

# Language, Reading & Math in Children

*A study of the skills that support children's learning*

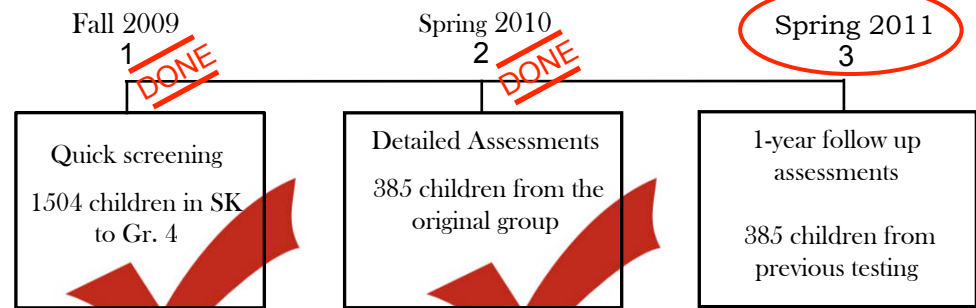
Investigators: Drs. Lisa Archibald, Marc Joanisse, Daniel Ansari, and Janis Cardy  
School of Communication Sciences and Disorders and the Department of Psychology  
The University of Western Ontario

## A BIG THANK YOU!

Our biggest project yet started last September (2009) with over 1500 kids in 34 area schools. Children from Senior Kindergarten to Grade 4 completed language, memory, math, reading, and other tasks. We're trying to understand the relationships between these tasks better.

In this newsletter, you'll read more about the results of this study so far, and about other studies we are doing right now. If you'd like more information, please contact us (see our contact details below).

## THE ONGOING STUDY



Step 1 of our study was to screen all of the children whose parent or guardian allowed them to participate in the study. Each child repeated sentences, read some words, and did some math questions.

For step 2, we chose 385 children with a wide range of different scores on the screening. These kids worked hard! They completed detailed assessments of language, memory, reading, math, thinking, and other skills.

Step 3 will start in Spring 2011. We'll be looking at how kids' skills change over time. We're one of the first research groups to measure a wide range of kids' abilities, and to see how they change.

We'll be contacting you by phone, email, or letter to let you know your child is involved in Step 3. You can also contact us at the information provided at the bottom of this page.

## THE RESEARCH TEAM



**Dr. Lisa Archibald**

Language & Working Memory Lab  
<http://www.uwo.ca/fls/lwm/index.html>



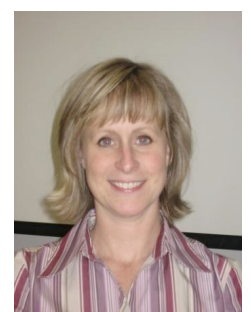
**Dr. Marc Joanisse**

Language, Reading & Cognitive Neuroscience Lab  
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**Dr. Daniel Ansari**

Developmental Cognitive Neuroscience Lab  
[http://psychology.uwo.ca/faculty/ansari\\_res.htm](http://psychology.uwo.ca/faculty/ansari_res.htm)



**Dr. Janis Cardy**

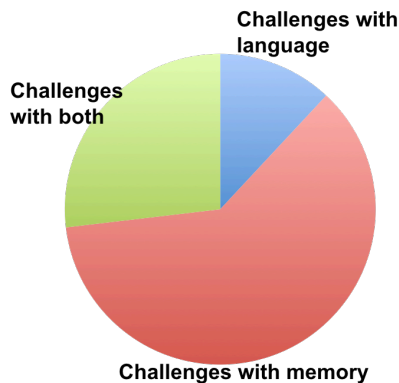
Autism Spectrum and Language Disorders Lab  
<http://www.uwo.ca/fls/ASLD/index.html>

The Language and Working Memory Lab - 519 661 2111, ext. 89053  
Project Coordinator: Allison Partridge; Email: [screening09@gmail.com](mailto:screening09@gmail.com)

