# **EIGHTH EDITION**

EDUCATIONAL TESTING AND MEASUREMENT: Classroom Application and Practice

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# PREFACE

Welcome to the eighth edition of *Educational Testing and Measurement: Classroom Application and Practice*, an up-to-date, practical, reader-friendly resource that will help you navigate today's evolving and complex world of educational testing, assessment, and measurement. When the last edition of this text was published we mentioned that the federal No Child Left Behind Act (NCLB) was passed in 2002. We stated that the many testing and assessment related features of the NCLB would likely have significant impact on education, and we were not mistaken.

With the passage of NCLB, the stakes associated with testing and assessment have never been higher; the focus on required annual academic assessments, related benchmark tests (see Chapter 1), and the monitoring of Adequate Yearly Progress (AYP) has never been more intense; and controversy and confusion about NCLB abounds. Performance of *all* students in schools on annual academic assessments is now under an increasingly powerful microscope at local, state, and national levels. For everyone to survive and thrive in this new accountability-driven environment, we believe that accurate, understandable, up-to-date, balanced, and relevant information must be made accessible to those on the NCLB/high-stakes testing front lines: classroom teachers and other educators.

Our primary goals for this revision are to (a) provide you with relevant information about the testing and assessment-related aspects of NCLB, (b) help you see how the educational measurement concepts and practices we present in the text apply to NCLB and other accountability requirements, and (c) seamlessly integrate this information throughout the text to help reduce confusion about this complex, far-reaching federal law. To ensure integrated treatment of the measurement implications of NCLB and state highstakes testing requirements throughout the text, we revised several of the chapters. We also completed a number of updates and additions, which are not specific to NCLB, that were suggested by users of the text. To facilitate the transition to the eighth edition for previous users of the text (and to introduce the text to new users!) we will describe the changes to this edition later in this preface.

As with previous editions of *Educational Testing and Measurement*, we present complex test and measurement content in a reader-friendly, nonintimidating, and unique manner, and relate this content in meaningful ways to important developments in educational measurement and assessment. In this revision we keep our primary audience—classroom teachers—fully in mind. We strive to present often abstract and sometimes difficult concepts and procedures in an up-to-date and accurate, but accessible manner. Rather than overwhelm students with jargon and statistical theory, we use a friendly, conversational style to enhance our emphasis on the application of theory. At the same time, we provide sufficient theoretical background to ensure that students will understand the foundations of measurement and avoid an oversimplified approach to measurement. Thus, we expect that both new and long-time users of the text should feel comfortable with the text.

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As though NCLB and state high-stakes testing complexities weren't enough to digest, the Individuals with Disabilities Improvement Act of 2004 (IDEA–04) was passed in November 2004. Although final federal regulations for IDEA–04 were not yet released when this text went to press, IDEA–04 appears to continue the trend that began with IDEA–97 toward emphasizing the education and assessment of children with disabilities within the regular curriculum and with regular assessment instruments. IDEA–04 includes an optional, very controversial change to the traditional method of determining Specific Learning Disabilities (SLD), the most common type of disability. This change, known as the response to intervention/instruction (RTI) model, can have substantial impact on the regular classroom teacher (see Chapter 20), if adopted. Because both IDEA–04 and NCLB require annual academic assessment for *all* students with disabilities, and because they are intertwined in complex ways, the implementation of these acts will prove challenging and controversial for years to come.

Given the intensity of the controversy that surrounds NCLB, high-stakes testing, and IDEA–04 it was tempting to take sides and advocate for one position or another in preparing this edition. However, we felt that this would be a disservice to you. Rather than take sides or advocate, our goal was to address NCLB, high-stakes testing, and IDEA–04 complexities and controversies in a thoughtful and balanced way to inform you about the issues, so that you can then decide the merits of these policies yourself.

# THE ORGANIZATION OF THE TEXT

Past users of the text should have no difficulty recognizing and adapting to this revision. The chapter sequence remains the same as in the 7th edition, and the flexible organization of the text continues to enable instructors either to follow the chapter sequence as is or to modify it to meet their particular needs. In response to requests, two new appendices help students prepare for the Praxis II measurement section and provide a more accurate way to determine the median when there are multiple tied scores in the middle of a distribution. The other major changes to the eighth edition are described in more detail next.

Chapter 1 has a number of additions. We continue our emphasis on "tests as tools that can be used or misused," and expand our treatment of the potential effects on test usefulness and validity evidence when the same test is used for different purposes, or with individuals from diverse backgrounds. The increasingly important distinction between testing or assessment and the assessment *process* has also been expanded. New information is included about a variety of contemporary trends, including NCLB, state high-stakes testing programs, and the implications of IDEA–04 for regular education teachers. Chapter 1 also introduces a new initiative cosponsored by the Joint Committee on Testing Practices (JCTP), the National Council on Measurement in Education (NCME), and John Wiley and Sons that provides purchasers of this text with free access to an informative video entitled *The ABCs of School Testing Practices in Education* on the Wiley website.

