

Contents

Preface	iv
Chapter 1 – Achievement Assessment and Instruction	1
Chapter 2 – Nature of Student Assessment	12
Chapter 3 – Planning for Assessment	18
Chapter 4 – Validity and Reliability	25
Chapter 5 – Preparing and Using Achievement Tests	46
Chapter 6 – Writing Selection Items: Multiple Choice	71
Chapter 7 – Writing Selection Items: True-False, Matching, and Interpretive Exercise	77
Chapter 8 – Writing Supply Items: Short Answer and Essay	84
Chapter 9 – Performance Assessments	92
Chapter 10 – Assessment in Distance Education	107
Chapter 11 – Grading and Reporting	116
Chapter 12 – Interpreting Standardized Achievement Test Scores	123
Chapter 13 – Using Assessment in Action Research	136
Appendix A: Test Item Answer Key	148
Appendix B: Illinois Rules of the Road	153

PREFACE

This instructor manual is intended to be used as an instructional resource by those teaching from *Assessment of Student Achievement* (10th ed.). The manual is divided into the thirteen chapters found in the textbook. The manual provides presentation slides that outline specific aspects of student assessment, suggested classroom exercises, and test items (see Appendix A for answer key). Also included in the manual are the *Illinois Rules of the Road* (see Appendix B). Several of the exercises focusing on assessment planning and test construction utilize this content. It is not the intent of the authors to suggest that mastery of the Illinois driving laws and regulations is, or should be, an important learning outcome related to the study of this textbook. Rather, the content serves as the basis for students to apply the concepts and procedures of assessment, and was chosen because the information should be familiar to most students regardless of the state in which they reside. The instructor should feel free to adapt these instructional aids to meet his or her individual needs, and make use of the other instructor resources available through the publisher.

C. Keith Waugh

Norman E. Gronlund

CHAPTER 1

ACHIEVEMENT ASSESSMENT AND INSTRUCTION

1.2

Chapter 1 – Achievement Assessment and Instruction

- Studying this chapter should enable you to:
 - Explain why both testing and performance assessment are important in achievement assessment
 - Write a definition of achievement assessment
 - Describe the relationship between instruction and assessment

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What Is A Task Analysis?

- A procedure conducted to identify the steps performed and the knowledge, skills, and attitudes needed to complete a task

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Chapter 1 – Achievement Assessment and Instruction

- Studying this chapter should enable you to (continued):
 - Distinguish among the various roles of assessment in the instructional process
 - List the ways that assessment can directly aid learning
 - Describe the historical events and legislation that have influenced assessment

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What Are Objectives?

- They define the behavior, standards and conditions that the trainee will perform upon completion of the training.

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Types Of Objectives

- Performance Objectives
- Competency Objectives
 - Knowledge Objectives
 - Skill Objectives
 - Attitude Objectives

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What Is An Evaluation?

- A judgment about the quality or worth of an educational program, worker performance/proficiency, or student attainments

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Types Of Criterion Assessments

- Performance/Skill Assessments (e.g., process checklist, product review)
- Knowledge Assessments (e.g., paper/pencil tests)
- Attitude Assessments (e.g., questionnaires, surveys)

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Roles Of Evaluation

- Formative Evaluations
 - Used to monitor the instructional process
 - Conducted during the instructional process
 - Provides feedback concerning student progress and areas needing improvement

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Roles Of Evaluation (continued)

- Summative Evaluations
 - Used to establish level and quality of learning
 - Conducted at the completion of the instructional process
 - Provides feedback concerning levels of student performance compared with other students

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Types Of Measurement

- Inventories (Has No Correct Answer)
 - Attitude Inventories (e.g., post-course reaction questionnaires)
 - Interest Inventories (e.g., Strong-Campbell Interest Inventory)
 - Preference Inventories (e.g., Myers-Briggs Type Indicator)

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What Is Measurement?

- The process of assigning numbers to individuals or their characteristics

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Types Of Measurement (continued)

- Tests (Has A Correct Answer)
 - Achievement Tests (e.g., mid-term exam)
 - Intelligence Tests (e.g., Stanford-Binet)
 - Aptitude Tests (e.g., ASVAB)

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What Is An Achievement Assessment?

