



## **Participant Information Sheet – Parent/Carer (Extended)**

**Project Title:** *Development of an automated reading assessment for children*

### **Project Summary:**

Your child aged 6.5 to 8 years old is invited to participate in a research study being conducted by the International Centre for Neuromorphic Systems at The MARCS Institute at Western Sydney University. The Principal Investigator is Saeed Afshar.

This research project is being conducted in order to develop an automated reading assessment for children. Specifically, it is adapting two tools to be automated. The first is called the Castles and Coltheart 2 (CC2); the second is the Letter Sound Test (LeST). These tests are validated assessments of aspects of Specific Learning Difficulties in reading in children.

For many children, a barrier to the timely diagnosis of reading difficulties is the availability and affordability of professionals suitably qualified to perform such testing. For example, children in rural or regional areas or from low socio-economic groups may have difficulty accessing assessments. This can delay timely intervention for such difficulties and impact the reading trajectory. The development of an automated assessment that can be conducted online offers an opportunity for prompt assessment and testing and has the potential to revolutionise the field of education.

### **How is the study being paid for?**

The pilot project is being funded by the International Centre for Neuromorphic Systems within The MARCS Institute at Western Sydney University.

### **What will my child be asked to do?**

Your child will be asked to read a list of real and made-up words, followed by a list of sounds. They will then be asked to repeat all the words and sounds after being instructed in the correct way to do this, to collect completely accurate word-reading items. This will be voice recorded. These voice files will be collected and together used to inform machine learning models, in that they will help demonstrate the typical voice of a child so the software can identify errors.

Your child will need to have access to a computer with a webcam and internet connection, as well as a quiet room for the testing session.

The following text will be read to your child before the testing explaining what it involves, so please feel free to share this with your child verbatim:

*"So, we're going to be playing a reading game today. We're going to get you to read a bunch of words and sounds. Some of the words will be real words, some will be made-up and silly words. Just do your best to read each one. The words and sounds can get very hard, so you probably won't be able to read all of them. That doesn't matter, just read as many as you can.*

*We're going to record your answers. This is so we can help make a computer that will help other kids get better at reading. The game will take around 30 minutes. You don't have to do it if you don't want to. We can have a short break when you like, just tell us.*

*Do you have any questions? <Answer any questions they might have>. Thank you for helping us out. You will get a \$10 gift card at the end of the game as a thank you."*

**How much of my child's time will he/she need to give?**

It is expected that the study will take less than 30 minutes of the child's time and will be conducted online via Zoom or an equivalent videoconferencing platform.

**What benefits will my child, and/or the broader community, receive for participating?**

Your child's responses will be analysed by a clinical neuropsychologist and you will be provided with a very brief summary of their performance on these two tasks. If your child appears to be performing significantly below age-expectations, recommendations for additional assessment options will be provided.

This study intends to develop an automated reading assessment. It aims to support children in the future receiving prompt assessment of and intervention for reading difficulties. Your child will receive a \$10 gift voucher as thanks for participating. There are no other perceived benefits to participation in the study.

**Will the study involve any risk or discomfort for my child? If so, what will be done to rectify it?**

No risks or discomfort are anticipated.

**How do you intend to publish or disseminate the results?**

It is anticipated that the results of this research project will be published and/or presented in a variety of forums. In any publication and/or presentation, information will be provided in such a way that the participant cannot be identified; rather, data will be averaged.

**Will the data and information that my child provides be disposed of?**

Please be assured that only the researchers will have access to the raw data your child will provide. However, your data may be used in other related projects for an extended period of time. The study is currently a pilot but we expect to broaden this research to include further children and a larger age range in the future. Hence, participants' analysed data will be used for research following the pilot study.

**Can I withdraw my child from the study? Can my child withdraw from the study?**

Your child's participation in the study is entirely voluntary and they are not obliged to be involved. Your child may withdraw from the study at any time – or you may withdraw your child from the study. It is requested that any audio records collected are retained by the research team unless otherwise requested by the parent/guardian.

**Can I, or my child, tell other people about the study?**

Yes, you or your child are encouraged to tell other people about the study by sharing the study contact details.

**What if I require further information?**

Please contact Claire McAulay at [c.mcaulay@westernsydney.edu.au](mailto:c.mcaulay@westernsydney.edu.au) should you wish to discuss the research further before deciding whether or not to participate.

### **What if I have a complaint?**

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through Research Engagement, Development and Innovation (REDI) on Tel +61 2 4736 0229 or email [humanethics@westernsydney.edu.au](mailto:humanethics@westernsydney.edu.au).

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you agree for your child to participate in this study, you may be asked to sign the Consent Form. The information sheet is for you to keep and the consent form is retained by the researcher/s.

This study has been approved by the Western Sydney University Human Research Ethics Committee. The Approval number is **H13791**.