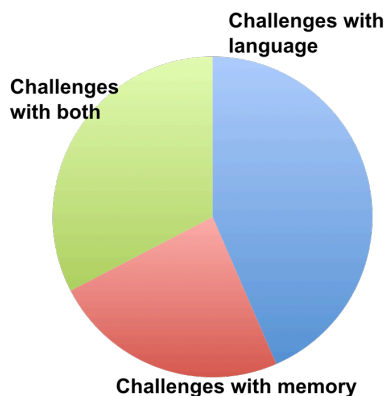
## NEWS FROM OUR STUDY

Basic language and memory skills help a child to learn in school. We have been looking at children who are struggling with language and memory skills, and how those challenges change over the school years.

### 6-7 year olds



### 8-9 year olds



In the pie charts above, the blue slice is smaller for the younger than older kids because fewer younger kids struggled with our language tasks for young kids. The red slice is larger for the younger than older kids because more younger kids struggled with our memory tasks.

We also found that younger children were more likely to be struggling in math than reading, and older children in reading than math.

## NEW STUDIES

### ATTENTION & MEMORY LOAD

We've invited some kids to participate in a study in their school looking at remembering while doing something else, like ignoring something or thinking about something.

## BRAIN STUDIES

Our brains (and bodies) naturally give off electrical energy when we think or move. We have special equipment for measuring that energy. We're inviting kids to come to our labs and do some activities while wearing our special cap. We'll learn important information about how the brain works from these studies.



You can find a story about visiting our labs here:

[http://www.uwo.ca/fhs/ASLD/parent\\_child\\_participation.html](http://www.uwo.ca/fhs/ASLD/parent_child_participation.html)

## SPECIAL THANKS!

We'd like to say a special thanks to all those who have helped or are helping us organize and complete our studies.

**TVDSB Lang.&Mem.Grp:** L. Culhane, C. Davison, D. Griffiths, E. Henderson, K. Huff, T. Lomas, T. Major, M. McKay, B. Mencil, D. Moser, C. Nicholson, Y. Nieuwesteeg, P. Rodd, C. Stager, A. Terry, N. Vanbussel; Also V. Fernandez, S. Killip, T. Spencer

**School Personnel:** All teachers secretaries, principals including J. McCredie, E. Wise, R. Culhane, V. Morrison, D. Lavery, E. Georgallidis, L. Baker, M. Chevalier, D. Gulyaprak, C. Patterson, J. Shewfelt, S. Empringham, S. McCombe, K. Viger, R. Auckland, S. Webb, S. Moore, P. Beaudin, C. Milligan, B. Dick, L. Campbell, Y. Elliott, M. Pezzutto, D. Duff, T. Vander Wallen-Howey, A. Luce, R. Taylor, J. Bruce, D. Spence, M. Roes, K. Ledingham, M. Lee, S. Shackleton, D. Ennis, A. Privitera, J. Munds, A. Saunders-Currie, D. Ferri, S. Blais, M. Hesse, B. Dunn, M. Cordy, K. Wagner, J. Hack, D. Baran, L. Newel, M. Murray, M. Lee, J. Newman, T. Kirkham, J. McCredie, J. Tonner, K. Corbeth, P. Baker, L. Howarth, K. Ledingham, B. Rabbitts, A. Sziesak, N. Tustin, L. Santyr, B. Travnicek, R. Leonard

**UWO Students:** R. Aupperle, K. Brittain, J. Berger, L. Pauls, M. Punnoose, A. Partridge, R. Merkle, T. Lin, S. Cloutier, L. Goldberg, A. Canton, L. Urbanek, A. Martin, A. Bender, C. Brown, K. Harder, N. Pounds, C. Cermak, T. Levee, A. Baleela, L. Vanderlaan, J. Uitvlugt, S. Beukema, J. Butts, D. D'Alessandro