</u> reasoning and <u>inductive</u> reasoning is:

    a. In deductive reasoning, the conclusion must be true if the premises are true
    b. In deductive reasoning, the conclusion will usually be true if the premises are true
    c. In inductive reasoning, the conclusion must be true if the premises are true
    d. In deductive reasoning, the researcher makes probabilistic generalizations
    Ans: a
    Learning Objective: 5
    Cognitive Domain: Analysis
    Answer Location: Reasoning
    Difficulty Level: Hard

34. If a researcher tests a hypothesis with new data to see if it is supported or rejected, she will be using which of the following methods?

    a. Exploratory method
    b. Confirmatory method
    c. Theory generation approach
    d. Cost analysis approach
    Ans: b
    Learning Objective: 6
    Cognitive Domain: application
    Answer Location: scientific method
    Difficulty Level: medium

35. Which statement best represents the Karl Popper's criterion of falsifiability?

    a. The most important property of a scientific theory is that it is capable of being supported by empirical data if it is true

b. The most important property of a scientific theory is that it is capable of being refuted by empirical data if it is false

c. When testing a theory, strong conclusions from a study can be drawn based on either supporting or refuting data

d. If there is a single study that does not support a theory it should be abandoned

Ans: b

Learning Objective: 6

Cognitive Domain: Analysis

Answer Location: Theory

Difficulty Level: Hard

36. Why is the word "proof" not used in empirical research in the social and behavioral sciences?

a. Human behavior always follows mathematical laws

b. Researchers create data to get promoted at their jobs

c. New theories might provide a better explanation of the same observations

d. 100 studies must be completed on a topic before something is proven

Ans: c

Learning Objective: 6

Cognitive Domain: Analysis

Answer Location: Principles of Evidence

Difficulty Level: Hard

37. What is the principle of evidence?

a. Research proves theories

b. Research produces deductive truth

c. Research provides evidence, not proof

d. Research provides information and it is up to the researcher to decide if the information proves his or her theory

Ans: c

Learning Objective: 6

Cognitive Domain: Comprehension

Answer Location: Principles of Evidence

Difficulty Level: Easy

38. Research literature refers to _____.

a. The research that has been done on literature from a specific historic time period

b. The set of published research studies on a particular topic

c. The literature about research done in a particular discipline

d. Research that backs up what a researcher is looking for in a study

Ans: b

Learning Objective: 1

Cognitive Domain: Knowledge

Answer Location: Why Study Educational Research
Difficulty Level: Easy

39. A group of teachers decided to review the research literature to find a possible solution for a problem they were having at their school. Different cohorts worked together and finally presented their findings. Which of the following represents the scenario they should consider the best and most reasonable presentation of research literature?

a. Two studies by well-known researchers provided proof that solution X will be the best solution for our problem
b. Four studies were done and although they were only done with less than 10 students in each, the results were good and the final study was conclusive
c. Four studies, three of them were large-scale studies, and the results of all of the studies suggest a good probability of success with this method
d. Three large-scale studies provided absolute proof that this method will be the most successful for our local school and with our population of students
Ans: c
Learning Objective: 6
Cognitive Domain: Analysis
Answer Location: Principles of Evidence
Difficulty Level: Hard

40. Epistemology is the:

a. Theory of knowledge and its justification
b. Idea that knowledge comes from experience
c. Theory that empirical evidence does not provide proof
d. Idea that research requires generating ideas about phenomena
Ans: a
Learning Objective: 5
Cognitive Domain: Knowledge
Answer Location: Sources of Knowledge
Difficulty Level: Easy

41. Researcher A completed a study of home-schooled children and found that 67% of the home-schooled students reported that they currently had difficulty relating to other children their age. Researcher B conducted a study to determine whether children who are home-schooled during their elementary school years will have problems relating to their peers during their college years. What type of studies were these researchers conducting?

a. A and B were both conducting descriptive studies
b. A was conducting a descriptive study, and B was conducting a predictive study
c. A and B were conducting predictive studies
d. A was conducting a predictive study. B was conducting a descriptive study

Ans: b
Learning Objective: 8
Cognitive Domain: Analysis
Answer Location: Objectives of Educational Research
Difficulty Level: Hard

42. In evaluation research, which type of assessment is concerned with whether a program is conceptualized in such a way that it should be effective?

a. Implementation
b. Impact
c. Efficiency
d. Theory
Ans: d
Learning Objective: 4
Cognitive Domain: Knowledge
Answer Location: Evaluation Research
Difficulty Level: Easy

