Designed to aid in Chapter 1 evaluation efforts, this bibliography provides information about types of tests and other measures designed to assess young children. Bibliographic summaries were based on information from publishers' manuals and scholarly reviews. Criteria for including a test in the bibliography were that the test: (1) was designed for use with children in preschool or kindergarten; (2) had been published in the last 10 years or was older but continued to be used regularly; (3) could be administered by teachers or trained teacher aides; and (4) was designed for developmental screening, assessment of instructional readiness or achievement, or program evaluation. The bibliography summarizes 36 tests, 16 of which were concerned with developmental screening; 21 with instructional readiness or achievement; 2 with assessment and instructional management; 5 with observation, rating scales, and checklists; 16 with prekindergarten; and 7 with nationally normed achievement tests. (Tests could be categorized as concerning more than one area.) Of the 36 tests covered, 8 were in Spanish or had Spanish directions. Summaries highlight factual information about the overview, purpose, content, administration, scores, scoring, standardization, norming, technical characteristics, components, publisher, and reviews of each test. Since reviewers' judgments vary, each summary includes test review sources, as available. (RH)
Bibliography of Tests for Early Childhood

Chapter 1 Evaluation

by Terri Strand, Ph.D.
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August 1989

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BEST COPY AVAILABLE
This Bibliography of Tests for Early Childhood Chapter I Evaluation was prepared by the Test Information Center to serve as an information resource for Chapter I staff. The bibliography provides summary information about the characteristics of different types of tests and other assessment measures designed to assess young children. The bibliography will be revised and expanded as new test information becomes available.

The individual early childhood test summaries are based on reviews of the test publications and also, on published reviews. The criteria for a test to be included in this bibliography were:

- the test was designed specifically for use with children in preschool and/or kindergarten.
- the test was published within the last 10 years or continues to be used regularly.
- the test can be administered by teachers or trained teacher aides.
- the test or other assessment measure was designed for developmental screening, assessment of instructional readiness/achievement, or program evaluation.

It should be noted that the inclusion of any test in this bibliography is not intended to imply approval or endorsement of the test for use in Chapter I evaluation.

The test summaries do not have page numbers but are arranged in alpha order by the test initials which appear in the upper right corner.

For each of the tests included in this bibliography, the test summaries highlight factual information on selected test characteristics:

- Overview/Purpose
- Technical Characteristics
- Content
- Components
- Administration
- Publisher
- Scores/Scoring
- Reviews
- Standardization/Norming

Test reviewers' judgments and viewpoints may vary. Therefore, to provide the reader with a ready source of balanced viewpoints, each early childhood test summary includes test review sources, as available.
Two user-friendly lists precede the early childhood test summaries: "List of Tests, by Alpha Order," and the "List of Tests, by Classification." The first list provides easy access to the early childhood test summaries by test name, and the second classifies the tests by function and characteristics:

- Developmental Screening
- Instructional Readiness/Achievement
  - Basic Relational Concepts
  - Emerging Literacy
  - Language/Speech
  - Mathematics
  - Prereading/Reading
  - Writing
- Assessment/Instructional Management
- Observation, Rating Scales, Checklists
- Prekindergarten
- Spanish or Spanish Directions
- Nationally-Normed Achievement Test Batteries*

* Test information summaries for these tests are not included in this document. Information about their availability may be obtained from the regional Technical Assistance Centers for Chapter 1 Evaluation.
LIST OF TESTS, BY ALPHA ORDER

- Basic School Skills Inventory-Diagnostic (BSSI-D), 1983
- Basic School Skills Inventory-Screen (BSSI-S), 1983 (Comprehensive)
- Battelle Developmental Inventory-Screening Test (BATTELLE-S), 1984
- Boehm Test of Basic Concepts-Preschool Version (BOEHM-P'), 1986
- Boehm Test of Basic Concepts-Revised (BOEHM-R), 1986
- Bracken Basic Concept Scale-Diagnostic (BRACKEN-D), 1984
- Bracken Basic Concept Scale-Screening (BRACKEN-S), 1984
- Brigance Early Childhood Screen for Two-Year-Olds & Two-and-a-Half-Year-Old Children (EARLY CHILDHOOD SCREEN), 1989
- Brigance K & 1 Screen for Kindergarten and First Grade (K & 1 SCREEN), 1982
- Brigance Preschool Screen for Three- and Four-Year-Old Children (PRESCHOOL SCREEN), 1985
- Chicago Early Assessment and Remediation Laboratory (CHICAGO EARLY), 1981, 1984
- CIRCUS (CIRCUS), 1972, 1979, Levels A & B
- Cognitive Skills Assessment Battery (CSAB), 1981
- Developing Skills Checklist (DSC), 1990
- Developmental Indicators for the Assessment of Learning-Revised (DIAL-R), 1983
- Early School Assessment (ESA), 1990
- Early Screening Inventory (ESI), 1983, 1988
- Early School Inventory-Developmental (ESI-D), 1986
- Early School Inventory-Preliteracy (ESI-P), 1986
- Florida Kindergarten Screening Battery (FKSB), 1982
- Howell Prekindergarten Screening Test (HOWELL), 1984
- Kindergarten Language Screening Test (KLST), 1983
LIST OF TESTS, BY ALPHA ORDER (continued)

- Kindergarten Readiness Test (KRT), 1988
- The Lollipop Test: A Diagnostic Screening Test of School Readiness, Revised (LOLLIPOP), 1981, 1989
- Meeting Street School Screening Test (MSSST), 1969
- Metropolitan Readiness Tests (MRT), 1986
- Miller Assessment for Preschoolers (MAP), 1982, 1988
- School/Home Observation & Referral System (SHORS), 1978
- Screening Children for Related Early Educational Needs (SCREEN), 1988
- Test of Early Language Development (TELD), 1981
- Test of Early Mathematics Ability (TEMA), 1983
- Test of Early Reading Ability-2 (TERA-2), 1989
- Test of Early Written Language (TEWL), 1988
- Test of Language Development-2 Primary (TOLD-2 PRIMARY), 1988
LIST OF TESTS, BY CLASSIFICATION

DEVELOPMENTAL SCREENING

- Basic School Skills Inventory-Screening (BSSI-D), 1983
- Basic School Skills Inventory-Diagnostic (BSSI-S), 1983 (comprehensive)
- Battelle Developmental Inventory-Screening Test (BATTLE-S), 1984
- Brigance Early Childhood Screen for Two-Year-Old & Two-and-a-Half-Year-Old Children (EARLY CHILDHOOD SCREEN), 1989
- Brigance K & 1 Screen for Kindergarten and First Grade (K & 1 SCREEN), 1982
- Brigance Preschool Screen for Three- and Four-Year-Old Children (PRESCHOOL SCREEN), 1985
- Chicago EARLY Assessment and Remediation Laboratory (CHICAGO EARLY), 1981, 1984
- Developing Skills Checklist (DSC), 1990
- Developmental Indicators for the Assessment of Learning-Revised (DIAL-R), 1983
- Early Screening Inventory (ESI), 1983, 1988
- Early School Inventory-Developmental (ESI-D), 1986
- Florida Kindergarten Screening Battery (FKSB), 1982
- Kindergarten Readiness Test (KRT), 1988
- Meeting Street School Screening Test (MSSST), 1969
- Miller Assessment for Preschoolers (MAP), 1982, 1988
LIST OF TESTS, BY CLASSIFICATION (continued)

INSTRUCTIONAL READINESS/Achievement

GENERAL:

o CIRCUS, (CIRCUS), 1972, 1979, Levels A & B

o Early School Assessment (ESA). 1990

o Howell Prekindergarten Screening Test (Howell). 1984

o The Lollipop Test: A Diagnostic Screening Test of School Readiness, Revised (LOLLIPOP-R), 1981, 1989

o Metropolitan Readiness Tests (MRT), 1986

o Screening Children for Related Educational Needs (SCREEN), 1988


BASIC RELATIONAL CONCEPTS:

o Boehm Test of Basic Concepts-Preschool Version (BOEHM-PV), 1986

o Boehm Test of Basic Concepts-Revised, (BOEHM-R), 1986

o Bracken Basic Concept Scale-Screening (BRACKEN-S), 1984

o Bracken Basic Concept Scale-Diagnostic (BRACKEN-D), 1984

EMERGING LITERACY:

o Developing Skills Checklist (DSC), 1990

o Early School Inventory-Preliteracy (ESI-D), 1986

o Test of Early Reading Ability-2 (TERA-2), 1989

o Test of Early Written Language (TEWL), 1988
LIST OF TESTS, BY CLASSIFICATION (continued)

LANGUAGE/SPEECH:
- Kindergarten Language Screening Test (KLST), 1983
- Test of Early Language Development (TELD), 1981
- Test of Language Development-2 Primary (TOLD-2 PRIMARY), 1988

MATHEMATICS:
- Test of Early Mathematics Abilities (TEMA), 1982

PREREADING/READING:
- Test of Early Reading Ability-2 (TERA-2), 1989

WRITING:
- Test of Early Written Language (TEWL), 1988

ASSESSMENT/INSTRUCTIONAL MANAGEMENT:
- Chicago EARLY Assessment and Remediation Laboratory (CHICAGO EARLY), 1981, 1984

OBSERVATION, RATING SCALES, CHECKLISTS:
- Basic School Skills Inventory-Diagnostic (BSSI-D), 1982
- Developing Skills Checklist (DSC), 1990
- Early School Inventory-Developmental (ESI-D), 1986
- Miller Assessment for Preschoolers (MAP), 1982, 1988
- School/Home Observation & Referral System (SHORS), 1978
LIST OF TESTS, BY CLASSIFICATION (continued)

PREKINDERGARTEN:

· Basic School Skills Inventory-Diagnostic (BSSI-D), 1983
· Basic School Skills Inventory-Screening (BSSI-S'), 1983
· Battelle Developmental Inventory-Screening (BATTLE-S), 1984
· Boehm Test of Basic Concepts-Preschool Version (BOEHM-P'), 1986
· Brigance Early Childhood Screen for Two-Year-Old & Two-and-a-Half-Year-Old Children (EARLY CHILDHOOD SCREEN), 1989
· Brigance Preschool Screen for Three- and Four-Year-Old Children (PRESCHOOL SCREEN), 1985
· Brigance K & 1 Screen for Kindergarten and First Grade (K & 1 SCREEN), 1982
· Early School Inventory-Developmental (ESI-D), 1986
· Early School Inventory-Preliteracy (ESI-P), 1986
· Howell Prekindergarten Screening Test (HOWELL), 1984
· Metropolitan Readiness Tests (MRT), 1986
· Santa Clara Inventory of Developmental Tasks Plus Computer Management System (SANTA CLAA PLUS), 1980, 1983
· Screening Children for Related Educational Needs (SCREEN), 1988
· Test of Early Written Language (TEWL), 1988
· Test of Language Development-2 Primary (TOLD-2 PRIMARY), 1988
· The Lollipop Test: A Diagnostic Screening Test of School Readiness-Revised (LOLLIPOP), 1981, 1989
LIST OF TESTS, BY CLASSIFICATION (continued)

SPANISH OR SPANISH DIRECTIONS:

- Boehm Test of Basic Concepts - Preschool Version (BOEHM-PV). 1986
- Boehm Test of Basic Concepts - Revised (BOEHM-R). 1986
- Brigance Preschool Screen for Three- and Four-Year-Old Children (PRESCHOOL SCREEN), 1985 (Spanish Directions)
- Brigance K & 1 Screen for Kindergarten and First Grade (K & 1 SCREEN), 1982 (Spanish Directions)
- Chicago EARLY Assessment and Remediation Laboratory (CHICAGO EARLY). 1981, 1984
- CIRCUS. (CIRCUS). 1972, 1979, Levels A & B

NATIONALLY-NORMED ACHIEVEMENT TESTS:*

- California Achievement Tests (CAT). 1985-86
- Iowa Tests of Basic Skills (ITBS). 1985-86
- Metropolitan Achievement Tests. Survey Battery (MAT 6'S). 1985
- Stanford Early School Achievement Test (SESAT). 1985
- SRA Achievement Test (SRA ACH). 1978, 1985
- The National Tests of Basic Skills (The Nationals). 1985

*The earlier levels of the above tests include readiness/achievement tests in reading, language, and mathematics for children in kindergarten. The test summaries for these tests are not included in this document. Information about their availability may be obtained from the regional Technical Assistance Center for Chapter 1 Evaluation.
OVERVIEW/PURPOSE. The Battelle Development Inventory-Screening Test (BATTELLE-S) is a developmental survey instrument that may be used for screening preschool and kindergarten children. The purpose of the BATTELLE-S is to identify children at risk for developmental delays who should receive more comprehensive assessment with the full scale Battelle Developmental Inventory (BDI). The BATTELLE-S uses three procedures to collect test data: (1) structured test administrations; (2) interviews with parents and/or teachers; and (3) observations.

CONTENT. The BATTELLE-S contains 96 items selected to represent the content of the full scale, 341-item Battelle Developmental Inventory. The BATTELLE-S is designed to assess skills in five domains and four subdomains:

<table>
<thead>
<tr>
<th>Domains</th>
<th>Subdomains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal/Social</td>
<td></td>
</tr>
<tr>
<td>Adaptive</td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>Gross Motor &amp; Fine Motor</td>
</tr>
<tr>
<td>Communication</td>
<td>Receptive &amp; Expressive</td>
</tr>
<tr>
<td>Cognition</td>
<td></td>
</tr>
</tbody>
</table>

ADMINISTRATION. The Screening Test is individually administered. The test takes about 20-30 minutes for children between ages 3-5 years, and about 10-15 minutes for children under 3 years or over 5 years. Examiner training, including test familiarization and practice in test administration, is required.

Administration materials include the Screening Test, Screening Test Booklet, and supplementary materials, such as a jump rope, cube, ring, small toys, etc. The Screening Test is a 108-page, spiral-bound book which includes both the test and examiner's directions. For each test item, the examiner is provided with detailed instructions for: specific behavior to be assessed, required materials, assessment procedures, and scoring criteria.

The examiner administers many of the structured items to the child while both are seated at a child-size table. The examiner uses basal and ceiling levels to determine the items in each subdomain and domain to be administered to the child. The examiner orally presents the item stimulus and the child's responses may be oral, pointing, or motor, as appropriate.

The examiner scores the child's test performance and records the scores in the Screening Test Booklet during administration.
SCORES/SCORING. The child's performance on each item may be scored 0 (incorrect or no response); 1 (attempted but did not fulfill all criteria); or 2 (met all criteria). Raw scores are calculated for the four subdomains, five domains, and the total test.

The BATTELLE-S provides cutoff scores and age equivalent scores for the total test, domains, and subdomains. The cut-off scores are provided for 10 age groups, based on the scores of the standardization sample. The cut-off scores correspond to 1.0, 1.28, 1.5, 1.65, and 2.33 standard deviations below the mean score for each age group.

STANDARDIZATION/NORMING. The Battelle Developmental Inventory was nationally standardized from December 1982 through March 1983 with a stratified sample of 800 children. Characteristics of the sample are reported for age, sex, race, and geographic region. Data for the BATTELLE-S were collected as part of the norming process for the full Inventory.

TECHNICAL CHARACTERISTICS. Predictive validity of the BATTELLE-S is based on its relationship to scores on the full scale BDI. A study of 164 children who were tested with both the BATTELLE-S and the BDI yielded correlation coefficients of .92 and above for the 10 scores on the BATTELLE-S and the comparable BDI components.

COMPONENTS. Materials include the 108-page, spiral bound Screening Test book, Screening Test Booklet (used for scoring and reporting), and the Examiner's Manual.

PUBLISHER. DLM Teaching Resources, P.O. Box 4000, One DLM Park, Allen, TX 75002 (800-527-4747; Texas: 800-442-4711).

REVIEWS:
OVERVIEW/PURPOSE. The Boehm Test of Basic Concepts (Boehm-PV) is a nationally normed readiness test of basic relational concepts. The test is designed for use with preschool children from 3 to 5 years or with older children having language difficulties. The purpose of the test is to identify children with weaknesses in comprehension of basic relational concepts in order to allow remediation before entry into first grade. Administration results may be used by the preschool teacher as an indicator of readiness for school and instructional planning.

CONTENT. The relational concepts tested by the Boehm-PV are those found in preschool language and early childhood curricular materials. The test which is available in one form represents a downward extension of the Boehm Test of Basic Concepts-Revised (Boehm-R).

The Boehm-PV includes 52 items which test 26 basic relational concepts. Each relational concept is tested with two test items. The relational concepts refer to characteristics, such as:

- size (e.g., tallest, shortest)
- direction (e.g., up, down)
- position in space (e.g., under, above)
- quantity (e.g., many, few)
- time (e.g., after, before).

ADMINISTRATION. The test is individually administered in about 10-15 minutes. Administration materials include the Boehm-PV Manual which contains directions for administration and scoring; the spiral-bound Picture Book which contains the test items; and the child's Individual Record Form.

The Picture Book is used in easel format during test administration. The pages containing the test items face the child and the corresponding pages with directions for administration face the examiner. The multiple-choice items are presented in a picture format. There are three response options for most items.

The examiner reads the test item to the child who responds by pointing to the correct response option. The examiner scores the child's responses during administration and records the results on the child's record form.
SCORES/SCORING. Each correct item response receives one point. The points are summed to get a total raw score (number correct). Scores available by age group include fall and spring percentiles corresponding to total raw scores and the percent of children passing each concept.

STANDARDIZATION/NORMING. The Boehm-PV was standardized from early 1985 through spring of 1986 with 433 children at 35 sites in 17 states. The children were selected from private day care centers, nursery schools, public preschools, and Head Start programs. The sample was stratified by race, geographic region, and parent education. The percentage of the standardization group on these variables were comparable to the national population, with some minor differences.

The number of children in the five age groups ranged from 72 for age 3 to 94 for age 4-1/2. There were five age groups: 3, 3-1/2, 4, 4-1/2, and 5 years. Two of the age groups (ages 3 and 5) were at 3-month intervals, and the others were at 6-month intervals.

TECHNICAL CHARACTERISTICS. Evidence of reliability was presented for internal consistency (using coefficient alpha and a corrected split-half coefficient) and stability (test-retest):

- Alpha coefficients for internal consistency ranged from .85 to .91 and the split-half coefficients ranged from .80 to .87 across the five age groups.

- Test-retest reliability coefficients were reported for a group of 78 children, ages 3-1/2 to 4-1/2, who were retested after a one-week period. The reliability coefficients were .94 for age 3-1/2 and .87 for age 4-1/2.

Evidence of validity was presented for content and concurrent validity.

- Content validity was based on the literature review, item tryouts, analysis of teachers' verbal interactions with children, and item reviews by education specialists.

- Concurrent validity was examined in two small studies using the Boehm-PV and the Peabody Picture Vocabulary Test (PPVT). In the first study, a correlation coefficient of .63 was reported for 29 children whose average age was 3 years 10 months. In the second study, a correlation coefficient of .57 was reported for 19 children whose average age was 4 years, 4 months and who were classified as language-delayed.
COMPONENTS. The Boehm-PV materials include the Boehm-PV Manual, Picture Book, Individual Record Form, and Group Record Form.

The Boehm-PV Manual contains the norms tables; directions for administering, scoring, and interpreting; and information on test content, the national standardizations, and technical characteristics. The spiral-bound Picture Book is constructed in easel format for use in test administration.

The Individual Record Form is used for scoring and recording the child's test performance. The Group Record Form is used for scoring and recording the test performance of individuals and groups. The form also serves as a teacher aid for instructional planning.

The Boehm Resource Guide for Basic Concept Teaching is a supplementary kit of curriculum materials and teaching activities designed to help young children develop mastery of basic relational concepts.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-0952 (800-228-0752).

REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Boehm Test of Basic Concepts (Boehm-R), is a nationally normed readiness test of basic relational concepts considered important for achievement during the early school years. The Boehm-R, intended for use with children in kindergarten through grade 2, is designed for instructional screening.

The purpose of the test is to identify: (1) children whose overall level of concept mastery is low and (2) specific concepts with which groups of children may be unfamiliar. The test is intended for use as part of a battery of tests to assess readiness, to identify children "at risk" for later learning, and for pre- and posttesting instruction in basic relational concepts.

CONTENT. The Boehm-R is published in two parallel forms (C & D). Each form includes 50 multiple-choice items in picture format printed in two test booklets. Each test booklet contains three practice questions and 25 test questions arranged in approximate order of difficulty.

Each test item measures a separate concept and most test items have three response options. The test items are classified under four categories: (1) Space (location, direction, orientation, and dimensions); (2) Quantity; (3) Time; and (4) Miscellaneous (taste, smell, behaviors, feelings, etc.).

The Applications level, used for grades 1 and 2, is printed in a separate test booklet which includes 26 test items containing combinations of relational concepts, e.g., following multiple-step directions.

ADMINISTRATION. The BOEHM-R may be administered individually or in small groups of about 8-10 children. Each test booklet takes about 15-20 minutes to administer. The test may be given in one or two sessions, depending on the attention span of the children being tested. Proctors are recommended for larger size groups.

Administration materials include the Boehm-R Manual which contains the administration directions, test booklets, and pencils. The examiner reads the test directions aloud and the children respond by marking the picture options in their test booklets.

SCORES. The norms tables are included in the Boehm-R Manual. National fall and spring norms are presented by grade and socioeconomic level (low, middle, and high). The normative scores include percentile equivalents of total raw scores and percent passing each test item. The manual also includes a percentile to NCE score conversion table.
STANDARDIZATION/NORMING. The test was normed in spring and fall of 1983, with a national sample of public school children selected to be nationally representative in terms of school districts and geographic region. Efforts were made to include children from the full range of socioeconomic levels represented in the districts.

The number of children included in the percentile norms for Form C or D was 10,260 in fall and 9,930 in spring, and for the Applications level, 6,923 in fall and 6,232 in spring. For percent passing each item, the number of children represented in the fall norms was 5,577 for Form C, 4,683 for Form D and 6,923 for the Applications level; and for spring was 5,326 for Form C, 4,604 for Form D, and 6,232 for the Applications level.

TECHNICAL CHARACTERISTICS. Reliability data are presented for alternate forms, internal consistency, and stability (test-retest).

- Alternate-form reliability coefficients, based on the scores of 625 children, were .82, .77, and .65 for children in kindergarten, first grade, and second grade, respectively.

- Test-retest reliability coefficients of a selected group of 548 children after a one-week period were .88 for kindergarten, .55 for grade 1, and .75 for grade 2.

- For students in the spring standardization, split-half reliability coefficients, by form and grade/socioeconomic level, and total sample, ranged from .55 to .87, with a median of .77 for Forms C & D and .76 for the Applications level. Ten of 24 reported coefficients exceeded .80.

Evidence of validity is presented for content validity, concurrent validity, and predictive validity.

