

# Essentials

## of KABC-II Assessment

Alan S. Kaufman

Elizabeth O. Lichtenberger

Elaine Fletcher-Janzen

Nadeen L. Kaufman



John Wiley & Sons, Inc.



# Essentials

of **PSYCHOLOGICAL ASSESSMENT** Series  
**Everything you need to know to administer, score,  
and interpret the major psychological tests.**

---

**I'd like to order the following**

**ESSENTIALS OF PSYCHOLOGICAL ASSESSMENT:**

- WAIS®-III Assessment / 0471-28295-2
- WISC-III® and WPPSI-R® Assessment / 0471-34501-6
- WJ III® Cognitive Abilities Assessment / 0471-34466-4
- Cross-Battery Assessment / 0471-38264-7
- Cognitive Assessment with KAIT & Other Kaufman Measures / 0471-38317-1
- Nonverbal Assessment / 0471-38318-X
- PAI® Assessment / 0471-08463-8
- CAS Assessment / 0471-29015-7
- MMPI-2™ Assessment / 0471-34533-4
- Myers-Briggs Type Indicator® Assessment / 0471-33239-9
- Rorschach® Assessment / 0471-33146-5
- Millon™ Inventories Assessment, Second Edition / 0471-21891-X
- TAT and Other Storytelling Techniques / 0471-39469-6
- MMPI-A™ Assessment / 0471-39815-2
- NEPSY® Assessment / 0471-32690-9
- Neuropsychological Assessment / 0471-40522-1
- WJ III® Tests of Achievement Assessment / 0471-33059-0
- Individual Achievement Assessment / 0471-32432-9
- WMS®-III Assessment / 0471-38080-6
- Behavioral Assessment / 0471-35367-1
- Forensic Assessment / 0471-33186-4
- Bayley Scales of Infant Development—II Assessment / 0471-32651-8
- Career Interest Assessment / 0471-35365-5
- WPPSI™-III Assessment / 0471-28895-0
- 16PF® Assessment / 0471-23424-9
- Assessment Report Writing / 0471-39487-4
- Stanford-Binet Intelligence Scales (SB5) Assessment / 0471-22404-9
- WISC®-IV Assessment / 0471-47691-9



**All titles are  
\$34.95\* each**

**Please complete the order form on the back**

---

**TO ORDER BY PHONE, CALL TOLL FREE 1-877-762-2974**

**To order online: [www.wiley.com/essentials](http://www.wiley.com/essentials)**

To order by mail refer to order form on next page



# Essentials

of **PSYCHOLOGICAL ASSESSMENT** Series

## Order Form

Please send this order form with your payment (credit card or check) to:

**John Wiley & Sons, Inc.**  
**Attn: J. Knott**  
**111 River Street**  
**Hoboken, NJ 07030-5774**

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Please add me to your e-mailing list

Quantity of Book(s) ordered \_\_\_\_\_ x \$34.95\* each

Shipping charges:	Surface	2-Day	1-Day	
First Item	\$5.00	\$10.50	\$17.50	
Each additional item	\$3.00	\$3.00	\$4.00	<b>Total \$</b> _____

For orders greater than 15 items, please contact Customer Care at 1-877-762-2974.

Payment Method:  Check  Credit Card (*All orders subject to credit approval*)  
 MasterCard  Visa  American Express

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

\* Prices subject to change.

**TO ORDER BY PHONE, CALL TOLL FREE 1-877-762-2974**

**To order online: [www.wiley.com/essentials](http://www.wiley.com/essentials)**



# **Essentials of KABC-II Assessment**

# Essentials of Psychological Assessment Series

Series Editors, Alan S. Kaufman and Nadeen L. Kaufman

*Essentials of WAIS®-III Assessment*

by Alan S. Kaufman and Elizabeth O. Lichtenberger

*Essentials of CAS Assessment*

by Jack A. Naglieri

*Essentials of Forensic Psychological Assessment*

by Marc J. Ackerman

*Essentials of Bayley Scales of Infant Development—II Assessment*

by Maureen M. Black and Kathleen Matula

*Essentials of Myers-Briggs Type Indicator® Assessment*

by Naomi Quenk

*Essentials of WISC-III® and WPPSI-R® Assessment*

by Alan S. Kaufman and Elizabeth O. Lichtenberger

*Essentials of Rorschach® Assessment*

by Tara Rose, Nancy Kaser-Boyd, and Michael P. Maloney

*Essentials of Career Interest Assessment*

by Jeffrey P. Prince and Lisa J. Heiser

*Essentials of Cross-Battery Assessment*

by Dawn P. Flanagan and Samuel O. Ortiz

*Essentials of Cognitive Assessment with KAIT and Other Kaufman Measures*

by Elizabeth O. Lichtenberger, Debra Broadbooks, and Alan S. Kaufman

*Essentials of Nonverbal Assessment*

by Steve McCallum, Bruce Bracken, and John Wasserman

*Essentials of MMPI-2™ Assessment*

by David S. Nichols

*Essentials of NEPSY® Assessment*

by Sally L. Kemp, Ursula Kirk, and Marit Korkman

*Essentials of Individual Achievement Assessment*

by Douglas K. Smith

*Essentials of TAT and Other Storytelling Techniques Assessment*

by Hedwig Teglassi

*Essentials of WJ III® Tests of Achievement Assessment*

by Nancy Mather, Barbara J. Wendling, and Richard W. Woodcock

*Essentials of WJ III® Cognitive Abilities Assessment*

by Fredrick A. Schrank, Dawn P. Flanagan, Richard W. Woodcock, and Jennifer T. Mascolo

