

Speaking of Literacy Listening Guide

Episode 3: An Interview With Dr. Susan Loveall

This listening guide serves as a reference while listening to the Iowa Reading Research Center's podcast, *Speaking of Literacy*. Visit our website to listen to the episode and access the transcript.

About the Guest

Dr. Susan Loveall is an assistant professor in the Department of Special Education and Communication Disorders at the University of Nebraska-Lincoln. She arrived at Nebraska after spending four years as an assistant professor in the Department of Communication Sciences and Disorders at the University of Mississippi. Prior to that, she was a postdoctoral fellow at the Life Span Institute at the University of Kansas. She holds a bachelor's degree in psychology from Southwestern College and earned her master's and doctorate in psychology at the University of Alabama.



Loveall's interests involve research on learning, language, and literacy in individuals with intellectual and developmental disabilities. A majority of her research is with the Down syndrome community. Ultimately, the goal of her research is to better understand cognitive development and to design and implement interventions for those who struggle with learning, language, or reading.

Pre-Listening Discussion Questions

Before you listen, consider the following questions. This can be a self-guided or discussion-based activity. Activating your background knowledge and considering your thoughts about these topics can help you relate the topics discussed in the episode to your personal experiences.

- As a researcher in special education and speech language pathology, Loveall works with students who have disabilities. How do you support students with disabilities in your classroom?
- When working with students with disabilities, it is helpful to bring together the perspectives of teachers, caregivers, speech-language pathologists, and other experts. Who do you consult when planning instruction for students with disabilities?

Thematic Summary

Could you introduce yourself and your role for us?

Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

How do the overall reading skills of individuals with intellectual disabilities differ from those of their typically developing peers? What are their strengths and weaknesses?

Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

What are SLPs' experiences and knowledge surrounding reading?

Key Takeaways	Notes
What did you learn?	

What questions do you still have?	
-----------------------------------	--

How do reading skills differ in people with Down syndrome?

Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

How can SLPs and teachers support literacy in people with Down syndrome?

Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

What is the Self-Teaching Hypothesis for reading?



Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

What is the Simple View of Reading? Is it supported in people with Down syndrome?

Key Takeaways	Notes
What did you learn?	
What questions do you still have?	

If you could give one piece of advice to parents, what would it be?

Key Takeaways	Notes
What did you learn?	

What questions do you still have?

Research Highlights

If you would like to learn more about the guest's research, these selected studies are a good place to start. Citations indicate where you can access the original publications, and brief summaries of each study's findings are included below.

Channell, M. M., Loveall, S. J., & Conners, F. A. (2013). Strengths and weaknesses in reading skills of youth with intellectual disabilities. *Research in Developmental Disabilities, 34*(2), 776-787. <https://doi.org/10.1016/j.ridd.2012.10.010>

In this study, the authors compared reading-related skills (e.g., word recognition, phonological decoding, orthographic processing, and rapid automatized naming) of children with intellectual disability to those of typically developing children with similar verbal ability. The authors found that the group with intellectual disability scored lower than the typically developing group on word recognition and phonological decoding, but similarly on orthographic processing and rapid automatized naming. The authors conclude that poor word recognition in children with intellectual disabilities may be largely attributable to poor phonological decoding.

Loveall, S. J., Pitt, A. R., Rolfe, K. G., & Mann, J. (2022). Speech-language pathologist reading survey: Scope of practice, training, caseloads, and confidence. *Language, Speech, and Hearing Services in Schools, 53*(3), 837-859. https://doi.org/10.1044/2022_LSHSS-21-00135

The authors of this study examined speech-language pathologists' opinions on their scope of practice related to reading and their ability to define, assess, and treat clients with reading difficulties. Survey results indicated that SLPs recognized that identification, assessment, and intervention of reading disabilities were part of their scope of practice. However, many reported that they did not believe they had adequate training in reading and that literacy instruction, to a greater extent, was the responsibility of teachers rather than SLPs.