- A broad category that includes all of the various methods for determining the extent to which students are achieving the intended learning outcomes of instruction

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Assessment in the Instructional Process

- Planning of Instruction
 - Define the intended learning outcomes of instruction
 - Specify how student achievement of learning outcomes will be determined

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Assessment Terms

- Performance Assessments
 - Requires students to perform a task to demonstrate knowledge and skill level
- Alternative Assessments
 - Assessments other than paper/pencil tests
- Authentic Assessments
 - Requires applying knowledge and skill to "real world" problems

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Assessment in the Instructional Process (continued)

- Beginning of Instruction

Placement Assessment)

- Purpose:
 - To determine if students have the prerequisite skills
 - To determine if students have already achieved intended outcomes

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1.19

Assessment in the Instructional Process (continued)

- During Instruction

(Formative and Diagnostic Assessment)

- Purpose:
 - To determine which learning tasks the students are progressing satisfactorily (Formative Assessment)
 - To determine which students need remedial work in particular material (Diagnostic Assessment)

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Other Ways Assessment Can Aid Learning

- To increase student motivation
- To increase retention and transfer of learning
- Provides student self-assessment
- Provides feedback concerning needed changes to curriculum

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Assessment in the Instructional Process (continued)

- End of Instruction

- Summative Assessment
 - Purpose:
 - To determine which students have mastered material and should move on to next course
 - To determine what grade should be assigned to each student

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Major Historical/Legislative Events

- 1840's
 - Mandatory testing of students in Massachusetts
- 1930's
 - Federal programs to improve education required assessment
- 1957
 - Russian launch of Sputnik I
- 1983
 - A Nation at Risk report
- 2001
 - No Child Left Behind Act

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Questions & Comments?

CHAPTER 1 - TEST ITEMS

MULTIPLE CHOICE

DIRECTIONS: Select the best answer for each item by circling the corresponding letter.

1. The process of assigning numbers to individuals is called
 - a. measurement
 - b. evaluation
 - c. criterion-referencing
 - d. norm-referencing
2. To make a judgment about the quality of an educational program is the purpose of
 - a. evaluation
 - b. measurement
 - c. criterion-referencing
 - d. norm-referencing
3. Measurement tools consisting of a set of questions with each having a correct answer are called
 - a. inventories
 - b. tests
 - c. surveys
 - d. scales
- *4. Which type of assessment is most suitable for evaluating a student's level of knowledge?
 - a. process checklist
 - b. product review
 - c. questionnaire
 - d. paper & pencil test
- *5. Assessments used to monitor student progress during instruction are called
 - a. placement assessments
 - b. criterion assessments
 - c. formative assessments
 - d. summative assessments
6. Assessments used to determine if students have the prerequisite skills are called
 - a. placement assessments
 - b. criterion assessments
 - c. formative assessments
 - d. summative assessments
- *7. Summative assessments are concerned with
 - a. certification of mastery
 - b. diagnosis of errors
 - c. entry learning skills
 - d. progress during learning

8. Diagnostic testing allows the instructor to identify
- the cause of the specific learning error
 - the effectiveness of the instruction
 - individual student progress
 - the next level of instruction
9. An achievement test used to measure entry performance is
- formative
 - diagnostic
 - placement
 - summative
- *10. Formative testing is used primarily for
- grading students
 - monitoring student progress
 - forming students groups
 - placing students in groups
- *11. The extent to which achievement tests contribute to improved learning and instruction is determined largely by the principles underlying their
- development and evaluation
 - development and use
 - research and development
 - use and evaluation
12. Objective tests can measure
- complex achievement
 - high levels of intellectual skill
 - low level understanding
 - all of the above
13. The formative test determines
- the placement of students at appropriate levels
 - the type of grade that will be assigned at the end of the course
 - whether students have mastered the learning objectives of a unit
 - whether students have necessary prerequisite skills
14. What type of assessment informs the instructor of a student's skills and abilities prior to instruction?
- Diagnostic
 - Summative
 - Formative
 - Placement
15. What type of assessment is used to identify a student's specific learning errors?
- Placement
 - Formative
 - Diagnostic
 - Summative

MATCHING

DIRECTIONS: Column A contains statements about test purposes. Column B has a list of the test types. Match the test purpose to the test type. Responses in Column B may be used more than once or not at all. Record your answers on the lines provided to the left of Column A.

	<u>Column A</u>	<u>Column B</u>
16. _____	Determines whether students a. Diagnostic test have prerequisite skill.	
17. _____	In progress monitoring of achievement b. Follow-up test of students.	
18. _____	Determines what knowledge and skills c. Formative test entering students possess.	
19. _____	Provide in-progress feedback to improve d. Placement test student performance.	
20. _____	Provide measurement of learning difficulties. e. Intelligence test	

MATCHING

k

DIRECTIONS: Column A has a list of the test types. Column B contains statements about test purposes. Match the test purpose to the test type. Responses in Column B may be used only once or not at all. Record your answers on the lines provided to the left of Column A.