*Essentials of WMS®-III Assessment*

by Elizabeth O. Lichtenberger, Alan S. Kaufman, and Zona C. Lai

*Essentials of MMPI-A™ Assessment*

by Robert P. Archer and Radhika Krishnamurthy

*Essentials of Neuropsychological Assessment*

by Nancy Hebben and William Milberg

*Essentials of Behavioral Assessment*

by Michael C. Ramsay, Cecil R. Reynolds, and R. W. Kamphaus

*Essentials of Millon Inventories Assessment, Second Edition*

by Stephen N. Strack

*Essentials of PAI® Assessment*

by Leslie C. Morey

*Essentials of 16 PF® Assessment*

by Heather E. P. Cattell and James M. Schuerger

*Essentials of WPPSI™-III Assessment*

by Elizabeth O. Lichtenberger and Alan S. Kaufman

*Essentials of Assessment Report Writing*

by Elizabeth O. Lichtenberger, Nancy Mather, Nadeen L. Kaufman, and Alan S. Kaufman

*Essentials of Stanford-Binet Intelligence Scales (SB5) Assessment*

by Gale H. Roid and R. Andrew Barram

*Essentials of WISC-IV® Assessment*

by Dawn P. Flanagan and Alan S. Kaufman

*Essentials of KABC-II Assessment*

by Alan S. Kaufman, Elizabeth O. Lichtenberger, Elaine Fletcher-Janzen, and Nadeen L. Kaufman

# Essentials

## of KABC-II Assessment

Alan S. Kaufman

Elizabeth O. Lichtenberger

Elaine Fletcher-Janzen

Nadeen L. Kaufman



John Wiley & Sons, Inc.

Copyright © 2005 by John Wiley & Sons, Inc. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.  
Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008.

**Limit of Liability/Disclaimer of Warranty:** While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering professional services. If legal, accounting, medical, psychological or any other expert assistance is required, the services of a competent professional person should be sought.

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where John Wiley & Sons, Inc. is aware of a claim, the product names appear in initial capital or all capital letters. Readers, however, should contact the appropriate companies for more complete information regarding trademarks and registration.

For general information on our other products and services please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our website at [www.wiley.com](http://www.wiley.com).

Library of Congress Cataloging-in-Publication Data:

Essentials of KABC-II assessment / Alan S. Kaufman . . . [et al].

p. cm. — (Essentials of psychological assessment series)

Includes bibliographical references (p.) and index.

ISBN 0-471-66733-1 (paper)

1. Kaufman Assessment Battery for Children. I. Kaufman, Alan S., 1944— II. Series.

BF432.5.K38E87 2005

155.4'1393—dc22

2004054210

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1



To  
Mark H. Daniel, Ph.D.  
executive director of assessment development  
AGS Publishing

and

Cheryl K. Johnson  
product manager  
AGS Publishing

*Two exceptional professionals who have devoted themselves—night and day,  
for more than five years—to the KABC-II, KTEA-II, and KBIT-2.*

*What began as a wonderful partnership has blossomed into a true friendship.  
We share with Mark and Cheryl a smooth and open exchange of ideas,  
communication with both trust and tact, and feelings of warmth, respect,  
and genuine affection. With that kind of relationship,  
mutual work projects thrive and succeed.*

*To Mark and Cheryl,  
with deepest gratitude.  
—Alan and Nadeen*

*To my parents, Lloyd and Dotty Olund.  
With your support I have been able to realize all my dreams.  
Thank you for your continual shows of love and encouragement.*

*With love,  
—Elizabeth*

*To David, Emma, and Leif for their support and love.*

*—Elaine*



# CONTENTS

	Series Preface	xi
<b>One</b>	Overview	1
<b>Two</b>	How to Administer and Score the KABC-II	33
<b>Three</b>	How to Interpret the KABC-II: Step by Step	79
<b>Four</b>	How to Interpret the KABC-II: Qualitative Indicators	138
<b>Five</b>	Strengths and Weaknesses of the KABC-II	168
<b>Six</b>	Clinical Applications of the KABC-II	176
<b>Seven</b>	Illustrative Case Reports	282
<b>Appendix A</b>	KABC-II Interpretive Worksheet	345
<b>Appendix B</b>	Standard Scores Corresponding to Sums of Subtest Scaled Scores for Planned Comparison Clusters: Delayed Recall, Verbal Ability, Meaningful Stimuli, and Abstract Stimuli	358
<b>Appendix C</b>	Standard Scores Corresponding to Sums of Subtest Scaled Scores for Planned Comparison Clusters: Problem-Solving and Memory and Learning	360

<b>Appendix D</b>	Standard Scores Corresponding to Sums of Subtest Scaled Scores for Planned Comparison Clusters: Verbal Response, Pointing Response, Little Motor, and Gross Motor	364
<b>Appendix E</b>	SES Norms: Converting the KABC-II Global Score of Children Ages 3–6 Years to a Percentile Rank Based on Their Socioeconomic Status	367
<b>Appendix F</b>	SES Norms: Converting the KABC-II Global Score of Children Ages 7–18 Years to a Percentile Rank Based on Their Socioeconomic Status	368
	References	369
	Annotated Bibliography	387
	Index	389
	About the Authors	399

## SERIES PREFACE

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. The series features instruments in a variety of domains, such as cognition, personality, education, and neuropsychology. For the experienced clinician, books in the series will offer a concise yet thorough way to master utilization of the continuously evolving supply of new and revised instruments, as well as a convenient method for keeping up to date on the tried-and-true measures. The novice will find here a prioritized assembly of all the information and techniques that must be at one's fingertips to begin the complicated process of individual psychological diagnosis.