- Content validity was based on the field testing, frequency of use of the basic relational concepts in school curricula, instructional materials, and teacher's verbal instructions.

- Predictive validity was based on correlations with achievement tests administered one year after testing with the Boehm-R. The median correlation coefficient was .4.

COMPONENTS. The Boehm-R materials include: two test booklets for each form (C & D) and one for the Applications level; Boehm-R Manual; Class Record Form, and Parent-Teacher Conference Report.
COMPONENTS (continued)

The Boehm-R Manual includes: background test information; directions for administering, scoring, and interpreting results; norms tables; technical test characteristics; and a summary of more than 15 years of research on the Boehm Test of Basic Concepts.

The Class Record serves as a combined scoring key, a record of class performance, and an aid to understanding reasons underlying children's errors. The Parent-Teacher Conference Report, designed to assist teachers in presenting test results to parents, also presents suggestions on how parents can help their children learn basic concepts at home.

The Boehm Resource Guide for Basic Concept Teaching is a supplementary kit of curriculum materials and teaching activities designed to help children develop mastery of basic concept usage in school and everyday life.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-2498 (800-228-0752).

REVIEWS/REFERENCES:

- Fitzmaurice, Colleen & Witt, Joseph D., Louisiana State University. Review of the Boehm Test of Basic Concepts-Revised. In Mental Measurements Yearbook Database (AN 1007-0333). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.


- Linn, Robert L., University of Colorado at Boulder. Review of the Boehm Test of Basic Concepts-Revised. In Mental Measurements Yearbook Database (AN 1007-0333). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.


OVERVIEW/PURPOSE. The Bracken Basic Concept Scale - Diagnostic (BRACKEN-D) is a 258-item readiness test of basic concepts for use with children from ages 2-6 through 7-11 years. The BRACKEN-D is one of two components of the Bracken Basic Concept Scale. The second component is the 30-item Bracken Basic Concept Screening test (BRACKEN-S) which is designed to identify kindergarten and grade 1 children who are at risk for learning problems. The purpose of the BRACKEN-D is to provide more intensive assessment of children identified as being at risk, and to provide useful information for instructional planning.

CONTENT. The BRACKEN-D is a multiple-choice test which measures 258 concepts grouped into 11 subtests. The School Readiness Composite includes five subtests:

- Color
- Letter Identification
- Numbers/Counting
- Comparisons
- Shapes

The other six BRACKEN-D subtests are:

- Direction/Position
- Social/Emotional
- Size
- Texture/Material
- Quantity
- Time/Sequence

ADMINISTRATION. The BRACKEN-D is an individually administered test. It is untimed but generally takes about 20-30 minutes. The test may be administered by professionals (teachers, speech/language specialists, and school psychologists) or trained paraprofessionals. However, interpretation should be done only by professionals.

Administration materials include the Examiner’s Manual which provides directions for administration; spiral-bound Stimulus Manual which contains all picture stimuli in easel format; and the individual Record Form.

The test items within each subtest are arranged by difficulty level. The items are multiple-choice and include four response options in pictorial format. The examiner administers the test items orally. The child responds orally or by pointing to the appropriate item response option.
Each child begins with the first five subtests which comprise the School Readiness Composite. The child starts with the first item and continues until he or she misses three consecutive items. The score on the five subtests is used to estimate the starting item on each of the remaining subtests. The examiner proceeds to administer each subtest until a basal and a ceiling are obtained. The examiner scores the child's response and records the score on the individual Record Form.

SCORES/SCORING. Each correct response earns one point. The number of correct responses is converted to a standard score (mean of 100, standard deviation of 15) based on the child's age at testing. A standard score or quotient is available for the BRACKEN-D Total Test and the School Readiness Composite.

A table is provided to convert the standard scores to percentile ranks, stanines, and NCEs. Also, "concept age" scores which describe average age performance are available for the BRACKEN-D total scores at one-month intervals, and for the subtest scores, at two-month intervals.

STANDARDIZATION/NORMING. The BRACKEN-D was standardized with 1,109 children between the ages of 2-6 to 7-11 years at 27 sites in four major geographic regions. Sample characteristics with regard to geographic region, sex, and ethnicity were compared to national characteristics, as reflected in the U.S. 1980 census. Reported data indicated that the north central region and the southern region were over- and underrepresented by about 10 percent, respectively.

TECHNICAL CHARACTERISTICS. Evidence of reliability is presented for internal consistency (split-half) and stability (test-retest).

- Reliability coefficients for internal consistency, reported for each 1-year age group from 3 to 7 years, ranged from .47 to .96 for the subtests and from .94 to .98 for the total test.

- Test-retest reliability coefficients for the total test and subtests are reported for a sample of 27 children who were tested two weeks apart. Reliability coefficients for the subtests ranged from .67 to .95. The reliability coefficients for the two composite scores (School Readiness and Total Test) were .98 and .97, respectively.
 Evidence of validity is presented for content validity and concurrent validity.

- Content validity was based on the procedures used in test development, as well as the field testing.

- Concurrent validity was based on the results of a number of studies which compared performance on the BRACKEN-D to the Peabody Picture Vocabulary Test-Revised, Boehm Test of Basic Concepts, Metropolitan Readiness Test, and the Token Test for Children. The correlation coefficients ranged from .68 to .88.

- Construct validity was based on the differential test performance of a small group of children who were hearing impaired and a matched sample of children who were not. The children who were hearing impaired scored significantly lower.

COMPONENTS. Materials include the Examiner's Manual, Stimulus Manual, and the individual Record Form.

The Examiner's Manual contains information on administration and scoring; interpretation of scores; use of test results for instructional purposes; test development; and technical characteristics, as well as the norms tables. The spiral-bound Stimulus Manual contains all picture stimuli in easel format.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-0952 (800-228-0752).

REVIEWS/REFERENCES:


OVERVIEW/PURPOSE. The Bracken Basic Concept Scale is a comprehensive measure of basic concepts. It includes two multiple-choice tests: a 30-item Screening test (BRACKEN-S) and a 258-item Diagnostic test (BRACKEN-D).

The BRACKEN-S is intended for use with children between the ages of 5 and 7 years who are enrolled in kindergarten and grade 1. The test, available in two alternate forms (A & B), is designed to screen and identify children for further assessment and/or remediation. The BRACKEN-D is intended for use with children who are identified as being at risk with the BRACKEN-S.

CONTENT. The BRACKEN-S is a multiple-choice test which includes 30 four-option items in pictorial format. The items were selected from eight of the BRACKEN-D subtests:

- Comparisons
- Shapes
- Direction/Position
- Social/Emotional
- Size
- Texture/Material
- Quantity
- Time/Sequence

ADMINISTRATION. The BRACKEN-S may be administered individually or to small groups of children with the use of a proctor. Administration is untimed but generally takes about 15 minutes. The test may be administered by professionals (teachers, speech/language specialists, and school psychologists) or by trained paraprofessionals. However, interpretation should be done only by professionals.

Administration materials include the Examiner's Manual, Directions Booklet, and the Test Booklet. The examiner administers the test items orally. The children respond to the examiner's directions by using a pencil or crayon to mark an X over the picture they consider to be the correct response.

SCORES/SCORING. Each correct answer earns one point. Based on the child's age at testing, the number of correct responses (raw score) is converted to a standard score (quotient) and the "concept age." The standard score is converted to a percentile rank, stanine, and NCE by age group. There are six 4-month age groups. The concept age is used to describe the average performance of the age groups on the subtests and total test.

The Examiner's Manual includes recommendations for establishing cut-off scores based on test performance that is more than one standard deviation below the mean.
STANDARDIZATION/NORMING. The BRACKEN-S was normed with 879 children in kindergarten and first grade, at 17 sites in four major geographic regions. Sample characteristics with regard to geographic region, sex, and race/ethnicity are compared to national characteristics, as reflected in the U.S. 1980 census data. Reported data indicated that the north central region was overrepresented by 10 percent and that the southern region was underrepresented by a corresponding amount.

TECHNICAL CHARACTERISTICS. Evidence of reliability was reported for internal consistency and alternate forms, using groups from the standardization sample. Reliability coefficients (K-R 20) ranged from .76 to .80 for internal consistency, and from .71 to .80 for alternate forms.

Evidence of validity of the BRACKEN-S was presented for content validity and concurrent validity. Content validity of the BRACKEN-S was based on content validity established for the total BRACKEN-D. Concurrent validity is based on the correlations of the BRACKEN-S with the total BRACKEN-D. The correlation coefficients are .61 for kindergarten and .60 and .64 for grade 1, Forms A and B, respectively. Predictive validity of the cut-score was not provided.

COMPONENTS. Materials include the Examiner's Manual, Directions Booklet, and the Screening Test Booklets (Form A and B). The Examiner's Manual includes information on administration and scoring, interpretation and instructional uses of test results, test development, technical characteristics, and score conversion tables.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-0952 (800-228-0752).

REVIEWS/REFERENCES:


OVERVIEW/PURPOSE. The Basic School Skills Diagnostic Inventory (BSSI-D) is a developmental survey instrument designed to measure children's general readiness skills for kindergarten or first grade. The BSSI-D is intended primarily for use with children from 4 to about 7-1/2 years old, as well as older children functioning within this developmental level.

The purpose of the BSSI-D is to: (1) identify children whose early abilities are significantly below those of their peers; (2) identify strengths and weaknesses for use in instructional planning; and (3) document progress resulting from intervention.

The Basic School Skills Inventory includes both the short 20-item BSSI Screening Inventory (BSSI-S) and the longer 110-item BSSI Diagnostic Inventory (BSSI-D). The BSSI-S is designed to identify children who may be at high risk for school failure. The BSSI-D, which is both norm- and criterion-referenced, is designed for conducting more comprehensive screening assessments.

CONTENT. The BSSI-D combines the format of a teaching rating scale with more formalized testing procedures. This structure is based on two premises: (1) school readiness should reflect the skills and abilities directly related to tasks and activities performed by children in school settings and (2) the child's classroom teacher should assume a primary role in assessing the child's performance.

The BSSI-D includes 110 items across six subtests which survey academic, linguistic, and behavioral skills:

<table>
<thead>
<tr>
<th>Subtests</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Living Skills</td>
<td>basic knowledge and skills required for day-to-day activities in school, including self-care, fine motor skills, independent behavior, knowing days of week, telling time, etc.</td>
</tr>
<tr>
<td>Spoken Language</td>
<td>ability to communicate orally, including vocabulary, language use and structure</td>
</tr>
<tr>
<td>Reading</td>
<td>pre-reading and reading skills, including letter recognition, sound-symbol relationships, words in context, emerging literacy</td>
</tr>
<tr>
<td>Writing</td>
<td>skills directly involved in writing letters, words, and sentences, including copying, spelling, grammar</td>
</tr>
</tbody>
</table>
## Content (continued)

<table>
<thead>
<tr>
<th>Subtests</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>concepts and operations involved in beginning mathematics, including numeral recognition, counting, quantitative relationships, computation</td>
</tr>
<tr>
<td>Classroom Behavior</td>
<td>behaviors of common concern to teachers, including attention, attitude, social skills, etc.</td>
</tr>
</tbody>
</table>

### Administration

The BSSI-D is individually administered. It is untimed but generally takes about 20-30 minutes. The examiner may be the teacher, aide, or other school staff member who have frequent opportunities to observe the daily classroom performance of the child.

Administration materials include the BSSI-D Manual which includes the six subtests and directions for administration; the Pupil Record Form for scoring and recording; and the Picture Book which contains materials needed for direct testing. The examiner must also supply a variety of item task stimulus materials, such as number and letter flash cards, scissors, clock, chalk, primary pencils, and paper.

The BSSI-D includes types of items: those which require a direct response by the child and those based on teacher observations of the child’s classroom performance. For items requiring a direct response by the child, the examiner presents the item task stimulus orally. The child’s responses may be oral, written, or pointing. The examiner scores and records the child’s scores during test administration.

For items based on teacher observations, each item starts with a question about the child’s performance and is followed by a detailed description of the expected behavior.

### Scores/Scoring

The child earns one point for each direct question answered correctly. For those items based on observations of the child’s daily behavior, the examiner makes a subjective "yes" or "no" judgment as to whether the child has mastered the skill in question.
SCORES/SCORING (continued)

The number of correct and "yes" judgments for each subtest and the total test are summed and then converted to standard scores and percentiles.

The standard scores for the subtests and total test are quotient scores: the total test standard score has a mean of 100 and a standard deviation of 15, and the subtests have a mean of 10 and a standard deviation of 3. Performance descriptors (superior, above average, average, and poor) are associated with ranges of the standard scores.

Norms are provided for seven age groups from 4-0 through 7-5 years, at six-month intervals. To assist in interpreting results, a profile form is provided for plotting standard scores and performance descriptors for the six subtests and total test. The Composite Skill Quotient, the standard score for the total test, provides an index of the child's overall skill performance. Children with skills quotients of 85 or lower, or percentiles below 16 are considered to be at high risk.

STANDARDIZATION/NORMING. The BSSI-D was standardized on a sample of 813 children between the ages of 4-0 and 7-5 years from 18 states. The characteristics of the sample relative to geographic area, type of community, race, sex, and parental occupation are compared to those of the national population as reported in the U.S. Statistical Abstract of the United States (1980). The size of the age groups is not indicated.

TECHNICAL CHARACTERISTICS. Evidence of reliability is based on internal consistency and alternate forms. Evidence of inter-rater reliability is not provided.

For the four age groups, from 4 through 7 years, coefficient alphas range from .79 to .97 for the six subtests and from .95 to .97 for the total test. Alternate form (BSSI-D and BSSI-S) reliability coefficients ranged from .83 to .92 for ages 4 to 6 years.

Evidence is presented for content validity, concurrent validity, and construct validity. Evidence of predictive validity is not provided.

Content validity is based on procedures used to develop the test. Concurrent validity was evaluated in relation to teachers' ratings. Construct validity was investigated in relation to differentiation by age and by ability, item discrimination, and interrelationships among the subtests.

COMPONENTS Materials include the 71-page Examiner's Manual, Picture Record Book, and one-page Pupil Record Form.
COMPONENTS (continued)

The Examiner's Manual includes the test, directions for scoring and administration, norms tables, and information on technical characteristics.

The Picture Book contains the materials for direct pupil testing on the Spoken Language, Reading, and Mathematics subtests.

The Pupil Record Form includes sections for recording score conversions, profile data, and examiner's comments.

PUBLISHER. PRO-ED, 8700 Shoal Creek, Austin, TX 78758-6847 (512-451-8542).

REVIEWS:


- Webster, William. J. Mental Measurement Yearbook Database (AN 0906-0424). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Basic School Skills Inventory (BBSI) consists of two components: the brief 20-item Screen (BSSI-S) and the longer 110-item Diagnostic (BSSI-D). The BSSI-S is designed for screening and identifying children who may be at high risk for school failure. The BSSI-D is designed for conducting more comprehensive assessments.

The BSSI-S is intended for use with four- through six-year-old children enrolled in day school, kindergarten, and first grade, as well as those not attending school. The purpose of the test is to identify children in need of remedial work, more comprehensive evaluation, or referral for special services; and also, to assess overall readiness for school.

CONTENT. The BSSI-S includes 20 items which focus on specific content and behaviors needed by young children in a classroom setting. The six areas of performance measured by the BSSI-S and the number of test items include:

- Daily Living Skills (5)
- Spoken Language (4)
- Reading Readiness (4)
- Mathematics Readiness (3)
- Writing Readiness (1)
- Classroom Behavior (3)

ADMINISTRATION. The test is individually administered in about 5-10 minutes. Since some test items require teacher ratings based on the examiner's observations, the test is best administered by the child's teacher who has frequent opportunities to observe classroom behavior.

Administration materials include the Answer and Record Sheet for each child, and item stimulus materials, including coins, alphabet flash cards, numeral cards, pencils, and paper. The four-page Answer and Record Sheet provides specific instructions to the examiner for administration and scoring, and also includes three test items.

The child's score is based on test performance as well as teacher ratings. The examiner orally presents instructions for each test item that requires the child's direct response. The child's responses are mostly oral but include pencil-and-paper (for the name writing task), and motor (for demonstrating book handling skills).
ADMINISTRATION (continued)

Items requiring teacher ratings are based on observations relating to the child's oral vocabulary and articulation, sight vocabulary, and various aspects of classroom behavior. The child's test performance is scored and recorded during administration.

SCORES/SCORING. The child receives a one (1) for each item passed or a "yes, the child can do this" rating, and a zero (0) for each item not passed or a "no, the child can't do this" rating.

The child's total raw score is converted to a standard score (mean of 100 and a standard deviation of 15) and an age-based percentile. Standard scores and percentiles are provided for three general age groups: 4-, 5- and 6-year olds.

Potential high risk performance is indicated by a standard score below 85 (one standard deviation below the mean) or a percentile below 16.

STANDARDIZATION/NORMING. The BSSI-S norms are based on the performance of a sample of 376 children, from ages 4 through 6, residing in 15 states. The characteristics of the sample relative to geographic area, residence, race, sex, and parent occupation are compared to those of the national population, as reported in the U.S. Statistical Abstract (1980).

The data reported indicated that the sample was not proportionate to the national population with respect to geographic area and parent occupation. The South was considerably overrepresented; and the East, Northeast, and West were underrepresented. Also, the sample included 25 percent more children of blue-collar workers than in the population.

TECHNICAL CHARACTERISTICS. Reliability data were reported for internal consistency (using Kuder-Richardson Formula 21) and for alternate forms.

- For internal consistency, the reliability coefficients ranged from .80 to .83 for the three age groups (4, 5, and 6).

- For alternate forms (BSSI-S and BSSI-D), the reliability coefficients ranged from .88 to .92 for the three age groups.

- Stability (test-retest) and interrater reliabilities were not reported.

Evidence was presented for content validity, concurrent validity, and construct validity.
TECHNICAL CHARACTERISTICS (continued)

- Content validity was based on the item selection procedures. The BSSI-S test items were selected from among those of the BSSI-D on the basis of their high correlations with the BSSI-D total score, as well as acceptable levels of difficulty and discriminating power.

- Concurrent validity was based on the correlations of the BSSI-S with the BSSI-D subtests and total score. The correlation coefficients ranged from .63 to .85 for the subtests and was .92 for the total test. Another study correlating the BSSI-S raw scores and teacher ratings yielded a correlation coefficient of .43.

- Construct validity was based on positive relationship of the BSSI-S raw scores and chronological age, and also on comparisons of correlations between average children and those classified as learning disabled.

- Data for predictive validity were not reported.

COMPONENTS. The BSSI-S materials include the Fact Sheet and the Answer and Record Sheet.

The 6-page Fact Sheet, which serves as the examiner's manual, provides background information about the development, standardization, and technical characteristics of the test, as well as directions for administration and scoring.

The 4-page individual Answer and Record Sheet includes specific instructions for test administration, space for recording the child's scores, norm tables, and a summary section.

PUBLISHER. PRO-ED, 8700 Shoal Creek, Austin, TX 78758-6897 (512-451-8542).

REVIEWS:


- Doebler, Leland K., University of Montevallo, Alabama. Review of the Basic School Skills Inventory-Screen. In Mental Measurement Yearbook Database (AN 0916-2861). Lincoln, Nebraska: Buros Institute of Mental Measurements at the University of Lincoln-Nebraska.
OVERVIEW/PURPOSE. The Chicago EARLY Assessment and Remediation Laboratory (Chicago EARLY) includes a 23-item developmental screening test and a correlated instructional program for use in prekindergarten and kindergarten programs. The purpose of the Chicago EARLY is to identify children with potential learning problems for further assessment and to give teachers systematic information for instructional planning.

CONTENT. The Chicago EARLY assesses children's skills in five skill areas:

- **Gross Motor** (walking on tiptoe, walking on a line, hopping, throwing, and catching)
- **Fine Motor** (copying designs, drawing parallel lines, and building a block bridge)
- **Language** (relating numbers to blocks, following directions, understanding basic relational concepts, and listening and speaking vocabulary)
- **Visual Discrimination** (matching symbols, solving puzzles, and sorting shapes)
- **Memory** (naming and pointing to colors, rote counting, recalling words, identifying body parts, understanding and responding to oral questions)

ADMINISTRATION. The Chicago EARLY Assessment is individually administered. Administration time generally ranges from 15 to 20 minutes. The examiner may be a teacher or trained paraprofessional.

Administration materials include the Assessment Manual which contains directions for administration in English and Spanish, individual score sheet, and item stimulus materials (bean bag, blocks, drawing worksheets, puzzles, pictures, and crayons).

For each item, the examiner gives directions orally in English and/or Spanish. The child's responses are oral, motor, and written, as required. The examiner scores the child's performance during test administration and records the score on the Assessment Score Sheet.

SCORES/SCORING. Items are scored from 0-7 according to established criteria. The 23 items on the Chicago EARLY Assessment yield a raw score in five subscales that correspond to the five skill areas: Gross Motor, Fine Motor, Language, Visual Discrimination, and Memory.

Raw scores are converted to equivalent percentile ranks by age group, in six month intervals, from ages 3-0 to 6-0. The percentile ranks range from 10 to 100, in intervals of 10.
SCORES/SCORING.

Suggested guidelines are given for score interpretation. Depending on various combinations of percentile standing in each of the five skill areas, the child may be rescreened; receive instructional remediation; or be referred for a Special Education evaluation, to the school nurse for a medical examination, for a hearing screening, for a vision screening, or to a speech and language therapist.

STANDARDIZATION/NORMING. The Chicago EARLY was developed by the Department of Research and Evaluation staff of the Board of Education of the City of Chicago.

The children in the norming sample were considered to be typical of large urban areas like Chicago, with about 54 percent Black, 29 percent White, 12 percent Hispanic, and 5 percent other. Reported information indicated that the norming sample included equal representation by both sexes, children with and without preschool experience, and children from a broad range of socioeconomic levels. The time period in which the norms were collected was not indicated.

The norm tables in the Assessment Manual were presented for six age groups, from ages 3 to 6, 4 in six-month time intervals. The size of the age groups ranged from 159 for ages 3-0/3-6 to 727 for ages 4-0/4-6.

TECHNICAL CHARACTERISTICS. Evidence of reliability was reported for stability (test-retest), interrater reliability, and internal consistency (using the alpha coefficient).

- Test-retest (over a one-week interval) correlation coefficients for the five subscales ranged from .72 to .91.

- Interrater reliability for the five subscales ranged from .87 to .98. The raters included trained outside testers and classroom teachers.

- The reliability coefficient for internal consistency of the total test was .89.

Evidence was reported for content validity, concurrent validity, and predictive validity.

- Content validity was based on the test construction and item selection process.

