

The Kaufman Test of Educational Achievement, 3rd Edition (KTEA-III)

Review by Jennifer Aussicker

Quick Information

Test: The Kaufman Test of Educational Achievement, 3rd Edition (KTEA-III)

Age range: Individuals 4:0–25:11

Publisher: Pearson

Authors: Alan S. Kaufman, PhD & Nadeen L. Kaufman, PhD

Year: 2014

Quick Information cont.

Cost:

- ⇒ **\$635.10** Q-global Kit (Digital)
- ⇒ **\$540.00** KTEA-3 Form A *or* B Complete Kit (Print)
- ⇒ **\$1264.50** KTEA-3 Form A & B Complete Kit (Print) with Q-global Score Report Qty 100 (Digital)

Overview

Overview:

- ⇒ Broad Band Achievement Test
- ⇒ Two forms of the test (A&B)
- ⇒ **Includes:** administration manual, test protocols, booklets for written expression stories, test easels, student response booklet, scoring manual, and a USB key
- ⇒ There are 19 subtests, however, not all subtests must be administered.
 - A subtest may stand on its own, or may be used as part of a composite.
- ⇒ This assessment provides measures of all eight specific learning disability areas identified in the IDEIA, 2004 as well as the areas of impairment specified by DSM-V

Question:

Why might a subtest be used on its own rather than part of a composite?

Administration & Scoring

Administration

- ⇒ Individual administration
- ⇒ Use the administration manual
- ⇒ Each subtest takes approximately 2-23 minutes to administer, 10-35 minutes per each of the three core academic composites, and 15-85 minutes for the Academic Skills Battery.
 - Ultimately, administration times vary by age. The older the student, the longer it normally takes

Administration Videos

Basal and Ceiling:

<https://youtu.be/SXyW4-EmIGk>

Administration of a Subtest:

<https://youtu.be/zCw1F5xEVvA>

Pros and Cons

- ❏ What do you like about the administration of the K-TEA III?
- ❏ What would you change about the administration of the K-TEA III?
- ❏ How is the administration of the K-TEA III similar to the administration of the WIAT IV?

Scoring

- ⇒ Can be done manually by hand or digitally via the Q-Global website
- ⇒ Scores should be consistent regardless of the form chosen for administration for Test A and Test B
- ⇒ The KTEA-III is composed of 33 scores. Of the 33 scores...
 - 4 core composite scores (reading, math, written language, and academic skills battery)
 - 19 subtest scores
 - 10 supplemental composite scores
 - 4 supplemental reading-related composite scores

Technical & Psychometric Properties

Reliability

- ⇒ The split-half method was used to compute reliability for all subtests besides the timed subtests
- ⇒ Composite score reliability coefficients fall in the .80s and .90s range
- ⇒ The Oral Fluency composite falls in the .70s
 - Showed the most reliability in the younger ages
- ⇒ These findings held true across all grade and age ranges
- ⇒ Mid- to high .90s: Nonsense Word Decoding, Letter and Word Recognition, Math Concepts and Applications, Reading Vocabulary, and Spelling
- ⇒ .80s to the low .90s: Phonological Processing, Reading Comprehension, Written Expression, Math Fluency, and Listening Comprehension

Reliability

- ⇒ Alternate-form reliability was computed for Forms A and B, and the test authors concluded that the two forms measure the same academic abilities.
- ⇒ Fluency tests were conducted and revealed lower reliabilities that could be explained by individual differences such as attention, stamina, motivation, and background knowledge.
- ⇒ Interrater reliability was high, at 90% for Oral Expression and 95% for Written Expression. Given these high reliability coefficients, scores are consistent across examiners when using the scoring criteria from the manuals presented.

Validity

- ⇒ Validity was established relative to internal structure, response processes, and test content
- ⇒ Higher correlations were found between core academic subtests and between KTEA-3 composites and similar composites on other tests
- ⇒ There were some limitations when compared to scores from other tests, such as the Woodcock-Johnson III Tests of Achievement. The mean scores of the KTEA-3 were somewhat lower, but this could be attributed to the Flynn effect.