Wherever feasible, visual shortcuts to highlight key points are utilized alongside systematic, step-by-step guidelines. Chapters are focused and succinct. Topics are targeted for an easy understanding of the essentials of administration, scoring, interpretation, and clinical application. Theory and research are continually woven into the fabric of each book but always to enhance clinical inference, never to sidetrack or overwhelm. We have long been advocates of what has been called intelligent testing—the notion that a profile of test scores is meaningless unless it is brought to life by the clinical observations and astute detective work of knowledgeable examiners. Test profiles must be used to make a difference in the child's or adult's life, or why bother to test? We want this series to help our readers become the best intelligent testers they can be.

In *Essentials of KABC-II Assessment*, the authors have attempted to provide readers with succinct, straightforward, theory-based methods for competent clinical interpretation and application of the second edition of the test that we developed in 1983. Unlike the original K-ABC (for ages 2.5–12.5), the KABC-II is normed for children and adolescents between 3 and 18 years. This book helps ease the transition of examiners who have been longtime K-ABC users and provides a

solid foundation for new examiners who are first discovering the Kaufman approach to cognitive assessment. The KABC-II reflects the blend of its 20-year history with the latest neuropsychological and psychoeducational theories. The second edition of the K-ABC offers innovative new subtests and allows examiners to choose the theoretical model that best meets the child's individual needs. This book thoroughly integrates theory, research, clinical history, and clinical inference with sets of guidelines that enable the examiner to give, and then systematically interpret and apply, this thoroughly revised and restandardized instrument.

*Alan S. Kaufman, PhD, and Nadeen L. Kaufman, EdD, Series Editors*  
Yale University School of Medicine

# **Essentials of KABC-II Assessment**





# One

## OVERVIEW

**A**t the time of its development, the original Kaufman Assessment Battery for Children (K-ABC; Kaufman & Kaufman, 1983a, 1983b) was innovative as a theory-based, empirically grounded clinical instrument. However, since the K-ABC's inception, many other tests have entered the field to provide clinicians with a plethora of tests that are theory based and empirically sound (e.g., Woodcock-Johnson III [WJ] III; Woodcock, McGrew, and Mather 2001]; Cognitive Assessment System [CAS; Naglieri & Das, 1997]). The Kaufman Assessment Battery for Children—Second Edition (KABC-II; Kaufman & Kaufman, 2004a) takes assessment to a new level by basing the test on a dual theoretical model and allowing clinicians to select the model for each child that is best suited to that particular child's background and reasons for referral. The KABC-II also focuses more on specific, rather than global, constructs that provide useful insights into children's learning abilities and problem-solving strategies. The KABC-II represents a substantial revision of the K-ABC, with only 8 of the original 16 K-ABC subtests retained for the KABC-II, and with 10 new subtests joining the revised battery.

This book was developed for those who test children within the 3- to 18-year-old age range and wish to learn the essentials of the KABC-II in a direct, non-nonsense, systematic manner. The main topics covered here are administration, scoring, interpretation, and clinical use of the instrument. Important points are highlighted throughout the book in "Rapid Reference" boxes, "Caution" boxes, and "Don't Forget" boxes. Each chapter contains questions that are intended to help you consolidate what you have read. After reading this book, you will have at your fingertips in-depth information to help you become a competent KABC-II examiner and clinician.

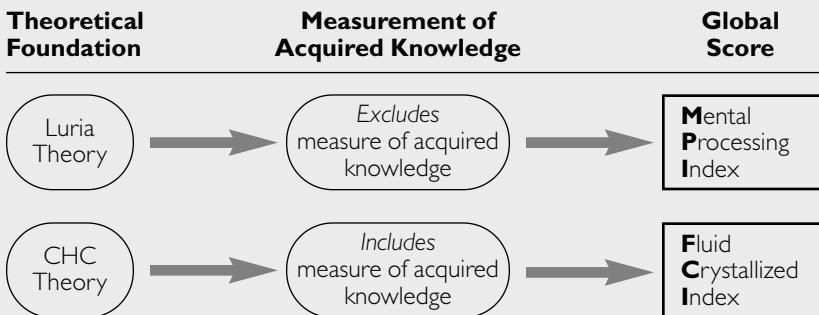
This chapter reviews the history of the K-ABC, the development of the KABC-II and the theoretical foundations of the test, and provides a thorough description of the test, its reliability, and its validity. In addition, we highlight changes from the K-ABC to the KABC-II as well as noting general uses for the test. However, be-

fore delving into these details of the KABC-II, we feel it is important to emphasize some important facts about the test. The KABC-II is founded in two theoretical models: Luria's (1966, 1970, 1973) neuropsychological model, featuring three blocks, and the Cattell-Horn-Carroll (CHC) approach to categorizing specific cognitive abilities (Carroll, 1997; Flanagan, McGrew, & Ortiz, 2000). The KABC-II yields a separate global score for each of these two theoretical models: The global score measuring general mental processing ability from the Luria perspective is the Mental Processing Index (MPI), and global score measuring general cognitive ability from the CHC perspective is the Fluid-Crystallized Index (FCI). The key difference between these two global scores is that the MPI (Luria's theory) *excludes* measures of acquired knowledge, whereas the FCI (CHC theory) *includes* measures of acquired knowledge. Only one of these two global scores is computed for any examinee. Prior to testing a client, examiners choose the interpretive system (i.e., Luria or CHC) that best fits with both their personal orientation and the reason for referral. Deciding which interpretive system to use will dictate which global score is reported and also whether measures of acquired knowledge are included from the core battery (see Rapid Reference 1.1).