43. According to the book, when you engage in inductive reasoning, you are also using:

a. Deductive reasoning
b. Quantitative reasoning
c. Moral reasoning
d. Probabilistic reasoning
Ans: d
Learning Objective: 5
Cognitive Domain: Knowledge
Answer Location: Reasoning
Difficulty Level: Easy

44. Dr. Ellis read a study about improving reading skills in elementary school students. Using the teaching techniques and assessments used in the article, she conducted another study at five local elementary schools to see if she too could improve students' reading skills. Dr. Ellis' study is:

a. A needs assessment.
b. A replication.
c. Basic research.
d. A formative evaluation
Ans: b
Learning Objective: 4
Cognitive Domain: Analysis
Answer Location: The Principle of Evidence
Difficulty Level: Hard

45. A central part of the scientific method is generating a *hypothesis*. A hypothesis is:

    a. The results of the research
    b. An explanatory system
    c. An educated guess
    d. An interpretation of findings
    Ans: c
    Learning Objective: 6
    Cognitive Domain: Knowledge
    Answer Location: Scientific Method
    Difficulty Level: Easy

46. Test scores are typically considered what type of data:

    a. Parsimonious
    b. Error-free
    c. Qualitative
    d. Quantitative
    Ans: d
    Learning Objective: 6
    Cognitive Domain: Comprehension
    Answer Location: Scientific Method
    Difficulty Level: Medium

47. An example of qualitative data would be:

    a. Scores on weekly spelling tests
    b. Responses on open-ended interviews
    c. The number of words a first grader read in a minute
    d. An individual's IQ
    Ans: b
    Learning Objective: 6
    Cognitive Domain: Comprehension
    Answer Location: Scientific Method
    Difficulty Level: Medium

48. Dr. James has been hired by the local schools to complete an evaluation of a math and science program implemented in elementary schools throughout the state to improve performance in these areas. This is an example of:

    a. A needs assessment
    b. A theory assessment
    c. An efficiency assessment

d. An impact assessment
Ans: b
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Scientific Method
Difficulty Level: Medium

49. Another name for critical theory research is:

a. Evaluation research
b. Orientational research
c. Applied research
d. Basic research
Ans: b
Learning Objective: 2
Cognitive Domain: Knowledge
Answer Location: Orientational Research
Difficulty Level: Medium

50. A researcher has developed a theory about student's motivation in school. She conducts several studies to test the theory. This is an example of:

a. Evaluation
b. Basic research
c. Applied research
d. Epistemology
Ans: b
Learning Objective: 2
Cognitive Domain: Analysis
Answer Location: Examples of Educational Research
Difficulty Level: Hard

51. A researcher has conducted several studies to verify her theory of school motivational factors. These studies have validated her theory so now she wants to conduct research to see if changing aspects of the school classroom based on her theory leads to improvements in the classroom. This is an example of:

a. Evaluation
b. Basic research
c. Applied research
d. Epistemology
Ans: c
Learning Objective: 2
Cognitive Domain: Analysis
Answer Location: Examples of Educational Research
Difficulty Level: Hard

52. A researcher is interested in the viewpoints of transgender students in schools so he designs a research study to investigate this topic. This study will meet which objective of educational research?

        a. Prediction
        b. Explanation
        c. Exploration
        d. Understanding
        Ans: d
        Learning Objective: 8
        Cognitive Domain: Application
        Answer Location: Objectives of Educational Research
        Difficulty Level: Medium

53. The explanatory system that explains how a phenomenon operates and why it operates as it does is a:

        a. Theory
        b. Hypothesis
        c. Principle of evidence
        d. Fact
        Ans: a
        Learning Objective: 7
        Cognitive Domain: Knowledge
        Answer Location: Theory
        Difficulty Level: Medium

54. A good theory is one that is:

        a. Clear and parsimonious
        b. Very complex
        c. Not easily testable
        d. Applicable in very limited circumstances
        Ans: a
        Learning Objective: 7
        Cognitive Domain: Comprehension
        Answer Location: Theory
        Difficulty Level: Medium

True/False:

1. Needs assessment, theory assessment, implementation assessment, impact assessment, and efficiency assessment are all currently considered part of the field of evaluation.

a. True
b. False
Ans: a
Learning Objective: 4
Cognitive Domain: Knowledge
Answer Location: Evaluation Research
Difficulty Level: Easy

2. According to your text, a synonym for the word theory is "explanation."

a. True
b. False
Ans: a
Learning Objective: 6
Cognitive Domain: Knowledge
Answer Location: Scientific Method
Difficulty Level: Easy

3. According to the principle of evidence, empirical research provides degrees of evidence but it does not provide proof.

a. True
b. False
Ans: a
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Principles of Evidence
Difficulty Level: Medium