Loveall, S. J., & Conners, F. A. (2013). Individuals with intellectual disability can self-teach in reading. *American Journal on Intellectual and Developmental Disabilities, 118*(2), 108-123. <https://doi.org/10.1352/1944-7558-118.2.108>

In this study, the researchers examined orthographic learning (learning and matching letter patterns in order to identify words) in individuals with intellectual disability and younger, typically developing children with similar verbal ability. The researchers tested participants' ability to remember nonwords they had learned under two conditions: a word supply condition (in which researchers told the pronunciation to the participants) and a word analysis condition (in which participants decoded words on their own, breaking them down and sounding them out based on sound-spelling correspondances).



Findings indicated that individuals in both groups remembered nonwords better when they were required to decode them on their own. The researchers conclude that individuals with intellectual disabilities may be able to “self-teach” orthographic patterns, learning the orthographic structure of words through decoding.

Loveall, S. J., & Conners, F. A. (2016). Reading skills in down syndrome: An examination of orthographic knowledge. *American journal on intellectual and developmental disabilities*, 121(2), 95–110. <https://doi.org/10.1352/1944-7558-121.2.95>

The researchers of this study examined the word identification of individuals with Down syndrome and typically developing children with similar word identification ability. They measured participants’ ability in two subskills of word identification: orthographic knowledge (knowledge of letter patterns and what words look like) and decoding (breaking down and sounding out words based on sound-symbol correspondances). Individuals with Down syndrome performed similarly to typically developing peers on two orthographic knowledge tasks, but worse on a decoding task. These findings suggest that individuals with Down syndrome may rely more heavily on memorization of individual words as compared to decoding.

Definitions

This episode includes technical terminology relating to research, linguistics, communication sciences and disorders, and the science of reading. Read the definitions below to understand how these important terms are being used in this context.

- **Intellectual disability:** To receive a diagnosis of intellectual disability, an individual has to have limitations in intellectual functioning (i.e., the ability to learn, reason, and problem solve) and adaptive functioning (i.e., everyday social and life skills), and those difficulties have to be evidence in the first 22 years of life, during the developmental period.
- **Down syndrome:** Down syndrome is a genetic condition that occurs when an individual is born with an additional chromosome. This affects the way their body and brain develop. Some characteristics of Down syndrome include intellectual disability, delays in language acquisition, and physical characteristics, although individuals may possess these characteristics to different degrees.
- **Autism spectrum disorder:** Autism spectrum disorder is a developmental disorder with symptoms that appear within the first three years of life. These symptoms include deficits in social communication and interaction and restricted, repetitive behaviors, interests, or activities. The word “spectrum” conveys that autism has different forms and levels of severity.
- **Word identification:** Word identification is the ability to recognize a written word. At first, this involves decoding—knowledge of sound-symbol correspondances and common word parts. With repeated practice, this process becomes automatic, and readers are able to recognize words without effort, or “on sight.”
- **Speech-language pathologist (SLP):** SLPs are professionals with expertise in communication, speech, language, voice, feeding, and swallowing. Speech-language pathologists work in education, research, and healthcare settings to treat patients across the lifespan.
- **Rapid automatized naming (RAN):** RAN is the ability to name colors, letters, numbers, and objects quickly and automatically. It is a predictor of automatic word recognition and fluency.
- **Orthographic processing:** The ability to recognize and recall the symbols of written language.