The authors of the KABC-II clearly state in the manual (Kaufman & Kaufman, 2004a, p. 4–5) that “the CHC model should generally be the model of choice, except in cases where the examiner believes that including measures of acquired knowledge/crystallized ability would compromise the validity of the Fluid-Crystallized Index.” In those cases, the Luria global score (MPI) is preferred. The first Don't Forget box reviews when it is advisable to administer the FCI and MPI.

### *Rapid Reference 1.1*

#### Select One of Two Theoretical Models Prior to KABC-II Administration



## DON'T FORGET

### When to Administer the FCI or MPI

#### CHC Model is Preferred (FCI)

- In the majority of cases.
- If a child has (or is suspected of having) a disability in reading, written expression, or mathematics.
- If a child has mental retardation.
- If a child has Attention-Deficit/Hyperactivity Disorder.
- If a child has an emotional or behavioral disturbance.
- If a child may be gifted.

#### Luria Model is Preferred (MPI)

- If a child is from a bilingual background.
- If a child's nonmainstream cultural background may have affected his or her knowledge acquisition and verbal development.
- If a child has known or suspected language disorders (expressive, receptive, or mixed).
- If a child has known or suspected autism.
- If a child is deaf or hard of hearing.
- If the examiner has a firm commitment to the Luria processing approach and believes that acquired knowledge should be excluded from any cognitive score.

*Note.* Examiners must select either the Luria or CHC model before testing the child or adolescent. The global score that the examiner decides to interpret should be based on referral and background factors. Both Luria and CHC theories are equally important as foundations of the KABC-II. Neither is deemed theoretically superior to the other.

## HISTORY AND DEVELOPMENT

The K-ABC was developed in the late 1970s and early 1980s and was published in 1983, during a time when IQ was largely a Wechsler-Binet monopoly; anti-IQ sentiments were rampant, with racial inequities at the forefront of most discussions; and the gap between theories of intelligence and measures of intelligence was a chasm. The Binet tradition was empirical and practical in contrast to the clinical tradition spawned by Wechsler the man and Wechsler the test developer. Neither orientation paid more than lip service to the burst of theories in cognitive psychology, neuropsychology, intelligence, and learning. Even the original Woodcock-Johnson Psycho-Educational Battery (WJ; Woodcock & Johnson, 1977), whose subsequent revisions became the quintessential application of in-

telligence theory to practice, was developed from a decidedly practical, nontheoretical foundation. And when old tests were revised (Wechsler, 1974, 1981) or new tests were developed (McCarthy, 1972), there were precious few novel tasks to supplement the traditional tasks developed during the early 1900s. The 1978 WJ was indeed replete with novel subtests, but for years the cognitive portion of this instrument was primarily a test used by special educators, not psychologists.

Although more than a half-century's worth of brain-related and thinking-related theories were obviously related to the measurement of intelligence, they did not invade the domain of IQ assessment until the 1980s with the advent of the K-ABC in 1983. The K-ABC broke from tradition, as it was rooted in neuropsychological theory—Sperry's (1968) cerebral specialization approach and the Luria-Das successive-simultaneous processing dichotomy. Both the Sperry and the Luria-Das models are characterized by a dual-processing approach that has been well supported by a large body of cognitive and neuropsychological research (Das et al., 1979; Neisser, 1967).

Shortly after the publication of the K-ABC, other tests were developed with theoretical underpinnings, such as the Stanford-Binet IV (Thorndike, Hagen, & Sattler, 1986) and the Woodcock-Johnson—Revised (WJ-R; Woodcock & Johnson, 1989). In the 1990s and early 2000s, further clinical tests with strong empirically grounded theoretical foundations were developed: the Kaufman Adolescent and Adult Intelligence Test (KAIT; Kaufman & Kaufman, 1993), the WJ III, and the CAS.

In addition to the K-ABC's theoretical underpinnings, its fairness in assessing children from diverse minority groups made it stand out above other tests, such as those developed from the Binet-Wechsler tradition. The size of group differences on tests of cognitive ability between white children and minority children is thought to reflect, in part, the cultural fairness of a test. Tests such as the Wechsler scales have typically yielded differences of about 15–16 points in favor of white children versus African-American children, but the K-ABC cut those differences in half (Kaufman & Kaufman, 1983b). Numerous research studies have shown that Latino or Latina children and Native American children also tended to score higher on the K-ABC than on conventional measures, resulting in reduced differences between white and minority children (e.g., Campbell, Bell, & Keith, 2001; Davidson, 1992; Fourqurean, 1987; Valencia, Rankin, & Livingston, 1995; Vincent, 1991; Whitworth & Chrisman, 1987).

