

# UMD Language & Cognition Lab

## WHAT WE DO

The Language and Cognition Lab at University of Maryland investigates how children's language comprehension is shaped by past experiences and how early processes influence later outcomes. Our work focuses on the 4 to 8 years of age when children have mastered basic aspects of communication but are still gaining expertise in language that will enable effective listening and reading in academic settings. We have three ongoing projects (see below), and each will aim to recruit about 30 participants.

1. **Relationship between language & cognitive development.** When children listen to sentences, they make assumptions about what words are coming up next. Sometimes these predictions turn out to be incorrect. This study investigates how development of inhibitory control allows children better revise their expectations and become more effective communicators.
2. **Language development in dual language learners (DLLs).** Many children learn one language at home and a second language in school, but little is known about how they combine their knowledge across contexts. This study investigates the strategies that DLLs use to understand words and sentences and how this compares with peers who only speak one language.
3. **SES differences in language development.** Parental input impacts early language ability, which in turn affects later academic performance. However, the causes of these relationships remain unclear. This study investigates how early experience with words in sentences differs across socioeconomic status (SES), and how this impacts children's strategies for interpreting sentences.



We use eye-tracking technology to study the moment-to-moment changes in children's comprehension, which are shaped by experience and cognitive development. We also collect optional demographic information (e.g., language survey, family income, parental education) to better understand how language abilities vary with social and cultural background.

## WHAT IS YOUR ROLE IN THIS?

We would like to partner with you in hosting this research at your schools. Typically, this involves the following:

- **Sending out and collecting consent forms from parents.** We would also welcome opportunities to talk to parents about our research in person (e.g., PTA meetings).
- **Providing a quiet space to conduct the studies.** We test children individually. Each study lasts about 20 minutes and some require two sessions (over two separate visits).

Children's participation is entirely voluntary. The teacher will decide an appropriate time when the child can participate in a room near the classroom. We have recently partnered with:

- ★ Center for Young Children (College Park, MD)
- ★ Apple Montessori School (Bethesda, MD)
- ★ Paint Branch Montessori School (Silver Spring, MD)

★ Franklin Montessori School (Washington, D. C.)

### SHARING OUR RESULTS

Once we have consent forms from parents, it takes about **3-4 weeks to collect data** for a study. When we finish the study, we will send you a letter to the schools and parents describing our findings. If the schools are interested, we have also discussed our research findings by hosting professional development seminars for teachers and parental education workshops. We will also make a donation of school supplies/books to the schools.

### FOR MORE INFORMATION

Visit our website: <http://languageandcognition.umd.edu>

### Contact us:

✉ Lab director Yi Ting Huang— [ythuang1@umd.edu](mailto:ythuang1@umd.edu)

✉ Lab e-mail— [umdlangcog@gmail.com](mailto:umdlangcog@gmail.com)

☎ Lab phone: (301) 405-3730

☎ Lab director phone: (301) 405-4227



Department of Hearing & Speech Sciences  
Lab location: 0208 Lefrak Hall  
University of Maryland  
College Park, MD 20740