- Concurrent validity was examined by comparing test administration results on the Chicago EARLY and intensive diagnostic testing. Using discriminant analysis, results on the EARLY Assessment were found to match those of the diagnostic testing with almost 90 percent accuracy.
TECHNICAL CHARACTERISTICS (continued)

- Predictive validity was examined through a longitudinal study conducted in Chicago. An 8-page supplement to the Assessment Manual states that: "Definite relationships were found between the performance of children on the EARLY Assessment and later learning and psychomotor difficulties two to four years after the screening."

- Technical information is included in a series of papers, some of which are listed below.

COMPONENTS. Materials include the: 58-page Assessment Manual, Item Score Sheet, and a 264-page Instructional Activities handbook.

The Chicago EARLY Assessment Manual includes directions for administration in English and Spanish, instructions for scoring, and guidelines for interpretation of results. The Manual also presents summary information on norming, reliability, and validity.

The Instructional Activities handbook includes prescriptive activities designed to strengthen children's skills in areas of need identified by the CHICAGO EARLY Assessment.

The Item Score Sheet is used to score the child's performance during administration. Other record forms include the Individual Progress Record (for monitoring individual mastery of objectives) and the Classroom Summary Sheet (for use in instructional grouping).

PUBLISHER. The Chicago EARLY Assessment and Remediation Laboratory was developed by the Board of Education, City of Chicago, and is published by Educational Teaching Aids, 199 Carpenter Avenue, Wheeling, IL 60090 (800-445-5985).

REVIEWS/REFERENCES:


REVSIEWS/REFERENCES:

CIRCUS Levels A and B are the first two test levels of the Sequential Tests of Basic Skills (STEP III). Levels A and B include multiple assessment measures which may be used for comprehensive assessment or individually selected for their relevance to specific program goals.

Level A is designed for use with children in preschool and kindergarten, and Level B for children in kindergarten and grade 1. The purpose of CIRCUS is for program evaluation, individual assessment, and pre-/posttesting.

CONTENT. The assessment measures, available in one form, include both basic and supplementary measures. The basic assessment measures include:

- **Listen to the Story** measures basic comprehension including memory, sequence, functional language, interpretation and vocabulary.
- **How Much and How Many** measures understanding of number concepts, including counting, one-to-one correspondence, ordination, comparison, simple additive notions, seriation, number-numeral correspondence, and simple spatial relationships.
- **Word Puzzles/Pre-reading** (Level B only) measures understanding of structural and phonetic properties of words.

The supplementary measures include:

- **Copy What You See, Do You Know?** (general knowledge)
- **Finding Letters and Numbers**
- **How Words Sound**
- **How Words Work**
- **Look-Alikes** (visual discrimination)
- **Make a Tree** (divergent pictorial production skills)
- **Noises**
- **Say and Tell**
- **See and Remember**
- **Things I Like**
- **Think It Through** (problem-solving)
- **What Words Mean**
ADMINISTRATION. The assessment measures may be administered individually or in a group of up to 10 children. The CIRCUS assessments are untimed but generally require about 20-30 minutes for each test. The examiner should be the classroom teacher.

Administration materials include the User's Guide which includes directions for administration, scoring, and interpretation; and the test booklet. Practice materials are available and most assessment measures have one or two sample items.

Most test items are multiple-choice with four response options in pictorial format. The examiner reads the questions aloud, and children respond by marking a picture option.

SCORES/SCORING. Items are scored pass/fail. For the basic battery tests, CIRCUS provides expanded standard scores (continuous with those of Levels C & D) and national percentiles and stanines. Test items are multiple-choice. Also, scoring for Levels A and B emphasizes verbal reports.

STANDARDIZATION/NORMING. Level A was nationally normed in midyear of 1972-73 (with 1,006 children in nursery school) and also in fall of 1972-73. Level B was nationally normed in fall of 1976 (with 6,394 children in kindergarten) and in spring of 1975.

TECHNICAL CHARACTERISTICS. Evidence of reliability is presented for internal consistency of each CIRCUS measure (except Make a Tree) and subscales within the measures. The alpha reliability coefficients ranged from .68 to .92 (nursery school); .71 to .87 (kindergarten); and .75 to .93 (first grade).

Evidence of validity is presented for content and concurrent validity. Content validity is based on test development. Concurrent validity is based on a study comparing children's scores on CIRCUS and teacher ratings. The average correlation was .41.

COMPONENTS (continued)

"After the CIRCUS" explains how to interpret test results and provides suggestions for follow-up teaching activities.

The CIRCUS Manual and Technical Report provides information on test development, standardization and norming, and technical characteristics.

PUBLISHER/DISTRIBUTOR. CTB/McGraw-Hill, 2500 Garden Road, Del Monte Research Park, Monterey, CA 93940 (800-538-9547; 408-649-8400 in AK, HI, and foreign countries).

REVIEWS:

- Aiken, Lewis R. Review of CIRCUS. In Mental Measurements Yearbook Database (AN 0901-1190). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.


OVERVIEW/PURPOSE. The Cognitive Skills Assessment Battery (CSAB) is a criterion-referenced test designed to assess three- to six-year-old children's skills in the cognitive and motor skills areas. The test is designed to assist teachers in profiling individual and group competencies for use in curriculum planning for prekindergarten and kindergarten programs.

CONTENT. The CSAB is not based on any one theory of early childhood development. Its content and skill areas are based on reviews of curricular materials, teacher interviews, classroom observations, and research. The skills assessed by the CSAB fall in five broad areas:

- **Orientation Toward One's Environment** (basic information, and identification of body parts)
- **Discrimination of Similarities and Differences** (color, shape, and symbol discrimination; and auditory and visual auditory discrimination)
- **Comprehension and Concept Formation** (number knowledge, information from pictures, picture comprehension, story comprehension, multiple directions, vocabulary, and letter naming)
- **Coordination** (gross motor and visual-motor)
- **Memory** (immediate, delayed, and picture recall; and overall memory).

ADMINISTRATION. The CSAB is individually administered in one or two sittings, depending upon the child. Administration time is about 20-25 minutes. Also, the test may be administered to large groups of children by a team of examiners or to a class of children by teachers and aides. Several options for administration are available: during fall registration or the first few weeks of school; during the regular school year; or during the last two or three weeks of the school year.

The CSAB was designed for use by teachers, aides, school psychologists, and learning disability specialists. While specialized training is not required to administer the test, thorough familiarity with test content and scoring procedures, as well as trial administrations, are necessary.

Administration materials include the **Assessor’s Manual**, **Card Easel** for presenting the items to the child, **Pupil Response Sheet**, and miscellaneous materials, including blocks, watch with a second hand, pencils, paper, and a clipboard.
ADMINISTRATION (continued)

During administration, the child and the examiner sit at a table on which the two-sided Card Easel is placed. The Card Easel presents the illustrations or information needed to perform the task on the side facing the child, and the corresponding instructions and scoring procedures on the side facing the examiner.

The examiner orally presents instructions for each task. The child's required response may be oral, written, or motor. The examiner codes the child's response and records it on the Pupil Response Sheet. The Pupil Response Sheet is also used by the child for printing his or her name and for the visual-motor coordination tasks.

After testing is completed, the examiner uses a four-point scale to rate the child's behavior on factors such as: task persistence, attention span, body movement, and attention to directions during assessment.

SCORES/SCORING. Depending on the item task, one of two different methods is used to code the child's response. One method uses a plus (+) or minus (-) sign to indicate that the child can or cannot perform the task. The other method uses a code to indicate the child's level of competence for developmental tasks: Level 2 indicates full competence; Level 1 indicates partial competence, and Level N indicates complete lack of competence.

Total scores are not available. For interpretation, two types of comparative fall and spring data are provided: (1) percent of children responding to each item option by grade level (prekindergarten and kindergarten) and socioeconomic level (lower and middle), and (2) average age maximum score for each goal area by grade and socioeconomic level.

STANDARDIZATION/NORMING. The test does not have national norms. The CSAB was field tested in the fall of 1979 and spring of 1980 with prekindergarten and kindergarten children selected to be broadly representative of socioeconomic status levels. The characteristics of children included in the fall (N = 860) and spring (N = 558) samples are described by geographic distribution, community type (urban, suburban), and socioeconomic level (lower and middle).

The comparative data from the field testing are intended to provide a general framework for understanding developmental and experiential differences; the data also provide understanding of how other pupils have performed in their prekindergarten and kindergarten experiences. The authors stress the importance of assessing the child's progress, from beginning to end of the school year, for making further decisions about needed instruction.
TECHNICAL CHARACTERISTICS. Evidence of reliability was presented for stability (test-retest) and validity (content).

- A test-retest study was conducted with 16 prekindergarten and 32 kindergarten children from two geographic locations. Testing occurred at the end of the school year, the retest interval was two- to three-weeks. Overall agreement on the test items was 80 percent at the prekindergarten level and 85 percent at the kindergarten level. Assessor agreement on the observations was 40 percent and 79 percent at the prekindergarten and kindergarten levels, respectively.

- Content validity is based on the procedures used in test development, including literature and curricula reviews, teacher survey of competencies, classroom observations, and field testing.

COMPONENTS. The CSAB includes four components: 58-page Assessors Manual, Card Easel used for test administrations, Pupil Response Sheet, and the Class Record Sheet.

The Assessors Manual includes a description of the CSAB; directions for administration and scoring; information about interpretation and use of test results; information about test development, field testing, and technical characteristics; and the fall and spring field test data.

Scores on the individual Pupil Response Sheets are transferred to the Class Record Sheet which are used for profiling individual and class responses.


REVIEWS:


OVERVIEW/PURPOSE. The DIAL-R is a developmental screening survey. The test is designed to screen large numbers of children from ages 2-6 on an individual basis and identify those with potential problems or giftedness who would benefit from further assessment.

CONTENT. The skills assessed by the DIAL-R include perception, memory, previous learning association, kinesthetic awareness and coordination, and language. The test includes 24 items in three skill areas:

- **Motor** (catching, jumping/hopping/skipping, building, touching fingers, cutting, matching, copying, and name writing)
- **Concepts** (naming colors, identifying body parts, counting, positioning, identifying concepts, naming letters, and sorting chips)
- **Language** (articulating, giving personal data, remembering, naming nouns, naming verbs, classifying foods, solving problems, and length of sentences used)

ADMINISTRATION. DIAL-R takes about 20-30 minutes to administer to each child. The test is administered in a large room by a team of examiners (professionals and/or paraprofessionals) at a separate station for each skill area.

Administration materials include the child's score sheet, materials included with the DIAL-R kit, and materials provided by the examiner (Polaroid camera, film/flash bulbs, balance watch with second hand, and clay).

Other stations include a registration/play area and a "photo" area where each child's picture is taken. Screening for vision and hearing is conducted in an adjacent room. A professional staff member who serves as coordinator is responsible for all arrangements, including training and monitoring of team members, and verification and interpretation of scores.

Children carry their score sheets from station to station where the examiner orally presents the skill area tasks. Recommended entry and exit levels for skill area tasks are provided by age. The examiner presents the item task orally and the child's required responses are oral or motor. The examiner at each station also observes and records aspects of children's social/emotional behavior which could influence their test scores.
SCORES/SCORING. The examiner rates the child's performance on each task according to established criteria and enters the score on the score sheet. Each raw score is converted to a scale score ranging from 0 to 4. A maximum of 31 points is possible within each of the three skill areas and the scores are summed to obtain a total DIAL-R score.

Cut-off scores are provided for total scores by three-month age groups. Children scoring 1.5 standard deviations below or above the mean of the norming sample are respectively identified as "potential problem" or "potential gifted." Supplementary cut-off scores are also provided for the 5th, 10th, 90th, and 95th percentiles for children by race (nonwhite and white). Cutoff scores are also available by skill area. Percentiles for the total score are provided by six-month age groups.

STANDARDIZATION/NORMING. The standardization of DIAL-R included a national sample stratified by geographic region, community size, age, sex, and ethnicity. Data were also collected on parent educational level and the use of a second language in the home. Testing was conducted between September 1981 and March 1983 with a sample of 2,447 children.

TECHNICAL CHARACTERISTICS. Reliability data were presented for internal consistency (using coefficient alpha) and stability (test-retest).

- Coefficient alphas were computed by age group for each subtest and the total score. For the subtests, the reliability coefficients ranged from .41 (for Language at age 5-6 years) to .88 (for Language at 2 years). Seventy-five percent of the 48 reliability coefficients were below .80. For the total score, the reliability coefficients ranged from .75 to .94.

- Test-retest reliability coefficients for a two-week period were computed across age groups. For the total test, the reliability coefficient was .87, and for the subtests, the reliability coefficients ranged from .76 for Motor to .90 for Concepts.

Evidence of validity was presented for content, concurrent, and predictive validity:

- Content validity of the DIAL-R was based on item selection procedures. These included the literature search, interviews with early childhood and kindergarten teachers, reviews by consultants, and the pilot study.
DEVELOPMENTAL INDICATORS FOR THE ASSESSMENT OF LEARNING, REVISED (DIAL-R), 1983

TECHNICAL CHARACTERISTICS (continued)

- A concurrent validity study was conducted with 125 children between the ages of 2 and 6 years who were tested with the DIAL-R and the Stanford-Binet. Correlations between the DIAL-R subtests and the Stanford-Binet ranged from .28 (Motor) to .50 (Concepts). For the total test, the correlation was .40.

- A classification analysis study of the cut scores showed that 64 percent of the children referred for potential problems and 97 percent of those who were not referred, were classified correctly.

- A predictive validity study of the previous edition of DIAL showed significant relationships between children's scores on DIAL and achievement tests in kindergarten and grade 1.

COMPONENTS. Materials include the DIAL-R Manual, individual score sheets, and other materials used for administration.

The DIAL-R Manual includes instructions for administration, information about standardization and reliability. It also addresses content and construct validity.

Available supplementary materials include a training videotape, microcomputer program, and follow-up instructional activity cards for home and school use. The microcomputer program performs scoring, reporting, and record keeping, and also may be used for developing local norms and cutoff scores.

PUBLISHER. Childcraft Educational Corporation, 20 Kilmer Road, Edison, NJ 08818 (201-572-6100).

REVIEWS/REFERENCES:

DEVELOPMENTAL INDICATORS FOR THE ASSESSMENT
OF LEARNING, REVISED (DIAL-R), 1983

REVIEWS/REFERENCES


OVERVIEW/PURPOSE. The Developing Skills Checklist (DSC) consists of a developmental screening test and two observation checklists: the Social-Emotional Observational Record (to be completed by the child's teacher) and the Home Inventory (completed by the child's parent).

The DSC was designed to provide information regarding the child's acquisition of skills which are considered to be: (1) characteristic of children by the end of kindergarten and (2) prerequisite to formal instruction in reading and mathematics. The primary purpose of the DSC is to assist teachers in planning individualized instructional programs.

CONTENT. The DSC developmental screening test includes the following scales, domains and objectives:

- **MATHEMATICAL CONCEPTS AND OPERATIONS** (37 items)
  - Shapes
  - Patterns
  - Counting
  - Identifying numerals
  - Matching sets and numerals
  - Joining & separating sets
  - Ordinal Positions
  - Logical Operations

- **LANGUAGE** (29 items)
  - Body Parts
  - Personal Information
  - Labeling Objects
  - Position Words
  - Story Sequence
  - Opposites

- **VISUAL** (16 items)
  - Matching Same/Different
  - Hidden Pictures
  - Identifying Colors

- **AUDITORY** (21 items)
  - Word Discrimination (Same/Different)
  - Segmenting Sentences
  - Segmenting Words
  - Rhyming

- **MEMORY** (29 items)
  - Short Term Memory
  - Naming Letters
  - Sounds and Letters
  - Blending C-V-C Words

- **MOTOR** (6 items)
  - Gross Motor (Hopping, Walking, Jumping, Skipping)
  - Fine Motor (Cutting Fringe, Holding Pencil)

- **PRINT CONCEPTS** (21 items)
  - Holding Book/Turning Pages
  - Identifying People Reading
  - Differentiating Words/Numerals
  - Components of Writing

*This review is based on the standardization edition. The scheduled publication date is September 1, 1989.*
DEVELOPING SKILLS CHECKLIST (DSC), 1990

Range: PreK-K; 4-6 Years

CONTENT (continued)

- WRITING CONCEPTS (# Items N/A)
- PREREADING TOTAL (115 items)

  Left-right Progression
  Printing First Name
  Drawing a Person
  Writing a Message - Mechanics
  Writing a Message - Quality

  Language
  Memory
  Visual
  Auditory
  Print Concepts

The Teacher Checklist includes 54 statements of skills pertaining to six areas of social/emotional behavior, as indicated below. The child's teacher rates each skill statement as "observed" if it is demonstrated by the child on a regular basis or "unobserved."

Social/Emotional Areas

Self-Esteem
Self-Control
Responsibility
Social Responsiveness
Classroom Skills
Self-Care

The Home Inventory includes 31 statements of skills pertaining to four areas of social/emotional behavior, as indicated below. The parent scores each skill statement as "observed" or "unobserved" and also reports the child's activities at home. The Home Inventory also requests information about the left- or right-handedness of the child.

Social/Emotional Areas

Home Skills
Self-Concept
Social Responsiveness
Self-Care
ADMINISTRATION. The test is individually-administered by a single examiner. The test is designed to be given in one testing session but may be given over a three-day period. The Writing and Drawing Book may be group-administered.

To facilitate screening large numbers of children, the Item Books can be team-administered at stations. Administration time at each station is about 10 minutes for each child. The examiner may be a teacher or trained classroom aide. Administration practice is required.

Prior to the actual test administration, the teacher sends home with each child the Home Inventory (parent checklist) and the Parent Letter.

Administration materials include: Administration manuals; spiral-bound Item Books; Writing and Drawing Book; and a 6-page booklet "A Day at School" (used as item stimulus material for the Print Concepts subtest); Score Sheet; and manipulatives. The manipulatives which come with the DSC kit include: attribute blocks, interlocking cubes, boxes, sorting sheet, plastic geometric shapes, rods, bunnies, etc.

The test items are included in the spiral-bound Item Books. The Item Books are displayed in easel format allowing the child to view one page while the examiner looks at the opposite page and reads the item directions to the child. The child's responses may be oral, motor, or written. The examiner rates the child's performance during test administration.

SCORES/SCORING. For each test item, the examiner rates the child's performance as "observed" or "unobserved," on the Score Sheet. The Score Sheet is available in two versions--one for hand-scoring and the other for machine-scoring.

Age norms (4 though 6 years of age) and time-of-year norms for the spring of prekindergarten and for fall, winter, and spring of kindergarten are available for the DSC scales. The scales include: Mathematical Concepts and Operations, Language, Memory, Auditory, Print Concepts, and Total Prereading.

STANDARDIZATION/NORMING. In publication.

TECHNICAL CHARACTERISTICS. In publication.

COMPONENTS. Materials include:

- DSC Administration and Score Interpretation Manual
COMPONENTS (continued)

- **DSC Item Books** (spiral-bound books for test administration):
  - Book 1. Mathematics Concepts and Logical Operations
  - Book 2. Language and Memory
  - Book 3. Motor, Visual, and Auditory

- **Concepts of Print and Writing Administration Manual** (presents the rationale and administration and scoring procedures for items pertaining to print and writing concepts development).

- **A Day at School** (6-page stimulus book used to administer Concepts of Print and Writing).

- **Box of Manipulatives** (item response stimuli, including: attribute blocks, interlocking cubes, boxes, sorting sheet, plastic geometric shapes, rods, bunnies, etc.).

- **Consumable Social-Emotional Observational Record** (for teacher observation of the child's social and emotional behavior) and **Social-Emotional Administration Manual**.

- **Home Inventory** for Parent Observations.

- **Parent Conference Form** (for reporting test results to parents and suggesting at-home educational activities).

- **Class Record Book** (on-going assessment form).

- **Norms Book and Technical Report** will include technical data about the DSC and the norms tables (in publication).

**PUBLISHER.** CTB/McGraw-Hill, 2500 Garden Road, Monterey, CA (800-538-9547 for continental U.S. and 408-649-8400 for AK, HI, or foreign countries).

**REVIEWS:**

- To be reported as available.
OVERVIEW/PURPOSE. The Early Childhood Screen is a developmental screening test designed for use with children at ages 2 and 2-1/2 years. The purpose of the Preschool Screen is to identify potential at-risk children for more comprehensive assessment. The Early Childhood Screen also includes a screening observation form and parent and teacher rating scales.

CONTENT. The Early Childhood Screen includes a group of criterion-referenced measures (assessments) designed to obtain a sampling of the learning and developmental skills of young children. The test includes both basic and optional advanced assessments. Each assessment includes varied numbers of items selected from the Brigance Inventory of Early Development (1978; birth to grade 7).

The developmental areas and skills assessed by the Early Childhood Screen are indicated below. The skills assessed for the 2-1/2 year-old children are at a more advanced level than those for the two-year-olds.

<table>
<thead>
<tr>
<th>Developmental Area</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Knowledge and Comprehension</td>
<td>Identifies Body Parts</td>
</tr>
<tr>
<td></td>
<td>Identifies People in Pictures</td>
</tr>
<tr>
<td></td>
<td>Identifies Objects</td>
</tr>
<tr>
<td></td>
<td>Quantitative Concepts</td>
</tr>
<tr>
<td></td>
<td>Matching Colors**</td>
</tr>
<tr>
<td>Speech and Language</td>
<td>Personal Data Response**</td>
</tr>
<tr>
<td></td>
<td>Picture Vocabulary</td>
</tr>
<tr>
<td></td>
<td>Verbal Fluency</td>
</tr>
<tr>
<td></td>
<td>Verbalizes Personal Needs**</td>
</tr>
<tr>
<td>Gross Motor Skills</td>
<td>Standing</td>
</tr>
<tr>
<td></td>
<td>Walking</td>
</tr>
<tr>
<td></td>
<td>Jumping</td>
</tr>
<tr>
<td></td>
<td>Hopping**</td>
</tr>
<tr>
<td>Fine Motor Skills</td>
<td>Builds Tower with Blocks</td>
</tr>
<tr>
<td></td>
<td>Draws Shapes (Visual-motor)**</td>
</tr>
<tr>
<td>Math</td>
<td>Number Concepts**</td>
</tr>
<tr>
<td></td>
<td>**Optional advanced assessment</td>
</tr>
<tr>
<td></td>
<td>***Basic and optional advanced assessment</td>
</tr>
</tbody>
</table>
ADMINISTRATION. The Early Childhood Screen is individually administered in about 12-15 minutes. The examiner may be a teacher or a trained paraprofessional.

Administration materials include the Manual which contains the assessments and directions for administration and scoring; Data Sheet (for each age level); building blocks; and writing paper and a pencil.