The innovative features of the K-ABC did not shelter it from controversy, with many psychologists and educators expressing strong positive and negative comments about the test. Voicing the diverse and varied responses among professionals was a special issue of the *Journal of Special Education* that was devoted to the

K-ABC (Miller & Reynolds, 1984). Kamphaus (1993, 2003) has reviewed and summarized the various perspectives on the K-ABC. The K-ABC's psychometric qualities were recognized as a clear strength, as well as its use of teaching items and the implementation of several novel subtests (Kamphaus, 2003). In contrast, the limited floor and insufficient ceiling on some subtests were noted as negative aspects of the K-ABC. Additionally, some professionals questioned whether the K-ABC's scales measured their intended mental processes (sequential and simultaneous) as opposed to measuring other abilities, such as semantic memory and nonverbal reasoning (Keith & Dunbar, 1984).

In revising the K-ABC and developing the KABC-II, the Kaufmans consid-

## DON'T FORGET

### Inspiration for KABC-II Subtests

Subtest	Inspiration
Atlantis	Memory for Names of WJ-R (Woodcock & Johnson, 1989)
Atlantis—Delayed	Talland (1965)
Block Counting	Cube Analysis (Yoakum & Yerkes, 1920)
Conceptual Thinking	Columbia Mental Maturity Scale (Gurgemeister, Blum, & Lorge, 1954, 1972)
Expressive Vocabulary	Stanford-Binet Picture Vocabulary task (Terman, 1916)
Face Recognition	Kagan and Klein (1973)
Gestalt Closure	Gestalt Completion Test (Street, 1931)
Hand Movements	Luria (1966)
Number Recall	Binet and Simon (1905)
Pattern Reasoning	X-O Test (Yoakum & Yerkes, 1920)
Rebus Learning	Visual-Auditory Learning of <i>Woodcock Reading Mastery Tests</i> (Woodcock, 1973)
Rebus Learning—Delayed	Talland (1965)
Riddles	Conceptual Inference (Kagan & Klein, 1973)
Rover	Tower of Hanoi (Cook, 1937)
Story Completion	DeCroly (1914)
Triangles	Kohs (1927)
Verbal Knowledge	Stanford-Binet Pictorial Identification task (Terman, 1916)
Word Order	McCarthy (1972) and Das, Kirby, & Jarman (1979)

ered several factors: the perspectives of psychologists and educators on the original K-ABC, the enormous amount of research on the test, and the current needs of clinicians as dictated by political, social, economic, and educational concerns. The second chapter of the KABC-II Manual (Kaufman & Kaufman, 2004a) details the goals for the test's revision. As we review in Rapid Reference 1.2, the goals for the KABC's revision included strengthening the theoretical foundations, increasing the number of constructs measured, enhancing the test's clinical utility, developing a test that fairly assesses children from minority groups, and enhancing fair assessment of preschoolers. In Rapid Reference 1.2 we also describe how each of these goals was achieved. Each of the subtests that was retained from the K-ABC, or newly developed for the KABC-II, was included to help meet the goals of the second edition (the Don't Forget box lists the inspiration for each KABC-II subtest).

## **THEORETICAL FOUNDATIONS OF THE KABC-II**

The following sections describe the theoretical traditions that contributed to the development of the KABC-II.

### **Luria's Neuropsychological Theory**

Luria (1970) believed that three main blocks or functional systems represented the brain's basic functions. These three blocks are responsible for arousal and attention (block 1); the use of one's senses to analyze, code, and store information (block 2); and the application of executive functions for formulating plans and programming behavior (block 3). Rapid Reference 1.3 explains how these blocks map to particular areas of the brain. Empirical research strongly supports Luria's clinical documentation of the three functional units (see, for example, Das, Naglieri, & Kirby, 1994; Naglieri, 1999; Naglieri & Das, 1997).

In his theory, Luria emphasized that the integration and interdependence of these blocks into functional systems is necessary in order to be capable of complex behavior; this integration is a key feature of Luria's approach to brain functioning (Naglieri, 1999; Reitan, 1988). The joint operation of several brain systems is crucial for children to learn new material efficiently. The Kaufmans focused on the integrative aspects of Luria's theory, rather than on each block's specific functions, in the construction of the KABC-II.

Indeed, the KABC-II was designed primarily to measure high-level, complex, intelligent behavior. Conceptually, the integration of Luria's blocks captures that complexity. Luria's theory emphasizes the integration of the incoming stimuli

## *Rapid Reference 1.2*

### Revision Goals of the KABC-II

1.  
Strengthen  
theoretical  
foundations

- Recognized that multiple theories were needed to explain the concepts measured by KABC-II scales
- Retained original Luria-based interpretations of scales
- Added CHC-based interpretation of scales
- Linked neuropsychological and psychometric theories with the dual theoretical foundation
- Developed subtests that measure more than one aspect of children's ability, allowing alternative theoretical interpretations of scales

2.  
Increase  
number of  
constructs  
measured

- Considered the forthcoming changes in IDEA guidelines
- Recognized that several specific abilities, rather than global abilities, are needed to help identify process disorders and to target interventions
- Enhanced measures of learning and planning in addition to sequential and simultaneous processing

3.  
Enhance  
clinical  
utility

- Extended age range to 3 years through 18 years
- Strengthened floors for young children and ceilings for older children
- Kept achievement (Gc) as a distinct construct, apart from general cognitive ability, and allowed clinicians to decide when to administer the Knowledge/Gc subtests to clients.
- Added qualitative indicators (QIs) for each subtest that allow examiners to record pertinent clinical observations during the evaluation
- Is suitable for inclusion in a neuropsychological assessment battery