- **ASHA:** ASHA (American Speech-Language Hearing Association) is the national professional, scientific, and credentialing association for SLPs and audiologists. ASHA provides continuing education and best practice guidelines and defines SLPs' scope of practice.
- **CEU:** CEU stands for "continuing education unit," a measure of the professional training required for professionals, such as teachers and SLPs, to maintain their certification and licensure.
- **Phonological awareness:** The knowledge of sounds within spoken language. It begins with the recognition of phrases within sentences and progresses to successively smaller units (e.g., words within phrases, syllables within words, onsets and rimes, and individual phonemes).
- **Decoding:** Applying knowledge of phonics to convert the letters or graphemes in a word to the sounds they represent, and then blending the sounds together to read the word.
- **Phonological memory:** Phonological memory refers to the ability to store and recall speech sounds.
- **Syntax:** Syntax refers to the order of words in a particular language—the rules that explain how words can and cannot combine.
- **Phonics:** Phonics is a teaching and learning process based on applying knowledge of letter-sound correspondences and spelling patterns to learn to read written text.
- **Galactosemia:** Galactosemia is a disorder that prevents the body from processing a sugar called galactose. Side effects may include intellectual disabilities and speech delays.
- **Highly imageable words:** Highly imageable words can be easily visualized.
- **Working memory:** Working memory allows individuals to store a small amount of information in their mind temporarily while completing cognitive tasks. Working memory is critical for reading, which requires individuals to store the sounds of a word long enough to blend them together and access the associated meaning.
- **Background knowledge:** A reader's previous experiences with and learning about a topic or concept in a text; information the reader already knows and can use to make sense of new information in a text; also referred to as "prior knowledge."
- **Sight words:** Sight words are words that can be recognized without applying any decoding or analytic skills.
- **Self-Teaching Hypothesis:** Developed by Jorm and Share (1983), the Self-Teaching Hypothesis proposes that children implicitly acquire new words through phonological decoding.
- **Nonwords:** Nonwords have no meaning, but they follow English spelling conventions. Nonwords can be used to assess a reader's ability to decode unfamiliar words using sound-symbol correspondences by ensuring that the reader has not simply memorized the word.
- **Graphemes:** One or more letters used to represent a single sound or phoneme. For example, the sound /k/ could be represented by any of the following graphemes: *c*, *k*, *ck*, *ch*, or *que*.
- **Simple View of Reading:** Proposed by Gough and Tunmer in 1986, the Simple View of Reading (SVR) states that reading comprehension is the product of decoding and language comprehension. This is displayed with the formula $\text{Word Recognition (WR)} \times \text{Language Comprehension (LC)} = \text{Reading Comprehension (RC)}$.
- **Constructs:** A construct is an abstract attribute (such as "language comprehension" or "intelligence") that cannot be directly observed or measured, but must be inferred based on an observable measure.
- **Variance:** In statistics, variance is a measure of dispersion—how much a set of numbers is spread out from its average value.

- **Predictor:** A predictor is a variable that can affect an outcome of interest. For example, word recognition is a predictor of reading comprehension.

Post-Listening Discussion Questions

After listening to the episode, continue the conversation with the following questions. This can be a self-guided or discussion-based activity. Considering these post-listening questions can allow you to reflect on the content of the episode, deepening your comprehension of the episode's key ideas.

- Loveall described the relative skills of students with intellectual disabilities. How do you leverage students' relative skills when teaching new skills?
- Loveall described the Self-Teaching Hypothesis. What role does self teaching play in your classroom? How do you balance self teaching with explicit, direct instruction?
- Loveall explained the importance of creating a language-rich environment for children from a young age. What are some ways you do that in your classroom? At home?
- Loveall mentioned the gap between researchers and educators, acknowledging that it is often difficult to translate research findings into classroom practices. From your perspective, how can researchers and educators learn from each other?

Resources and More Information

Want to learn more? The following list contains resources and studies that were mentioned in the episode as well as further reading materials on key topics from the episode.

- [Learning Lab for Intellectual and Developmental Disabilities](#): Loveall's lab website provides more information about her current research and publications, as well as SLP resources in Nebraska.
- [Dr. Susan Loveall's research](#): To access more of Loveall's research, visit her Google Scholar page.
- [Dr. Chris Lemon's research](#): To read more about Lemon's research on reading interventions for students with Down syndrome, visit his Google Scholar page.
- [Babble Boot Camp](#): To learn about the benefits of exposing infants and toddlers to a language-rich environment, visit the Babble Boot Camp lab website.
- [The American Speech-Language-Hearing Association's \(ASHA\) Practice Portal](#): This portal provides vetted information and resources to SLPs on a variety of topics related to their scope of practice.
- [A Novel Idea: The History of the Science of Reading](#): For more information about the science of reading and further listening, check out the IRRC's podcast, *A Novel Idea: The History of the Science of Reading*.
- [Science of Reading eLearning Module](#): For a visualization and explanation of the Simple View of Reading, check out the Science of Reading eLearning module on the IRRC's Caregivers Resource Hub.