Chapter 2 begins by clarifying the similarities and differences between NCLB and state high-stakes testing programs. It also provides updated information regarding the

history of high-stakes testing, describes both sides of the controversy surrounding NCLB and high-stakes testing, continues to consider the position taken by national measurement associations regarding the use of high-stakes tests, and provides future teachers with concrete recommendations they can use to prepare themselves and their students for high-stakes tests.

Chapters 3 and 4 are revised to clarify the linkage between classroom objectives and state academic standards, and to clarify the relationships between NCLB requirements and procedures and classroom-based assessment practice. Throughout Chapter 4 and in several later chapters we substituted "validity evidence" for "validity" when appropriate to ensure continuity with language included in the most recent edition of the Standards for Educational and Psychological Tests (AERA, APA, NCME, 1999). Chapters 5 through 11 remain largely the same as in the last edition, with only minor wording changes and additions. In response to reader requests for exercises that will help students prepare for the measurement section of the Praxis, we added a new appendix (Appendix B), entitled "Preparing for the Praxis II: Principles of Learning and Teaching Assessment." The appendix may be most appropriate to assign to students after they have completed Chapters 6 through 9, since it integrates information from those chapters. It introduces the Praxis series and then presents case studies followed by sample short answers and scoring criteria that familiarize students with how short answer items on the Praxis are scored. Finally, a sample of multiple-choice items similar to those included on the Praxis is provided.

To be consistent with the latest version of the *Publication Manual of the American Psychological Association* (APA, 2004) we replace the  $\overline{X}$  symbol for arithmetic mean or average with M in Chapters 12 and 13. Reviewers also requested additional explanation and procedural guidance regarding the determination of the median when there are multiple tied scores in the middle of a score distribution. Part of this is provided in Chapter 12, and a second new appendix (Appendix C) includes additional information and a computational example. Chapter 14 is updated.

Chapter 15 is now entitled "Validity Evidence" to make it consistent with the approach to the establishment of validity evidence described in the latest edition of the *Standards for Educational and Psychological Tests* (AERA, APA, NCME, 1999). This chapter reinforces the importance of considering the potential limiting effects on test usefulness and validity evidence that can emerge when one test is used for multiple purposes or with diverse populations. Chapters 15, 16, and 17 are also updated to help ensure their integration with NCLB.

Chapter 18 includes information regarding the new IDEA–04 option to use a response to intervention/instruction (RTI) model instead of the traditional discrepancy model to determine special education eligibility under the Specific Learning Disability (SLD) category. Integration of various aspects of the chapter with NCLB, high-stakes testing, and other aspects of IDEA–04 is also new. Chapter 19 is updated to include the latest revisions of several standardized tests and now has updated information relevant to cognitive assessment research and theory.

Chapters 20 and 21 are significantly revised and updated to better inform regular education teachers about NCLB, state high-stakes testing programs, and IDEA–04 as they apply to all children, including children with disabilities. NCLB requires that *all* students participate in the annual academic assessments required of regular education students, but

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allows appropriate accommodations and alternate assessments for students with disabilities, if so designated in the student's Individual Educational Plan (IEP). Regardless, the performance of students with disabilities must also be reported annually, with *penalties applied to the whole school if students with disabilities fail to make Adequate Yearly Progress* (AYP) toward state academic proficiency standards. Chapter 20 also provides an update on the legislative requirements of IDEA–04 and provides expanded treatment of the new, very controversial, option that IDEA–04 makes available for Specific Learning Disability (SLD) identification. States and districts can now adopt this model, known as the response to intervention/instruction (RTI) model, as an alternative to the traditional aptitude–achievement discrepancy SLD eligibility model. Finally, Chapter 22 also reflects the impact of NCLB, state high-stakes testing programs, and IDEA–04 on educational testing and measurement.

Throughout the text we reference a variety of contemporary measurement trends, tying these to day-to-day decision making for the classroom teacher. We include updated references, suggested readings, list of supplemental statistics and measurement texts, and we cite recent articles, chapters, and books that reinforce and expand the changing face of educational measurement in today's classroom.

As with earlier editions, readers will find at the conclusion of each chapter a stepby-step summary in which all important concepts in the chapter are identified for review, and a section of practice items and discussion questions. The summaries are updated for most of the chapters, incorporating information relevant to NCLB, state high-stakes testing programs, and IDEA–04. The discussion questions and exercises should help students learn how to apply the concepts presented and, along with the newly revised *Instructor's Manual*, should help instructors identify organized activities and assignments that can be integrated into class presentations. Discussion questions and exercises marked with an asterisk have answers listed in Appendix F.

We have tried to select traditional and contemporary topics and provide examples that help the teacher, especially the beginning teacher, deal with practical, day-to-day issues related to the testing and assessment of students and measuring their behavior, in the context of NCLB, state high-stakes testing programs, and IDEA–04. The topics we have chosen, their natural sequences and linkage to the real-life tasks of teachers, the step-by-step summaries of major concepts, and our discussion questions and exercises all work, we believe, to make this text a valuable tool and an important resource for meeting the accountability requirements of today's educators.

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Tom Kubiszyn Gary Borich

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