

Virginia Language & Literacy Screening System

Acknowledgments

Development of the Virginia Language & Literacy Screening System (VALLSS) has been supported by a grant from the Virginia Department of Education. Without the support provided by this grant, the research and development required for this assessment would not have been possible.

The research team that developed the VALLSS is indebted to many individuals who have supported the effort to create and refine a developmentally sensitive, valid, and reliable tool to use for screening risk in early literacy skills. Without the generous support and participation of many public-school classrooms throughout the Commonwealth of Virginia, this screener would not exist. We extend our sincere gratitude to the many administrators, division leaders, and teachers who have welcomed us into their classrooms.

For questions about the VALLSS, please contact Virginia Literacy Partnerships:

Phone: 1-888-882-7257

Email: literacy@virginia.edu

Website: <https://literacy.virginia.edu>



SCHOOL of EDUCATION
and HUMAN DEVELOPMENT

Copyright © 2024 by the University of Virginia.

All rights reserved. No part of these materials protected by this copyright notice may be reproduced or utilized in any form or by any means by persons or school divisions without prior written permission of the copyright owner. Reproduction and/or utilization includes electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system.

Student Materials Illustrations: Charles Peale, Lena Pham, Sahini Komandla, & Kelly McGuire

Design: Branner Graphic Design

Printed in the United States of America.



SCHOOL of EDUCATION
and HUMAN DEVELOPMENT

Introduction

Literacy achievement is tied not only to improved outcomes in all academic areas, but also to higher rates of employment and overall improved life expectancy.¹ Because students who have difficulties in reading during elementary school are likely to continue to have reading difficulties later in life,² it is important to screen for reading difficulties early so that schools can provide adequate instruction and intervention to reduce students' risk. The National Reading Panel (NRP) identified a set of five key skills that are necessary for the development of strong readers: phonemic awareness, phonics, fluency, vocabulary, and reading comprehension.³ There is strong evidence that demonstrates the importance of developing word-level skills (e.g., phonemic awareness, phonics, decoding), in tandem with developing vocabulary and oral language skills in order to successfully comprehend written text.⁴ As such, to comprehend written text, individuals must be able to decode written symbols into spoken language (e.g., "sounding out" words). They must then apply their language skills (e.g., vocabulary, knowledge of syntactic structures, background knowledge) to understand the meaning of the decoded text. Additionally, processing speed is a factor associated with reading development.⁵ The Virginia Language & Literacy Screening System (VALLSS) contains subtests to measure decoding (word reading), linguistic (language) skills, and rapid naming (processing speed).

The purpose of VALLSS is two-fold. First, scores can be used to identify students at risk for reading difficulties. Additionally, the screener serves as a measure of both foundational literacy skills and oral language development, which are predictive of later literacy achievement, allowing educators to design instruction that can improve reading and literacy achievement.

Virginia Language & Literacy Screener: Grade 3

Domains and Subtests

Code-based Subtests

Phonological Awareness: Students' phonological awareness abilities are measured through *Phoneme Segmenting*, in which students divide words into individual phonemes (or sounds). Phonological awareness is the ability to recognize and manipulate the units of sound in a spoken language. Awareness of the sounds in spoken language is an essential part of learning letter sound correspondence which is necessary for word reading and spelling. Research has demonstrated that students' early phonological awareness is a predictor of learning to read in an alphabetic written language system such as English.⁶

Decoding: Students' decoding ability is measured through two subtests, *Real Word Decoding*, in which the students are asked to read real, decodable words from a list, and *Pseudoword Decoding*, in which students are asked to read pretend words which still follow typical decodable spelling patterns. Word reading ability in the early elementary grades is a strong predictor of later reading achievement.⁷ Nonsense words (or pseudowords) allow us to assess whether a student has mastered phonics skills and can decode automatically without drawing on memory.⁸

Encoding: Students' encoding ability is measured through the *Encoding* subtest, which is a group-administered assessment, in which students are asked to spell words that are read aloud. The ability to correctly identify the grapheme (letter) that is matched to a phoneme (sound) is an essential skill for fluent reading and can be assessed through encoding ability.⁹ This subtest can be administered in a group setting, where each student silently writes on their own sheet of paper the words read aloud.

