In the Essentials of Psychological Assessment series, we have attempted to provide the reader with books that will deliver key practical information in the most efficient and accessible style. Many books in the series feature specific instruments in a variety of domains, such as cognition, personality, education, and neuropsychology. Other books, like Essentials of KABC-II Assessment, focus on crucial topics for professionals who conduct assessments—topics such as specific reading disabilities, evidence-based interventions, or ADHD assessment. For the experienced professional, books in the series offer a concise yet thorough review of a test instrument or a specific area of expertise, including numerous tips for best practices. Students can turn to series books for a clear and concise overview of the important assessment tools, and key topics, in which they must become proficient to practice skillfully, efficiently, and ethically in their chosen fields.

Wherever feasible, visual cues highlighting key points are utilized alongside systematic, step-by-step guidelines. Chapters are focused and succinct. Topics are organized for an easy understanding of the essential material related to a particular test or topic. Theory and research are continually woven into the fabric of each book, but always to enhance the practical application of the material, rather than to sidetrack or overwhelm readers. With this series, we aim to challenge and assist readers interested in psychological assessment to aspire to the highest level of competency by arming them with the tools they need for knowledgeable, informed practice. We have long been advocates of “intelligent” testing—the notion that numbers are meaningless unless they are brought to life by the clinical acumen and expertise of examiners. Assessment must be used to make a difference in the child’s or adult’s life, or why bother to test? All books in the series—whether devoted to specific tests or general topics—are consistent with this credo. We want this series to help our readers, novice and veteran alike, to benefit from the intelligent assessment approaches of the authors of each book.
We are delighted to include *Essentials of the CAS2* in our series. This book offers an innovative approach to understanding intelligence as a set of neurocognitive processes. The authors offer a succinct overview of the CAS2 suite of tests, administration and scoring guidelines, its use with Hispanic/Latino English Language Learners and the development of interventions based on PASS theory. The CAS2 is a valuable tool in the detection of specific learning disabilities, ADHD, TBI, intellectual disability, giftedness, and nondiscriminatory assessment of diverse populations.

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In a 2015 publication entitled, “One Hundred years of intelligence testing: Moving from traditional IQ to second-generation intelligence tests” (Naglieri, 2015), I suggested that it is time for the field of psychology to embrace a revolutionary step in the assessment of intelligence. This book is designed to help professionals understand why a substantially different approach to defining and measuring ability is so desperately needed and how we can achieve this goal. To illustrate the magnitude of the need we remind the reader that all traditional IQ tests with verbal, quantitative, and nonverbal content are based on the US Army and Beta Tests (Yoakum & Yerkes, 1920) which will be 100 years old in 2017! Cosmetic modifications, extraordinary efforts on the part of the publisher to modernize the test, and extensive methods to reinterpret subtests according to contemporary ideas of intelligence, do not change the fact that the “new” Wechsler (now in its fifth edition) is an antique.

Traditional IQ tests which were originally devised to “aid in segregating and eliminating the mentally incompetent, classify men according to their mental ability, and assist in selecting competent men for responsible positions” (Yoakum, 1921, p. 19) are insufficient for the demands of today for several reasons. First, these tests were not built on any theory of intelligence which is critical for test development and puts undue responsibility on the user to determine what the scores mean. Second, the use of verbal and quantitative tests as measures of ability is hard to justify because the test questions are often virtually indistinguishable from questions on tests of achievement. Third, the fact that these IQ tests demand knowledge of English creates considerable problems for the assessment of those with limited familiarity with English. Fourth, traditional IQ tests also are ineffective for non-discriminatory assessment and yield inaccurately large racial and ethnic differences. Fifth, these tests have failed to yield profiles for students with specific kinds of learning problems. Finally, IQ test scores continue to have no relevance to instruction. (The evidence for all these limitations is provided in
Chapter 1) For years, critics of IQ tests have noted these limitations and argued that measures of intelligence should not be used at all.

Rather than eliminating tests of intelligence in this book we advocate for a revolutionary step in how to conceptualize and measure human cognitive functioning. We will describe an approach that works because it departs considerably from traditional IQ, and rather than rely on a 100-year-old concepts, we take a brain-based approach to defining and measuring essential neurocognitive abilities.

Our neurocognitive approach begins with a theory called PASS, which stands for the following basic psychological processes: Planning, Attention, Simultaneous, and Successive (Chapters 1 & 2). These constructs were described by A. R. Luria and have been widely studied, especially within the field of neuropsychology. Instead of building upon the US Army Mental Tests, our conceptualization of intelligence is based on Luria’s understanding of actual brain function. In this book, we will clearly define this four-dimensional theory and how it has been operationalized in the CAS2. We will also address the administration and scoring of the test, a theory based interpretation method, how to use the PASS scores for assessment of individuals with various kinds of learning problems, and finally how to build or select interventions based on a student’s PASS profile (Chapter 7).

Having a theory of human cognitive processes provides a tremendous advantage over traditional IQ. First, starting with a well-grounded theory provides a clear vision of what needs to be measured. In our case, this means the four PASS constructs, which are easy to describe. Importantly, the definitions guided the development of subtests included in the first and second editions of the Cognitive Assessment System (see Chapters 5 & 6). This means that practitioners do not have the responsibility of figuring out what the test scores mean nor do they have to choose from a list of possible abilities measured by every subtest. The responsibility of the test author is to describe and validate what the test scores measure, not the practitioner. Most importantly, the PASS theory as operationalized by the CAS and CAS2 is well supported by empirical research. In this book, we will show how PASS scores (a) are more predictive of achievement test scores than any other ability test; (b) show distinctive profiles for different children with different disabilities; (c) can be used for SLD eligibility determination consistent with Federal Law; (d) offer the most equitable way to measure diverse populations; and (e) can be readily used for instructional planning and interventions. Thus, we start with a theory (PASS) which is operationalized by a test (CAS2) and has been well validated for the most important tasks that tests of ability should have—understanding the basic neurocognitive processes underlying learning and academic difficulties and providing solutions to maximize learning.
Our overarching goal for this book is to help practitioners better assess the neurocognitive abilities of the students they intend to help. For us, this means using the PASS theory as measured by the CAS2 (as part of a comprehensive assessment process). This also means that this book is a call for the field of cognitive assessment to embrace a revolution in the way we define and measure ability. This requires that practitioners embrace a new way of describing human cognitive functioning that is conceptualized as neurocognitive functions so that we can be instrumental in helping children achieve their greatest potential.

Change is not always easy, and in fact, it requires looking at what we have known and done with a fresh perspective. PASS is an innovative way of thinking about ability, and the CAS2 is a new way to measure neurocognitive abilities. This book provides the scientific evidence to support this approach. We suggest that practitioners manage this necessary transition with the assurance that an evolutionary step in our field is most definitely needed given all we have learned in the past 100 years. As one of our founding fathers, Thomas Jefferson, noted: “I am not an advocate for frequent changes in laws. But laws must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths discovered and opinions change, institutions must advance also to keep pace with the times.” Only though revolutionary change can we improve the evaluation of human cognitive function and better serve children and adolescents with learning needs.

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