Accessible Technology for Language, Literacy and Social Communication:
Using Applications (apps) to Help Children with Speech and Language Impairments

We live in an information rich society and parents, educators and school-aged children themselves have access to highly sophisticated technology. Professionals, individuals and families are becoming more interested in assistive technology being considered in the treatment process for speech and language disorders. However, it is important to be aware of the technology available and the relative strengths and weaknesses of different technologies. It is also important to use evidence based practice in applying the use of technology.

Key factors to be considered is using assistive technology as a support for children with speech and language impairments include:
- Individual goals should be developed that relate to meeting the demand of the environment (home, school or community)
- Matching a person with the technology to assist in meeting the goals.
- Understanding and providing intervention that is sensitive to the functional demands of the environment.
- Consideration of the preferences and needs of the child
- Consideration of the technologies being used by same aged peers on a daily basis and how these technologies can be applied to increase communication, language and social growth.

Technology is part of our daily lives and participation in the classroom is inclusive of technology including the computer, smart board, television etc. Activity and participation limitations in the classroom may emerge early in school aged children with language impairment who are unable to engage in technology based interactions. These activity and participation limitations will increase the gap in language, literacy and learning for children with language impairment. Older school-aged children with language impairment are at risk for further activity and participation limitations as instant messaging, texting, e-mailing, and playing online games are important in developing social relationships.

Assistive technologies, or the use of technology to assist learning in the classroom, usually means computers or specialized equipment to meet the student's individual needs. Hand held technologies are less common in the classroom but widely used on a daily basis by children and adults. Commonly available hand held technology includes:
- Smart Phones (such as IPhone or Blackberry)
- Portable Media players (such as IPod or ITouch)
- Portable Computers (such as IPad or Netbooks)
- Personal Data Assistant (Smart Phones or ITouch)

Hand-held technology is a useful therapy tool for language, literacy and social communication development. Many of the devices have touch screen and voice activated operation and use pictures or symbols to access features. Devices with personal data assistants can support language development with auto-text, auto correct and word prediction features. Such devices can be used to save information on homework assignments, and schedule reminders for assignment due dates.

Media players can be used to download videos or television shows and pre-set examples to use for literacy, social skills, receptive and expressive language. Children with language impairment may benefit from supplementing auditory input with visual support.

Electronic books or e-readers, can be used to access children's books. Many of these books are illustrated and narrated, with text along the bottom of the screen. Text may be highlighted as the word is read and the reader is able to manually turn the pages. For example, the E-book version of Dr. Seuss's Cat in the Hat can be used for phonological awareness, vocabulary development, grammar and story reformulation. E-readers may be used for emergent literacy skills, phonological awareness activities, phoneme-grapheme correspondence, to practice tracing and drawing letters and upper and lower case letter identification

Some hand held devices can be used to access applications (or apps) to meet individual needs. There are many different apps that can be used to support children with speech and language impairments. For example, there are apps available for:

- Communication (Learn to Talk, Sentence Builder, Voice4U)
- Organization (MyHomework, PictureScheduler)
- Reading (ABC Animals, IStorytIme Kids Books, StoryKit)
- Writing (IWrite Words, Word Magic)
- Math (Math Drills, Money Learn to Count)
- Music (Drum Kit,FingerPiano)
- Assistive Technology (A Special Phone, IHear Dialler)

There are many ways that assistive technology, including hand held devices, can be used in the treatment of speech and language disorders. Speak to your child's Speech-Language Pathologist to find out if any of these devices or apps, can be used to support your child. For additional information on apps to help students with special education needs, check the OAFCCD Website at www.oafccd.com

Adapted with Permission, from a 2010 Presentation by Alison Turner, University of Western Ontario

University of Toronto
MyVoice, Mobile App

On April 6th, the University of Toronto launched MyVoice, a mobile app and server system, that turns Smartphone's into customized speaking aids. According to the website, "This cutting edge communication aid will both drastically cut the cost of assistive communication technology and improve the ability to speak for those with communication disabilities."

For more information on this new app and to download the app, check the website at: http://www.myvoiceaac.com