#### CHILD LANGUAGE LAB



Faculty for Medicine, Health and Human Sciences

# Listening to Faces

# A LANGUAGE GAME

We spend a lot of our time listening to people talk – to our family, our friends, our teachers. But sometimes it is hard to hear what people are saying. Maybe you're trying to talk to each other through the window. Or maybe a bus passing, the neighbour's lawnmower, or loud music are making it difficult to listen.

Did you know that your eyes can help you listen in these situations?



These language games will help you find out how you can use your *eyes* to listen when it's difficult to *hear* someone.

Do you want to know more before you start playing the games? Go straight to The Science on the next page!

#### **THE GAMES**

The games go from low-tech to hightech. The high-tech games may be more suitable for older children.

# 1. DO SOUNDS LOOK DIFFERENT?

1 or more players; in person

Look in the mirror and say these sounds. Do you *see* the change, or not?

- 1. ba da ba da ba da
- $2. \quad "ooh-aah-ooh-aah-ooh"$
- 3. "ba ma ba ma ba ma"
- 4. "da ga da ga da ga"

This is what you can expect to see:

- 1. "ba" and "da" look *different*, only "ba" has big lip movement
- 2. "ooh" and "aah" look *different*: "ooh" has pouted lips; "aah" an open mouth.
- 3. "ba" and "ma" look *similar*: "ba" and "ma" both have big lip movements. Because some sounds look very similar, lip reading can be tricky.
- 4. "da" and "ga" look *similar*, but *not the same*: "da" and "ga" both have tongue movements, which you can't see very well. But, maybe you can spot the difference?



## 2. ANIMAL FRIEND MATCHING

2 players; in person

Make two sets of drawings of your 6 favourite animals (e.g. 2 cats, 2 dinosaurs).

Each player takes one set to opposite sides of a closed window or glass door.

- Decide on the speaker and lipreader.
- The speaker chooses a picture, without showing the lipreader, and whispers the animal's name.
- The lipreader reads the speaker's lips and holds up the picture they think the speaker named.
- The speaker reveals their picture is it a match?
  - Yes? You've scored a point together! Now put these animal cards to one side.
  - No? The animals go back in your set and you can try another one.

Continue until all six animals have found their friend. Which animal names are easier or more difficult to lipread?

## 3. DO EYES BEAT THE MUSIC?

2 or more players; in person

Turn up the volume for your favourite music and try to have a conversation. (Note: loud music is essential).

- First try this with your eyes open.
- Then continue with your eyes closed.

Do you understand each other better with your eyes open or closed?

#### THE SCIENCE

When people talk, they use their lips and tongue to shape the sounds that make up the words. Because our lips are visible, they can give some extra information about the sounds we are saying.

Our brain can use this information to help understand what someone is saying. That is particularly useful when we can't hear what someone is saying very well: our brain can use what we see to help fill in the gaps.

When you listen in a noisy situation, you might be tempted to ask the other person to shout in your ear. But that means you can't see their lips move. When we're listening in noisy situations, it can be much more effective to use a combination of what we hear and what we see to help understand language. Did you experience that your eyes can be helpful in game 3?

Sometimes we can even understand what people are trying to say just from looking at them, with no sound at all! This is called "lip-reading". But lip-reading is a difficult skill, and most people are not very good at it. How did you do in game 2?

# **CAN YOU SHARE THE FUN?**

The Child Language Lab would love to hear or see examples of your family playing one of these games. Can you record it and share on the Child Language Lab Facebook page:

#### www.facebook.com/CLLMQ

You can see examples of Child Language Lab members having a go at these games on Facebook too!

#### **MEET THE TEAM!**

This worksheet was developed by Rebecca Holt. Her PhD research in the Child Language Lab tries to find out how we can make listening easier for children with hearing loss. Titia Benders, one of the Child Language Lab's Deputy Directors, helped here and there. Leanne Trinh, a third-year student in the Bachelor of Speech, Hearing and Language Sciences who is completing an internship in the lab, chose the pictures and fixed the layout. They hope you enjoy the result!

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The Child Language Lab studies the process of child language acquisition. Our goal is to understand the nature of language development in children in order to inform theories of language acquisition and more targeted language therapies, providing an evidence base for health and education policy.

**POPULATIONS**: Our research group studies language development in infants, monolingual and bilingual children, children with hearing loss and children with language delay.

**TOPICS**: We focus primarily on issues at the phonetics/phonology/morphology interface, including the acquisition of grammatical morphology and language processing more generally.

**METHODS**: We do our research with specifically designed tasks to gather behavioural and neurological evidence of children's developing language abilities in both comprehension and production. Our methods include : behavioural speech perception and production tasks, eye-tracking, EEG/MEG (KIT-Macquarie Brain Research (MEG) Laboratory), various standardised tests of language, working memory, cognition and executive function

#### MAIN RESEARCH AREAS:

- Hearing loss: What are the challenges faced by children with hearing loss when it comes to language, communication and listening effort?
- Bilingualism: How do bilingual or second language learners acquire language? What are their unique strengths and challenges in language processing?
- Production/speech planning: What are the factors that determine how children produce sounds, words, morphemes, prosody and sentences, and how does this change over time?
- Perception/comprehension/processing: When are children able to recognize sounds, words and morphemes, and predict what's coming next in the sentence?

#### FIND OUT MORE:

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