Dear all,

Thank you for your continued support and interest in the research taking place at the Child Language Lab, Macquarie University.

We have had a busy year already, with interstate workshops and presentations, the Annual Conference of the German Linguistics Society (DGfS) in March, papers being published, results being shared and discussed through the media and online, and new studies under development for the second half of 2015.

Please take a moment to check our current studies below, and see if you are able to join any of them. Especially those with school-aged children who may be looking for a unique school holiday experience! All of our research participation opportunities are also listed and updated on our website.

Thank you again for your involvement!
Best regards,
Distinguished Prof. Katherine Demuth, Lab Director, ARC Laureate Fellow

If you would like to get in touch with us, please email ling.cll@mq.edu.au or call 9850 2917. We love hearing from you!

Open Plan Classroom Research Sparks Debate

Kiri Mealings, a PhD candidate researching speech perception in open plan classrooms, recently published a piece on The Conversation, titled “Students struggle to hear teacher in new fad open-plan classrooms”. Here is an extract from the article: or read the whole piece <here>

“Our findings suggest that open-plan classrooms that are unable to control the noise from adjacent classes are not appropriate learning environments. Acoustically treated enclosed classrooms are much better listening environments.

If open-plan classrooms are still strongly desired, then they need to be purpose-built as flexible learning spaces with proper acoustic treatment and, most importantly, operable walls that can be closed when a class is engaged in critical listening. Quiet rooms are essential in these classrooms so children who have particular difficulty working in noisy conditions can quietly work away from the other students. Additionally, teachers need to be trained how to teach effectively in these environments.

We also need to better understand how children who have special educational needs, such as attention deficits, hearing impairments, language delays and English as a second language cope in these environments.”
Kids just love iPads! Whether they’re touching, flicking or swiping, the touchscreen devices are so rewarding and intuitive for children.

At the Child Language Lab, we’re always looking for new ways to make our experiments more engaging for children. Participating in research should be a fun activity, not a boring chore! Ben entertains the kids with his balloon animals. Thembi displays cartoon scenes to keep children interested during her EEG studies. Hui and Ben use music and movement in their animations to keep kids’ attention focused on the screen. We want kids to have fun, and the more fun they’re having doing our task, the more likely we are to collect useable data.

Our most recent project to increase participation engagement with our studies, is the development of iPad apps to test language acquisition hypotheses. Researchers Tamara Schembri and Ben Davies have been designing applications whereby children can interact with the experiments directly, receive immediate feedback, and hopefully stay interested for longer!

Our first iPad experiment is currently in planning stages, and will hopefully be open for enrolment soon! It will be conducted by Ben Davies, who is investigating the acquisition of grammar by typically hearing 5.5-6.5 yr-olds

Beyond words: learning to use intonation

Meaning isn’t all about the words you use - it’s also the way you use them! We want to find out how children are using words. Take home a $40 Coles/Myer gift card!

For a limited time, complete the 15 min Connected Speech study too, and take home an extra $20!

Processing Speech: Monolinguals

7.5-11 yr-olds, English speakers with or without SLI/language delay

How do children process ungrammatical speech? Our EEG study will watch what your brain does when you hear grammatical and ungrammatical sentences.

Processing Speech: Bilinguals

7.5-11.5 yr-olds, English learners

Exciting EEG study for Mandarin-speaking children acquiring English as a second language (L2 learners).

Please register your details if your child is a native Mandarin speaker with 1-3 years exposure to English.

Music and Reading

9-11 yr-old English speakers with at least 1 year of formal music training, or with no music training at all

Is there a "musician's advantage" in the development of reading skills?
Investigating challenges faced by children with hearing loss

In March, researchers from the Child Language Lab presented some of their work to clinicians and researchers at the Shepherd Centre. If you’re not familiar with the Shepherd Centre, it’s an outstanding Australian organisation that works with children with hearing difficulties, and their families. The Shepherd Centre helps children overcome some of the challenges associated with hearing loss, such as speech production and language comprehension.

Find out more about the Shepherd Centre here >>

PhD students from the Child Language Lab Kiri Mealings, Kelly Miles and Ben Davies presented ongoing research into language acquisition in children with normal hearing, and proposed research questions to further investigate issues faced by children with hearing loss.

