IOWA | Iowa Reading Research Center

Listening Guide for *A Novel Idea*

Episode 4: "Phonics Fights Back"

*This listening guide is for caregivers interested in learning more about literacy instruction and educators who want to facilitate discussion within their higher education classroom or professional development setting. In this episode, we take a deep dive into the work of several influential researchers in the early days of the science of reading. Visit **our website** for the transcript and sources of this episode*.

Before You Listen

What You've Heard So Far

Previously on *A Novel Idea*, Host Meg Mechelke and Guest Natalie Wexler discussed the evolution of children's books during the 20th century, from McGuffey readers to picture books and decodable texts, and how these texts aligned with different approaches to teaching 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 connect the episode to your own experiences.

1. What do you know about early literacy research?

2. *For educators*: Reflect on the training you've received to become a teacher. What did you learn about how to best support students with dyslexia?

3. *For caregivers*: How do you incorporate multisensory learning at home? How might this support phonics instruction?

Press Play

Break It Down

Here, you can find the key points from the episode, organized with thematic headings and time stamps. Key terms related to literacy instruction are italicized and defined.

Early Phonics Research
(00:00 - 3:10)

In episode four of *A Novel Idea,* Host Meg Mechelke introduces us to the early research on *phonics instruction* conducted by Physician and Pathologist Dr. Samuel T. Orton.

> *Phonics instruction* is the systematic method of teaching reading that relies on letter-sound correspondences and phonological awareness (i.e., the knowledge of sounds within spoken language).

Dyslexia and Literacy
(3:10 - 13:16)

Mechelke interviews IRRC Assistant Director of Education and Outreach Nina Lorimor-Easley about the process of learning to read with *dyslexia* and the impact of Orton's research on literacy.

> According to the International Dyslexia Association, "*Dyslexia* is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge."

Dyslexia and the Brain
(13:16 - 15:45)

Mechelke interviews Dr. Fumiko Hoeft, director of the University of Connecticut's Brain Imaging Research Center, about the neural processes and pathways characteristic of dyslexia.

Combining Approaches to Literacy
(15:45 - 20:30)

Mechelke introduces the collaboration between Samuel Orton and Anna Gillingham in the *Orton-Gillingham approach*.

> The *Orton-Gillingham approach* is a research-based literacy instruction intervention that combines multisensory learning with phonics instruction. This approach has been found to be particularly effective for individuals with dyslexia.

Code-Emphasis vs. Meaning-Emphasis
(20:30 - 27:52)

Mechelke highlights the controversy around phonics as an alternative to the sight-reading method, despite the research supporting phonics. They introduce the work of Jeanne Chall, a professor at Harvard and a prominent reading researcher. Her 1967 book, *Learning to Read,* followed three years of research in over 300 U.S. classrooms. Chall's research identified two types of literacy instruction: meaning-emphasis instruction that prioritized the general meaning of the text and code-emphasis instruction that emphasized phonics. The results indicated that early instruction with code emphasis tended to have better word recognition, spelling, and reading comprehension outcomes compared to meaning-emphasis instruction alone.

The Science of Systematic Reading
(27:52 - 30:38)

Dr. Maryanne Wolf, professor-in-residence at UCLA and the director of the Center for Dyslexia, Diverse Learners, and Social Justice, explains the neuroscience behind the systematic teaching of reading.

The Libermans' Research
(30:38 - 39:59)

In conversation with Dr. Reid Lyon, Mechelke introduces Isabelle and Alvin Liberman and their research on phonemes. Alvin Liberman was a linguist at the Haskins lab at Yale developing a machine to read text aloud for blind students. His research

examined how phonemes, the individual sounds of spoken language, are perceived in the brain. He discovered that, during listening, the brain does not process the individual sounds of spoken language, called phonemes, one by one. Instead, the brain perceives larger units of sound, like syllables and whole words, before identifying and differentiating the phonemes that they comprise. This discovery is further explained in his article “Perception of the Speech Code.” Isabel Liberman was a psychologist at the Haskins lab at Yale. Her research examined phonemic and phonological awareness and how they relate to reading. Isabel Liberman was a distinguished expert of reading disabilities.

After You Listen

Post-Listening Discussion Questions

Continue the conversation with the following questions. This can be a self-guided or discussion-based activity. Considering these post-listening questions can deepen your comprehension of the episode’s key ideas and allow you to connect the episode's topics to your own experiences.

1. In this episode, Nina Lorimor-Easley discusses stereotypes associated with dyslexia. What do you think educators and caregivers can do to better understand reading and writing disabilities and address stereotypes in the classroom?

2. *Looking ahead*: Why do you think that understanding the neuroscience of dyslexia allows us to design more effective literacy instruction?

Go Beyond the Episode

*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. For a full list of sources, visit **our website**.*

“The Neuroscience of Reading with Dr. G. Reid Lyon”: Learn more from Dr. G. Reid Lyon in this blog post. Lyon discusses his experience in the fields of neuroscience and reading research.