The Assessment of Literacy and Language (ALL) is used to evaluate the emergent literacy skills and language development of prekindergarten, kindergarten, and first-grade children. ALL can help you diagnose children who have language disorders and who are at risk for later reading impairment. ALL may also be used for early identification of children who are at risk for reading impairment due to specific risk factors including environment, heredity, and difficulties of phonological processing. Test results and information given by parents on the Caregiver Questionnaire help you develop an accurate profile of a child’s language and emergent literacy strengths and weaknesses and guide you toward evidence-based intervention and instruction.

Overview

ALL provides three levels of assessment: Initial Indicator, Diagnostic, and Criterion-Referenced.

1. Use the initial indicator subtests to identify children who are at-risk for language impairment or who may be at-risk for reading problems in the future. If a child has performed poorly on the initial indicator subtests, administer the diagnostic subtests.

2. Use the diagnostic subtests to assess the child’s present language and emergent literacy skills. You can determine if the child’s difficulties result from underlying language or emergent literacy deficits. If further information is needed, use the criterion-referenced subtests.

3. The criterion-referenced subtests give further information by evaluating additional clinical behaviors associated with language and reading impairment. Use your clinical judgment to decide whether to administer one or all of the criterion-referenced subtests as part of extension testing.
To meet the standards of the Early Reading First and Reading First (No Child Left Behind Act, Title I, Part B, Subpart I, 2001) initiatives, classroom instruction must be based on developmentally-appropriate, scientific evidence from research in the component areas of language, phonological awareness, alphabetic knowledge, print awareness, fluency, and comprehension. ALL subtests align with these components.

### Early Reading First and Reading First Components and ALL Subtests and Tasks

<table>
<thead>
<tr>
<th>Early Reading First and Reading First Components</th>
<th>ALL Subtest</th>
<th>The Child’s Task</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language</strong></td>
<td>Basic Concepts</td>
<td>The child points to a picture that best represents the target concept.</td>
</tr>
<tr>
<td></td>
<td>Receptive Vocabulary</td>
<td>The child points to a picture that best represents the word the examiner says.</td>
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<tr>
<td></td>
<td>Parallel Sentence Production</td>
<td>The child completes a phrase or sentence (cloze procedure) that contains the targeted structure(s).</td>
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<tr>
<td></td>
<td>Word Relationships</td>
<td>The child describes the relationship between two stimulus words.</td>
</tr>
<tr>
<td><strong>Phonological Awareness</strong></td>
<td>Rhyme Knowledge</td>
<td>Task 1: The child tells if pairs of words rhyme.</td>
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<tr>
<td></td>
<td>Sound Categorization</td>
<td>The child identifies which word does not start with the same sound as the others when given a set of 3 or 4 words</td>
</tr>
</tbody>
</table>
|                                               | Elision | Task 1: The child deletes syllables or sounds in stimulus words to form new target words. Pictures are used as stimuli.  
Task 2: Administered like Task 1, but stimulus pictures are not used. |
| **Alphabetic Knowledge**                      | Letter Knowledge | Task 1: The child points to letters on the stimulus page as they are named by the examiner.  
Task 2: The child names letters that the examiner points to.  
Task 3: The child writes letters that the examiner names. |
|                                               | Phonics Knowledge | Task 1: The child produces the sounds of the letters.  
Task 2: The child produces the sounds of the letter combinations.  
Task 3: The child reads nonsense words. |
|                                               | Invented Spelling | The child writes words dictated by the examiner. |
| **Print Awareness**                           | Book Handling | The child identifies parts of a book and demonstrates how to use a book. |
|                                               | Concept of Word | The child identifies groups of letters as words. |
|                                               | Matching Symbols | The child points to the symbol that matches the target symbol presented by the examiner. |
| **Fluency**                                   | Sight Word Recognition | The child reads words. |
| **Comprehension**                             | Listening Comprehension | The child retells a story and answers questions about that story. |
Subtest Scaled Scores

ALL subtest scaled scores provide measures of specific aspects of language and emergent literacy, depending on the subtest tasks and the child’s responses. Subtest scaled scores are normative scores used specifically to compare the child’s performance to the performance of children of the same grade and semester peer group. These scores are derived from the subtest total raw scores.

Index Scores

ALL includes four index scores: Emergent Literacy, Language, Phonological, and Phonological-Orthographic. ALL index scores are composite scores that are formed from the scores of two or more subtests. They provide information about a child’s strengths and weaknesses across language and emergent literacy domains.

Emergent Literacy Index Score

Emergent Literacy Index is an overall measure of emergent literacy skills and is derived for children in prekindergarten, kindergarten, and first grade. The subtests used to derive this score depend on the child’s grade level and semester and include Letter Knowledge, Rhyme Knowledge, Elision, Phonics Knowledge, Sound Categorization, and Sight Word Recognition.