Children with hearing loss can have limited access to speech input, which means they have extra challenges in acquiring a language, simply because are not equally able to hear all the sounds that a typically hearing person might have access to. This can make a big difference in words with very minimal differences or in grammatical markings such as plurals.

Children in the classroom face additional challenges, picking out their teacher's voice amongst all the background noise. While cochlear implants are able to provide unsurpassed access to sound signals, the technology does not match the ability of the auditory brain to discriminate between multiple and simultaneous sound sources, which can often result in children with hearing loss missing out on a lot of valuable instruction and direction from their teacher, or...
The Child Language Lab is excited to be developing further studies to find out more about language acquisition challenges faced by children with hearing loss, with the aim of developing even more targeted language therapies.

Exposure to English affects their sensitivity to these markers. This is very important for informing language acquisition theories, and has implications for language screening protocol for children who are learning English as a second language.

Thembi still needs more 7-11 year-olds for her study, so please let your friends know or sign up today!

Recent Events

University of Sydney Machine Learning Summer School

Machine learning is a highly interdisciplinary field involving statistics, engineering and information technology. Its primary aim is to find patterns within data, and is particularly well suited to applications that involve lots of data, or ‘Big Data’.

In February, the University of Sydney held a machine learning summer school which ran over the course of 10 days. Days were comprised of multiple lectures along with lab sessions involving hands-on introductions to using various machine learning techniques.

Researcher and MRes candidate, Nay San, says it was a great opportunity to learn more about the field and meet a diverse group of people employing the techniques in various areas, both in science (bioinformatics, physics) and industry (finance, search engines). Nay is looking forward to soon trying out some of the techniques he learnt on some linguistic data!

ANU Workshop on Building Corpora for Australian Languages

On the 5th of March, the Australian National University (ANU), Canberra, held a one-day workshop that consisted of a series of presentations, followed by a panel discussion to deliberate on the major issues that were raised throughout the day.

Researcher Nay San presented work on the Kaytetye language, an Australian language of the central Northern Territory known for its unusual word and syllable structure. Nay’s presentation focused on a set of tools that had been developed to annotate and visualise articulatory data collected using ultrasound imaging.

“It was crucial to learn about how others were approaching corpus construction and access, as we hope to eventually make the Kaytetye data available in some form. Although most of the corpora are still in their early days, I’m looking forward to seeing future versions, whose data are accessible by linguists and the communities alike,” stated Nay.

Upcoming Events

ARC Centre of Excellence in Cognition and its Disorders - MARCS Babylab and the CLL together at this year's PBC Expo!
Annual Stakeholders' Workshop

On Friday May 8, 2015 the CCD is holding its Stakeholders' Workshop: “Supporting Research Impacts” in the Australian Hearing Hub at Macquarie University. This workshop would be relevant to anyone who is interested in learning about CCD research plans and exploring new collaborations in support of research outcomes.

The workshop will include several focus sessions including "Childhood Language Development, SLI and Bilingualism" which may be of particular interest, as it will include research updates from the Child Language Lab as well as discussion of planned and potential research directions.

If you feel you might have input to offer, could help identify opportunities for support or are interested in collaborating with our research team, we’d love to see you there!

Additional information about the event, including a full program and a registration link, can be found on the event page on the CCD website. Registration is free, but those interested in attending should register by 8th April.

Child Language Lab researchers and staff will join MARCS Babylab staff and researchers at this year’s Pregnancy, Babies and Children’s Expo, held at Sydney Olympic Park, May 22-24.

The Child Language Lab are excited to be holding a joint stall with MARCS, and are looking forward to meeting existing supporters and new supporters of our research.

Much of our research relies on the generous participation of parents and children, who graciously donate the rarest resource a parent has to offer: time! With this in mind, we do try to keep our study participation as short and fun as possible. Most study appointments take less than an hour, and tasks are designed to be fun and engaging for kids.

Come and visit us in May to learn more about how you can be involved, or visit our website: mq.edu.au/childlanglab or the MARCS Babylab website: babylab.uws.edu.au

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