# Language and Working Memory Lab VOL 17

February 2025 School of Communication Sciences and Disorders at Western University

## Spoken Language Assessment Tool for Teachers of the d/DHH

Many students who are d/Deaf and/or Hard of Hearing (d/DHH) benefit from additional support in the classroom to be successful learners. Supporting these students is facilitated, in part, by assessing their oral language skills to determine what they can do, where they struggle, and how to help them reach their full learning potential. While some assessments may be available for this, most are not designed for d/DHH students in the classroom.

In our current project, we have been working with a group of Specialist Teachers of the d/DHH and educational Speech-Language Pathologists (SLPs) to co-develop an assessment tool specifically for use with d/DHH students. The tool assesses the spoken language skills of d/DHH students, focusing on the areas of language with which these students often struggle in the classroom. The tool has been tested and revised based on feedback from use with d/DHH students. This assessment tool will be available for use by all Specialist Teachers of the d/DHH this fall.

Rachel Benninger, M.Cl.Sc./PhD Candidate

https://iconduck.comemojis//133186/person-deaf-light

# Narrative Skills and Working Memory: Do Questions Help Children Include More Information?

Children tell stories all the time using what are called, narrative skills. Telling a story requires us to remember lots of parts. We can expect that working memory skills help with storytelling. Working memory refers to the ability to hold information in mind briefly. In this study, we're examining links between narrative skills and working memory.

This study is ongoing. We are recruiting 7–8-year-old children. Over 2 sessions, children tell stories and answer questions and do a few other language and working memory tasks. Children can participate via Zoom or in person. So far, it looks like children include more information in their stories if they are asked The kind of question might matter too. Questions about the overall structure of the story like where it is set or who is in the story might prompt children to include these details when they tell the story. Questions focused on linking ideas in sentence might result in children including more linking words in their story. With more children participating in this study, we'll be able to better address these and other questions.

Diya Nair, PhD Student

https://www.123rf.com/photo 89258478 brain-reading-book-or-newspaper-vector-concept-illustration-of-learning-informed-mind-flat-design.htm

# **Language and Working Memory Token Test**

When we speak, we have to know words, use them, and understand what people are saying to us. But what can help us learn a language? One key skill is our working memory. Working memory lets us keep information in our minds for a short time and think about it. Keeping words in our working memory helps us learn a language and understand new and unfamiliar words. However, as we learn more of a language, we may depend less on our working memory, as words we already know come to mind so quickly that we hardly need to use our working memory to remember them.

We created a tool to see how memory and language skills help us understand sentences. In our test, we made two parts: one looks at working memory, where commands gradually increase in length, and the other looks at language skills, where commands are complex sentences. First, we checked the commands of each subtest to make sure they worked well together, and most of them did! Then, we studied the two parts to learn if all the subtests of each part followed the same pattern, and they did! Now, our next step is to make sure our test measures what it's supposed to measure and is valid by comparing our data with that of two widely used tasks for working memory and language skills!

Niloufar Ansari, PhD Candidate



https://www.tokentest.eu/en/home

# **Language and Working Memory Lab**

### **Talk Moves**

There is a strong connection between rich classroom talk and student learning. One way to support oral language and participation in class is through the use of talk moves. Talk moves are sentence starters and gestures that can be used to encourage talk and participation in the classroom. For example, the "Support" move is used to help students explain their answers. The gesture is hands holding a book and students can use sentence starters like, "I know because...". Teachers and students can use talk moves to invite everyone into the conversation and encourage academic thinking.

## Talk Move - Support:

- · Gesture: Hands holding a book
- Sentence: "I have evidence from the book. Remember, it said..."



We wanted to know if talk moves do help all students of all abilities talk and participate in class. In this study, two classes were in the "talk moves" condition and one class was the "control class". The talk moves class learned a new talk move every 2 weeks over 4 months. We recorded classroom conversation and measured students' language abilities to investigate changes before and after using talk moves in class.

Theresa Pham, M.Cl.Sc/PhD

## **Optimizing Reading Intervention Study**

The intervention phase of the Optimizing Reading study, run in partnership with the Learning Disabilities Association – London Region (LDA), was completed at the end of the Spring 2024. Children completed two 10-week intervention blocks. Participants were randomly assigned to one of two programs at the start of each block: (1) skills-based program focusing on phonics, reading fluency and comprehension, or (2) reason-based program focusing on understanding the meaning units of words (base words and affixes) and reading comprehension. This meant some children continued in the same program in the second 10 week block, while others changed program.

The children attended weekly 1.5 hour sessions with graduate students in speech-language pathology or undergraduate students working as research assistants. Participants completed testing of their reading and spelling, and their ability to understand novel words and remember sentences at the beginning and end of each block. We saw many individual children improve in their reading skills during the study. We are now analyzing the data to look for patterns across our intervention programs.

Katrina Kelso, Postdoctoral Associate

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Language and Working Memory

Lab

http://www.uwo.ca/fhs/lwm/



USING QUESTIONS TO PROMOTE MACRO - OR MICROSTRUCTURE ELEMENTS IN NARRATIVES



In this study we evaluate how asking questions effects children's story telling skills.

#### What are we doing in this study?

- 2 sessions per participant of approximately 1 hour each
- · Conducted in-person or via zoom
- Compensation of \$10 per session
- · We'll ask you to tell stories, point at pictures, and say words and sentences

#### Eligibility

• 7 and 8 year olds

### Study Investigators

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OUR SINCERE THANKS!

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Thank you to all parents, and children who make our studies possible. Thank you also to the talented graduate students working on these research projects! Thank you to all of the parents who have indicated that they would like to be contacted for future studies. As we continue working on our research projects, we greatly appreciate your continued participation.



A research study evaluating an assessment of language and literacy

#### **VOLUNTEERS NEEDED!**

### **Assessment of Language and Literacy**

In this study, we're evaluating an assessment of language and literacy for children 4 to 6 years of age. First study sessions start in January 2025.

### What will happen in this study?

- You'll come to our clinic twice
- Each visit will be about 60-90 minutes
- Children will complete measures of language
  and literacy
- Activities include things like pointing to pictures, saying words and making sentences
- Caregivers will provide some information about their child's development

First study sessions start in January 2025 You may choose to receive a study report summarizing your child's scores.

## Is your child eligible?

- 4 to 6 years of age
- Able to attend sessions at Western University's H.A.Leeper Speech & Hearing Clinic (Elborn College)
- Must be primarily English speaking, not have an intellectual disability, moderate-to-severe hearing impairment or social/emotional difficulties that might make it difficult to complete study activities

## Who are the study investigators?

Dr. Lisa Archibald, <u>larchiba@uwo.ca</u> Dr. Alyssa Kuiack, akuiack2<u>@uwo.ca</u> Communication Sciences & Disorders

For more information or to book an appointment, contact dnair3@uwo.ca

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List of our published papers can be found at the lab website: https://www.uwo.ca/fhs/lwm/publications/index.html

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