

BC Vision Teachers' Conference
Linking Up - Linking in Perspectives
in Vision and Deafblindness

iPads

Dr. Linda Mamer

Dr. Linda Mamer
Provincial Deafblind Consultant

BC Provincial Outreach Program for Students with
Deafblindness (POPDB)
10300 Seacote Road
Richmond, British Columbia, Canada V7A 4B2

[www.http://popdb.sd38.bc.ca/](http://popdb.sd38.bc.ca/)
linda.mamer@shaw.ca

Agenda

Uses of the iPad to benefit children with
Deafblindness or Visual and Multiple Disabilities

Instruction in how to use the iPad and how to
access the many different Apps that are
available that promote meaningful
communication and literacy experiences

Resources and Sharing

Initial iPad Research with CVI

- University of Kansas and Junior Blind of America in Los Angeles – Muriel Saunders is looking at the use of the Light Box and the iPad with 15 children with CVI – the results were overwhelmingly in favour of the iPad
- “the interactivity, sound and colour are a great deal more engaging to the children with CVI”

Beginning Goals in using the iPad
(from the research)

- prepare for longer-term engagement
- learn how to reach
- teach visual skills
- teach cause and effect

Next step for goals
(from the research)

- Learning that you can do something with someone else
- Having the child look at you when they want the iPad that you are holding
- Having the child turn to look at you as if asking “Am I doing it right?”

The Role of iTechnology

The iPad is not a toy

iPad as an assessment tool – it is NOT a toy!

- What are the student’s sensory abilities?
- Vision – can they see / identify / match photos / pictures?
- Hearing – can they tune into the sounds?
- Physical ability – can the iPad be accessed?
- Tactile ability – can they activate the apps?

The iPad is a tool

The iPad can be a tool for students with deafblindness / students who are non-verbal, in terms of their communication – within the **Deafblind Total Communication Approach:** By using photos, pictures of objects, board maker type pictures, for choice making, calendar systems, journals / daily communication books and social interaction with peers.

We look at opportunities for communication / social interaction with other students in the class, in the school, in the family, as well as other members of the community.

Mamer’s Considerations for iPad APP Selection:

Considerations for iPad APPS Selection:

- What is the student’s visual impairment? If the child has functional vision, describe it.
- What is the student’s hearing level? If the child has functional hearing, describe it.

Considerations for iPad APPs Selection:

What is the adult's (SSA / TA / Parent etc.) current comfort level with an iDevice?

Considerations for iPad APPs Selection:

From the student's perspective:

- What is the student's current level of use / comfort level with the iPad?

Considerations for iPad APPs Selection:

- Does your child use any adaptations with the iPad – (voice over, zoom, Bluetooth, contrast selection / inverting colours)?
- What apps does the student currently use? Be specific as you can (type, colour, movement, auditory component, activation needs etc.)

Considerations for iPad APPs Selection:

- Are there similar characteristics within those apps? (e.g. colour, clarity, auditory component)
- When you find a good APP (usually clear, easy to see, etc) look for additional apps by the same developer

Considerations for iPad APPS selection:

What is the student's favorite thing to do with the iPad?

What is **your** favorite thing to do with the iPad?

How does the child learn something new on the iPad?

Communication APPS

- Pictello
- Story Creator
- Choice Board Creator
- Answers HD yes:no
- iComm

Mamer's Expectations for the use of the iPad:

The Adult's Role

- The adult needs to know the device / the program first. Learning with the student / child may work, but it could be difficult, frustrating and has the potential to affect the student's comfort level.

Rules

How much time do you think is appropriate from a parent's / teacher's perspective on different areas of the iPad – games, social media, reading, etc.

Purchasing of the iDevice

- Can the child develop some advocacy skills in this area?
- Can raise some of the funds for this
- Can research which iDevice is appropriate
- Can articulate why they need one

Purchasing of APPs

iTunes / Apps
– discussion of the purchasing of apps – who pays?
And for what?

Can we build in a level of responsibility for this?

Care / placement

Is there a regular place to keep the iPad at home?
At school?

Charging of the iDevice

Whose responsibility is this?

Cleaning the iDevice

Can the child be responsible for some or all of the regular cleaning?

Manners

- When someone is speaking to you, turn the iDevice off or close the lid

Posture

Leaning into (or down to) the iPad is common with students with a visual impairment
– What are expectations as to the use of a slant on the case / slant board / reading stand?