4. Once a researcher has completed the initial search of literature and generated a hypothesis, the purpose of the research is to prove that the hypothesis is true.

a. True
b. False
Ans: b
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Principles of Evidence
Difficulty Level: Medium

5. A theory can be judged in terms of how well empirical data fit the theories predictions.

a. True

     b. False
     Ans: a
     Learning Objective: 7
     Cognitive Domain: Application
     Answer Location: Theory
     Difficulty Level: Medium

6. Exploratory research is often conducted in the early phases of research on a topic because little is known about the topic.

     a. True
     b. False
     Ans: a
     Learning Objective: 8
     Cognitive Domain: Comprehension
     Answer Location: Objectives of Educational Research
     Difficulty Level: Medium

7. Qualitative and quantitative researchers focus on different parts of the research cycle and neither goes through the entire research cycle.

     a. True
     b. False
     Ans: b
     Learning Objective: 6
     Cognitive Domain: Comprehension
     Answer Location: Scientific Methods
     Difficulty Level: Medium

8. Replication is a way to evaluate the quality of a theory or finding.

     a. True
     b. False
     Ans: a
     Learning Objective: 7
     Cognitive Domain: Application
     Answer Location: Principle of Evidence
     Difficulty Level: Hard

9. In educational research, we focus on the most complex theory that works and ignore the simplest theory.

     a. True
     b. False

Ans: b
Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Theory
Difficulty Level: Medium

10. Studying educational research least to improvements in critical thinking skills.

a. True
b. False
Ans: a
Learning Objective: 1
Cognitive Domain: Knowledge
Answer Location: Why Study Educational Research
Difficulty Level: Easy

11. AERA is interested in research from all fields and settings of education.

a. True
b. False
Ans: a
Learning Objective: 61
Cognitive Domain: Comprehension
Answer Location: Areas of Educational Research
Difficulty Level: Medium

Essay
1. What do you, as a student hope to gain from studying educational research?
Ans: Information will be interesting and beneficial, develop critical thinking skills, better understand portrayals of research in other settings, learn that research varies in quality, be able to assess the quality of research, learn to question and evaluate research.

Learning Objective: 1
Cognitive Domain: Comprehension
Answer Location: Why Study Educational Research
Difficulty Level: Easy

2. Define the five kinds of research presented in the book and provide an example of each.
Ans: Basic research: Focuses on generating fundamental knowledge.
Applied research: Focuses on real-world questions and applications.
Evaluation research: Focuses on determining the worth, merit, or quality of intervention programs.
Action research: Focuses on solving local problems that practitioners face.
Orientational research: Focuses on reducing inequality and giving voice to the disadvantaged.

Examples will vary by student

Learning Objective: 2, 3, 4
Cognitive Domain: Application
Answer Location: Examples of Educational Research
Difficulty Level: Hard

3. Compare and contrast qualitative and quantitative researchers.
Ans: A quantitative researcher is someone who focuses on testing theories and hypotheses using quantitative data to see if they are confirmed or not. A qualitative researcher is someone who focuses on the exploration, description, and sometimes generation and construction of theories using qualitative data. Quantitative researchers like hard data like test scores while qualitative researchers prefer to explore educational issues using qualitative data, such as open-ended interviews that provide data based on the participants' perspectives and their actual words. Both go through the full research cycle, but they emphasize different parts. Quantitative researchers emphasize movement from theory to hypotheses to data to conclusions and qualitative researchers emphasize movement directly from observations and data to descriptions and patterns and, sometimes, to theory generation.

Learning Objective: 6
Cognitive Domain: Comprehension
Answer Location: Scientific Methods
Difficulty Level: Medium

4. Describe the objectives of educational research.
Ans: Exploration research occurs when the researcher is trying to understand some phenomenon that is relatively unknown. Description is the objective of educational research when the researcher is trying to identify the characteristics or the phenomenon. Understanding is part of studies that focus on participants subjective viewpoints either as individuals or as members of groups. Some research studies are focused on prediction, attempting to forecast or predict the phenomenon. Finally, research also can be designed to influence. In influence, the research is done to make certain outcomes happen.

Learning Objective: 8
Cognitive Domain: Knowledge
Answer Location: Objectives of Educational Research
Difficulty Level: Easy

5. Define theory and explain its role in educational research.
Ans: A theory is an explanation or explanatory system that explains how a phenomenon operates and why it operates as it does. It is generalize too many different situations. It can also help in the predication of outcomes. In educational research, some research is focused on developing theories, some on providing support for theories, and other on applying theories to solve problems.
Learning Objective: 6
Cognitive Domain: Application

Answer Location: Theory
Difficulty Level: Medium