Language Index Score

The Language Index is an overall measure of receptive and expressive language ability. It is derived for children in prekindergarten, kindergarten, and first grade by summing the scaled scores from a combination of four or five subtests. The child’s grade and semester determine which of the following are used to derive this score: Basic Concepts, Receptive Vocabulary, Parallel Sentence Production, Word Relationships, and Listening Comprehension.

Phonological Index Score

The Phonological Index is a measure of phonological awareness for children in kindergarten and first grade. The Phonological Index is derived by adding a combination of the scaled scores for Rhyme Knowledge, Elision, and Sound Categorization, depending on the child’s grade and semester.

Phonological-Orthographic Index Score

The Phonological-Orthographic Index is a measure of a child’s knowledge of letters, sound-letter correspondence, and word identification and is derived for children in spring kindergarten and first grade. The Phonological-Orthographic Index is derived by adding the scaled scores of the Letter Knowledge, Phonics Knowledge, and Sight Word Categorization, depending on the child’s grade and semester.

Percentile Ranks

ALL provides grade-based percentile ranks for subtest scores and index scores. Percentile ranks are easy to understand and useful for explaining a child’s performance on ALL relative to the performance of others.
**Criterion-Referenced Subtest Scores**

Criterion-referenced scores provide a way to compare a child’s performance to a standard (criterion) of performance. The criterion-referenced cut scores for ALL were established by examining the frequency distributions of subtest raw scores by grade and determining the effect of different cut points on the correct classification of children in the sample according to their a priori diagnostic classification (i.e., normal or at-risk).

**Minimizing Item Bias**

Precautions were taken to ensure that ALL items are appropriate for a wide range of children from diverse cultural, linguistic, and socioeconomic backgrounds. A panel of speech-language pathologists with expertise in the areas of language, literacy development, and assessment of diverse populations, reviewed the ALL test items for content and cultural bias.

ALL items were also submitted to statistical studies of group performance differences with regard to sex, race/ethnicity, socioeconomic status based on the educational level of the primary caregiver/parent. Traditional bias analysis was conducted using both Mantel-Haenszel (Holland & Thayer, 1998) and item response theory (IRT) methods (Hambleton, 1993). Items that were considered biased were dropped from consideration for the final item sets of the assessment.

**Reliability and Validity**

The standardization sample data were analyzed for evidence of reliability, including test-retest stability, internal consistency, and interscorer reliability. Validity was evaluated by examining test content, response processes, internal structure, relationship to other diagnostic instruments, and diagnostic accuracy.

**Reliability**

The test-retest reliability of ALL was evaluated in a study of 104 children. The average corrected stability coefficients for all grades combined ranges from .75 (Receptive Vocabulary) to .93 (Sight Word Recognition) for subtest scores. Three of the four index scores for the average corrected stability coefficients for all grades combined are excellent.

The Phonological Index score reliability is good (.87). The index score reliability coefficients for all grades combined ranges from .87 to .96, and are higher than the reliability coefficients of the individual subtests that compose the index scores. ALL scores possess adequate to excellent stability across time for all grades.

**Validity**

Studies were conducted with children who had been previously identified as having a specific language impairment and with children considered “at-risk” for future reading disability. Children considered “at risk” included children with a positive family history of language and reading disability, children who had difficulties with phonological processing, and children who had limited literacy experiences.
Diagnostic Accuracy

The diagnostic accuracy of ALL was evaluated using two diagnostic validity statistics that describe how a test performs: sensitivity and specificity. Sensitivity indicates the probability that someone who has a language disorder will test positive for it, and specificity indicates the probability that someone who does not have a language disorder will test negative. The table that follows shows the percentage of children classified as having a specific language impairment (sensitivity) and the percentage of children without specific language impairment (specificity) by the ALL Language Index Score at 1, 1.5, and 2 standard deviations below the mean.

<table>
<thead>
<tr>
<th>Language</th>
<th>Index Score? SD Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>–1 SD</td>
<td>.98</td>
<td>.89</td>
</tr>
<tr>
<td>–1.5 SD</td>
<td>.86</td>
<td>.96</td>
</tr>
</tbody>
</table>

Classification of Specific Language Impairment by Language Index Score

Fall Standardization

The ALL fall standardization was collected from August through November of 2004. The sample of 300 children closely represents the 2002 U.S. Census for race/ethnicity and socioeconomic status based on the educational level of the primary caregiver, and geographic region. Equal numbers of males and females were included in the study.
Spring Standardization

The ALL spring standardization was collected from March through May of 2004. The sample of 300 children closely represents the 2002 U.S. Census for race/ethnicity and socioeconomic status based on the educational level of the primary caregiver, and geographic region. Equal numbers of males and females were included in the study.
Summary

ALL is the first comprehensive assessment that looks at both language and emergent literacy skills.

ALL subtests fully align to Early Reading First and Reading First objectives.

ALL results enable you to determine child’s strengths and weaknesses and put the child into one of four profiles. From the profiles, suggestions for prevention and intervention, plus resources, are provided.

References