The Manual, displayed in easel format, displays the child's assessment material on the page facing the child and the examiner's directions on the opposite page facing the examiner. For each assessment, the examiner's page includes the oral instructions to the child as well as detailed directions for administration and scoring, in a standard format, including:

- **Skill:** general statement of skill being assessed.
- **Data Sheet:** age-level data sheet to be used.
- **Assessment Method:** means recommended for assessment - oral, pointing, motor, or written.
- **Material:** response stimulus materials needed for the assessment.
- **Discontinue:** the time frame, or criteria and suggestions for discontinuing the assessment.
- **Time:** suggested or recommended length of time for the assessment.
- **Accuracy:** scoring criteria.
- **Point Value:** the number of points given for each correct response.
- **Student Page Format and Answers:** facsimile of student page and correct answers.
- **Notes:** helpful notes regarding observations, adaptations, and supplemental assessments.
- **Directions (recommendations for assessing the skill).**

The examiner scores the child's performance during administration and records the scores in the Child Data Sheet.
SCORING/SCORING. Each correct response is assigned a different score value, depending on the assessment. The examiner calculates a raw score value for each assessment and the total test. The total possible score is 100.

After screening is completed, each child's data are reviewed by a committee and a decision is made for referral, as appropriate.

STANDARDIZATION/NORMING. Norms are not available.

TECHNICAL CHARACTERISTICS. Technical data on reliability and validity are not available. Content validity for the Brigance Preschool Screen and the K & 1 Screen is based on a literature review and the results of field testing and critiquing.

COMPONENTS. The ECS materials include: Manual, Data Sheets (one for age two and one for age two and one-half), building blocks, and Spanish Directions Booklet.


REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Early School Assessment (ESA) is a nationally-normed, instruction readiness test designed for use at the end of prekindergarten through the beginning of grade 1. The primary purpose of the test is to assist teachers in planning individualized instructional programs. The test assesses skills that are characteristic of kindergarten children as well as skills that are prerequisite to formal instruction.

The ESA has two test levels (Levels 1 & 2) which measure prereading and mathematics skills. Level 1 is intended for the end of prekindergarten through the middle of kindergarten. Level 1 can also be used at the end of kindergarten for children who are not mastering basic kindergarten skills. Level 2 is intended for use from the middle of kindergarten through the beginning of first grade.

CONTENT. The ESA provides five subtest scales: Language, Visual, Auditory, Memory, and Mathematical Concepts and Operations, and two scales for the composites: Total Prereading and Total Mathematics. The number of items and objectives within each scale are:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Level 1 Objectives</th>
<th>Level 2 Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>(22 items) Matching, Hidden pictures, Letter names</td>
<td>(18 items) Patterns, Embedded Patterns</td>
</tr>
</tbody>
</table>

*This review is based on the standardization edition. The test will be available October 1, 1989.
CONTENT (continued)

<table>
<thead>
<tr>
<th>Scale:</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematical Concepts and Operations</td>
<td>(32 items)</td>
<td>(37 items)</td>
</tr>
<tr>
<td>Number Concepts</td>
<td>Number/Numeral Correspondence</td>
<td>Number/Numeral Correspondence</td>
</tr>
<tr>
<td></td>
<td>Quantitative Concepts</td>
<td>Quantitative Concepts</td>
</tr>
<tr>
<td></td>
<td>Joining Sets</td>
<td>Joining Sets</td>
</tr>
<tr>
<td></td>
<td>Separating Sets</td>
<td></td>
</tr>
<tr>
<td>Logical Operations</td>
<td>Set Equivalence</td>
<td>Set Equivalence</td>
</tr>
<tr>
<td></td>
<td>Grouping</td>
<td>Grouping</td>
</tr>
<tr>
<td></td>
<td>Ordering</td>
<td>Ordering</td>
</tr>
<tr>
<td>Memory</td>
<td>(22 items)</td>
<td>(22 items)</td>
</tr>
<tr>
<td></td>
<td>Listening Comprehension</td>
<td>Listening Comprehension</td>
</tr>
<tr>
<td></td>
<td>Following Directions</td>
<td>Following Directions</td>
</tr>
<tr>
<td></td>
<td>Word Sequence</td>
<td>Word Sequence</td>
</tr>
<tr>
<td>Prereading</td>
<td>(86 items)</td>
<td>(87 items)</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>Language</td>
</tr>
<tr>
<td></td>
<td>Visual</td>
<td>Visual</td>
</tr>
<tr>
<td></td>
<td>Auditory</td>
<td>Auditory</td>
</tr>
<tr>
<td></td>
<td>Memory</td>
<td>Memory</td>
</tr>
<tr>
<td>Total Mathematics</td>
<td>(54 items)</td>
<td>(55 items)</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td>Math</td>
</tr>
<tr>
<td></td>
<td>Visual</td>
<td>Visual</td>
</tr>
</tbody>
</table>

ADMINISTRATION. The ESA is a group administered, multiple-choice test. Administration time for each of the six testing sessions is about 25 minutes, including break time. The ESA is administered by the teacher. Practice in administration is required.

ADMINISTRATION (continued)

Prior to administering the ESA, the teacher distributes a copy of the coloring sheet for each child and reads aloud a story about the characters in the picture. These characters appear throughout the 16-item Practice Book (administered on a subsequent date) and the ESA test book.

The ESA test items are in pictorial format and contain three or four response options. The teacher reads each test item aloud and the child responds by bubbling in the circle under the item response option he/she considers to be correct.

SCORES/SCORING. The ESA provides both norm- and criterion-referenced information. Norm-referenced scores include: scale scores, national percentile ranks, national stanines, and normal curve equivalents (NCEs). Predictions to CAT/E and CTBS/4 will be available from the child's performance on the ESA.

The criterion-referenced information for each objective includes: number of items possible, number of items answered correctly, and the performance criteria: + (move to next instructional level); P (continue instruction and practice); - (introduce or reteach); and blank (no valid attempt).

STANDARDIZATION/NORMING. The ESA was standardized in the fall of 1988, winter of 1988-89, and the spring of 1989. The national sample was scheduled to include about 30,000 prekindergarten and kindergarten children from public school districts, private schools, and Catholic dioceses.

TECHNICAL CHARACTERISTICS. Preliminary reliability data for internal consistency is based on the fall 1988 standardization. Using Kuder-Richardson Formula 20 (K-R 20), the reliability coefficients ranged from .82 to .88 for the Level I scales, and from .80 to .90 for the Level II scales. For the Total Scores (Prereading and Mathematics), the K-R 20 coefficients ranged from .91 to .94.

COMPONENTS. Materials available include:

- Master Coloring Sheet and the Practice Book (consumable) are used for test familiarization activities.

- Test Book (for each test level) includes a machine- and a hand-scoreable test book. An Answer Key is provided for each level.

- Examiner's Manual (for each test level) contains directions for administration.
COMPONENTS (continued)

- **Teacher's Guide** (for each level) presents the theoretical foundations of the ESA, objectives measured by the ESA, and information on score interpretation.

- **Class Record Sheet** for Hand Scoring helps the teacher collect criterion- and norm-referenced information about students for instructional purposes.

- **Parent-Teacher Conference Report** (for each level) provides information about the child's performance on the ESA and suggestions for at-home instructional activities.

- **Preliminary Norms Booklet** (in publication) contains norms for both test levels.

- **Preliminary Technical Report** (for both levels) is in publication.

The ESA may be supplemented with two components of the Developing Skills Checklist: (1) **Concepts of Print and Writing** and (2) the **Social-Emotional Observational Record and Administration Manual**.

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**PUBLISHER.** CTB/McGraw-Hill, 2500 Garden Road, Monterey, CA 93940 (800-538-9547 for continental U.S. and 408-649-8400 for AK, HI, or foreign countries).

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**REVIEWS:**

- To be reported as available.
OVERVIEW/PURPOSE. The Early Screening Inventory (ESI) is a brief developmental screening test designed for use with four- to six-year old children. The purpose of the ESI is to identify and refer children with potential learning or handicapping conditions for further assessment and/or special services. The ESI may be used as part of a comprehensive screening process that includes a parent questionnaire, medical examination, and hearing and vision tests. The ESI is not intended for use as a school readiness or entry examination.

CONTENT. The ESI includes 30 items which are structured to survey children's development in the areas of speech, language, cognition, perception, and gross- and fine-motor coordination. The ESI consists of a series of tasks organized in four sections:

- **Initial Screening.** The item tasks assess ability to respond to an unstructured drawing task and fine motor control (letter writing).

- **Visual-Motor/Adaptive.** The item tasks focus on fine-motor control, eye-hand coordination, and ability to recall visual sequences, draw visual forms, and reproduce visual three-dimensional structures.

- **Language and Cognition.** The item tasks measure language comprehension, verbal expression, and ability to reason, count, and remember auditory sequences.

- **Gross Motor/Body Awareness.** The item tasks focus on balance, large motor coordination, and ability to imitate body positions from visual cues.

ADMINISTRATION. The test is individually administered and usually takes about 15 to 20 minutes. Examiners are required to have some formal background in early childhood behavior and development, and also, receive supervised practice in administration.

Administration materials include the combined Test and Manual which includes detailed instructions for administration and scoring, individual ESI Score Sheet, pencils and paper, and nonconsumable item stimulus materials (cards, cubes, ball, button, and a small toy truck or car).

During administration, the child is seated at a child-sized table across from the examiner who orally presents the stimulus for each item task. The child's responses are oral, written, or motor, as required. As the child completes each item, the examiner checks the appropriate box (pass, fail, or refuse) on the ESI Score Sheet and records any relevant observations.

*The ESI Score Sheet and Manual were revised in 1988. The test is currently being renormed.*
SCORING. The number of points possible for each task range from 0 to 3, depending on the task. The total raw score is obtained by adding all the points received by the child.

Separate cutoff scores are provided for the four 6-month age groups, from 4-0/4-5 to 5-6/5-11. The cutoff scores are based on the standardization sample’s means and standard deviations. The classification categories and their score ranges are:

- **OK** category includes scores higher than one SD below the mean.
- **Rescreen** category includes scores falling between one and two SDs below the mean. Children with scores in the rescreen range are tested again in 8-10 weeks to determine need for referral.
- **Refer** category includes scores lower than two SDs below the mean.

Because of the small sample size of children in the 5-6/5-11 age group (N=13), the cutoff scores for this age group were extrapolated from the scores of the younger age groups.

STANDARDIZATION/NORMING. Limited information about the norming sample is provided. The sample included 465 children, ages 4-2 to 5-10, who were primarily from urban white families of low to lower-middle socioeconomic status. Two age groups (4-6/4-11 and 5-0/5-5) included 227 and 175 children, respectively. However, the youngest age group (4-0/4-5) included 50 children, and the oldest age group (5-6/5-11) included 13 children.

The ESI is currently being renormed with a large national sample of children to be stratified by age, sex, and race. Norms for Hispanic children are expected to be available. A separate version of the ESI will be prepared for three-year-olds.

TECHNICAL CHARACTERISTICS. The ESI was first introduced in 1975 as the Eliot-Pearson Screening Inventory. The test items were developed by the authors or were selected and adapted from well-known diagnostic and screening instruments (Denver Developmental Screening Test, Purdue Perceptual-Motor Survey, Illinois Test of Psycholinguistic Abilities, and the Stanford-Binet Intelligence Scale).

The Inventory had four major revisions, based on extensive trial-testing and preliminary reliability and validity studies.

An item analysis was conducted with the standardization sample to examine the ability of items to differentiate between children classified as OK and Refer. Results indicated that the items did differentiate between children in the two groups. With one exception, at least 75 percent of the children classified as OK passed each item and about 60 percent of the children classified as Refer failed each item.
TECHNICAL CHARACTERISTICS (continued)

Test reliability data are presented for interscorer reliability and stability (test-retest):

- In a study that included three examiners and 18 children, ages 4 to 5-10 years, interscorer reliability percentages for the four ESI sections were above .80, and the correlation for the total scores was .91.

- Test-retest reliability for the ESI total scores of 57 children tested a week apart by six examiners was .82.

Evidence of validity is presented for concurrent and predictive validity:

- A concurrent validation study that included 102 children, stratified in terms of age, sex, and socioeconomic status, indicated a strong correlation (.73) between the scores on the total ESI and the General Cognitive Index of the McCarthy Scales of Children's Abilities (MSCA). Contingency tables analyses supported the strong relationship between the ESI and the MSCA.

- A short term predictive validity study of the ESI and the Metropolitan Readiness Test (MRT) was conducted with 475 kindergarten children. The children had been tested with the MRT at the end of kindergarten and had been screened with the ESI from 7-12 months earlier. Results indicated moderate but statistically significant correlation coefficients ranging from .44 to .49 across age and sex groups. Using a 15 percentile cutoff criterion on both the ESI and the MRT prereading composite based on local kindergarten norms, contingency table analyses showed 83 percent agreement on children who scored below or above the criterion for both tests.

- A longitudinal predictive validity study was conducted with 115 children from kindergarten through grade 4. The 15th percentile was used as the cutoff score for the ESI and report-card grades, referral, and disposition (promotion or detention), as well as other screening results (parent questionnaire, vision, hearing, medical). Correlation, stepwise multiple regression, and contingency tables analyses were performed. Results indicated: the highest correlations were between ESI scores and report-card grades in kindergarten through grade 2; a significant correlation existed between ESI scores and the need for special education services in grades 3 and 4; the addition of ESI scores to other screening components strengthened or made the regression equation statistically significant; the total percent of children correctly identified ranged from 64 percent to 79 percent; and the ESI most correctly identified children from kindergarten through grade 1.
COMPONENTS. The ESI is available in a kit which includes the 60-page combined Test and Manual; screening materials (an assortment of nonconsumable objects used in test administrations); Score Sheet; and the Parent Questionnaire.

The combined Test and Manual includes the test; general guidelines for conducting screenings; directions for administration, scoring, and interpretation; information about reliability and validity; and facsimiles of the Score Sheet and Parent Questionnaire.

The Score Sheet provides space for recording the child's performance as well and the examiner's comments.

The Parent Questionnaire includes questions about the child's developmental, medical, and family history.

A training videotape is also available for rental from: Michigan Media--Film Library, the University of Michigan, Ann Arbor, MI 48103.

PUBLISHER. Teachers College Press, Columbia University, Teachers College, 1234 Amsterdam Avenue, New York, NY 10027 (800-356-0409).

REVIEWS/REFERENCES:


OVERVIEW/PURPOSE. The Early School Inventory-Developmental (ESI-D) consists of a developmental survey checklist which is designed for use as part of a screening program. The ESI-D is intended for use with children in pre-kindergarten and those entering school for the first time in kindergarten or first grade. The ESI-D was designed to supplement the results of standardized tests, such as the Metropolitan Readiness Test, and help teachers with instructional planning. The ESI-D is part of the Metropolitan Readiness Assessment Program.

CONTENT. The ESI-D is an 80-item checklist for recording systematic observations of a child's behavior in school in four developmental areas:

- **physical development** (large muscle, fine muscle, sensory, general health)
- **language development** (speech, vocabulary, oral and written language)
- **socio-emotional development** (intra- and interpersonal skills)
- **cognitive development** (information, details, memory, time and space concepts)

ADMINISTRATION. Observations by the teacher or assistant may be completed at any convenient time—in the classroom or in special screening sessions. However, the observer may observe only one child at a time. The ESI-D is most often used early in the school year but may also be administered at periodic checkpoints during the year.

SCORES/SCORING. In rating the child's behavior on each item of the checklist, the observer records YES (the child demonstrates this behavior during normal school activities) or NO (the child does not demonstrate this behavior when it would be appropriate, or attempts it but is unsuccessful).

Composite scores are not available for the clusters of behavior in each developmental area. Both norm- and content-referenced interpretation is available for ESI-D task performance.

The national referenced norms consist of percentages of children demonstrating each behavior on the ESI-D. The norms are available for four 6-month age interval groups, from ages 5 to 7. The number of children in each group ranged from 318 to 808.

A performance rating is assigned to each behavior assessed by the ESI-D, depending on whether the child was observed performing the behavior. The ratings are: + (proficient), / (acquiring the skills), and - (needing help).
SCORES/SCORING (continued)

The performance ratings are based on the authors' judgments of the difficulty level of the objective to which the behavior is matched. Performance corresponding to the observed and not observed categories are provided for two age groups: 60-71 months and 72-84 months.

STANDARDIZATION/NORMING. The ESI-D was nationally standardized in spring and fall of 1985 and winter of 1986 with a subsample of children who participated in the national standardization of the Metropolitan Readiness Test. About 2,150 children participated in the ESI-D standardization.

Normative data are provided for four age groups, at six-month age intervals, from ages 5 to 7. Norms are not provided for four-year-olds because of the small sample size in this age group.

TECHNICAL CHARACTERISTICS. Reliability is based on point-biserial correlation coefficients for each age group and total group for each ESI-D task. Most correlation coefficients were well above .25.

Data on inter-rated reliability were not included in the Manual for Interpretation and Use but are available in a separate research paper which can be obtained from the publisher.

Evidence is presented for content and concurrent validity.

Content validity is based on the extensive review of literature that was conducted prior to the development of the ESI-P and the ESI-D objective analyses. Additional evidence of validity is presented by the relationship between performance of the ESI-D and the MRT for children observed and not observed on each behavior in each of the four development areas.

COMPONENTS. The ESI-D components includes the ESI-D Self-Scoring Checklist, Directions for Administering, and the Manual for Interpretation and Use.

The ESI-D Self-Scoring Checklist is a two-part observation form—one part to be retained by the teacher, and the other to be sent home to parents.

The ESI-D also includes a special supplement for parents: "Ways That Parents Can Help," which lists at-home activities to help the child develop new skills.

The Manual for Interpretation and Use includes age-referenced norms and teacher-directed and independent activities for developing children's skills.
EARLY SCHOOL INVENTORY - DEVELOPMENTAL (ESI-D), 1986

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-2498 (800-228-0752).

REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Early School Inventory - Preliteracy (ESI-P) is a checklist designed for screening children in a prereading program—usually preschoolers and children beginning kindergarten. The ESI-P focuses on children's preliteracy concepts of print, writing, and story: what reading and writing are, how one reads and writes, why one reads, and what a story is. The Inventory is designed to supplement the results of standardized tests, such as the Metropolitan Readiness Test, and also, to help teachers plan individualized instruction.

CONTENT. The ESI-P measures a range of preliteracy objectives divided into three sections, as follows:

- **Print Concepts:** assesses the child's ability to discriminate print from pictures and objects, to understand the functions of reading, and to grasp certain print concepts and conventions necessary for learning to read.

- **Writing Concepts:** assesses the child's ability to communicate through writing by attempting to write his/her name and a message to someone, and judges the stage of development of written expression using a 6-point scale.

- **Story Structure:** assesses the child's ability to retell a familiar story, using conventional story elements.

ADMINISTRATION. The ESI-P is individually administered by the child's teacher in about 20 minutes.

Administration materials include the Directions for Administering which contains directions for the examiner, 12 picture panels, a manuscript-typed card for the Print Concepts tasks, and pencil and paper for the Writing Concepts tasks.

Several days before the administration, the teacher reads the story of "Goldilocks and the Three Bears" to the class. During administration, the teacher sits with the child in a quiet corner, orally presents each task stimulus, and scores the child's response on the individual checklist form. The child's responses are oral, pointing, and written, as required. The examiner scores the child's responses during administration.

SCORES/SCORING. For each section of the ESI-P, the examiner sums the number of points the child received and then calculates the percent score.

Both norm- and criterion-referenced scores are available for the Print Concepts, Story Structure, and Writing Concepts (Part A and B).
SCORES/SCORING (continued)

The national referenced norms consist of cumulative percentages of children obtaining each raw score or rating. The norms are available for four 6-month age interval groups, from ages 5 to 7.

The criterion-referenced scores are performance ratings which are classified as: + (proficient), / (acquiring the skills), and - (needing help). The performance ratings are based on the authors' judgments of the degree of proficiency demonstrated by specific score bands for each section of the inventory.

STANDARDIZATION/NORMING. The ESI-P was nationally standardized in spring and fall of 1985 and winter of 1986 with a subsample of children who participated in the national standardization of the Metropolitan Readiness Test. About 2,400 children participated in the ESI-P standardization.

Normative data were provided for four age groups, at six-month age intervals, from ages 5 to 7. Norms were not provided for four-year-olds because of the small sample size in this age group.

TECHNICAL CHARACTERISTICS. Reliability data were reported for internal consistency, using Kuder-Richardson Formula 21 (K-R 21). Data on inter-rated reliability were not included in the Manual for Interpretation and Use but are available in a separate research paper which can be obtained from the publisher.

The K-R 21 coefficients, across eight age groups at 3-month intervals from ages 5-7 years, ranged from .76 to .86 for Print Concepts and from .75 to .81 for Story Structure. The reliabilities for Writing Concepts were not reported since they were rating scales.

Evidence was presented for content and concurrent validity.

Content validity was based on the extensive review of literature that was conducted prior to the development of the ESIP. Concurrent validity was based on correlations of the scores of kindergarten children in the sample who were tested with both the ESI-P and the Metropolitan Readiness Test (MRT), Levels 1 and 2. Correlation coefficients, corrected for attenuation, for the ESI-P sections, the three MRT subtests, and composite for Level 1, ranged from .48 to .61 for Print Concepts, and .31 to .42 for Story Structure. For Level 2, the correlation coefficients ranged from .43 to .58 for Print Concepts and from .22 to .29 for Story Structure.
COMPONENTS. The ESI-P components include the Self-scoring Sheet, Directions, set of cards, ESI-P Skill Record, and the ESI Manual for Interpretation and Use.

The Manual provides normative information, interpretive guidelines, and follow-up activities designed to promote skill development.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-2498 (800-228-0752).

REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Florida Kindergarten Screening Battery (FKSB) is a battery of five standardized assessment measures intended for use in screening kindergarten children for potential reading disability. The FKSB is intended for use only as a predictive screening procedure for reading disability and not for clinical interpretation.

The purpose of the FKSB is to: (1) identify children at high risk for later reading difficulties; (2) rule out children at low risk for reading disability; and (3) indicate those in need of further diagnostic evaluation. The FKSB provides a simple procedure for obtaining a prediction equation to classify children into three risk groups: high, mild, or low.

CONTENT. The FKSB consists of four basic tests and an optional test to be administered in the following order:

- Beery Developmental Test of Visual-Motor Integration (Beery VMI): Short Form: an age-normed, perceptual, motor copying task
- Recognition-Discrimination: a visual perceptual task requiring the child to identify a geometric stimulus design from four figures
- Peabody Picture Vocabulary Test-Revised Edition (PPVT-R): a measure of hearing vocabulary requiring pointing responses
- Alphabet Recitation Test: requires the child to recite as many letters of the alphabet as he or she can, regardless of order
- Finger Localization Test (optional): a neuro-psychological test consisting of five levels of performance relative to sensing varied types of finger stimulations made with a paper clip.

