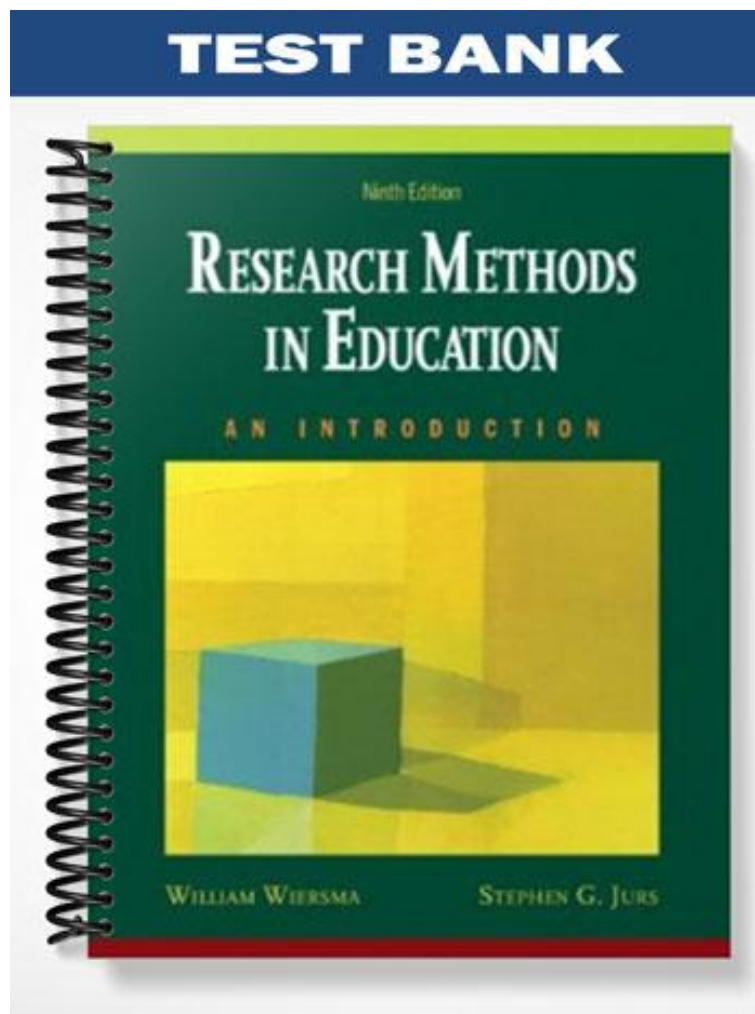


**TEST BANK**



Ninth Edition

**RESEARCH METHODS  
IN EDUCATION**

AN INTRODUCTION

WILLIAM WIERSMA

STEPHEN G. JURIS

**Online  
Instructor's Manual  
and Test Bank**  
*to accompany*

**Research  
Methods in**

**Education:  
An Introduction  
Ninth Edition**

**William Wiersma**  
*Emeritus, University of Toledo*

**Stephen Jurs**  
*Emeritus, University of Toledo*

 This work is protected by  
US copyright laws and is for  
instructors' use only.

Merrill  
is an imprint of

PEARSON

Upper Saddle River, New Jersey  
Columbus, Ohio



**This work is protected by United States copyright laws and is provided solely for the use of instructors in teaching their courses and assessing student learning. Dissemination or sale of any part of this work (including on the World Wide Web) will destroy the integrity of the work and is not permitted. The work and materials from it should never be made available to students except by instructors using the accompanying text in their classes. All recipients of this work are expected to abide by these restrictions and to honor the intended pedagogical purposes and the needs of other instructors who rely on these materials.**

---

**Copyright © 2009 by Pearson Education, Inc., Upper Saddle River, New Jersey 07458.**

All rights reserved. Printed in the United States of America. This publication is protected by Copyright and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permission(s), write to: Rights and Permissions Department.

**Pearson®** is a registered trademark of Pearson plc  
**Merrill®** is a registered trademark of Pearson Education, Inc.

Instructors of classes using *Research Methods in Education: An Introduction*, 9e, by Wiersma and Jurs may reproduce material from the instructor's manual for classroom use.

**Merrill**  
is an imprint of

9 8 7 6 5 4 3 2 1



ISBN-13: 978-0-13-714504-1

ISBN-10: 0-13-714504-7

## **PREFACE**

The ninth edition of *Research Methods in Education: An Introduction*, like previous editions, is a textbook written for courses in research methodology. As an introductory text, its use does not require training in related areas such as statistics. The text provides an overview of research methods most commonly used in education. Rationales are developed for research procedures and examples are provided in their applications.

Of course, instructors are free to use the text in any way they choose, and the same is true for the instructor's manual. There is no presumption of telling instructors how to teach their courses. But the manual does contain lists of chapter objectives for the reader, usually the student, and suggestions about instruction. It is a source of test items if the instructor chooses to use items from the manual. To those ends, it is hoped that instructors find the manual useful.