Reading Fluency: Students' reading fluency is measured through the *Oral Reading Fluency (ORF)* subtest, in which students read a passage aloud for one minute. While the student reads the passage, the assessor documents the words that are skipped or read incorrectly, resulting in the correct number of words read per minute. ORF is a widespread measure of reading fluency, is a strong predictor of reading ability, and is associated with later reading comprehension.¹⁰

Language Subtests

Passage Comprehension: Passage comprehension is assessed by two subtests utilizing the same passage. First, for *Passage Retell*, a student is read a passage aloud and then retells the passage using the same set of illustrations. *Passage Retell* is scored on the student's ability to include story elements and use rich vocabulary and syntax. Second, on the *Expressive Comprehension Questions*, students give an oral response to questions about the passage. Asking students to retell a story is an accurate and frequently used measure of narrative language abilities.¹¹ Reconstructing and interpreting narratives (i.e., retelling and answering comprehension questions) have been found to be a strong indicator of students' reading comprehension.¹²

Nonsense Sentences: For *Nonsense Sentences*, students repeat sentences varying in both length and grammatical complexity. If students do not, for example, correctly repeat a plural noun when presented by the examiner, it is unlikely that they correctly use plurals in their everyday speech. This subtest gives educators an indication of which grammatical structures a student has in their repertoire. Students' ability to repeat nonsense sentences has been shown to reflect the grammatical structures they use correctly in conversational speech.¹³

Vocabulary: Vocabulary is assessed through the *Vocabulary Fluency* subtest, in which students are asked to accurately name as many images as quickly as possible in one minute. Picture naming has been used to examine lexical access in children¹⁴ where slower processing speeds have been assumed to reflect limitation in processing capacity and resources, including less rapid access to object names.¹⁵

Processing Subtest

Rapid Automatized Naming (RAN): For *RAN: Letters*, students name the letters they see on the page as quickly as possible. This is a measure of a students' processing speed. Examiners record the number of letters the student can correctly label in the array of 50 letters within one minute. RAN measures have been shown to be a predictor of later word reading and reading fluency, as fluent reading requires students to quickly recognize letters, their associated sounds, and then blend them with other sounds as part of word reading.¹⁶

Notes

- ¹ Gilbert, L., Teravainen, A., Clark, C., & Shaw, S. (2018). Literacy and life expectancy. Retrieved from www.literacytrust.org.uk.
- ² Boscardin, C. K., Muthén, B., Francis, D. J., & Baker, E. L. (2008). Early identification of reading difficulties using heterogeneous developmental trajectories. *Journal of Educational Psychology, 100*(1), 192-208.
Francis, D. J., Shaywitz, S. E., Stuebing, K. K., Shaywitz, B. A., & Fletcher, J. M. (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology, 88*(1), 3-17.
McNamara, D. S., & Kendeou, P. (2011). Translating advances in reading comprehension research to educational practice. *International Electronic Journal of Elementary Education, 4*(1), 33-46.
- ³ National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. National Institute of Child Health and Human Development, National Institutes of Health.
- ⁴ Foorman, B., Beyer, N., Borradaile, K., Coyne, M., Denton, C. A., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., & Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: <http://whatworks.ed.gov>.
Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(1), 6-10.
- ⁵ Kail, R., & Hall, L. K. (1994). Processing speed, naming speed, and reading. *Developmental Psychology, 30*(6), 949-954.
National Early Literacy Panel. (2008). Developing early literacy: A scientific synthesis of early literacy development and implications for intervention. National Institute for Literacy.
Norton, E. S., & Wolf, M. (2012). Rapid automatized naming (RAN) and reading fluency: Implications for understanding and treatment of reading disabilities. *Annual Review of Psychology, 63*, 427-452.
- ⁶ Adams, M. (1990). *Beginning to read: Thinking and learning about print*. MIT Press.
Goswami, U., & Bryant, P. (2016). *Phonological skills and learning to read*. Psychology Press.
Nation, K., & Hulme, C. (1997). Phonemic segmentation, not onset-rime segmentation, predicts early reading and spelling skills. *Reading Research Quarterly, 32*(2), 154-167.
National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. National Institute of Child Health and Human Development, National Institutes of Health.
Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. National Academies Press.