ADMINISTRATION. The tests are individually administered in the prescribed order during one session which generally requires about 20 minutes. The authors recommend that each examiner administer the battery of FKS B measures to kindergarten children at least five times before beginning screening activities. Paraprofessionals with little testing experience may be trained to administer the FKSB in a one-day workshop. The measures are considered simple to learn and score, although more practice is required for the optional Finger Localization test.
Administration materials vary by test:

- For the Beery VMI, materials include the test booklet and a pencil without an eraser.
- For the Recognition-Discrimination, materials include the test booklet, FKSB Record Form, and a stop-watch.
- For the PPVT-R, materials include the book of plates and the record sheet.
- For the Alphabet Recitation test, materials include the FKSB Record Form.
- For the Finger Localization test, materials include a shield printed with a diagram of hands, paper clip, and the FKSB Record Form.

The examiner orally presents the task stimulus, and the child's required response may be written, oral, or pointing, as required.

Scores/Scoring. The Florida Battery yields three types of scores:

- number correct (for the Alphabet Recitation, Finger Localization, and Recognition-Discrimination tests).
- age-equivalent scores (for the Beery VMI)
- intelligent quotients (for the PPVT-R)

The child's scores for all tests are entered in the FKSB Record Form which presents a simple procedure for calculating both the four- and the five-variable prediction equation, depending on the number of the tests used.

The child's total classification score is obtained by first weighting the four or five obtained scores, and then subtracting a constant from their sum. The resulting score is compared to cutoff scores which are used to place the child into a particular risk group: high, mild, low, or none. The authors recommend that children designated at risk receive diagnostic evaluations, with placement and remediation depending on the results of these evaluations.
FLORIDA KINDERGARTEN SCREENING BATTERY
(FKSB), 1982

Grade: K

STANDARDIZATION/NORMING. Thirteen tests were used for the standardization and cross-validation studies. The FKSB was reduced to its current size by using multivariate statistical procedures that selected optimal predictors and by eliminating tests with a low additive or non-additive predictive relationship with reading achievement criteria used in the follow-up studies.

The FKSB was standardized using a longitudinal study design that followed different samples of children from kindergarten through the elementary school years. The original standardization sample included 497 white male children, mostly from middle- or upper-socioeconomic families, who were entering kindergarten in Alachua County, Florida in 1970.

The first cross-validation study was conducted in 1971 with 181 white male kindergarten children. A second cross-validation study was conducted with 132 male and female children who were racially mixed.

TECHNICAL CHARACTERISTICS. Reliability data for the PPVT and the Bee-y VMI is presented along with data from additional reliability studies conducted for the Recognition-Discrimination and Finger Localization tests. The authors report that most reliability coefficients ranged between .77 and .98, except for the Finger Localization test.

Content validity is based on the multivariate procedures used to select the 5 out of 13 assessment measures that comprise the FKSB.

Predictive validity is based on the results of three-, six-, and seven-year followup studies. Results indicated that the FKSB was more accurate in predicting severe risk than mild risk.

Construct validity is based on the results of factor analysis.

COMPONENTS. The FKSB comes in a basic kit that includes the 47-page spiral-bound Manual; Record Forms; Finger Localization Test with accompanying cardboard/cloth shield; Recognition-Discrimination Test; and the Alphabet Recitation Test. An expanded kit also includes the Beery Developmental Test of Visual-Motor Integration and the Revised Peabody Picture Vocabulary Test.

PUBLISHER. Psychological Assessment Resources, Inc., P.O. Box 98, Odessa, FL 33556 (800-331-TEST or in Florida, 813-968-3003).
FLORIDA KINDERGARTEN SCREENING BATTERY
(FKSB), 1982

REVIEWS:


- Gotts, Edward Earl, Huntington State Hospital. Review of the Florida Kindergarten Screening Battery. In Mental Measurements Yearbook Database (AN 8905-2950). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Howell Prekindergarten Screening Test is a pencil-and-paper readiness test designed to help identify students' instructional needs prior to or upon entrance to kindergarten. Test results are used to classify children in three categories: (1) those who may need remedial assistance to ensure successful entry into formal education; (2) those whose skills seem appropriate for typical kindergarten work; and (3) those with well-developed skills that could be enhanced by especially designed educational experiences.

CONTENT. The test booklet includes 73 multiple-choice items, most in pictorial format. The items are designed to assess performance across 21 skills representing a sampling of verbal, quantitative, perceptual, and general cognitive skills:

- shape recognition
- listening comprehension
- auditory memory
- colors
- color words
- vocabulary
- consonant sounds
- classification
- letter identification
- rhyming
- letter writing
- directionality and spatial relationships
- visual motor
- visual discrimination
- name
- number identification
- number writing
- counting sets
- math concepts
- addition and subtraction
- copying
- "draw-a-person" (not included as part of the total score)

ADMINISTRATION. The test is group-administered; group size is optional. The total test administration time is about two hours. The test is given in four sittings of about one-half hour each over a two-day period. The teacher administers the test with assistance from another person. However, the test may also be administered by a trained paraprofessional, parent, or volunteer.

Administration materials include the Examiner’s Manual, test booklet for each child, primary pencils, box of crayons for each child, strips of heavy paper for markers, and tape.

The teacher reads instructions to the children who respond to most items by marking an X on the appropriate option. Most test items are multiple-choice with three options.

SCORES/SCORING. Test items are scored on a pass/fail basis. A total of 73 points are available. The Howell provides a raw score for math and for the total test.
SCORES/SCORING (continued)

A range of raw scores are provided to classify children in three performance categories: critical (0-30), regular (31-51), and high (52-73).

STANDARDIZATION/NORMING. The Howell Prekindergarten Screening Test was developed by the Howell Township Schools of Howell, New Jersey, a middle-income suburban-rural community with a heterogeneous population. The norms group included 631 children. Descriptive data about the characteristics of the norms group is not provided.

TECHNICAL CHARACTERISTICS. Reliability coefficients for internal consistency (KR-21) obtained in three successive years from 1981 through 1983 were .88, .87, and .88 (N=186, 216, and 229, respectively).

The final version of the 83-item test was developed following a pilot study of an earlier version of the test that included 100 test items.

Results of several predictive validity studies are reported. Mean test scores for four groups of children, classified by achievement level by their teachers at the end of kindergarten, were found to be significantly different. In another study with a one- and a two-year interval between testing with the Howell Prekindergarten Screening Test and the California Achievement Tests, the correlation coefficients were respectively .71 and .64 for reading, and .68 and .72 for mathematics.

COMPONENTS. Materials include the 50-page Examiner's Manual, 20-page test booklet, primary pencils, box of crayons for each child, tape, and oak tag strips for use as markers.

The Examiner's Manual provides directions for administration and scoring, along with guidelines for interpretation of results.

PUBLISHER. Book-Lab, 500 74th Street, North Bergen, NJ 07047 (201-861-6763 or 201-868-1305).

REVIEWS:

REVIEW: (continued)


- Feiring, Candice, University of Medicine and Dentistry of New Jersey. Review of the Howell Prekindergarten Screening Test. In Conoley, Jane Close; Kramer, Jack J.; and Mitchell, James V., Jr. (Eds.), *The supplement to the ninth mental measurements yearbook* [9]. Lincoln, NE: Buros Institute of Mental Measurements of the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Brigance K & 1 Screen is a developmental screening test intended for use with five- and six-year-old children in kindergarten and grade 1. The purpose of the K & 1 Screen is to provide helpful information for pupil placement, special service referrals, and instructional planning. The K & 1 Screen also includes various forms: Screening Observations Form, Teacher's Rating Form, and Parent's Rating Form.

CONTENT. The K & 1 Screen consists of a group of criterion-referenced measures (assessments) designed to obtain a sampling of the child's skills and behavior. The test includes basic assessments (12 for kindergarten and 13 for grade 1) and optional advanced assessments not included in the total score. Each assessment includes varied numbers of test items selected from two Brigance diagnostic/prescriptive inventories: Inventory of Early Development (1978; birth to grade 7) and Brigance Inventory of Basic Skills (1977; kindergarten through grade 6).

The developmental areas and skills assessed by the K & 1 Screen are presented below. The skills assessed for grade 1 are at a more advanced level than for kindergarten.

<table>
<thead>
<tr>
<th>Developmental Areas</th>
<th>Skills Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Knowledge and Comprehension</td>
<td>Identification of Body Parts</td>
</tr>
<tr>
<td></td>
<td>Color Recognition</td>
</tr>
<tr>
<td></td>
<td>Following Directions</td>
</tr>
<tr>
<td>Speech and Language</td>
<td>Personal Data Response</td>
</tr>
<tr>
<td></td>
<td>Picture Vocabulary**</td>
</tr>
<tr>
<td></td>
<td>Articulates Initial Sounds*</td>
</tr>
<tr>
<td></td>
<td>Syntax and Fluency</td>
</tr>
<tr>
<td>Gross Motor Skills</td>
<td>Standing</td>
</tr>
<tr>
<td></td>
<td>Walking</td>
</tr>
<tr>
<td></td>
<td>Hopping</td>
</tr>
<tr>
<td>Fine Motor Skills</td>
<td>Draws Shapes (Visual-Motor)</td>
</tr>
<tr>
<td></td>
<td>Draws a Person</td>
</tr>
<tr>
<td>Math</td>
<td>Rote Counting</td>
</tr>
<tr>
<td></td>
<td>Numerals in Sequence</td>
</tr>
<tr>
<td></td>
<td>Basic Number Skills*</td>
</tr>
</tbody>
</table>

*Optional advanced assessment.
**Basic and optional advanced assessment.
### CONTENT (continued)

<table>
<thead>
<tr>
<th>Developmental Areas</th>
<th>Skills Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness</td>
<td>Visual Discrimination</td>
</tr>
<tr>
<td></td>
<td>Recites Alphabet</td>
</tr>
<tr>
<td></td>
<td>Recognition of Lowercase Letters (Uppercase Alternate)</td>
</tr>
<tr>
<td>Basic Reading Skills</td>
<td>Auditory Discrimination</td>
</tr>
<tr>
<td></td>
<td>Basic Preprimer Vocabulary*</td>
</tr>
<tr>
<td></td>
<td>Preprimer/Primer Oral Reading*</td>
</tr>
<tr>
<td>Manuscript Writing</td>
<td>Prints Personal Data</td>
</tr>
</tbody>
</table>

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*Optional advanced assessment.

**Basic and optional advanced assessment.

### ADMINISTRATION.

The K & 1 Screen may be administered individually by one examiner or by a team of examiners at multiple stations. Other methods include varied combinations of individual and small group administrations for selected assessments; and use of teacher's ratings, parent's ratings, and data from the student's records. Administration time generally ranges from about 12-15 minutes. The examiner may be a teacher or a trained paraprofessional.

Administration materials include the K & 1 Screen Manual, which contains the basic and advanced assessments, and the Pupil Data Sheets (one for kindergarten and one for grade 1).

The Manual, displayed in easel format, presents the student assessment material on the page facing the child and the examiner's directions on the opposite page, facing the examiner. For each assessment, the examiner's page is structured to include the oral instructions to be presented to the child, as well as detailed administration and scoring directions.

The examiner orally presents the item task to the child and the child's response may be oral, pointing, motor, or written. The examiner scores the child's performance and records the scores on the Pupil Data Sheet during administration.

### SCORES/SCORING.

The number of points earned for each correct response ranges from .5 to 2.5. A raw score is calculated for each assessment and for the total test. The possible score for the total test is 100.

Cut-off scores are obtained by ranking the total test scores for the local

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Region C TAC
ETS-SRO
scores/scoring (continued)

Reference group and then classifying the scores by performance level: above average, average, and below average. The author presents an example for establishing cut-off scores, but recommends that each program establish its own cut-off scores for different purposes.

The author identifies reasons why a child may score low and emphasizes that referrals for further assessment should not be based only on the child's score. After screening is completed, each child's data are reviewed by a committee which makes a recommendation for placement and/or referral, as appropriate.

standardization/norming. Norms are not available.

technical characteristics. Technical data on reliability and validity are not available. Content validity is based on a literature review and field testing of the K & 1 Screen in 14 states.

test components. Materials include: The 51-page, spiral-bound K & 1 Screen Manual; Data Sheet (one for each grade level); Class Summary Record (one for each grade level); and the Spanish Directions Booklet.

The Manual contains the basic and optional advanced assessments and the reproducible Screening Observations Form, Teacher's Rating Form, and Parent's Rating Form.


reviews/references:

- Boehm, Ann E. (Columbia University). Review of the Brigance K & 1 Screen (AN 0916-2143). In Mental Measurements Yearbook Database (MMYD). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.


- Wright, Dan (Ralston Public Schools, NE). Review of the Brigance K & 1 Screen (AN 0916-2143). In Mental Measurements Yearbook Database (MMYD). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Kindergarten Language Screening Test (KLST) is a general language screening instrument intended for use with children of kindergarten age. The test was designed to compare children's language abilities to age- and grade-appropriate levels. The purpose of the test is to identify children for more intensive assessment in order to identify any areas of language deficit that might affect their academic progress.

CONTENT. The KLST is based on verbal language abilities considered average for children of kindergarten age. The 30-item test incorporates several types of measurement tasks reflecting both receptive (listening) and expressive (speaking) language competence:

- **Receptive Language** (8 items): tasks include following directions, such as pointing to body parts (chin, knee, elbow, and ankle); following three-part sequential commands; and understanding prepositions (on, under, and behind).

- **Expressive Language** (22 items): tasks include telling full name and age; pointing to colors and naming them; pointing to and counting pictured animals on a card; repeating sentences up to 11 words; and presenting a spontaneous speech sample displaying a variety of speech abilities and syntactic structures.

The examiner also rates the child on intelligibility, attention to task, willingness to communicate, and gestural communication on a five-point scale. The scores on these items are not included as part of the child's score on the KLST, but may be used for later reference.

ADMINISTRATION. The KLST is individually administered. Administration time may vary from 15 to 40 minutes, depending on the child's age and ability. The test is easily administered.

Administration materials include the Examiner's Manual, Individual Screening Test Form (used for scoring the child's responses during administration), and a set of three item stimulus picture cards.

The examiner administers the test items orally. The child's response may be oral, pointing, or motor, as required.

SCORES/SCORING. The child's total raw score is the number of items he or she answered correctly. The score conversion tables provide raw scores to percentile rankings for four age groups, in months: 48-59, 60-65, 66-71, and 72-83.
STANDARDIZATION/NORMING.

Normative data are based on a sample of 485 children, including Headstart children tested in 1984 and other children tested at later dates.

TECHNICAL CHARACTERISTICS.

The test-retest reliability coefficient was .87 for 22 randomly selected Headstart children who were tested within a four-week period in 1974. The reliability coefficient for internal consistency, using Kuder-Richardson Formula 20 (K-R 20), was .86.

Content validity was based on a literature survey of age appropriateness of test item content. The studies cited ranged from 1940 to 1972. Predictive validity of the KLST for kindergarteners was established by a follow-up study of 30 children who had scored 19 or below on the KLST. In 1978, two and one-half years later, it was found that 82 percent of the children were below grade level academically or were receiving special education intervention. Construct validity was established by inter-correlations of the KLST with other language tests, including the Utah Test of Language Development, Illinois test of Psycholinguistic Abilities, Clark-Madison Test of Oral Language, and the Boehm Test of Basic Concepts.

COMPONENTS. Materials include the Examiner's Manual; set of Picture Cards; and the Individual Screening Test Form (used for scoring).

PUBLISHER. PRO-ED. 8700 Shoal Creek Boulevard. Austin, TX 78758 (512-451-3246).

REVIEWS:


OVERVIEW/PURPOSE. The Kindergarten Readiness Test (KRT) is a developmental screening test designed for use with four- to six-year-old children entering kindergarten. The purpose of the KRT is to: (1) help determine if a child is developmentally ready to begin kindergarten in a given school year and (2) identify children for further evaluation. The test is intended for use with other methods in determining readiness.

CONTENT. The KRT includes 26 tasks designed to screen key developmental areas across a broad range of skills considered necessary for beginning school. Test content is described in terms of general skill areas and related tasks as well as primary skill areas.

The KRT general skill areas and related item tasks are:

<table>
<thead>
<tr>
<th>General Skill Areas</th>
<th>Item Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding, Awareness, and Interactions With One's Environment</td>
<td>Print first name</td>
</tr>
<tr>
<td></td>
<td>Answer general questions</td>
</tr>
<tr>
<td></td>
<td>Draw a human figure</td>
</tr>
<tr>
<td></td>
<td>Name primary, secondary and neutral colors</td>
</tr>
<tr>
<td></td>
<td>Identify pictures</td>
</tr>
<tr>
<td></td>
<td>Identify directions and positions</td>
</tr>
<tr>
<td></td>
<td>Identify quantities, measurements, and amounts</td>
</tr>
<tr>
<td>Judgment and Reasoning in Problem Solving</td>
<td>Complete a maze</td>
</tr>
<tr>
<td></td>
<td>Identify picture similarities and differences</td>
</tr>
<tr>
<td></td>
<td>Visually discriminate and match two shapes</td>
</tr>
<tr>
<td></td>
<td>Match one-to-one</td>
</tr>
<tr>
<td></td>
<td>Sequence events: first, second, and third</td>
</tr>
<tr>
<td>Numerical Awareness</td>
<td>Count shapes to 20</td>
</tr>
<tr>
<td></td>
<td>Recognize numbers 1-10</td>
</tr>
<tr>
<td>Visual and Fine-Motor-Coordination</td>
<td>Copy figures</td>
</tr>
<tr>
<td></td>
<td>Copy letters</td>
</tr>
<tr>
<td></td>
<td>Color a ball</td>
</tr>
<tr>
<td></td>
<td>Complete a maze</td>
</tr>
<tr>
<td></td>
<td>Hold a pencil correctly</td>
</tr>
<tr>
<td></td>
<td>Fold and crease a piece of paper</td>
</tr>
<tr>
<td></td>
<td>Cut a piece of paper in two pieces</td>
</tr>
</tbody>
</table>
CONTENT (continued)

General Skill Areas

Visual and Fine-Motor-Coordination (continued)

Item Tasks

Print the first name
Draw a human figure
Visually discriminate and match two shapes
Match one-to-one

Auditory Attention Span
and Concentration

Repeat back 4- to 5-word sentences
Repeat back 3 to 4 numbers

The primary skills tapped by the KRT are:

- **Language and Vocabulary**
  - Expressive Language
  - Verbal Vocabulary-Word Retrieval
  - Verbal Identification
  - Verbal Articulation
  - Receptive Language
  - Auditory Discrimination & Identification
  - Auditory Sequencing
  - Auditory Short Term Memory
  - Auditory Interpretation of Directions

- **Comprehension, Reasoning, and Judgment**
  - Sequential & Logical Relationships
  - Grouping & Classifying
  - Discrimination and Matching
  - Comparisons
  - Positioning Relationships
  - Understanding Complex Instructions
  - Problem Solving
  - Numerical Reasoning
  - General Awareness, Knowledge, & Understanding

- **Visual-Perceptual-Motor**
  - Visual Discrimination & Identification
  - Visual Sequencing
  - Visual Classification
  - Visual Relationships
  - Visual Spatial Concepts
  - Visual Fine-Motor-Coordination

- **Memory and Concentration**
  - Past Observations and Memory
  - Short Term Memory and Concentration
  - Attention Span

- **Maturity and Development**
  - Manipulate information and materials through all the listed skill areas.
KINDERGARTEN READINESS TEST (KRT), 1988

ADMINISTRATION. The KRT is individually administered. Administration is untimed but generally takes about 15 to 20 minutes. Scoring is done in about five minutes. The examiner may be a specialist, teacher, or trained para-professional. Thorough familiarity with the test is required before administration.

Administration materials include the 33-item test booklet and item stimulus materials, including those provided with the KRT kit (nine colored blocks, picture cards, and pad of blank paper) and those which the examiner provides (penny, nickel, dime, dollar bill, pencil, crayons, and scissors).

The examiner sits at a table across from the child, with the pages of the test booklet open between them. The test items and the examiner's instructions appear in close proximity, either on the same or adjacent pages. The examiner orally presents the item task. The child's responses are varied: oral, pointing, cutting with scissors, and written. The score for Task 26 is based on the examiner's observations of the child's performance during test administration.

The examiner scores the child's responses during administration and records most scores directly in the test booklet. However, some of the responses are scored following the test in order to compare with the manual's scoring examples.

SCORES/SCORING. The item tasks are presented in a sequential developmental-maturational format. Weighted scoring is used for items which are of a more advanced difficulty level. Based on well-defined criteria, the points assigned to the various KRT tasks range from 0 to 6.

The sum of the child's total points is placed in the Scoring Interpretation Sheet. Performance descriptors (above average, average, lower average, and below average/questionable readiness) are related to ranges of points. The test is designed so that the majority of children will successfully complete at least 78 to 90 percent of the measured tasks. Follow-up consultation is recommended for children who score 30 (61 percent of the items) and below. Derivation of the cut score is not provided.

The individual Performance Grid Sheet is used to indicate weak performance on the specific item tasks which the child missed.

STANDARDIZATION/NORMING. The KRT norming sample included 1,015 children residing in four midwest states: Nebraska, Kansas, Iowa, and Minnesota. The children were tested in May (year not indicated) before their entrance into school the following fall semester.
STANDARDIZATION/NORMING (continued)

Although tabulated data displaying sample characteristics is not presented in the KRT Manual, some information is provided. The KRT Manual reports that five percent of the sample were members of minority groups; three percent were later diagnosed as having handicapping conditions; and the average education level of parents was high school completion. The number of children in each of the three age groups (4, 5, and 6) is not reported.

TECHNICAL CHARACTERISTICS. Items were selected for the KRT after the authors reviewed tests widely used for assessing young children; consulted with professionals, including program specialists, assessment specialists, and teachers; and performed item analysis.

The KRT Manual presents statistical data for the norming group, including: tables of item difficulties; frequency distributions of total scores; and the total group mean, median, and standard deviation by score points and percent scores.

Also, the results of several studies that were conducted are reported. Findings indicated differentiation in the test performance of four- and five-year-old children, and no significant differences in the test-retest scores of four small groups of children tested after a two-month period.

COMPONENTS. Materials include the 39-page KRT Manual; Test Booklet; stimulus materials; Scoring Interpretation Sheet—one for school records and the other for parents; Performance Grid Sheet; and the Letter to Parents.

The KRT Manual presents background information about the test and its technical characteristics, and directions for scoring. The examiner uses the individual Test Booklet for administration and recording the number of points the child receives for each task. Task stimulus materials included in the Test Booklet are supplemented by colored blocks, picture cards, and a pad of paper provided in the KRT kit.

The examiner enters the child's total points on the Scoring Interpretation Sheet and checks the tasks that the child missed on the Performance Grid Sheet. Copies of these two forms are sent to the child's parents along with the parent letter.

PUBLISHER. Slosson Educational Publications, Inc., P.O. Box 280, East Aurora, NY 14052 (716-652-0930).

REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Lollipop Test is a readiness screening test intended for use with children from 2-6 years. The name of the test is derived from the illustrations used as item response stimuli. The purpose of the test is: (1) to identify children in need of additional readiness activities in order to obtain maximum benefit from their kindergarten and/or first grade experience; (2) identify children for further assessment; and (3) assist in instructional planning and evaluation.

CONTENT. The Lollipop Test consists of 49 items grouped within four subtests:

- Identification of colors and geometric shapes, and copying shapes (11 items)
- Picture description, position, and spatial recognition (10 items)
- Identification of numbers and counting (14 items)
- Identification of letters and writing (14 items).

ADMINISTRATION. The test which is individually-administered requires about 15-20 minutes for administration and scoring. Examiners require a brief orientation period to the test.

Administration materials include the test booklet (called the Administration and Scoring Booklet) for each child, set of seven spiral-bound picture stimulus cards, and pencils.

During test administration, the examiner and child sit at a small table. The examiner places the stimulus cards used for the specific test item in front of the child and orally presents the item task. The child's response may be oral, pointing, or written (e.g., copying shapes and name writing). The examiner scores the child's responses during administration and records the scores in the Administration and Scoring Booklet.

SCORES/SCORING. All items answered correctly, except copying shapes, earn one point. The copying shapes items earn two points for each shape copied correctly. The examiner sums the raw scores for the four subtests and for the total test.

Ages: 2-6 to 6-0 Years

SCORES/SCORING (continued)

The author suggests five ranges of raw scores for readiness, based on the performance of children included in the original validation sample and two additional study samples. The raw score ranges are classified as: below average, low average, average, high average, and above average.

STANDARDIZATION/NORMING. The Lollipop Test is not a nationally normed test. The author suggests that districts develop their own local norms and provides instructions in the manual.

The 1989 revision of The Lollipop Test primarily includes changes in the Developmental and Interpretive Manual to report the additional validity studies. The content of the test remained the same.

TECHNICAL CHARACTERISTICS. Evidence of reliability is presented for internal consistency, using the Kuder-Richardson Formula #20 (K-R 20). The reported reliability coefficient is .93, based on the results of the initial validation study.

Evidence is presented for content, construct, and criterion-related validity.

Content validity is based on the careful selection of test items and the author's background experience as a school psychologist.

Construct validity is based on the results of a literature review, factor analytic studies, and high correlations between subtest and total test scores (.79-.89).

Criterion-related validity is based on the results of several validation studies. The first study consisted of 69 students in kindergarten and Head Start in Mississippi. The students whose average age was 70 months were eligible to enter the first grade in the fall of 1977. The students were administered both The Lollipop Test and the Metropolitan Readiness Test (MRT), and also were rated on their readiness skills by their teachers. The correlation of The Lollipop Test total scores with those of the MRT was .86, and with the teachers' ratings .58.

Two additional validation studies are reported in the Developmental and Interpretive Manual, revised 1989 edition. Results of the studies indicated that predictions with The Lollipop Test were similar to those with the MRT and the Developmental Indicators for the Assessment of Learning (DIAL).
TECHNICAL CHARACTERISTICS (continued)

The first of the two studies included a sample of 283 students (average age of 74 months) who were tested with both The Lollipop Test and the MRT. The students were initially followed through grade 4. The second study included a sample of 129 students (average age of 62 months) who were tested with The Lollipop Test and DIAL four months before entry to kindergarten. The students were followed through first grade.

In the first of the above studies, correlations of The Lollipop Test with the Stanford Achievement Test in grades 1, 3, and 4 were higher in grade 1 (.75 for reading and .72 for math) than in grade 4 (.40 for reading and math).

COMPONENTS. Materials include the Administration and Scoring Booklet, set of seven spiral-bound picture stimulus cards, and the Administration Developmental and Interpretive Manual.

The individual Administration and Scoring Booklet contains the test items, directions for administration, scoring instructions, space for recording scores, and general guidelines for interpretation.

The Administration Developmental and Interpretive Manual includes background information about readiness concepts and theories, the criterion-referenced approach to school readiness, design and development of The Lollipop Test, interpretation and utilization of scores, and procedures for developing local norms.

PUBLISHER. Humanics Limited, 1182 West Peachtree Street, P.O. Box 7447, Atlanta, Georgia 30309 (404-874-2176).

REVIEWS:

- Reck, Isabel L. (University of Pittsburgh). Review of The Lollipop Test (AN 0911-2185). In Mental Measurements Yearbook Database (MMDY). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

- Morris, Janet (University of Nebraska-Lincoln). Review of The Lollipop Test (AN 0911-2185). In Mental Measurements Yearbook Database (MMDY). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Miller Assessment for Preschoolers (MAP) is a short developmental screening test designed to identify children who display mild, moderate, or severe delays in one or more developmental areas. The MAP's scoring system was designed to discriminate children functioning below the 25th percentile.

The purpose of the MAP is to identify developmentally delayed children at risk for learning problems in order that they may receive further in-depth assessment. The MAP also includes two structured observation forms designed to assist in assessing behaviors and qualities that may influence the child's test performance.

CONTENT. The MAP includes 27 test items which assess three types of developmental abilities: (1) cognitive, (2) sensory and motor, and (3) combined abilities. Within these ability areas, the test items are categorized into five MAP performance indices intended to target specific areas requiring intervention and remediation:

(1) **Cognitive abilities** are assessed along two performance indices: Verbal and Non-Verbal. Test items for both indices were chosen to evaluate skills required for language development, problem solving, memory, and perception.

Verbal Index items (4) examine memory, sequencing, comprehension, association, and expression in a verbal context.

Non-Verbal Index items (5) examine memory, sequencing, visualization, and mental processing without requiring spoken language.

(2) **Sensory and motor abilities** are assessed along two performance indices: Foundations and Coordination.

Foundations Index items (10) involve performance of basic motor tasks and awareness of sensations.

Coordination Index items (7) involve performance of oral motor, fine motor, and gross motor tasks.

(3) **Combined abilities** are assessed along the Complex Task Index. The items (4) measure sensorimotor abilities in conjunction with cognitive abilities, and require interpretation of visual-spatial information.
ADMINISTRATION. The test is individually administered in about 25 to 35 minutes, depending upon the child's age and developmental status. The test may be administered and scored by professionals or by trained paraprofessionals under supervision. Advanced clinical training is required to use the Supplemental Observations Sheet.

Administration materials include the MAP Manual which contains the examiner's directions; Scoring Notebook which holds the Cue Sheets, individual Item Score Sheets, and item stimulus materials; the consumable Drawing Booklet; and additional manipulatives.

The examiner orally presents each item task to the child. The child's response may be oral, motor, or written, as required. The examiner scores the child's test performance during administration.

SCORES/SCORING. Scoring for each test item is done on the Item Score Sheet for the appropriate age group. For each test item, the Item Score Sheet displays color-coded ranges of raw scores falling in three different zones. The Green/Go zone means the child scored above the 25th percentile (normal limits); the Yellow/Caution zone means the child scored between the 6th and 25th percentile; and the Red/Stop zone means the child performed at the 5th percentile or below.

The MAP provides raw scores and percentile scores for the total test and the five performance indices. The scores are obtained by adding the relevant number of Red and Yellow raw scores and then converting the sum to an equivalent percentile corresponding to age group. Percentiles are available for six age groups at six-month intervals, ranging from 2-9/3-2 to 5-2/5-8 years.

STANDARDIZATION/NORMING. The MAP was nationally standardized between April and July of 1980 with a sample of 1,204 children between the ages of 2 years, 9 months, and 5 years, 8 months. Approximately equal numbers of children were selected from each of the nine geographic regions in the continental U.S. The sample was designed to reflect national population characteristics by sex, race, community size, and socioeconomic status. Although comparable, the sample was overrepresented by higher levels of parent education, job status, and family income.

TECHNICAL CHARACTERISTICS. Evidence of reliability is presented for interrater agreement, stability (test-retest), internal consistency of the total test (using the corrected split-half method), and the standard error of measurement.
TECHNICAL CHARACTERISTICS (continued)

- A high level of interrater reliability was obtained between pairs of scores provided by two trained field supervisors for a sample of 40 children. Pearson product-moment correlation coefficients ranged from .84 to .99 for the total score and the five performance indices.

- Test-retest reliability was calculated on the stability of the total score and the five performance indices for a sample of 81 children for a period of one to four weeks. Stability ratios, expressed as percentages, ranged from 72 percent to 94 percent.

- Internal consistency reliability, based on the raw scores for the total standardization sample, was .79 for the corrected split-half method and .82 for the average item-to-test correlation.

- The standard error of measurement (SEM) was .59 for the Red/Stop scores and 1.40 for the Yellow/Caution scores.

Evidence of validity of MAP is based on content validity (theoretical foundation and national item tryout), concurrent validity, predictive validity, and construct validity:

- The MAP is organized around the five performance indices (behavior categories) which are indicated in the literature review as being essential for assessing developmental delays.

- The 27 MAP items and the series of structured observations were selected from over 800 items that were field tested. In addition, a national field test of 530 items was conducted with a sample of 60 children with and 500 children without identified pre-academic problems.

- Concurrent validity, although not conclusive, is based on correlations of the MAP with other tests (Weschler Preschool and Primary Scale of Intelligence, Illinois Test of Psycholinguistic Abilities, Southern California Sensory Integration Tests, and the Denver Developmental Screening Test).

- A predictive validity study was conducted with 338 children in the standardization sample four years after initial testing. Results indicated that the MAP total score significantly predicted performance on standardized tests and six school performance criteria (retention in school, teachers' observations of behavioral problems, special class enrollment, and report card ratings in language, reading, and math).
TECHNICAL CHARACTERISTICS (continued)

- Predictive validity also was examined in a four-year study of classification accuracy of the MAP total score at the 5th and 25th percentile ranks (PRs). The criteria included test scores and school performance indices. Results indicated that the average classification accuracy was 89 percent at the 5 PR cutoff point and 76 percent at the 25 PR cutoff point.

Also, data were obtained concerning the rate of false positives (children erroneously identified as being at risk) and false negatives (children erroneously identified as not being at risk). The rate of false positives at the cutoff points was 3 percent at the 5 PR and 19 percent at the 25 PR. The rate of false negatives at the cutoff points was 8 percent at the 5 PR and 5 percent at the 25 PR.

- Construct validity of the MAP was established using factor analysis, item age trends, correlation of items and performance indices with total scores, and correct identification of children with preacademic problems.

COMPONENTS. Materials include the: MAP Manual (revised in 1988), Scoring Notebook, Cue Sheets, Item Score Sheets (includes Behavior During Testing observational form, Drawing Booklet, stimulus materials, and Record Booklet). Staff training materials, including a videotape and training manual, and workshop services are available from the publisher.

The Manual includes directions for administration and scoring; detailed information about the background and development of the MAP and its technical characteristics; and the norms tables. The Scoring Notebook is used to organize the Cue Sheets (instructions) and the Item Score Sheets during administration.

The Record Booklet is used at the end of the testing session for recording impressions of the child's performance, defining the child's strengths and weaknesses, and suggesting remediation. The Supplemental Observations Form, intended for use by a trained clinician, provides a means for recording subjective impressions of the child's behavior (vision, touch, speech and language, and movement) during test performance.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204 (800-228-0752).
MILLER ASSESSMENT FOR PRESCHOOLERS (MAP),
1982, 1988

Ages: 2-9 to 5-8 Years

REVIEWS:


- Deloria, Dennis J., MOBIUS Corporation. Review of Miller Assessment for Preschoolers. In Mental Measurements Yearbook Database (AN 0916-2874). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

- Michael, William B., University of Southern California. Review of Miller Assessment for Preschoolers. In Mental Measurements Yearbook Database (AN 0916-2874). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

OVERVIEW/PURPOSE. The Metropolitan Readiness Tests (MRT) are nationally normed, multiple-choice tests designed to assess mastery of pre-reading, pre-mathematics, and language development skills. The MRT is also designed to identify instructional needs.

The MRT is available in two levels. Level 1 is intended for four-year olds in the preschool setting, just prior to entry into kindergarten, and for the first half of kindergarten. Level 2 is intended for use during the second half of kindergarten and in the early part of first grade.

CONTENT. The MRT tests are based on theories related to early childhood education. Test content is drawn from auditory, visual, language, and quantitative concept areas.

Level 1 tests are designed to measure skills most relevant to pre-reading. The test level includes six tests across three skill areas:

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>Auditory Memory</td>
</tr>
<tr>
<td></td>
<td>Beginning Consonants</td>
</tr>
<tr>
<td>Visual</td>
<td>Letter Recognition</td>
</tr>
<tr>
<td></td>
<td>Visual Matching</td>
</tr>
<tr>
<td>Language</td>
<td>School Language and Listening</td>
</tr>
<tr>
<td></td>
<td>Quantitative Language</td>
</tr>
</tbody>
</table>

Level 2 tests are designed to measure skills needed in beginning reading and mathematics. The test level includes eight tests across four skill areas:

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>Beginning Consonants</td>
</tr>
<tr>
<td></td>
<td>Sound-Letter Correspondence</td>
</tr>
<tr>
<td>Visual</td>
<td>Visual Matching</td>
</tr>
<tr>
<td></td>
<td>Finding Patterns</td>
</tr>
<tr>
<td>Language</td>
<td>School Language</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
</tr>
<tr>
<td>Quantitative</td>
<td>Quantitative Concepts</td>
</tr>
<tr>
<td></td>
<td>Quantitative Operations</td>
</tr>
</tbody>
</table>

An optional Copying Test is available for both levels.
ADMINISTRATION. Children may be tested in small groups of up to 10 in pre-kindergarten and 15 in kindergarten and first grade. For Level 1, testing time including the MRT practice test, ranges from 11 to 15 minutes, with a total testing time of 95 minutes (seven sittings). For Level 2, testing time ranges from 9-16 minutes, with a total testing time of 80 minutes for the Pre-Reading Composite (four sittings) and 105 minutes for the Complete Battery (five sittings). The examiner is generally the classroom teacher.

Test administration materials include Directions for Administering used by the examiner, test booklets (one for each level), and pencils.

The examiner administers most items orally and the children respond by filling in a circle for the correct response options. The test items, most in pictorial format, are multiple-choice with three or four response options.

SCORES/SCORING. Completed test booklets may be scored by hand or machine. Scoring services are available from the publisher.

The MRT provides both norm- and content-referenced scores. The norm-referenced scores include percentile ranks and stanines for each Skill Area and the Pre-Reading Composite. A Battery Composite is also available for Level 2. Empirical norms are available for pre-kindergarten (spring), kindergarten (fall, midyear, and spring), and grade 1 (fall).

The content-referenced scores include three performance ratings for each test: + (proficient); / (acquiring the skills); and - (needs instruction). The derivation of the tables used to obtain the ratings are not described.

STANDARDIZATION/NORMING. National norms for prekindergarten through beginning of grade 1 were obtained by testing approximately 30,000 students between April of 1985 and February of 1986. Testing was conducted in spring of 1985 (April and May), in fall of 1985 (September and October), and in winter of 1986 (January and February). In addition to the main standardization program, 3,000 students were tested in several special research programs.

The characteristics of the norming sample relative to geographic region school district enrollment, socioeconomic status, and public or private school status were compared to the U.S. population (1980). Sample data were statistically adjusted to compensate for the more than 10 percent variation from the national population.

TECHNICAL CHARACTERISTICS. Evidence of reliability was presented for internal consistency, using Kuder-Richardson Formula 20 (K-R 20) and for stability (test-retest):
TECHNICAL CHARACTERISTICS (continued)

- The K-R 20 reliability coefficients were reported for subtests and composites for the fall, midyear, and spring norms. The reliability coefficients for the Pre-Reading Composites were over .90; for the skill area composites, they ranged from .66 to .88.

- Test-retest reliability coefficients for a two-week interval were calculated for the Pre-reading Composite and the Skill Area Composites. The reliability coefficient for the Pre-Reading Composite was .92 for Level 1 and .88 for Level 2. For the Skill Area Composites, the reliability coefficients ranged from .64 to .87 for Level 1 and from .62 to .88 for Level 2.

Evidence of validity was based on content validity and predictive validity:

- Content validity was based on the extensive literature review that was conducted on child development, reading, and early school learning, as well as two national item analysis programs.

- Two predictive validity studies were conducted with first grade children who were administered MRT Level II in the fall and the Metropolitan Achievement Tests or the Stanford Achievement Test Series in the spring. Results indicated that the MRT scores were more highly predictive of scores on the Stanford Achievement Test Series.

COMPONENTS. The MRT components include: Practice Test, Test Booklet (one for each level), Copying Sheets, Directions for Administering (one for each level), Manual for Interpreting (one for each level), Norms Booklet (common to both levels), Class Record/Class Analysis Charts, and the Parent-Teacher Conference Report.

The Parent-Teacher Conference Report provides information to parents about the test, the child's performance, and suggestions for helping the child develop readiness skills.

The Metropolitan Readiness Tests are part of the Metropolitan Readiness Assessment Program. Other program components include: Early School Inventory-Developmental (detailed checklist for recording observations of cognitive and noncognitive development), the Early School Inventory-Preliteracy (checklist for obtaining information about a child's concepts of print, writing, and story), and the Handbook of Skill Development Activities for Young Children. The Handbook is a resource book which contains individual and small group activities designed to remediate weak areas identified by the tests.

PUBLISHER. The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204-2498 (800-228-0752).
REVIEWS:


OVERVIEW/PURPOSE. The Meeting Street School Screening Test (MSSST) is a developmental survey test for screening gross motor, visual-perceptual-motor, and language skills of 5- to 7-year old children in kindergarten and grade 1. The test was designed to identify children with potential learning disabilities and is intended for use in screening large groups of children.

The MSSST was developed by a team of multidisciplinary professional staff members at the Meeting Street School in Providence, Rhode Island, which is known for its work with children with cerebral palsy. In developing the MSSST, the staff anticipated that early identification of children with potential learning disabilities would reduce the large number of children who develop learning problems at a later age.

CONTENT. Test content is based on a theoretical information processing model which is structured to briefly scan a child’s input, integration, and output skills in the areas assessed by the three MSSST subtests:

- **Motor_Patterning** subtest tasks focus on bilateral motor skills and awareness of body in space, including gait patterns, hand clapping, hand patterns, following directions, and touching fingers.

- **Language** subtest tasks focus on listening comprehension, auditory memory, and language formulation.

- **Visual-Perceptual-Motor** subtest tasks focus on visual discrimination, visual memory, reproducing geometric and letter forms, and understanding spatial and directional concepts on paper.

ADMINISTRATION. The MSSST is individually administered and requires about 15-20 minutes. When used for screening, the test may be administered by a teacher or paraprofessional trained in its use. When used diagnostically, the test must be administered and interpreted by a trained clinical examiner.

Administration materials include the MSSST monograph/manual and the individual Test Record Form. The area set aside for testing requires a table and two chairs, as well as space for the gross motor tasks. Following directions in the Manual, the examiner orally presents the item cues and demonstrates specific motor patterns to be imitated.

As the child completes each of the tasks in the three subtests, the examiner scores his/her performance according to scoring directions and records the child’s score in the Test Record Form. Most tasks are rated 0, 1, or 2.
MEETING STREET SCHOOL SCREENING TEST (MSSST), 1969

Grades: K, 1

SCORES/SCORING. The child's ratings are totaled to obtain a raw score for each subtest and the total MSSST. Using a score conversion table corresponding to the child's chronological age, the examiner converts the raw scores to scaled scores, and then records and plots them on the profile of scores included in the child's Test Record Form.

For each subtest, the scaled scores range from 1 to 19 and have a mean of 10 and a standard deviation of 3. For the MSSST total, the scaled scores range from 20 to 80 and have a mean of 50 and a standard deviation of 10.

The scaled scores for the three subtests and the total score are used for decision-making concerning learning disabilities. As a screening measure to identify high risk children, MSSST has raw score cutoff points of 39 for kindergarten and 55 for grade 1. These scores represent the scores of children tested with an average time of four months into the school year.

STANDARDIZATION/NORMING. The MSSST was standardized in Rhode Island on a sample of 500 children in kindergarten and first grade. The children were selected to represent the population socioeconomically through the use of the 1966 U.S. Census data for father occupation. Each of the five normative tables are based on the scores of 100 children at half-year intervals, from ages 5-0 to 7-5 years. The sample was comprised of equal numbers of boys and girls distributed across the age ranges and socioeconomic levels.

TECHNICAL CHARACTERISTICS. Data are reported for reliability and validity. Test-retest reliability coefficients (two to four weeks apart) for the total test clustered at .85, and for subtests ranged from .75 to .85. Interrater reliability coefficients were above .95.

Validity is based on content and the results of a predictive validity study. To assess the MSSST as a predictor of academic achievement, 220 kindergarten and 274 first grade children in the normative sample were followed for two years. The MSSST scores of the kindergarten children correlated significantly with readiness scores at the end of kindergarten (r = .66) and at the end of first grade (r = .63). With children tested in the first grade, the correlation with first and second grade achievement was .53 and .46, respectively.

COMPONENTS. The MSSST components include the 126-page spiral-bound monograph/manual: Early Identification of Children with Learning Disabilities: the Meeting Street School Screening Test, and a four-page individual Test Record Form.
COMPONENTS (continued).

The monograph/manual includes: discussion of the theoretical foundation of the MSSST; an overview of early identification programs; nine test administration cards; directions for administration, scoring, and interpretation; and score conversion tables.

The individual Test Record Form includes space for recording and plotting scores on the Profile of Scores, and a scale for rating children on 10 behavioral dimensions (test cooperation, attention, concentration, use of feedback, motor control, pencil skills, eye control, speech, language, and overall efficiency) considered to be important indicators of learning disabilities.

PUBLISHER. The MSSST is available from the Meeting Street School, Easter Seal Society of Rhode Island, Inc., 667 Waterman Avenue, East Providence, RI 02914 (401-438-9500).

REVIEWS:

- Bannatyne, Alex. Review of the Meeting Street School Screening Test (excerpt). In Mental Measurements Yearbook Database (AN 0807-435), Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

- Kress, Roy A., Temple University. Review of the Meeting Street School Screening Test. In Mental Measurements Yearbook Database (AN 0807-435), Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

OVERVIEW/PURPOSE. The Preschool Screen is a developmental screening test intended for use with three- and four-year-old children. The purpose of the Preschool Screen is to identify and refer at-risk children for further assessment, placement, and program planning. The Preschool Screen also includes a screening observation form and a rating scale for both the child's teacher and parent.

CONTENT. The Preschool Screen consists of a group of criterion-referenced measures (assessments) designed to obtain a sampling of the child's skills and behavior. Each assessment contains from 2 - 9 items, most of which were selected from the Brigance Inventory of Early Development.