4.  
Fairly assess  
children from  
minority  
groups

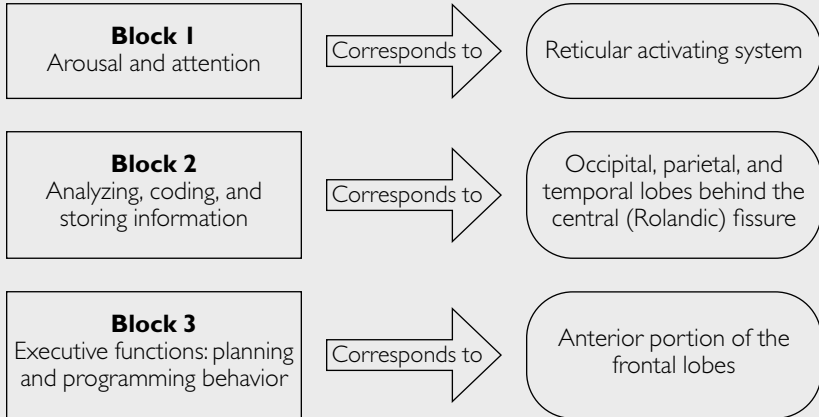
- Allowed examiners to exclude measures of verbal ability and factual knowledge when appropriate
- Retained teaching items to ensure that a child's performance is not due to lack of understanding the test's directions
- Simplified instructions
- Offered a nonverbal scale

5.  
Enhance fair  
assessment of  
preschoolers

- Retained teaching items
- Simplified administration and scoring procedures
- Limited verbalizations required for preschool children
- Constructed child-oriented, gamelike test stimuli
- Developed adequate floors for low-functioning preschoolers

## *Rapid Reference 1.3*

### How Luria's Blocks Map to Brain Structures



and the responsibility of block 2 to make connections with block 3. Thus, the KABC-II includes subtests that require synthesis of auditory and visual stimuli (e.g., Word Order, Atlantis, Rebus Learning, and Rover). To capture the linkage between blocks 2 and 3, the KABC-II includes measures of simultaneous processing that not only require the analysis, coding, and storage of incoming stimuli but also demand executive functioning and problem solving for success (e.g., Rover, Conceptual Thinking).

### **Cattell-Horn-Carroll (CHC) Theory**

Whereas Luria's theory was driven by his own clinical and neuropsychological research and his respect for the work of others, the CHC model is a psychometric theory that rests on a large body of research. Thus, CHC theory represents a data-driven theory, in contrast to the distinctly clinical origins of Luria's model (although Luria's theory has also been empirically validated).

As explained by Kaufman and Kaufman (2004a), two theories were merged into a single model in the late 1990s to create CHC theory: (1) Raymond Cattell's (1941) original two-pronged *Gf-Gc* theory, which was expanded and refined by John Horn (1965, 1989) to include an array of abilities (not just *Gf* and *Gc*); and (2) John Carroll's (1943, 1993) half-century of rigorous pursuit to satisfy "the



field's need for a thoroughgoing survey and critique of the voluminous results in the factor-analytic literature on cognitive abilities" (Carroll, 1993, p. vii).

Both the Cattell-Horn and Carroll models essentially started from Spearman's (1904) *g*-factor theory, and ended up with consistent conclusions about the spectrum of broad cognitive abilities. Horn and Carroll ultimately merged their separate but overlapping models into a unified theory called Cattell-Horn-Carroll (CHC) theory. The details of CHC theory have been articulated by Dawn Flanagan, Kevin McGrew, and Samuel Ortiz (2000; Flanagan & Ortiz, 2001; McGrew, Woodcock, & Ford, 2002).

Cattell's (1963) system revolved around the concept of general intelligence (*g*), as he posited two types of *g* abilities, not just one: Fluid intelligence (*Gf*), the ability to solve novel problems by using reasoning, which Cattell considered to be largely a function of biological and neurological factors and to be vulnerable to the effects of aging; and crystallized intelligence (*Gc*), a knowledge-based ability believed to be highly dependent on education and acculturation and resistant to the impact of aging.

Horn collaborated with Cattell on a series of studies to enrich and validate the two aspects of *g* (Cattell & Horn, 1978; Horn & Cattell, 1966, 1967). However, Horn believed that the psychometric data, as well as neurocognitive and developmental data, were suggesting more than just these two general abilities. Early in his collaboration with Cattell, Horn (1965, 1968) identified four additional abilities—Short-Term Acquisition and Retrieval (*Gsm*), Long-Term Storage and Retrieval (*Glr*), Visual Processing (*Gv*), and Speed of Processing (*Gr*). Horn subsequently refined the definition and measurement of these factors and added additional factors, so that by the late 1980s to mid-1990s his model included 9 to 10 Broad Abilities (Horn, 1989; Horn & Hofer, 1992; Horn & Noll, 1997). Although the theory continued to be called *Gf-Gc* theory, the multiple Broad Abilities were treated as equals, not as part of any hierarchy.

Based on his in-depth survey of factor-analytic studies, Carroll (1993, 1997) developed a hierarchical theory composed of three levels or strata of abilities, which are detailed in Rapid Reference 1.4. Horn's *Gf-Gc* theory always focused on the Broad Abilities, and he discussed the more specific or narrow abilities as well, but the *g* construct had no place in his *Gf-Gc* theory. Otherwise, the Carroll and Cattell-Horn theories were similar enough to warrant their merger into the new CHC theory. Differences between the theories have been spelled out elsewhere (Flanagan et al., 2000; Flanagan & Ortiz, 2001; McGrew et al., 2002).