W. Wiersma & S.G. Jurs

## **CONTENT AND ORGANIZATION OF THE INSTRUCTOR'S MANUAL**

The content of this manual consists of three types of information: (1) reader objectives, (2) suggested exercises and activities which can be conducted individually or in groups, and (3) test items. The content is organized by chapter, and the amount of information varies somewhat across chapters.

The reader objectives cover the general outcomes intended from instruction based on the chapter content. The exercises and activities of the manual may be used to supplement those in the text. Some activities may be done in class, while others may be done individually or in groups outside of class.

There are over 400 test items included in the manual, many in multiple-choice format.

Correct answers are given for the multiple-choice and true-false items. The items are not intended to be exhaustive of the content, but represent a sampling of possible items. The estimated difficulty level (DL) is given for each item; "E" for easy, "M" for medium and "C" for challenging. Instructors may want to supplement the items with their own or with those from other sources. All in all, the content and its organization are intended as aids to instruction, and should be used to that end.

## CONTENTS

Preface.....	iii
Content and Organization of the Instructor's Manual.....	iii
Chapter 1 Educational Research: Its Nature and Characteristics.....	1
Chapter 2 Identification of a Research Problem .....	8
Chapter 3 The Review of the Literature.....	15
Chapter 4 Communicating about Research.....	22
Chapter 5 Evaluating Research Reports.....	27
Chapter 6 Research Design in Quantitative Research.....	32
Chapter 7 Experimental Research.....	38
Chapter 8 Quasi-experimental Research.....	50
Chapter 9 Non-experimental Quantitative Research.....	58
Chapter 10 Research Design in Qualitative Research.....	72
Chapter 11 Historical Research.....	78
Chapter 12 Ethnographic Research.....	85
Chapter 13 Mixed, Modeling and Delphi Methods.....	94
Chapter 14 Sampling Designs .....	100
Chapter 15 Measurement and Data Collection.....	107
Chapter 16 Data Analysis: Descriptive Statistics.....	115
Chapter 17 Data Analysis: Inferential Statistics.....	122

Answer Key .....130

## Chapter 1

### EDUCATIONAL RESEARCH: ITS NATURE AND CHARACTERISTICS

#### I. Chapter Objectives for the Reader

Upon completion of the chapter, the reader should be able to:

- describe the nature of educational research, giving examples of the characteristics used in the description.
- explain validity of educational research.
- distinguish between internal validity and external validity of educational research.
- explain reliability of educational research.
- distinguish between basic research and applied research.
- distinguish between qualitative and quantitative research, describing the two different approaches to understanding phenomena being investigated.
- describe the contrasting characteristics of qualitative and quantitative research.
- describe the major differences between experimental, quasi-experimental, historical, and ethnographic research.
- provide examples of experimental, quasi-experimental, historical, and ethnographic research.
- describe the role of theory in educational research.
- identify the general activities in conducting a research study.
- order the general activities in conducting a research study into a sequential pattern.

## II. Suggested Exercises and Activities

1 After reading the chapter, have students independently select examples of educational research studies in their own areas of interest (one example per student). These can be examples from the research literature. Have the students describe the research studies, describe the format (outline or structure) in which the research is reported, identify the types of research involved (basic or applied; type of general methodology), and comment upon the apparent validity and reliability of the studies.

2 If there are teachers in the class, have each teacher describe an example of action research applicable in an elementary or secondary school setting. Presumably, the teachers will select examples from their own areas of interest.

3 Review with the students the meanings of validity and reliability of educational research studies. Have them discuss examples of studies in which validity and/or reliability are lacking. For the examples, discuss how validity and/or reliability might be enhanced.

4 Discuss with students qualitative and quantitative research, identifying distinguishing characteristics of these two types of approaches to conducting research.

5 Have the students identify and discuss examples of how theory is used in educational research. Include in the examples at least one which deals with grounded theory, and discuss how grounded theory development differs from theory development using a conceptual base of a discipline.

6 Review with the students the general activities of conducting a research study as described in the chapter and as organized in Figure 1.5. Although conducting research may not always be as orderly as we would like, discuss the benefits of a sequential pattern for the activities.



### III. Test Items

1.1 When we say that educational research should be reliable, we are emphasizing:

- a. generalizability.
- b. replicability.
- c. accuracy.
- d. interpretability.

DL: E

1.2 Interpreting the results of a research study is most closely associated with:

- a. external reliability.
- b. external validity.
- c. internal reliability.
- d. internal validity.

DL: E

1.3 A researcher who has interpreted the results of a research study and then is concentrating on generalizing the results is concerned primarily with \_\_\_\_\_ validity.

- a. external
- b. internal

DL: E

1.4 In a research study for which multiple observers are used in elementary school classrooms, the extent of observer agreement is most closely an issue of:

- a. external reliability.
- b. external validity.
- c. internal reliability.
- d. internal validity.