The skills assessed by the Preschool Screen are the same for both three- and four-year-olds. However, the skills for the four-year-olds are at a more advanced level. The Preschool Screen includes 11 basic assessments and 8 optional advanced assessments whose scores are not included in the total score. The assessments are included in the following developmental areas:

<table>
<thead>
<tr>
<th>Developmental Areas</th>
<th>Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Knowledge and Comprehension</td>
<td>Identifies Body Parts</td>
</tr>
<tr>
<td></td>
<td>Identifies Objects</td>
</tr>
<tr>
<td></td>
<td>Colors: Matches, Identifies**</td>
</tr>
<tr>
<td></td>
<td>Follows Directions*</td>
</tr>
<tr>
<td>Speech and Language</td>
<td>Personal Data Response</td>
</tr>
<tr>
<td></td>
<td>Picture Vocabulary**</td>
</tr>
<tr>
<td></td>
<td>Verbalizes Personal Needs*</td>
</tr>
<tr>
<td></td>
<td>Repeats Sentences</td>
</tr>
<tr>
<td></td>
<td>Plural s and -ing, Prepositions and</td>
</tr>
<tr>
<td></td>
<td>Irregular Plural Nouns</td>
</tr>
<tr>
<td></td>
<td>Articulates Initial Sounds*</td>
</tr>
<tr>
<td>Gross Motor Skills</td>
<td>Cross Motor Skills: Standing, Walking, Hopping**</td>
</tr>
<tr>
<td>Fine Motor Skills</td>
<td>Builds Tower With Blocks (3-10)</td>
</tr>
<tr>
<td></td>
<td>Visual-Motor: Copies**</td>
</tr>
<tr>
<td>Math</td>
<td>Number Concepts</td>
</tr>
<tr>
<td></td>
<td>Counts by Rote*</td>
</tr>
</tbody>
</table>

*Optional advanced assessment.
**Basic and optional advanced assessment.
ADMINISTRATION. Administration time generally ranges from about 12-15 minutes. The Preschool Screen may be administered individually by one examiner or by a team of examiners at multiple stations. Alternate screening methods include the use of teacher’s ratings, parent’s ratings, or data from school records. The examiner may be a teacher or a trained paraprofessional.

Administration materials include the spiral-bound manual used for administration, individual Pupil Data Sheet for the appropriate age, unlined paper, pencils, and one inch colored building blocks.

The manual which is displayed in easel format presents the pupil assessment material on the page facing the child and the directions for administration on the opposite page facing the examiner. For each assessment, the examiner’s page is structured in a standard format, with oral directions to the child on the right side of the page, and detailed directions for administration and scoring on the left.

The child’s required responses may be oral, pointing, motor, or written. The examiner scores the child’s responses and records them on the Pupil Data Sheet during administration.

SCORES/SCORING. The correct response to each item earns from 2-5 points, depending on the assessment. The examiner calculates the score for each assessment and then sums them to obtain the total score. The total possible score is 100.

The scores for all children are ranked and assigned to three groups: average, lower than average, and above average. The manual presents an example for establishing a cut-off score, using the lower 20 percent of the group. However, the author recommends that each program establish its own cut-off scores for different purposes and referrals.

Also, the author identifies many reasons why a child may score low and recommends that referrals for further assessment not be based on the child’s score only. After screening is completed, each child’s data is reviewed and a recommendation is made for placement and/or referral, as appropriate.

STANDARDIZATION/NORMING. Norms are not available.

TECHNICAL CHARACTERISTICS. Technical data on reliability and validity are not available. Content validity of the Preschool Screen is based on the literature review, and the field testing and critiquing which was conducted in 12 states.
BRIGANCE PRESCHOOL SCREEN FOR THREE- AND FOUR-YEAR-OLD CHILDREN (PRESCHOOL SCREEN), 1985

TEST COMPONENTS. Materials include the 51-page, spiral-bound Manual; Child Data Sheets (one for each grade level) for scoring and reporting; colored building blocks; and the Spanish Directions Booklet.

The Manual includes the basic and optional advanced assessments, and reproducible forms: Screening Observation Form, Teacher’s Rating Form, and Parent’s Rating Form.


REVIEWS:


- Turco, Timothy L., Lehigh University, PA. Review of the Brigance Preschool Screen (AN 1002-388). Mental Measurements Yearbook Database (MMYD). Lincoln, Nebraska: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

OVERVIEW/CONTENT. The Santa Clara Inventory is a criterion-referenced instrument developed to assess readiness of preschool and kindergarten children. The purpose of the Inventory is to: (1) screen incoming children; (2) serve as a developmental guide for on-going instruction; (3) help plan individualized instruction; (4) monitor student progress; and (5) facilitate parent/teacher conferences. The Inventory is also used to assess abilities of handicapped children of all ages. Use of the Santa Clara was enhanced by the development of a computer management system.

CONTENT. The Inventory is structured on 72 developmental tasks in nine skill areas: social/emotional, motor coordination, visual motor performance, visual perception, visual memory, auditory perception, auditory memory, language development, and conceptual development.

The tasks are sequenced by chronological age and are arranged by order of difficulty. Each task is assigned a two-digit reference number to facilitate use of the Inventory's basic components.

ADMINISTRATION. The Santa Clara Inventory may be administered individually, either by a teacher in one-half hour screening session, or by a team of staff in a four-station organization which permits each child to be tested individually and move rapidly through each assessment area.

Administration materials include the Teachers Manual and Observation Guide, student record form, and item stimulus response materials (flash cards, response cards, and worksheets) and other commonly used school materials to be provided by the examiner (paper, beads, button, chalk, etc.)

The examiner orally presents each task to the child. The child's responses are motor, oral, or written, as required.

SCORES/SCORING. Scoring for each task is done on a three point scale: 0, 1, and 2. The child receives a 0 if the task is beyond his/her developmental level, 1 if he/she has mastered certain aspects of the skill required to perform the task, and 2 if he/she can perform the task on his/her own with minimal help.

After administering the Santa Clara Inventory, the teacher records student performance by entering responses by keyboard or optical mark scanner into a microcomputer. The Santa Clara computer management program generates pupil developmental profiles, class skills profiles, prescriptions of activities to help foster students' current and previous performance.
SANTA CLARA PLUS COMPUTER MANAGEMENT SYSTEM
(SANTA CLARA PLUS). 1980-83

Grades: PreK, K

STANDARDIZATION/NORMING. The Santa Clara Inventory of Developmental Tasks was initially developed as an E.S.E.A. project of the Santa Clara Unified School District in 1967 and was revised in 1980.

TECHNICAL CHARACTERISTICS. Information on the technical characteristics of the Santa Clara Plus is not available.

COMPONENTS. The testing program materials include the Teachers Manual and Observation Guide, Developmental Profile, Instructional Activities Manual, and the Computer Management System. The testing program also includes a parent/teacher interview form and a set of spirit masters.

The Teachers Manual and Observation Guide contains instructions for administering and assessing the performance of each developmental task.

The Developmental Profile is a record form for recording individual student Observations.

The Instructional Activities Manual is a resource guide which contains educational activities related to each of the developmental tasks.

The Santa Clara Computer Management System generates pupil development profiles, class skills profiles, prescriptions of activities to help foster development of unmastered skills, and progress charts displaying students' current and past performance. The Santa Clara Computer Management System is compatible with the Apple II+ and IIe and the TRS-80 microcomputers.

PUBLISHER. Zaner-Bloser, Inc., 1459 King Avenue, P.O. Box 16764, Columbus, OH 43216 (614-486-0221).

REVIEWS:

- To be reported as available.
SCREENING CHILDREN FOR RELATED EARLY EDUCATIONAL NEEDS (SCREEN), 1988

OVERVIEW/PURPOSE. The SCREEN is an individually-administered, 70-item achievement test which measures beginning academic skills in oral language, reading, written expression, and mathematics.

The test was developed for use with 3- to 7-year olds and was designed to: (1) identify children with potential academic problems; (2) determine individual strengths and weaknesses; and (3) evaluate educational programs and interventions.

CONTENT. The SCREEN's test items consist of the most discriminating items from the Test of Early Language Development (TELD), 1981; Test of Reading Ability (TERA), 1981; Test of Early Written Language (TEWL), 1988; and Test of Early Mathematics Ability (TEMA), 1983.

The SCREEN has four subtests:

- Oral Language (18 items) covers the areas of meaning (semantics), structure (syntax), and use (pragmatics). Item tasks include: identifying pictures, defining words, repeating sentences, combining sentences to form more complex ones, and responding to questions related to family and friends and to favorite stories.

- Writing (16 items) measures writing skills through: identification of materials associated with writing, copying print, and writing words and sentences.

- Reading (18 items) measures reading skills through: identification of letters, words, and numbers; comprehension of sentences and short passages; and ability to identify the top, bottom, beginning, and end of a page.

- Mathematics (18 items) measures mathematics skills through: rote counting, skip counting, counting objects, and solving addition problems both with concrete objects and in printed form.

ADMINISTRATION. The SCREEN is individually administered in 15 - 40 minutes, depending upon the child's age and ability. The test may be administered by properly trained and supervised paraprofessionals, but results should be interpreted by qualified examiners.
SCREENING CHILDREN FOR RELATED EARLY
EDUCATIONAL NEEDS (SCREEN), 1988

ADMINISTRATION (continued)

Administration materials include the Examiner's Manual which contains
directions for administration and scoring; spiral-bound Picture Book which
contains item response stimuli; 20 small objects (coins, paper clips, etc.)
to be provided by the examiner for counting tasks; 8-page individual Student Workbook used for items requiring written responses; 4-page individual Profile/Record Form; and pencils and erasers.

The test is administered at a table at which the child and the examiner are
both seated. The examiner uses basal and ceiling levels to determine the
items to be administered to the child. The examiner presents the item tasks
orally and the child responds in a variety of modes: oral, pointing, and
written. The examiner scores the child's responses during administration
and records the scores in the student's Profile/Record Form.

SCORES/SCORING. The child's responses are scored "correct," or "incorrect,"
based on defined scoring criteria. Correct item responses receive one point.

Three types of scores are available for each of the four subtests and total
test: raw scores, age-based percentile ranks, and standard scores (quotients with a mean of 100 and a standard deviation of 15). The normative
scores are provided for children from ages 3-0 to 7-11 years in 10 age groups
of six months each.

STANDARDIZATION/NORMING. The SCREEN was standardized on a sample of 1,355
children in 20 states. The sample was stratified by geographic region
(Northeast, North Central, South, and West), place of residence (urban or
rural), sex, race, and ethnicity. The percentages of the standardization
group on these variables was comparable to that of the national population
In terms of urban/rural areas of residence, the urban areas were over-
represented and rural areas were underrepresented by 7 percent.

The standardization sample consisted of 10 age groups of 6-month intervals, ranging from ages 3-0/3-5 to 7-5/7-11. The number of children in each
of the 10 age groups ranged from 105 to 174.

TECHNICAL CHARACTERISTICS. Evidence of reliability for the subtests and
total test were obtained for internal consistency (using coefficient alpha)
and stability (test-retest):
TECHNICAL CHARACTERISTICS  (continued)

- For the total test, the coefficient alphas for each age group in the standardization sample ranged from .85 to .98. For the respective subtests, the coefficient alphas ranged from .83 to .92 for Language; .86 to .94 for Reading; .71 to .92 for Writing; and .87 to .97 for Mathematics. Internal consistency was also analyzed through Rasch analytic techniques.

- Test-retest reliability coefficients with a two-week time interval were calculated for two groups of children (sample size not indicated) from the Dallas/Fort Worth metropolitan area. The children varied in age from 6-0 to 7-3. The test results were correlated and the influence of age was partialed out of the resultant coefficients. The test-retest reliability coefficients exceeded .80.

Evidence is presented for content, criterion-related, and construct validity:

- Content validity is based on the item selection procedures.

- Concurrent validity is based on the high correlations between the items selected for the SCREEN and the total test score on the original measures (TELD, TERA, TEWL, TEMA). The correlation coefficients were .94 and above.

- Construct validity is based on: the positive relationship of SCREEN to chronological age and school experience, high subtest correlations, significant relationship to intelligence, and differentiation between children with normal learning capacity and those with impaired learning capacity.

COMPONENTS. Materials include the Examiner's Manual, Profile/Record Form, Student Workbook, spiral-bound Picture Book, and the PRO-SCORE System.

The Examiner's Manual includes the norms tables, information on interpreting administration results, and a sample report. The spiral-bound Picture Book contains item response stimuli. The 8-page Student Workbook is used by the student for items which require written responses. The PRO-SCORE System is a scoring system that is available for the Apple and IBM microcomputers.

PUBLISHER. PRO-ED, 8700 Shoal Creek, Austin, Texas 78758-6897 (512-451-3246).
REVIEW:


OVERVIEW/PURPOSE. The School/Home Observation and Referral System (SHORS) is a systematic approach that uses observational checklists for early identification and referral of children with problems that may interfere with learning. The SHORS was designed for use in public schools and day care or Head Start Centers. The SHORS is intended to be used by parents, teachers, and other professionals who work with young children from preschool through early elementary grades.

CONTENT. Observations of the child are made during regular classroom or home activities using checklists available in seven specific areas:

- Health
- Motor
- Vision
- Hearing
- Speech and Language
- Learning
- Behavior

ADMINISTRATION. Teachers and parents complete the checklists during the first month of school and then meet to discuss their observations. Information from the specific checklists may indicate need for a more comprehensive evaluation by a professional.

When problems are identified, the teacher and parent plan and work together to assure that appropriate attention is given to the child, including referrals to specialists as indicated. Follow-up and observations are continued throughout the school year.

SCORES/SCORING. Not available.

STANDARDIZATION/NORMING. Norms are not available.

TECHNICAL CHARACTERISTICS. Not available.


The Teachers Guide provides detailed instructions on the use of the checklists; explains observational techniques; describes symptoms and behaviors indicating possible problems; and provides guidelines for parent discussions and for referrals.
COMPONENTS (continued)

The Parents Guide includes a checklist and guidelines for observing the child within the home and provides general information about available resources when help is needed.

The Observation and Referral Record provides a continuous record of observations, parent conferences, and follow-up information for each child.

The General Checklist, included as part of the Observation and Referral Record, contains items that describe common physical symptoms or behavioral signs of problems. Each item on the General Checklist is keyed to one or more of the seven Specific Checklists.

The Specific Checklist is available separately for each of the seven areas of SHORS: health, motor, vision, hearing, speech and language, learning, and behavior. The checklist is used to record unusual behaviors or physical symptoms in detail.

School/Home Orientation Materials include audiovisual presentations for explaining the SHORS to teachers and parents.

PUBLISHER. Publishers Test Service, CTB/McGraw-Hill, 2500 Garden Road, Monterey, CA 93940 (800-538-9547; 408-649-8400 for AK, HI, or foreign countries).

REVIEWS:


OVERVIEW/PURPOSE. The Test of Early Learning Development (TELD) is a readiness test designed to measure the spoken language abilities of children from ages 3-0 through 7-11 years. The test was developed to provide a standardized measure of spoken language assessment for young children based on current theoretical perspectives. The purpose of the test is to: (1) screen and identify children who are significantly behind their peers in language development, (2) document children's progress in language, and (3) suggest instructional practices.

CONTENT. The TELD includes 38 items which measure different aspects of language. The test items are cross-classified by MODE (Receptive and Expressive) and FEATURE (Content and Form).

Test items relating to Content focus on knowledge of words and conceptual categories, and interpretation of meaning within various contexts. Test items relating to Form focus on syntax (sentence structure), morphology (the smallest meaningful units of language), and phonology (pronunciation).

ADMINISTRATION. The TELD is individually administered. The test is untimed but generally requires about 15-20 minutes. The examiner must be competent in test administration and thoroughly familiar with the Manual, especially the sections relating to the use of worms and the interpretation and reporting of scores. The author(s) advise that any further assessment based on administration results be done by professional staff trained in normal language development and language assessment.

Administration materials include the TELD Manual which contains the test and instructions for administering and scoring the test items; set of 11 Picture Cards; and the individual one-page Report Form.

The examiner orally presents the item stimulus and the child responds orally or by pointing. Basal and ceiling levels based on the child’s age and performance are used to determine the test items to be administered to the child.

SCORES/SCORING. The examiner scores and records the child's scores during administration. The child receives one point for each item he or she answers correctly or meets the item criterion. Basals and ceilings are applied in the scoring and the child's total raw score is the sum of the points received for all test items.

The total raw score is converted to standard scores and percentiles provided for 10 age groups at 6-month intervals (ages 3-0 through 7-11 years) and to age equivalent scores. The total standard scores, called Language Quotients, have a mean of 100 and a standard deviation of 15. The Language Quotients are interpreted in terms of performance categories (superior, above average, average, below average, and poor) associated with the score ranges.
SCORES/SCORING (continued)

To assist in interpretation, the Record Form includes an Item Profile which presents the TELD items classified by Mode (Receptive and Expressive) and Feature (Content and Form) and the associated Language Ages. Each item the child has passed is marked with a slash, and the profiled results provide a rough indication of the child’s level of functioning in language. However, the manual does include cautions concerning the use of Language Ages which are age equivalent scores.

STANDARDIZATION/NORMING. The norms are based on the test performance of 1,184 children in 11 states and one Canadian province. The characteristics of the children relative to geographic area, type of community, sex, age, and parent occupation are comparable with those of the national population, as reported in the Statistical Abstract of the United States (1979). However, the sample was somewhat overrepresented by the southern geographical region, urban communities, and parents who were white-collar workers.

TECHNICAL CHARACTERISTICS. Evidence of reliability is presented for internal consistency (using coefficient alpha) and stability (test-retest):

- In a study of 500 children, the internal reliability coefficients for the five age groups (ages 3-7) ranged from .87 to .92, and was .90 for the total test.

- Test-retest reliability coefficients for the five age groups from a study of 177 children for a two-week interval ranged from .72 to .87. The test-retest reliability coefficient for the total group was .90.

Evidence is presented for content validity, concurrent validity, and construct validity:

- Content validity is based on the selection of test content, results of pilot studies, and item analyses.

- Concurrent validity is based on the correlations of the TELD scores with other tests (Preschool Language Scale, Test of Language Development, Metropolitan Readiness Tests, and the Metropolitan Achievement Tests).

- Construct validity is based on differential age and group performance, and on correlations with tests of reading, readiness, and intelligence.
COMPONENTS. Materials include the 39-page TELD Manual; set of 12 Picture Cards used in test administration; and the one-page, consumable Record Form.

The Manual provides information about the rationale, development, standardization, and technical characteristics of the TELD. Also, the Manual includes directions for administration, scoring, and interpretation of results; and the norms tables.

The individual Record Form is used for recording the child's age, item and total test raw and derived scores, other test results, testing conditions, test performance in terms of item constructs, and interpretations and recommendations.

PUBLISHER. PRO-ED, 5341 Industrial Oaks Boulevard, Austin, TX 78735-8898 (512-892-3142).

REVIEWS:


- Dole, Janice Arnold, Dole, University of Denver. Review of the Test of Early Language Development. In Mental Measurements Yearbook Database (AN 0904-2190). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.

- Prather, Elizabeth M., Arizona State University. Review of the Test of Early Language Development. In Mental Measurements Yearbook Database (AN 0904-2190). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/PURPOSE. The Test of Early Mathematics Ability (TEMA) is a readiness test intended for use in identifying children with learning problems in elementary mathematics or those who are likely to develop such problems. The TEMA was designed for use with 4- through 8-year-old children, and also for older children with learning problems. The purpose of the TEMA is to: (1) screen and identify children who are significantly behind or ahead of their peers in developing mathematical thinking; (2) identify individual strengths and weaknesses; (3) suggest instructional practices; and (4) document children's progress.

CONTENT. The TEMA consists of 50 questions. The test was developed to serve the need for a standardized test of mathematical thinking for young children that would measure informal as well as formal mathematics concepts and skills:

- The formal (school taught) test items include 27 items that focus on reading and writing numerals, number facts, calculation, and base-ten concepts.
- The informal test items include 23 items that cover concepts of relative magnitude, counting, and calculation.

ADMINISTRATION. The TEMA is untimed but generally can be completed in about 20 minutes. If necessary, the test may be given in more than one sitting. The examiner must be competent in test administration and thoroughly familiar with the content of the manual, especially sections relating to the use of norms and interpretation, and have practice in administration and scoring.

Administration materials include the TEMA Manual which contains the test items and instructions for administering and scoring, set of Picture Cards, individual four-page Record Form, and the Examiner's Cue Card to assist in scoring during administrations. Also, three test items require the use of pennies, chips, or other small countable objects to be provided by the examiner.

The examiner orally presents most test items using the Picture Cards for 24 items. The Student Worksheet, included in the Record Form, contains seven printed test items to be completed by the child. The child's response is oral or written, depending on the test item. Basal and ceiling levels based on the child's age and performance are used to determine the items to be administered. The examiner scores the child's responses during administration.
SCORES/SCORING. The examiner records one point on the Record Form for each item answered correctly or a zero for an incorrect answer. The child's total raw score is the sum of the points received for all test items. Basals and ceilings are applied in the scoring.

The total raw scores are converted to standard scores and percentiles for each 6-month age interval group, from 4-0 through 8-11 years, and age equivalents.

The total standard scores called Math Quotients (MQs), have a mean of 100 and a standard deviation of 15. The Math Quotients are interpreted in terms of five performance categories (superior, above average, average, below average, and poor) associated with MQ score ranges.

The age equivalents are called Math Ages and the manual includes cautions regarding their use. To assist in interpretation, the Record Form includes an Item Profile which lists each item and its associated Math Age. Every item the child has passed is marked with a slash and the profile results provide a rough idea of the child's level of functioning.

STANDARDIZATION/NORMING. The TEMA was standardized with 617 children in 12 states. The characteristics of the children relative to geographic area, type of community, age, sex, race, and parent occupation are compared with those of the national population, as reported the Statistical Abstract of the United States (1981).

TECHNICAL CHARACTERISTICS. Evidence of reliability was presented for internal consistency and stability (test-retest):

- Internal reliability coefficients reported for five age groups, from 4-8 years, ranged from .86 to .94.
- The test-retest reliability coefficient for 71 children, ages 4 and 5 years, was .94 over a period of one week.

Evidence was presented for content validity, concurrent validity, and construct validity:

- Content validity of the TEMA was based on the selection of test content and procedures used in test development.
- Concurrent validity was based on correlations of the scores of 6- and 8-year-old children on the TEMA and the math calculation subtest of the Diagnostic Achievement Battery. The correlation coefficients were .40 and .59 which were statistically significant at the .05 level.
TECHNICAL CHARACTERISTICS (continued)

- Construct validity was based on differential age and group performance, and correlations with tests of language (Test of Early Language Development) and intelligence (Slosson Intelligence Test).

COMPONENTS. Materials include: the 69-page TEMA Manual, set of 26 Picture Cards used during administration, Examiner's Cue Card, and consumable Record Form designed for use in scoring, recording, and interpreting scores.