When CHC theory is applied to the KABC-II, the *g* level is not intended as a theoretical construct but as a practical one to provide a summary score. There are five CHC Stratum II abilities (corresponding to five KABC-II scales) that are

## *Rapid Reference 1.4*

### Carroll's Three-Stratum Hierarchy

Level of Hierarchy	Number of Abilities	Description
Stratum III (general)	1	A Spearman-like $g$ , which Carroll (1993, 1997) considered to be a valid construct based on overwhelming evidence from factor analysis
Stratum II (broad)	8	Correspond reasonably closely to Horn's (1989) Broad Abilities and "show rough correspondences to Gardner's [1993] seven 'intelligences'" (Carroll, 1997, p. 127)
Stratum I (narrow)	70	Organized by the Broad Ability with which each is most closely associated, many of which indicate the person's "level of mastery, along a difficulty scale," "speed with which the individual performs tasks," or "rate of learning in learning and memory tasks" (Carroll, 1997, p. 124)

measured by the KABC-II ( $Glr$ ,  $Gsm$ ,  $Gv$ ,  $Gf$ , and  $Gc$ ). An additional sixth Broad Ability, Quantitative Knowledge ( $Gq$ ), is also tapped by the KABC-II because the Narrow Ability of Mathematical Achievement is measured by two subtests as a secondary ability (Rover and Block Counting both require the child to count). Four Broad Abilities and their respective Narrow Abilities are excluded from the KABC-II: Reading and Writing ( $Grw$ ), Auditory Processing ( $Ga$ ), Processing Speed ( $Gs$ ), and Decision/Reaction Time/Speed ( $Gt$ ).

Separate measures of  $Gq$  or  $Grw$  were not included on the KABC-II because the authors view reading, writing, and mathematics as more appropriate for tests of academic achievement than for tests of cognitive ability (these abilities are measured by both the Brief and Comprehensive Forms of the Kaufman Test of Educational Achievement—Second Edition (KTEA-II; Kaufman & Kaufman, 2004b). Auditory Processing ( $Ga$ ), Processing Speed ( $Gs$ ), and Decision/Reaction Time/Speed ( $Gt$ ) were also not included on the KABC-II because they lacked the requisite complexity for inclusion in the Kaufmans' test battery. When the KABC-II is administered alongside the KTEA-II Comprehensive Form, then the number of Broad Abilities measured by the combined set of subtests increases from five to eight, and the number of CHC Narrow Abilities measured more than doubles (see the section in Chapter 6 on integrating the KABC-II and KTEA-II).

## PURPOSES AND USES OF THE KABC-II

The KABC-II can be used to assess preschool-age and school-age children, as well as adolescents. The types of assessments that it may be used for include psychological, clinical, psychoeducational, and neuropsychological evaluations. The results from such evaluations may be used in making clinical and educational diagnoses, in educational and treatment planning, and in making placement decisions. Like the original K-ABC, the KABC-II is quite useful for the assessment of African American, Hispanic, Native American, and Asian-American children and adolescents within a wide variety of settings.

The number of children in prekindergarten through 12th grade who were served under the Individuals with Disabilities Education Act and Chapter 1 of the Education and Consolidation and Improvement Act in 2000–2001 numbered nearly 6.3 million (U.S. Department of Education, 2002). That number indicates that approximately 13% of students enrolled in public education problems are considered disabled and receive some type of special programming. Thus, a very large number of children need assessments to create effective educational and psychological interventions.

When the KABC-II is administered as part of a larger battery of tests, it is optimally useful. To identify mental retardation, for example, the KABC-II can be used in conjunction with measures of adaptive behavior. When it is combined with informal measures of creativity and talent, it can identify intellectual giftedness. To better understand brain-behavior relationships in individuals with brain dysfunction or damage, the KABC-II can be administered along with measures of specific neuropsychological functioning. To evaluate students with known or suspected learning disabilities, administer the test with measures of achievement.

For children across the spectrum of cognitive ability, the KABC-II helps identify an individual's strengths and weaknesses in cognitive ability and mental processing. It helps identify disorders of basic psychological processing, a key aspect of the definition of learning disabilities. Educational interventions and treatment plans can be developed based on the results of KABC-II profile analyses.

## DESCRIPTION OF THE KABC-II

The KABC-II is a measure of the processing and cognitive abilities of children and adolescents between the ages of 3 years 0 months and 18 years 11 months. It is organized into three levels (age 3, ages 4–6, ages 7–18). The KABC-II yields from one to five scales depending on the age level of the child and the interpretive approach that the clinician chooses to take. At age 3, there is only one scale, a global measure of ability, composed of either five subtests (MPI) or seven sub-

tests (FCI). For ages 4–6, subtests are organized into either three scales (Luria model) or four scales (CHC model): Sequential/*Gsm*, Simultaneous/*Gv*, and Learning/*Glr* are in both models, and Knowledge/*Gc* is only in the CHC model. For ages 7–18, four scales (Luria) or five scales (CHC) are available, with the Planning/*Gf* scale joining the aforementioned KABC-II scales. The KABC-II scales for each age level are shown in Rapid Reference 1.5. The Don't Forget box provides additional information about the KABC-II.

From the Luria perspective, the KABC-II scales correspond to learning ability, sequential processing, simultaneous processing, and planning ability. From the vantage point of the CHC model, as applied to the KABC-II, the scales measure the following Broad Abilities (Rapid Reference 1.6 on page 14 describes how the scales are conceptualized by each theoretical perspective).