DL: E

1.5 An educational psychologist conducting research in a learning laboratory is most likely engaged in:

- a. action research.
- b. applied research.
- c. basic research.
- d. survey research.

DL: E

1.6 If the primary purpose of a research study is to add to the existing body of knowledge, it is:

- a. action research.
- b. applied research.

c. basic research.

DL: E

1.7 Action research is associated more with applied research, than with basic research.

a. True

b. False

DL: E

1.8 The major distinction between basic and applied research is in the:

a. methodology used.

b. purpose.

c. use of samples vs. populations.

d. replicability of results.

DL: E

1.9 A high school mathematics teacher has four algebra classes and she uses two different instructional approaches, each with two of the classes, to determine the relative effectiveness of the two approaches. This teacher is most likely engaged in:

a. survey research.

b. basic research.

c. experimental research.

d. quasi-experimental research.

DL: M

1.10 Words are to qualitative research what \_\_\_\_\_ are to quantitative research.

a. numbers

b. symbols

c. letters

d. codes

DL: M

1.11 Of the following, the characteristic most closely associated with qualitative research is:

a. focus on individual variables.

b. emphasis on statistical analysis.

c. intent of generalization.

d. use of holistic inquiry.

DL: M

1.12 Of the following, the characteristic most closely associated with quantitative research is:

a. detached role of the researcher.

b. narrative description.

c. emphasis on the specific context.

d. observer-participant role of the researcher.

DL: M

1.13 Which of these terms least belongs with the others?

- a. inductive inquiry
- b. deductive inquiry
- c. holistic inquiry
- d. grounded theory

DL: M

1.14 Which of the following least belongs with the others? Administering an experimental procedure to a:

- a. group of naturally assembled individuals.
- b. class of sixth-grade students.
- c. group of randomly selected individuals.
- d. seminar group composed of high school principals.

DL: M

1.15 The difference between experimentation and other types of research is the:

- a. number of dependent variables included.
- b. manipulation of one of more independent variables.
- c. statistics used to analyze the data.
- d. confidence in the validity of the research.

DL: M

1.16 External validity of research is to generalizability, as internal validity is to:

- a. interpretation
- b. replicability
- c. consistency
- d. objectivity

DL: M

1.17 A distinctive difference between experimental research and ethnographic research is:

- a. manipulation of variables.
- b. number of individuals involved.
- c. number of variables involved.
- d. setting of the research.

DL: E

1.18 Of the following, the characteristic most closely associated with quantitative research is:

- a. holistic inquiry.
- b. inductive inquiry.
- c. context-free.
- d. atheoretical.

DL: M

1.19 Of the following, which is most considered to be a characteristic of qualitative research?

- a. researchers have a personal involvement with the subjects of the research
- b. data collection is done using objective measures
- c. researcher assumes a detached role
- d. focus is on individual variables

DL: M

1.20 A counselor is conducting a study of the college attending plans (type and location of colleges, etc.) of the upcoming graduates of five high schools. This type of research is:

- a. ethnographic.
- b. experimental.
- c. historical.
- d. survey.

DL: E

1.21 Action research is usually conducted for the purpose of:

- a. adding to the knowledge base.
- b. developing theory.
- c. solving a specific problem.
- d. revising theory.

DL: M

1.22 The development of grounded theory is based on:

- a. inductive analysis.
- b. deductive analysis.

DL: M

1.23 When conducting research, which of the following steps would generally occur first?

- a. identifying the research problem
- b. collecting data
- c. reviewing literature
- d. revising theory

DL: E

1.24 In which of the following types of research is the researcher most likely to form a close personal relationship with the participants?

- a. experimental
- b. ethnographic
- c. historical
- d. quasi-experimental

DL: M

1.25 Theory is more closely associated with basic research than with applied research.

- a. True
- b. False

DL: E

1.26 Generalizability of results is more likely to be emphasized in qualitative research than in quantitative research.

- a. True
- b. False

DL: E

1.27 A researcher is investigating the social interaction patterns of a group of varsity athletes in a large high school. The most likely type of research for this study is:

- a. experimental
- b. quasi-experimental
- c. historical
- d. ethnographic

DL: M

## Chapter 2

### IDENTIFICATION OF A RESEARCH PROBLEM

#### I. Chapter Objectives for the Reader

Upon completion of the chapter, the reader should be able to:

- describe different types of variables such as independent variables, dependent variables, and control variables and provide examples of each type.
- identify different types of variables in the context of specific research studies.
- identify sources for research problems in education.
- provide adequate statements of example research problems in both declarative and question form.
- identify the criteria for adequate hypotheses.
- distinguish between directional and non-directional hypotheses.
- develop one or more hypotheses from a research problem statement.
- identify types of variables, develop related hypotheses, and identify necessary operational definitions, given a research problem statement.