

## **A Makey Makey app for early language development**

Supervisor: Dr. Manuela Kunz

Number of students: 2-3

The *Makey Makey* kit ([www.makeymakey.com](http://www.makeymakey.com)) is a device that can be exchanged with a computer keyboard and/or mouse enabling the user to design a fun and interactive keyboard using everyday objects.

*Makey Makey* began as a project initiated as an academic and artistic project by two students at MIT Media Lab under the advisorship of Mitch Resnick. With *Makey Makey*, a child or adult can create a keyboard with up to six keys using everyday objects that are (even just a tiny bit) conductive. Example for possible keys are a banana, an apple, a glass of water, a blob of playdoh, a pencil line, and many more. This makes it ideal for very early learners (3 – 5 years of age), and young learners with motor skill challenges. There are a number of apps for *Makey Makey* available, however, most of these are games or designed for older children.

The goal of this project is to design and implement an early-learner app for language development to be used in combination with the *Makey Makey* kit. An example for such language development skills in early learners would be the identification of rhyming words, or words that start with similar sounds or end with similar sounds. A local Kindergarten teacher will support this project.

Outline of student's role: (1) Identify the requirements of the app by reviewing literature and curriculums, talking with the teacher, observing Kindergarten students interacting with *Makey Makey*; (2) Design an app, identify all software requirements and develop timelines; (3) Develop a prototype; (4) Test your prototype with the help of Kindergarten students.

Please contact Manuela Kunz [kunz@queensu.ca](mailto:kunz@queensu.ca) if you are interested.