The names of the KABC-II scales reflect both the Luria process it is believed to measure and its CHC Broad Ability, as indicated in Rapid Reference 1.6: Learning/*Glr*, Sequential/*Gsm*, Simultaneous/*Gv*, and Planning/*Gf*. However, the Knowledge/*Gc* scale that measures crystallized ability reflects only CHC theory, as it is specifically excluded from the Luria system.

As stated, KABC-II yields two global scores that encompass the scales: the MPI and the FCI. The MPI provides a global overview of the KABC-II scales that make up the Luria model, and the FCI offers a global summary of the scales constituting the CHC model. The primary difference between the MPI and the FCI is the inclusion of the Knowledge/*Gc* scale in the FCI and its exclusion from the MPI (see the Don't Forget box). The inclusion of crystallized abilities in the global score yielded by the CHC model (FCI) offers an alternative way of view-

## *Rapid Reference 1.5*

### Number of KABC-II Scales at Each Age Level

Age 3	Ages 4–6	Ages 7–18
MPI, FCI, or NVI <i>(only global scales are provided at age 3)</i>	MPI, FCI, or NVI Learning/ <i>Glr</i> Sequential/ <i>Gsm</i> Simultaneous/ <i>Gv</i> Knowledge/ <i>Gc</i>	MPI, FCI, or NVI Learning/ <i>Glr</i> Sequential/ <i>Gsm</i> Simultaneous/ <i>Gv</i> Planning/ <i>Gf</i> Knowledge/ <i>Gc</i>

*Note.* The MPI from the Luria system *excludes* Knowledge/*Gc* subtests (age 3) and scale (ages 4–18). The FCI of the CHC system *includes* the Knowledge/*Gc* subtests (age 3) and scale (ages 4–18).

## DON'T FORGET

### Basic Information about the KABC-II

**Author:** Alan S. Kaufman and Nadeen L. Kaufman

**Publication date:** 2004

**What the test measures:** learning (long-term retrieval), sequential processing (short-term memory), simultaneous processing (visualization), planning (fluid ability), and verbal knowledge (crystallized ability)

**Age range:** 3 to 18 years

**Administration time:** Core battery: from 25–35 minutes at age 3 to 50–70 minutes at ages 13–18; Expanded battery: from 35–55 minutes at age 3 to 75–100 minutes at ages 13–18

**Qualification of examiners:** Graduate- or professional-level training in psychological assessment

**Publisher:** AGS Publishing  
4201 Woodland Road  
Circle Pines, Minnesota  
55014-1796  
Ordering phone: 800-328-2560  
<http://www.agsnet.com>

**Price (from 2004 catalog):**

KABC-II Kit:

Includes four easels, one manual, all necessary stimulus and manipulative materials, 25 record forms, and soft-sided briefcase. \$724.99

KABC-II Computer ASSIST™ Scoring Software \$199.99

ing children's cognitive abilities that is founded in a theory that has gained much popularity among assessment-oriented psychologists (Flanagan et al., 2000; McGrew & Flanagan, 1998) and is consistent with several other Kaufman tests (Kaufman & Kaufman, 1990, 1993, 2004a) and with traditional (Wechsler-Binet) views of cognitive ability.

In addition to the MPI and FCI, and the five scales, the KABC-II has a Nonverbal Scale, composed of subtests that may be administered in pan-

## DON'T FORGET

### Differences Between the KABC-II's Global Constructs

- The Mental Processing Index (MPI) measures general mental processing ability on the KABC-II from the Luria perspective and *excludes* measures of acquired knowledge.
- The Fluid-Crystallized Index (FCI) measures general cognitive ability on the KABC-II from the Cattell-Horn-Carroll (CHC) perspective and *includes* measures of acquired knowledge (crystallized ability).

## *Rapid Reference 1.6*

### Definitions of Luria and CHC Terms

KABC-II Scale	Luria Term	CHC Term
<b>Learning/Glr</b>	<b>Learning Ability</b>	<b>Long-Term Storage and Retrieval (Glr)</b>
	<p>Reflects an integration of the processes associated with all three blocks, placing a premium on the attention-concentration processes that are in the domain of block 1, but also requiring block 2 coding processes and block 3 strategy generation to learn and retain the new information with efficiency. Sequential and simultaneous processing are associated primarily with Luria's block 2 and pertain to either a step-by-step (sequential) or holistic (simultaneous) processing of information.</p>	<p>Storing and efficiently retrieving newly learned, or previously learned, information.</p>
<b>Sequential/Gsm</b>	<b>Sequential Processing</b>	<b>Short-Term Memory (Gsm)</b>
	<p>Measures the kind of coding function that Luria labeled "successive" and involves arranging input in sequential or serial order to solve a problem, where each idea is linearly and temporally related to the preceding one.</p>	<p>Taking in and holding information, and then using it within a few seconds.</p>
<b>Simultaneous/Gv</b>	<b>Simultaneous Processing</b>	<b>Visual Processing (Gv)</b>
	<p>Measures the second type, or simultaneous, coding function associated with block 2. For its tasks, the input has to be integrated and synthesized simultaneously (holistically), usually spatially, to produce the appropriate solution. As mentioned earlier, the KABC-II measure of simultaneous processing deliberately blends Luria's block 2 and block 3 to enhance the complexity of the simultaneous syntheses that are required.</p>	<p>Perceiving, storing, manipulating, and thinking with visual patterns.</p>