

Outcome Measure	Test of Integrated Language and Literacy Skills (TILLS)
Sensitivity to Change	Unknown
Population	Pediatrics
How to obtain	https://tillstest.com/
Domain	Language and Communication
Type of Measure	Standardized test of child language and literacy
Time to administer	25 to 45 minutes for core subtests, 90 minutes for entire test
Description	<p>TILLS measures language and literacy skills of children aged 6 to 18 years. It aims to identify language and literacy disorders, document patterns of relative strengths and weaknesses, and track changes in language and literacy over time.</p> <p>TILLS is based on a language levels-by-modalities model of the language and literacy skills that students must demonstrate to succeed in academic and social contexts. The two language levels in this model are: 1) the sound and word level (including skills such as phonemic awareness, nonword repetition, reading fluency, and vocabulary awareness) and 2) the sentence and discourse level (including skills such as listening comprehension, following directions, reading comprehension, and social communication). The four modalities in this model are: 1) listening, 2) speaking, 3) reading, and 4) writing. In addition, TILLS includes three subtests aimed directly at measuring aspects of memory (digit span forward and backward, delayed story retelling) that are relevant to classroom performance and performance on the other subtests.</p> <p>The model is designed to allow examiners to assess and compare students' language-literacy skills at the sound/word level and the sentence/discourse level across the four oral and written modalities—listening, speaking, reading, and writing.</p> <p>TILLS can be administered either in its entirety, or in single subtests, or a combination of subtests in one or more sessions. The full assessment can be administered in 90 minutes or less. The core subtests for diagnosing language and literacy disorders can be administered in 25 to 45 minutes.</p> <p>A companion tool, the TILLS Student Rating Scale, can be used to document parent, teacher, and student perceptions and priorities related to the student's strengths and needs.</p>
Properties	<p>Normative data based on 1,262 US students with typical language (equal numbers of boys and girls distributed across age intervals from 6 through 18 years).</p> <p>Items and subtests have gone through extensive testing, including item response theory analysis and traditional test standardization research. Exploratory factor analysis indicates that TILLS assesses two latent factors—sound and word structure knowledge and sentence and discourse knowledge, which support the theoretical model on which the test was constructed.</p> <p>Reliability: Internal Consistency (measured by omega coefficient) .95-.99 for subtests; Test-retest stability (ICC): .79-.98 for subtests. Inter-rater reliability: .86 to 1.0 for subtests (Mailend, Plante et al. 2016)</p> <p>Sensitivity and specificity ranges from .83 to .97 and Specificity ranges from .81 to 100% across ages as reported here: http://archive.brookespublishing.com/documents/TILLS_Sensitivity_Specificity.pdf</p>
Advantages	TILLS provides information on diagnostic accuracy (sensitivity and specificity) for every age at which the test is normed. The assessment may be used to detect changes in performance at intervals of 6 months or longer.
Disadvantages	Not yet standardized/normed on an AU population.

References

Mailend, M.-L., et al. (2016). "Reliability of the Test of Integrated Language and Literacy Skills (TILLS)." *International Journal of Language & Communication Disorders* **51**(4): 447-459.

Nelson, N. W., Plante, E., Helm-Estabrooks, N., & Hotz, G. (2015). Test of Integrated Language and Literacy Skills (TILLS). Baltimore, MD: Paul H. Brookes Publishing Co.