Safety of the iPad

How will we keep it safe from falling?

How will we keep it safe from stolen?

Safety

- Learning about “find my phone”
- Learning about passwords
- Label the iPad / can engrave it
- Label the cords
- Check into home insurance for coverage

Ease of use of iPad

- Student can design where the most-used icons could be for instant access
- Possible use of a stylus

Bedtime

The lights from a screen can affect the ability to fall asleep
- So for parents - what is a reasonable time to put the devices away?

Other Areas:

iPad Equipment

It is very important when picking a case or holder that the Intervenor's style and needs are considered. It may take a few different cases to get the right fit. A holder might work for a few months and then need to be changed. For example, one of our students was in a wheelchair walker and the modular hose worked well. Then he became more mobile and we needed something that was portable.

iPad Equipment

- Things that might need to be considered:
- Safety of iPad (might it be knocked or fall?)
 - Will only the adult have physical access to carrying it?
 - Do we want the child to have access to the iPad? (this could also be a stage that may come later)
 - What is the Intervenor comfortable carrying?
 - Is the child in a wheelchair some or all of the day?
 - How mobile is the child?

iPad Equipment

- Holders that we have found to be good:
- Modular hose (www.modularhose.com)
- ModulR (www.modulr.com)
- Otter boxes (www.otterbox.com)

Expanded Core Curriculum

- [Compensatory and Functional Academic Skills](#)
- [Assistive Technology](#)
- [Social Interaction Skills](#)
- [Independent Living Skills](#)
- [Visual Efficiency Skills / Sensory Efficiency](#)
- [Orientation and Mobility](#)
- [Recreation and Leisure Skills](#)
- [Career Education](#)
- [Self-Determination](#)

APPS – Ideas for students (may just be on the iPhone)

Apple supplied and used (by me): This may seem obvious, but it is always worth it to check what comes with the device

- iBooks
- iCal
- Maps
- Notes
- Reminders
- Contact
- Siri
- TapDictionary (to look up words within Safari)
- iDictation (now available on the newer operating systems and new devices on the keyboard)
- App store
- Camera (of others, locations, of their own eyes)
- Messages
- iPhoto
- FaceTime
- iComm
- Safari
- Dragon Dictation

Accessibility features

- Accessibility – Voice Over, Zoom, Large Text, Invert Colors, Speak Selection, Assistive Touch, Guided access
- Brightness options

Apple APPS

Suggested from colleagues in the field (I have not used them yet) :

- Air Display
- Game Center

Non-Apple APPS - Used by my students or me:

For Organization:

- Pages
- Notability
- Evernote
- Goodreads –(download books) can only enlarge so much

Non-Apple APPS - Used by my students or me:

For Teaching:

- ShowMe, YouTube, Flipboard, TED videos
- TapTapSee
- Vision Assist – can enlarge on-the-spot – works for handouts, short amounts of reading
- iBlink – radio, podcasts, for individuals with visual impairment
- Dropbox
- Vlingo – can use voice activation with email, internet searches
- BigBrowser

Non-Apple APPS - Used by my students or me:

Social / Life skills:

- Stories such as APP “Miss Spider’s Tea Party” can be used to discuss social aspects and making friends
- Can use some of the braille apps in social settings to learn braille, play games with peers (although may not work with Voice Over)
- Virtuoso (can play 2 pianos – with peer on one iPad)

Non-Apple APPS - Used by my students or me:

Functional Skills Systems;
My A-Z – can create your own flashcards, with photos and voice

Social Skill Builder (has a Lite version)

Talking Tom (and other animals)

TimerTouch+

Non-Apple APPS - Used by my students or me:

Vocational:
Handycashier (a cash register for store employees)

Math:
Jumbo calculator
Telling Time

O & M:
iMove
Record routes for mobility

Suggested but not used (yet – will try soon):

- Read2Go
- iHomework
- Hidden Curriculum for Kids (from autism)
- Dexteria Fine Motor Skill Development
- LookTelRecognizer
- Skype – (have used on computer, not on iPad)
- Keynote
- Join.me
- Writer’s studio – can create books
- Syncpad
- <http://fleksy.com/>
- www.prezi.com

Choosing Book APPs

- **Choosing areas to consider:** Once you point out these areas, people have much greater success in matching the book APP to the child