The TEMA Manual includes directions for administering, scoring, and interpreting results; norms tables; and information about test development, standardization, and technical test characteristics.

PUBLISHER. PRO-ED, 5341 Industrial Oaks Boulevard, Austin, TX 78735-8898 (512-892-3142).

REVIEWS:


- Lindeman, David P., University of Kansas. Review of Test of Early Mathematics Ability. In Mental Measurements Yearbook Database (AN 0905-2910). Lincoln, NE: Buros Institute of Mental Measurements at the University of Nebraska-Lincoln.
OVERVIEW/CONTENT. The Test of Early Reading Ability-2 (TERA-2) is a test of reading ability based on current theoretical perspectives on emergent literacy. The TERA-2 is designed for use with children from ages 3 through 9, in preschool, kindergarten, and primary grade levels. The purpose of the test is to: (1) identify children who are significantly different from their peers in the early development of reading; (2) document children's progress in learning to read; and (3) suggest instructional practices.

CONTENT. The TERA-2 is a 46-item test which is available in two forms (A & B). The test items are classified within three constructs:

- **Construction of Meaning**: items measure ability to construct meaning from print of three types: (1) figural/situational contexts, such as signs, logos, and words; (2) relational vocabulary, such as words that "go with" a stimulus word; and (3) discourse, such as understanding words that function as labels, deducing the meaning of an unfamiliar word from its context, anticipating written language, and cloze tasks designed to assess comprehension during silent reading.

- **Knowledge of the Alphabet and Its Functions**: items focus on letter naming and oral reading.

- **Conventions of Written Language**: items relate to book handling; response to other print conventions (left-right and spatial presentation of the story on the page); and proofreading (discovering errors in printed material).

ADMINISTRATION. The TERA is individually administered. The test is untimed but can generally be administered in about 15 - 30 minutes, depending on the child's age and ability, and the examiner's experience. The use of breaks with young children is encouraged.

Examiners who administer and interpret the TERA-2 should have some formal training in the administration of assessment instruments and the interpretation of assessment data. Teachers without such training, paraprofessionals, and aides may administer the test under direct supervision. However, interpretation may only be done by a qualified examiner.

Administration materials include the spiral-bound Picture Book, Profile/Examiner Record Form used for scoring and recording the child's responses, and pencils and erasers. The Picture Book contains all the TERA-2 test items. Each item has a picture and/or text. The examiner is requested to substitute regional logos for the national logos in the test which children may not be familiar with.
ADMINISTRATION (continued)

The examiner sits side by side or at a right angle from the child when administering the test. Basals and ceilings are used to determine the items to be administered to each child. Testing always begins with the item that responds to the child's age and continues until the child misses five consecutive items. The child's responses are oral and pointing. The examiner scores the child's responses during administration.

SCORES/SCORING. The child receives one point for each item answered correctly. Basals and ceilings are applied in the scoring. The child's total raw score is the sum of all points received.

The total raw score is converted to a percentile, normal curve equivalent, and standard score, based on the child's chronological age group. The standard score is the Reading Quotient which has a mean of 100 and a standard deviation of 15. The Reading Quotients are interpreted in terms of performance categories (superior, above average, average, below average, and poor) associated with defined score ranges.

The child's Instructional Target Zone which serves as a starting point for instructional development is created using the Profile/Examiner Record Form. The Instructional Target Zone is established by examining item performance across the three constructs measured by the TERA-2 (Meaning, Alphabet, and Convention) in relation to chronological age. Each item the child has passed is marked with a slash and results provide a rough indication of the child's level of functioning.

STANDARDIZATION/NORMING. The TERA-2 norms are based on the test performance of 1,454 children in 15 states. The sample's characteristics relative to sex, urban/rural residence, race, geographic region, and age are compared with those of the national population, as reported in the Statistical Abstract of the United States (1985). The sample was representative. However, rural residence was overrepresented by 8 percent and urban residence was underrepresented by a corresponding amount.

Sample size data are reported for seven age groups, from ages 3 through 9. The age groups ranged in size from 107 for age 3 to 350 for age 7.

The TERA-2 normative scores are reported for 12 age groups. Of these, two (ages 3 and 9) are based on 12-month age intervals and 10 (from 4-0 to 8-11) are based on six-month age intervals. The sample size for the six-month age groups is not indicated.
TECHNICAL CHARACTERISTICS. Reliability estimates are reported for internal consistency (using coefficient alpha and Rasch analysis) and for stability (test-retest with alternate forms):

- The coefficient alphas for the standardization sample in the seven age groups (3 to 9 years) ranged from .78 to .98 for Form A, and from .80 to .94 for Form B. The Rasch analysis was presented as an additional verification of internal consistency.

- A test-retest with alternate forms study, with a two week period between testing sessions, was conducted in Dallas with 49 students from ages 7 to 9 years. The Form A raw scores were correlated with those for Form B, and the influence of age was partialed from the resulting coefficient. The obtained correlation coefficient was .79 and, with an adjustment made for error variance, was .89.

Evidence of validity of the TERA-2 is based on content validity, concurrent validity, and construct validity:

- Content validity is based on the procedures used for item development, analysis, and selection.

- Concurrent validity is based on the correlation of the TERA-2 scores with those of other reading tests in two separate studies. The first study included 63 children ranging in age from 4 years, one month to 6 years. The children were also tested with the reading subtest of the Basic School Skills Inventory-Diagnostic. The second study included 34 students from ages 6 to 9 years who were tested with the Paragraph Reading subtests of the Test of Reading Comprehension.

  The reported correlation coefficients were partialed to control for the effects of age. In the first study, the correlation coefficients were .36 for Form A and .52 for Form B (significant beyond the .01 level). In the second study, the correlation coefficients were .36 for Form A and .34 for Form B. Correlation coefficients are not presented for separate age groups.

- Evidence of construct validity is based on the results of several studies. Statistically significant relationships are reported for the TERA-2 scores and chronological age, as well as school-related behaviors, as indicated by performance on the Basic School Skills Inventory-Diagnostic Scale. Also, notable group differences on TERA-2 performance are reported for students in the standardization sample and for a group of 22 children who were classified as learning disabled.
COMPONENTS. Materials include the 44-page TERA-2 Manual, Picture Book (one for both Forms A and B), and the consumable Profile/Examiner Record Form (one for each form). An optional software scoring system is also available.

The TERA-2 Manual contains: directions for administering, scoring, and interpreting results; norms tables; and information about test development, standardization, and technical characteristics. A sample printout from the TERA-2 software system is included in the Appendix.

PUBLISHER. PRO-ED, 8700 Shoal Creek Boulevard, Austin, Texas 78758-6897 (512-451-3246).

REVIEWS:

- To be reported as available.
OVERVIEW/PURPOSE. The Test of Early Written Language (TEWL) is a readiness test of written language skills intended for use with young children from ages 3 through 7. The test, based on an orientation that knowledge of and about writing occurs early in a child's life, is designed to measure the emerging written language skills of young children.

The TEWL was developed to meet the need for early detection of written language problems and the development of educational interventions. The purpose of the test is to: (1) identify children who have early achievement problems in the area of writing as compared to others of the same age; (2) determine individual strengths and weaknesses in writing; and (3) monitor student progress in regular, special, and remedial class settings; and (4) evaluate educational programs and interventions.

CONTENT. The test has 42 items which were selected on the basis of an analysis of research literature and existing writing tests for older children. The TEWL items are directly related to the activities of young children and measure several different aspects of writing, including:

- transcription (copying from a model)
- conventions of print (identifying the uses of punctuation; knowledge of differences among words, sentences, and paragraphs; spelling; and proofing)
- communication (writing notes, shopping lists, and titles of favorite stories and television shows)
- creative expression (developing sentences from target words, and the use of aspects of writing in composing a story)
- record keeping (copying and dictation)
- record keeping (skills such as copying and dictation)

ADMINISTRATION. The TEWL is individually administered in about 10 to 30 minutes, depending on the child's age and ability, as well as the examiner's experience. Examiners should have some formal training in administering and interpreting assessment instruments. Also, supervised practice in using educational tests is desirable.

Administration materials include the Examiner's Manual which contains directions for administration, scoring, and interpretation; Picture Cards which serve as item stimuli; Student Workbook for individual responses to selected test items; Profile/Record Form used by the examiner for scoring and recording the child's responses; and pencils and erasers.
ADMINISTRATION (continued)

The examiner sits next to or diagonally across from the child during administration and orally presents each test item. Basals and ceilings are used to determine which items to administer to the child. Testing always begins with the item that corresponds to the child's age and continues until the child misses five consecutive items. The child's responses are oral, pointing, or pencil-and-paper, as required by the item tasks. The examiner scores the child's response to each test item during administration and records the score on the Response Record (included in the Profile/Record Form).

SCORES/SCORING. Each correct response to an item earns one point. Incorrect responses do not earn any points. The examiner adds the points and enters the total raw score on the cover of the Profile/Record Form.

The TEWL yields three types of scores: raw score (number correct), percentile, and Written Language Quotient (a standard score with a mean of 100 and a standard deviation of 15).

The child's total raw score is converted to the Written Language Quotient (WLQ) for the appropriate age group. The WLQs are then converted to percentile ranks by age group. Norms are provided for 10 age groups with six-month intervals, ranging from 3-0/3-5 to 7-6/7-11 years.

Descriptors for the Written Language Quotient are based on ranges of the TEWL scores: Very Superior = above 130, Superior = 121-130, Above Average = 111-120, Average = 90-110, Below Average = 80-89, Poor = 70-79, and Very Poor = below 70.

STANDARDIZATION/NORMING. The TEWL was normed between April 1986 and May 1987 on a nation-wide sample of 1,355 children from 19 states. The sample was designed to reflect the national population characteristics with regard to sex, race, ethnicity, geographic region, and urban/rural residence, as reported in the Statistical Abstract of the United States (1985). The sample was representative on most population characteristics. However, about eight percent more of the sample were from urban residences. The number of children in the various age groups ranged from 105 to 174.

TECHNICAL CHARACTERISTICS. Two types of reliability data based on the standardization group are reported: internal consistency (coefficient alpha) and stability (test-retest).

Coefficient alphas for all but one age group ranged from .80 to .95. The coefficient alpha was .74 for the 4-0/4-5 age group. Internal consistency was also addressed using Rasch analyses.
TECHNICAL CHARACTERISTICS (continued)

Two test-retest studies with a 2-week time interval were conducted in 1986 with one group consisting of 39 children, and another consisting of 26 children. The children ranged in age from 6-0 to 7-3 years. The correlation coefficients for both studies exceeded .90.

Evidence of validity is presented for content validity, criterion-related validity, and construct validity.

Content validity is based on item selection from the content domain and format, as well as the item analyses.

Criterion-related validity is based on correlations with other tests (Test of Written Spelling, Written Expression Test, and the Quick-Score Achievement Test: Writing). The correlations all exceeded .40 (significant at the .01 level).

Construct validity is based on significant correlations found between the TEWL and chronological age and school experience, other academic measures, intelligence, and differentiation between groups of children with normal learning ability and those with language related disorders.

COMPONENTS. Materials include the following:

- Examiner's Manual (62 pp.) contains directions for administration, scoring, and interpretation, and also includes the norms tables.

- Picture Cards (7) are used as item response stimuli during test administrations.

- Student Workbook (16 pp.) is used by the child to respond to test items requiring a written response.

- Profile/Record Form (4 pp.) is used for scoring and recording the child's responses.

PUBLISHER. PRO-ED, 8700 Shoal Creek, Austin, TX 78758-6897 (512-451-3246).

REVIEWS:

- Hammill, Donald; Brown, Linda; & Bryant, Brian R. *A consumer's guide to tests in print*. Austin, TX: PRO-ED, 1989.
OVERVIEW/PURPOSE. The Tests of Basic Experiences, Second Edition (TOBE 2) is designed to measure children's acquisition of concepts and experiences considered necessary for participation in the early grades of school.

The TOBE 2 is designed for use in a norm-referenced fall/spring evaluation model to help determine program effectiveness. Instructional uses of the TOBE 2 are to assess strengths and weaknesses of individuals and groups; establish instructional needs and priorities; and group students for instruction.

CONTENT. The TOBE 2 is available in two overlapping test levels (K & L) which span spring of prekindergarten to spring of grade 1. Each test level includes four 26-item subject area subtests and related skills:

- **Language** (visual discrimination; alphabet knowledge; initial sounds; final sounds; rhyming; space and location; verb tense; sentence sense; context; comprehension; and reading terminology).

- **Mathematics** (order of numbers; counting; geometry; time and money; weight, volume, and linear measurement; properties and operations; and fractions).

- **Social Studies** (geography and travel; environment and use of natural resources; human relationships and behavior; occupations and the world of work; sociocultural geography; health and safety; and money and consumer behavior).

- **Science** (electricity and magnetism; force, motion, and mechanics; light, optics, and sound; chemistry; earth science and astronomy; animal reproduction and development; animal behavior and characteristics; and plant life).

ADMINISTRATION. Up to 20 children may be tested at one session, with the aid of proctors. One proctor is recommended for every 4-10 children, depending on their maturity. Each of the four subtests takes about 30-45 minutes to administer. The 6-item Practice Test whose use is considered essential takes about 20 minutes to administer. The tests may be administered by a teacher or a trained aide.

Administration materials include the Examiner's Manual (one for each test level), test booklets, and pencils with erasers. Directions for test administration are available in English and Spanish.
ADMINISTRATION (continued)

The TOBE 2 test items are multiple-choice with four item options in pictorial format. Each test item consists of a verbal stimulus and four picture responses. As the examiner reads the item stimulus aloud, the child fills in a small circle under the picture he or she believes is the correct answer.

SCORES/SCORING. Raw scores for the four subtests and composites (Mathematics/Language combined and the total battery) may be converted to standard scores, percentiles, stanines, and NCE scores. The tests may be hand-scored or machine-scored.

STANDARDIZATION/NORMING. The TOBE 2 was nationally normed in fall with 11,724 children and in spring with 12,172 children. The sample was drawn by stratified random sampling procedures from the national public and Catholic school populations. The same sample of 125 elementary schools participated in both the fall 1977 and spring 1978 administrations.

The norming sample included children in prekindergarten, kindergarten, and grade 1. Sample size per grade for kindergarten through grade 1 ranged from 2,553 to 7,046. A sample of 465 prekindergarten children in Head Start programs took the hand-scorable version of Level K to provide spring referenced norms for prekindergarten.

TECHNICAL CHARACTERISTICS. Reliability data for internal consistency (using Kuder-Richardson Formula 20) are presented for both fall and spring scores. The reliability coefficients ranged from .76 to .84 for subject area tests and from .87 to .94 for Mathematics/Language and Total Battery.

Test-retest correlation coefficients between fall and spring administrations range from .64 to .87.

Validity is based on the procedures used to develop the test, including item development, tryout, and item analysis.

COMPONENTS. The TOBE 2 materials include the Examiner’s Manual (one for each level), Practice Test, Test Book, Class Evaluation Record, and the Norms and Technical Data Book. An optional Instructional Activities Kit is available to help teach the concepts and skills assessed by the TOBE 2. The Norms and Technical Data Book includes information on test development, norming, and reliability, and presents results of a content validation study.
COMPONENTS (continued)

Test Booklets are hand-scorable for all subtest and machine-scorable for Mathematics and Language.

The Class Evaluation Record is used for organizing individual and group test administration results.

The Instructional Activities Kit provides materials to help teach concepts and skills assessed by TOBE 2 and also includes a parent involvement component. The Kit includes a User's Guide which explains use of the instructional materials and the individual and class record forms.

PUBLISHER. CTB/McGraw-Hill, 2500 Garden Road, Del Monte Research Park, Monterey, CA 93940 (800-538-9547 for Continental U.S. and 408-649-8400 for AK, HI, or foreign countries).

REVIEWS:


**OVERVIEW/PURPOSE.** The TOLD-2 Primary is a readiness test designed to assess the spoken language skills of children from 4 years through 8 years 11 months. The purpose of the test is to: (1) identify children significantly below their peers in language proficiency; (2) determine children's specific strengths and weaknesses in language skills; and (3) document children's progress in special intervention programs.

Test results are not intended for use in day-to-day instructional planning but rather as a first step in a comprehensive evaluation of a student's problems in language. Followup may include clinical teaching, criterion-referenced testing, and informal assessment procedures.

An abbreviated 55-item form of TOLD-2 Primary is available for large-scale screening. The abbreviated form consists of the two subtests (Picture Vocabulary and Grammatic Completion) which are most strongly correlated with the TOLD-2 Primary total score.

**CONTENT.** The TOLD-2 Primary test is based on a two-dimensional model of language structure which was used to generate the subtests. The model consists of three linguistic features (semantics, syntax, and phonology) and two linguistic systems (listening/receptive and speaking/expressive). The test includes 7 subtests and 175 items which measure different components of spoken language. An overview of the TOLD-2 Primary is presented below:

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Items</th>
<th>Language System*</th>
<th>Specific Ability</th>
<th>Language Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture Vocabulary</td>
<td>25</td>
<td>Li</td>
<td>Understanding Words</td>
<td>Semantics</td>
</tr>
<tr>
<td>Oral Vocabulary</td>
<td>20</td>
<td>Sp</td>
<td>Defining Words</td>
<td>Semantics</td>
</tr>
<tr>
<td>Grammatic Understanding</td>
<td>25</td>
<td>Li</td>
<td>Understanding Sentence Structures</td>
<td>Syntax</td>
</tr>
<tr>
<td>Sentence Imitation</td>
<td>30</td>
<td>Sp</td>
<td>Generating Proper Sentences</td>
<td>Syntax</td>
</tr>
<tr>
<td>Grammatic Completion</td>
<td>30</td>
<td>Sp</td>
<td>Using Acceptable Morphological Forms</td>
<td>Syntax</td>
</tr>
<tr>
<td>Word Discrimination</td>
<td>25</td>
<td>Li</td>
<td>Noticing Sound Differences</td>
<td>Phonology</td>
</tr>
<tr>
<td>Word Articulation</td>
<td>20</td>
<td>Sp</td>
<td>Saying Words Correctly</td>
<td>Phonology</td>
</tr>
</tbody>
</table>

*Includes Li (Listening/Receptive) and Sp (Speaking/Expressive)
CONTENT (continued)

The Picture Vocabulary and Oral Vocabulary subtests assess understanding and meaningful use of spoken words. The Grammatic Understanding, Sentence Imitation, and Grammatic Completion subtests assess different aspects of grammar. The Word Articulation and Word Discrimination subtests are supplemental tests that measure ability to say words correctly and distinguish between words that sound similar.

ADMINISTRATION. The TOLD-2 Primary is individually administered. The test is untimed but generally takes about 30 minutes to one hour, depending upon the child's age and ability. Testing for young children may be extended over several sessions. Examiners should have some formal training in assessment. Practice in administering the TOLD-2 Primary is required.

Test administration materials include the Examiner's Manual which provides directions for administration, scoring, and interpretation; the spiral-bound Picture Book which contains the item response stimuli; and the Profile/Examiner Form which is used for scoring and recording the child's responses.

The examiner administers the tests in the prescribed order. The testing begins with the first item on all subtests and is stopped when the child misses five items in succession. Using the item response stimulus, the examiner reads each item aloud to the child and the child responds orally or by pointing. The child's responses are scored during test administration.

SCORES/SCORING. Using detailed criteria, the examiner rates the child's response as correct (1) or incorrect (0). Following administration, the points for each subtest are summed and the total subtest score is recorded on the cover of the Profile/Examiner Form.

The TOLD-2 Primary yields four types of scores: raw (number correct) scores, percentiles, subtest standard scores, and composite standard scores (quotients) for Spoken Language, Listening, Speaking, Semantics, Syntax, and Phonology. The quotients are obtained by adding the standard scores for the specific subtests which comprise the composites. The subtest standard scores have a mean of 10 and a standard deviation of 3, and the quotient standard score has a mean of 100 and a standard deviation of 15.

Test performance, as indicated by ranges of standard scores for the subtests or the quotients, is interpreted in terms of descriptors ranging from "very superior" to "very poor." The child's standard scores and quotients present a graphic profile when plotted on the Profile/Examiner Form.
STANDARDIZATION/NORMING. The TOLD-2 Primary was standardized in 1987 with a sample of 2,436 children from 28 states and one Canadian province. The characteristics of the subjects are compared to the national population, with regard to sex, urban/rural residence, ethnicity, geographic region, and parent occupation, as reported in the Statistical Abstract of the United States (1985). The sample was representative on most population characteristics. However, the Northeast region was overrepresented by 7 percent and the North Central region was underrepresented by a corresponding percent.

The sample included four 1-year age groups from 4 through 8. Sample size for the age groups ranged from 315 for age 4 to 822 for age 6.

TECHNICAL CHARACTERISTICS. Evidence of test reliability is based on internal consistency (using coefficient alpha) and stability (test-retest).

- Results of a study of internal consistency with 250 children from the standardization sample are reported by age group, subtests, and composites. For the subtests, the alpha coefficients ranged from .85 to .95, with the exception of Picture Vocabulary and Grammatic Understanding. For the composites and total spoken language (both long and short forms), the coefficient alphas ranged from .90 to .97.

- A test-retest study with a 2-week time interval was conducted in 1987 with a group of 59 children. Reliability coefficients ranged from .74 to .95 for the subtests, and from .80 to .94 for the composites and total spoken language. Results of an earlier study done with the previous edition is also reported.

Evidence of validity is presented for content validity, concurrent validity, and construct validity.

- Content validity is based on the theoretical framework of the test, the mean ratings of 50 professional language experts, the item selection method, pilot studies, and item analyses.

- Concurrent validity is based on correlations of TOLD-2 Primary subtests and total spoken language scores with those of eight widely-used language and intelligence tests.

- Construct validity is based on the results of studies which examined the relationship of TOLD-2 Primary to age, IQ, and school achievement. Also, the scores were factor analyzed. Results of a study indicated that the TOLD-2 Primary scores distinguish between groups of children who have language problems and those who do not.
COMPONENTS. Materials include: the Examiner's Manual, Picture Book, Profile/Examiner Record Form, and PRO-SCORE, an optional software scoring system available for the Apple and IBM microcomputers.

The Examiner's Manual contains directions for administration, scoring, and interpretation, and includes the norms tables. The examiner uses the Picture Book for item response stimuli during test administration, and the Profile/Record Form for scoring and recording the child's responses.

An optional software system is available. The system converts the child's subtest raw scores into standard scores and percentiles, generates composite scores, tests for significant differences among composites, and prints the test results on a summary report. The system also allows users to input data from any one of four intelligence tests and to conduct an automatic discrepancy analysis between aptitude and spoken language performance.

PUBLISHER. PRO-ED, 8700 Shoal Creek Boulevard, Austin, TX 78758-6897 (512-451-3246).

REVIEWS: