

Language and Working Memory Lab VOL 16

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CO-DESIGNING A SPOKEN LANGUAGE ASSESSMENT TOOL FOR EDUCATORS OF THE DEAF AND/OR HARD OF HEARING

- Rachel Benninger, M.Cl.Sc./PhD Student



Students who are d/Deaf and/or hard of hearing (DHH) often require extra support at School to be the most successful learners they can be. Specialist Teachers of the DHH support these students, but these teachers don't always have access to the tools and resources they need to understand and support the spoken language learning needs of DHH students. Educational Speech-Language Pathologists (SLPs) have expertise in language development, assessment, and intervention, and they support these Specialist Teachers.

In our current project, we are working with a group of Specialist Teachers of the DHH and educational SLPs. We're working to design, implement, test, and improve a curriculum-based spoken language assessment and intervention tool for use by Specialist Teachers of the DHH. We've developed a prototype assessment tool which is now being piloted with DHH students. Those piloting the tool are providing feedback, allowing us to improve the prototype. Our goal is to develop a useful and effective assessment tool that teachers can use in the classroom every day.

INTRODUCING THE LANGUAGE AND WORKING MEMORY TOKEN TEST!

- Niloufar Ansari, PhD Student



When we talk, we need to know words, produce them, and understand what others are saying. But what abilities help us to learn a language?! One important ability is our working memory. Our working memory allows us to briefly hold information in mind and think about it. Holding words in our working memory helps us to learn the language, at least sometimes. Our working memory helps us to understand new and unfamiliar words. As we know more language, however, we might rely less on our working memory. For example, words that we know really well get activated in our brain so fast that we barely have to use our working memory to hold them in mind.

We are developing a tool to examine how working memory and language knowledge support our ability to understand sentences. In our Language and Working Memory Token Test, participants are asked to carry out directions with shapes of different colours and sizes. In one part, the sentences are very long, for example, 'Click the small light green circle, the small dark blue square and the large dark green star'. The language in these sentences is not tricky, but there are many words to remember. We think these sentences will require more working memory. In another part of the test, the sentences have more complex language, for example, After you have clicked a diamond, move a circle. We think these sentences will require more language knowledge. Our test will be online, so no matter where you are, you are one click away from accessing this test! Our first study with this tool will be for adults.

OPTIMIZING READING STUDY

- Katrina Kelso, Postdoctoral



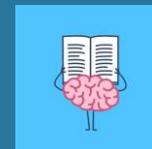
In partnership with the Learning Disabilities Association – London Region (LDA) we completed a pilot study with 6 children comparing 2 reading programs. Each participant completed detailed testing of their oral language (phonological awareness, listening comprehension and expressive language) and literacy skills (reading, spelling and writing) revealing two broad profiles: one group with weak reading accuracy but age-appropriate listening comprehension, and the other with the opposite profile. Based on these assessment profiles, three children were allocated to each of the programs:

Read Up (skills-based program) targeted	Wise Words (reason-based program) targeted
Phonemic awareness (segmenting and blending sounds in words) Phonics (letter-sound relationships) Reading fluency Understanding reading	Identifying the base of a word and its core meaning Identifying affixes – the parts added to the beginning or ending of a word that give it meaning Understanding how bases and affixes are joined& why words are spelled the way they are Understanding reading

The children attended weekly 1.5 hour sessions with graduate students in speech-language pathology for up to 12 weeks. In this short time, some improvements were observed in decoding words, reading fluency, and increased confidence in reading.

We are currently recruiting participants for another reading study. If your child has a learning difference and struggles with reading, and you are interested in participating, please contact the LDA (<https://www.ldalondon.ca/readup-plus>).

NARRATIVE SKILLS AND WORKING MEMORY: USING QUESTIONS TO PROMOTE MACRO- OR MICROSTRUCTURE ELEMENTS IN NARRATIVES



- Diya Nair, MSc student

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, and we are currently in the process of recruiting 7–8-year-old children. Over 2 sessions, children tell stories and answer questions, and a few other language and working memory tasks. Children can participate via Zoom or in person. The study findings could help us understand how a difference in language and working memory skills could support narrative language production with the use of different type of questions.

Language and Working Memory
Lab
<http://www.uwo.ca/fhs/lwm/>



WESTERN

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

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FIND OUT MORE ABOUT OUR RESEARCH!

- Follow this link to find out more about our work our past newsletters:
<https://www.uwo.ca/fhs/lwm/research/newsletter.html>
- List of our published papers can be found at the lab website:
<https://www.uwo.ca/fhs/lwm/publications/index.html>
- Language and Working Memory Lab: 519-661-2111 ext. 89053

OUR SINCERE THANKS!

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.

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