Visual clarity (a lack of visual busyness)
Placement of print (in same place on each page?)
Print clarity / background (contrast)
Brightness of image
Size of Font (is it changeable?)
Type of Font

iPad Social Ideas

Can use shared interest between students to draw students together

Can develop turn taking / sharing skills (APPS: Take Turns (timer), Stop – Go! (a traffic light timer), Turn Taking – Sharing (from Autism))

Creating and sharing stories with friends (APP Pictello, Story Creator)

Learning to make eye contact – can turn the camera around so the child is looking at their own face

(adapted from POPDB Intervenor Conference, January 2013, notes taken by Sheila McIntosh)

iPad: Social Ideas

- Can take photos of people in their world so that they can get comfortable looking at their faces on the iPad if they are not comfortable looking at the person directly
- Learning about their eye condition – can look at their eyes with the camera
- Take photos of people in their world so that they can look at the photo to be able to recognize them
- Take photos of locations (e.g. in their school, community) using the camera and MAPS to be able to know, in advance what to look for

(adapted from POPDB Intervenor Conference, January 2013, notes taken by Sheila McIntosh)

iPad: Social Ideas

- Can create social stories, can practice life skills (APPS: Model Me Going Places, Turn Taker, Conversation Social Stories and Simple PECS Communication Tool – Autism (Touch Autism), Conversation Builder)
- Group work using the iPad for class projects
- Games to develop language (e.g. APPS Talking Tom and other Talking apps)
- Can use Pictello for the sub book or home book – easy to see the routines

(adapted from POPDB Intervenor Conference, January 2013, notes taken by Sheila McIntosh)

Home – School Communication Ideas

Student can video their activities to share with family, extended family, friends

Pictello / Story Creator APPS can be used to show special events both at school and at home

Parent / student can create stories with school from earlier in the child's life as well as sharing about extended family, holidays

(adapted from POPDB Intervenor Conference, January 2013, notes taken by Sheila McIntosh)

Resources

POPDB: Provincial Outreach Program for Students with Deafblindness [www.http://popdb.sd38.bc.ca/](http://popdb.sd38.bc.ca/)

Hand-under-Hand Information: Talking the Language of the Hands to the Hands - Barbara Miles <http://nationaldb.org/>

Light Box On-Line training: www.vision.alberta.ca/training/modules/light-box.aspx

Technology for Your ToolBox: Boardmaker and iPad by Dr. Brenda Fossett from ACT – Autism Community Training <http://www.actcommunity.net/>

Resources

[Using the iPad and a Sequence of Apps for Young Children with Multiple Disabilities](http://www.cadbs.org/newsletter/resources-fall-2012/) by Cristi M. Saylor, DHH Itinerant Teacher and Gloria Rodriguez-Gil, CDBS Educational Specialist www.cadbs.org/newsletter/resources-fall-2012/

Using the iPad with Students with Deafblindness, or My Adventure with the Shiny New Toy! In TX SenseAbilities, Texas School for the Blind, Summer 2012, pages 22-25 www.tsbvi.edu/resources/106/1241-tx-senseabilities

Simplified Technology – Linda Burkhart www.lburkhart.com

Resources

Jane Farrall writes on many topics and is beginning to describe using switches with iPads [-http://www.janefarrall.com/bloghttp://](http://www.janefarrall.com/bloghttp://)

Power Up! Apps for Kids with Special Needs and Learning www.commonsemmedia.org/guide/special-needs

Resources

From Perkins School for the Blind:

www.perkins.org for webinars
www.WonderBaby.org
www.pathwaystoliteracy.org

Resources

- Switch Apps for iPad
www.enablingdevices.com

Conclusion

"The idea kids can access tools for learning 24 hours a day and can access learning not bound by the walls of the school is critical," Hobbs said. "It's indicative of what we mean by a 21st-century education."

English teacher, David Hobbs, New Hampshire, winner of the 2012 Christa McAuliffe Sabbatical

- Whatever the device, Hobbs said, both teachers and students respond to the opportunities presented.
- "It's kind of a snowball effect, as soon as kids have access to that technology, all of a sudden you can apply it here, there and everywhere," Hobbs said. "It becomes so embedded in a student's learning that you almost do need it in every class. Teachers use more technology when they can count on students having it."

**We want the children
to create a web
in their heads**

Dedication and Thanks

This is dedicated to the children, their families and the school based teams who willingly started using the iTechnology without guarantees or research that it would be a beneficial learning tool.

This is also dedicated to Steven Jobs.