Discriminant Validity

- ⇒ There were several studies involving special populations
- ⇒ Special Populations: individuals with...
 - Learning disabilities
 - Attention-deficit/hyperactivity disorder
 - Specific learning disability
 - Intellectual disability
 - Academically gifted
- ⇒ Results: high discriminant validity, making it useful clinically

Standardization

- ⇒ Standardization was established by breaking down norms by grade level, then by season (fall, winter, and spring)
- ⇒ The norm sample based upon ages was largely taken from the grade norm sample
- ⇒ In both samples, half of the group was administered Form A and half Form B
- ⇒ Considerable care was taken to ensure a representative sample for this assessment based on the most up to date US census data.

Critical Review

Utility of Measure

- ⇒ The utility of the KTEA-3 is high, given its clinical value and adaptability
- ⇒ Clinically, this test can be used to identify areas of strengths and weaknesses of a student's academic achievement
- ⇒ The KTEA-3 is adaptable in the sense that it can be used as a comprehensive test, or only as a subtest. As a comprehensive assessment it can give a fuller picture of a student's abilities, whereas subtests can look at a certain area of concern (such as reading) and evaluate those skills specifically
- ⇒ Less test-retest bias with alternate forms of the test

Technical Adequacy: Reliability

- ⇒ The **split-half method** was used to compute reliability for all subtests besides the timed subtests.
 - The split-half method: ensures the test's internal consistency and measures the extent to which all parts of the test contribute equally to what is being measured.
 - **Composite score reliability coefficients** were high and fell in the .80s and .90s range, which is higher than the normally accepted reliability mark of .60 or .70. These scores show that all the parts of the test contribute equally to what is being measured up to an 80-90% reliability.
- ⇒ By having two **alternate forms** (Test A and Test B), the authors were able to determine alternate-form reliability, and that each form measured the same academic abilities.
- ⇒ There was high **inter-rater reliability** at 90% for Oral Expression and 95% for Written Expression. These high scores show that across different examiners, scores remained almost completely consistent.

Technical Adequacy: Validity

- ⇒ The KTEA-3 accurately demonstrates the anticipated performance across all areas of testing, thus meaning that this assessment has a strong sense of validity
- ⇒ High discriminant validity
 - **Discriminant Validity:** the lack of correlation between various constructs of the test. This test measures what it is supposed to measure.
 - Various populations of interest, such as those with learning disabilities, were a part of this evaluation of discriminant validity.

Commentary on Administration and Scoring

- ⇒ Administration and scoring is relatively easy, the administration manual describes every step to administering the test, as well as videos available to demonstrate administration
- ⇒ Scoring can be manually by hand or virtually on the Q-Global website, whichever the administrator prefers

Recommendations & Cautions

- ⇒ Use this assessment if an evaluator wants to only evaluate a singular area of interest, such as reading fluency
- ⇒ If the complete assessment is used to get a full picture of the student's abilities, using it as a standalone assessment may cause some discrepancies (the Flynn effect). In order to use this test, it should be used in conjunction with other assessments of achievement.
- ⇒ Prepare for a lengthy test if evaluating an older student- the older they are, the longer the test usually takes

Question:

Would you use this assessment as a school psychologist?

References

- KTEA-3 Kaufman Test of Educational Achievement 3rd Ed.* (2023). Pearson Assessments. Retrieved April 2, 2023, from <https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Academic-Learning/Reading/Kaufman-Test-of-Educational-Achievement-%7C-Third-Edition/p/100000777.html>
- Mackler, K., & McCurdy, M. (2017). Kaufman Test of Educational Achievement, Third Edition. *The Twentieth Mental Measurements Yearbook*.
- Trahan, L. H., Stuebing, K. K., Fletcher, J. M., & Hiscock, M. (2014). The Flynn effect: a meta-analysis. *Psychological bulletin*, 140(5), 1332–1360. <https://doi.org/10.1037/a0037173>