Column A Column B

- | | | |
|-----------|----------------------------------|----|
| 21. _____ | Placement Assessment | a. |
| | determines test weighting | |
| 22. _____ | Summative Assessment | b. |
| | determines satisfactory progress | |
| 23. _____ | Formative Assessment | c. |
| | determines prerequisite skills | |
| 24. _____ | Diagnostic Assessment | d. |
| | determines student mastery | |
| | determines student attitude | e. |

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TRUE – FALSE

DIRECTIONS: Read each statement and record as true or false on the lines provided.

- *25. _____ A summative test evaluates terminal achievement of students.
- *26. _____ A formative test is designed to cover a wide range of content in a unit.
- *27. _____ An achievement test used to measure entry performance is called a diagnostic test.
- *28. _____ Formative testing is used primarily for grading students.

RESTRICTED RESPONSE ESSAY

- *29. The authors of your textbook discuss the other ways assessment can aid learning. List and describe how each of these “other ways” can aid student learning. Confine your answer to one page.

*Items shown as self-assessment items in textbook

CHAPTER 2

NATURE OF STUDENT ASSESSMENT

Slide 2.2

Chapter 2 – Nature of Student Assessment

- Studying this chapter should enable you to:
 - Describe a situation where both testing and performance assessment are needed and indicate why
 - Describe the major types of assessment methods and give example of each

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Slide 2.3

Chapter 2 – Nature of Student Assessment

- Studying this chapter should enable you to (continued):
 - Distinguish between tests and performance assessments in terms of realism of tasks, complexity of tasks, assessment of time needed, and judgment in scoring
 - List the guidelines for effective student assessment.
 - Distinguish between norm-referenced and criterion-referenced assessments.

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Types of Assessment Methods

- Selected-Response (e.g., multiple choice, true-false, matching)
- Supply-Response (e.g., essay, fill-in-the-blank, etc.)
- Restricted Performance Assessment (e.g., locating information on a computer)
- Extended Performance Assessment (e.g., using a computer to solve a math problem)

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Guidelines For Effective Student Assessment

- Effective Assessment Requires:
 1. A clear conception of intended learning outcomes
 2. A variety of assessment procedures
 3. Relevant instructional procedures
 4. Adequate sample of student performance

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Guidelines For Effective Student Assessment (continued)

- Effective Assessment Requires:
 5. Fair procedures for everyone
 6. Specifying the criteria for judging successful performance
 7. Feedback that emphasizes strengths and weaknesses of performance
 8. A comprehensive grading and reporting system

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Providing Feedback

- Feedback Should:
 - be given immediately following assessment
 - be detailed and understandable to students
 - focus on both successes and errors
 - provide remedial suggestions for correcting errors
 - be positive and provide a guide for improving performance and self-assessment

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EXERCISE

Feedback

Purpose: *To demonstrate the importance of feedback for improved performance.*

Materials Required: *pencil/pen, feedback exercise sheet in student manual, overhead/LCD projector, transparency showing an image of an object or animal.*

Time Required: *approximately 20 minutes*

Procedure: *Place students into groups of two. Assign one student in each group as the "describer" and the other student the "drawer". Instruct the drawers to face away from the projection area. Read the directions and rules aloud to the groups. When the students are in place, begin the activity by displaying the transparency on the projector to the describers. When all the groups have completed the activity, instruct the drawers to view the image and discuss the difficulty of the task and importance of two-way communication and feedback. If time permits, the instructor may repeat the activity using a second image, but allowing two-way communication and feedback to demonstrate improved accuracy in reproducing the image.*

DIRECTIONS: Your instructor will place you into groups of 2 students. One of the students (the describer) will be given the task of describing to his/her partner the image that the instructor will show on the overhead. The other student (the drawer) will be given the task of listening to his/her partner's instructions regarding how to draw the image.

Rules:

Describer You can not tell the drawer what the image is. You can only describe how she/he is supposed to move the pencil on the page. You cannot look at what the drawer is drawing until instructed to do so. This will prevent you from providing to the drawer any corrective feedback.

Drawer You cannot look at the image being displayed by the instructor. You must remain facing toward the rear of the classroom until instructed to turn around. You cannot ask the describer any questions. In fact, you can't speak at all! Listen carefully to the describer and follow his/her instructions regarding how to draw the image. Use the space provided below to draw the image.

Slide 2.8

Methods of Interpretation

- Norm-Referenced
 - Provides a relative ranking of students
- Criterion-Referenced
 - Provides a description of the learning tasks a student can and can't perform

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Questions & Comments?

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