- ⁷ Compton, D. L., Fuchs, D., Fuchs, L. S., Elleman, A. M., & Gilbert, J. K. (2008). Tracking children who fly below the radar: Latent transition modeling of students with late-emerging reading disability. *Learning and Individual Differences, 18*(3), 329-337.
- Fuchs, L. S., Fuchs, D., & Compton, D. L. (2004). Monitoring early reading development in first grade: Word identification fluency versus nonsense word fluency. *Exceptional Children, 71*(1), 7-21.
- ⁸ Lowell, S. C., Felton, R. H., & Hook, P. E. (2014). Basic facts about assessment of dyslexia: Testing for teaching. Baltimore, Maryland: The International Dyslexia Association, Incorporated.
- ⁹ Snow, C. E., Griffin, P., & Burns, M. S. (Eds.) (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world*. San Francisco: Jossey-Bass.
- ¹⁰ Kame'enui, E. J., & Simmons, D. C. (2001). Introduction to this special issue: The DNA of reading fluency. *Scientific Studies of Reading, 5*(3), 203-210.
- Deno, S. L., Fuchs, L. S., Marston, D., & Shin, J. (2001). Using curriculum-based measurement to establish growth standards for students with learning disabilities. *School Psychology Review, 30*(4), 507-524.
- Fuchs, L. S., Fuchs, D., Hosp, M. D., & Jenkins, J. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading, 5*(3), 239-259.
- National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. National Institute of Child Health and Human Development, National Institutes of Health.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.) (1998). *Preventing reading difficulties in young children*. National Academies Press.
- ¹¹ Pico, D. L., Hessling Pahl, A., Biel, C. H., Peterson, A. K., Biel, E. J., Woods, C., & Contesse, V. A. (2021). Interventions designed to improve narrative language in school-age children: A systematic review with meta-analyses. *Language, Speech, and Hearing Services in Schools, 52*(4), 1109-1126.
- Reese, E., Suggate, S., Long, J., & Schaughency, E. (2010). Children's oral narrative and reading skills in the first 3 years of reading instruction. *Reading and Writing, 23*(6), 627-644.
- ¹² Reed, D. K., & Vaughn, S. (2012). Retell as an indicator of reading comprehension. *Scientific Studies of Reading, 16*(3), 187-217.
- ¹³ Devescovi, A., & Caselli, M. C. (2007). Sentence repetition as a measure of early grammatical development in Italian. *International Journal of Language & Communication Disorders, 42*(2), 187-208.
- ¹⁴ Seiger-Gardner, L., & Schwartz, R. G. (2008). Lexical access in children with and without specific language impairment: A cross-modal picture-word interference study. *International Journal of Language & Communication Disorders, 43*(5), 528-551.
- ¹⁵ Cook, A. E., & Meyer, A. S. (2008). Capacity demands of phoneme selection in word production: New evidence from dual-task experiments. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 34*(4), 886.
- Miller, C. A., Kail, R., Leonard, L. B., & Tomblin, J. B. (2001). Speed of processing in children with specific language impairment. *Journal of Speech, Language, and Hearing Research, 44*(2), 416-433.
- ¹⁶ Georgiou, G. K., Parrila, R., Cui, Y., & Papadopoulos, T. C. (2013). Why is rapid automatized naming related to reading? *Journal of Experimental Child Psychology, 115*(1), 218-225.