Communication Skill Development
Through Visual Systems and New
iDevice Technology

PM SESSION: iDevices

Caution in Using an iDevice

Must realize that iDevices are tools, platforms only

- Not everyone can use them successfully, e.g., motor limitations, extreme degree of intolerance
- Quality of the applications (Apps) varies and can be confusing, e.g., two Apps with the same name appeared in the same week
- Some of those people initiating use of them have not had the training to know the correct way of going about initiating their use. It is hard to undo improper approaches. Ref: Youtube TapToTalk002.MP4
Caution in Using an iDevice

- Devices need to be customized after much forethought
- Due to motor requirements, should consult with Occupational Therapist for appropriate Apps for building skills if necessary to ensure lack of frustration in access
- A program in Pennsylvania provides a 7-week training series in iPad use for parents

Conducting an Interest Needs Assessment

Conducting an Interest Inventory

- Let me ask you this???
  - Are you willing to work for something you do not like???
  - Can you list ALL the things the people you support like???
  - Do you think it possible that they might like something you have not thought about???
Examples of Possible Interests

<table>
<thead>
<tr>
<th>Tangible</th>
<th>Activities</th>
<th>Social</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business cards</td>
<td>Having lunch</td>
<td>Applause</td>
<td>Free ticket</td>
</tr>
<tr>
<td>Music</td>
<td>Draws</td>
<td>Greeting from the boss</td>
<td>Point toward something</td>
</tr>
<tr>
<td>Coffee/tea</td>
<td>Time off</td>
<td>Name on work table</td>
<td>Certificate</td>
</tr>
</tbody>
</table>

Other examples of Possible Interests

<table>
<thead>
<tr>
<th>Item/Activity</th>
<th>What does the student enjoy about the item/activity?</th>
<th>Other similar options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koosh Ball</td>
<td>Texture</td>
<td>Play doh, bean bags, sponge, foam, goop, cornstarch &amp; water, etc.</td>
</tr>
<tr>
<td>Running</td>
<td>Movement</td>
<td>Catching fish, throwing, jumping, catching, kicking, running, etc.</td>
</tr>
<tr>
<td>Hanging out with friends</td>
<td>Social Group</td>
<td>Work, reading buddies, helping peers with areas of interest, early lunch with a friend, etc.</td>
</tr>
</tbody>
</table>

CONSIDERATIONS FOR SETTING UP iDEVICES
Considerations for Setting up iDevices:
I HAVE MY DEVICE – NOW WHAT

- What is its purpose: TOOL versus TOY
- Can they use “prerequisite” Apps (Bubblepop, yes/no, art of glow, etc – indicates discrimination and dexterity)
- Can they use App for choicemaking
- Stimulus response – set up situation I want ____.
- Screening (discussed this morning) provides ideas for content, interest inventory provides idea for content etc.

Considerations for setting up device

- What are the communication needs?
- Individual’s skill level
- Durability of device
- Selection method (how does the client touch the symbols)
- Funding
- Behaviour proceeds communication – need compliance before can focus on communication

iPad 1-2 or 3??

iPad 1
- Cheaper
- Does not have camera
- Does not support many apps

iPad 2
- Many apps
- Camera
- Recently reduced price

iPad 3
- Many apps not yet designed for 3
- Faster
- Better camera and graphics
- High definition graphics need more memory
Costs: from Apple Canada website

<table>
<thead>
<tr>
<th>The New iPad – 3</th>
<th>iPad – 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wi-Fi</strong></td>
<td><strong>Wi-Fi</strong></td>
</tr>
<tr>
<td>$519 16GB</td>
<td>$419 16GB</td>
</tr>
<tr>
<td>$619 32GB</td>
<td></td>
</tr>
<tr>
<td>$719 64GB</td>
<td>$549 16GB</td>
</tr>
<tr>
<td><strong>Wi-Fi + 4G</strong></td>
<td><strong>Wi-Fi + 3G</strong></td>
</tr>
<tr>
<td>$649 16GB</td>
<td>$549 16GB</td>
</tr>
<tr>
<td>$749 32GB</td>
<td></td>
</tr>
<tr>
<td>$849 64GB</td>
<td></td>
</tr>
</tbody>
</table>

Larger memory no longer available

Cases for the iDevice: an essential accessory!
- Griffin Survivor - $80
- iPAD iGUY – 39.95
- Otterbox Defender $90
- Griffin Survivor - $80
- Otterbox Defender $90
- AMDI iAdaptor case - $265
  - speakers
  - handle

Air printing:
iDevices cannot use a regular printer, you must own a “air printing ready printer”. Here is a list (from Apple.com) of the printers that currently offer air printing:

- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
- HP LaserJet M1536dnf
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Setting up an iTunes Account:

- Download iTunes
- Click App store (top menu bar)
- Buy a ‘free’ App
- Create account
- Add information
- Select payment type
- iTunes gift card: Redeem Code
- Sync iDevice to computer – click apps>click sync (plug it into USB drive)

The Apple Volume Purchase Program:

- The Volume Purchase Program allows educational institutions to purchase iOS apps and books in volume and distribute them to students, teachers, administrators, and employees.
- Check the Apple Canada website

How Many Apps are Out There?

- Over 500,000!!
  iCloud:
  When you buy and download apps from the App Store, you always have access to them, no matter which device you’re using. Because the App Store keeps them in the cloud. So if you bought an app on your iPhone, it can automatically download straight to your iPad over Wi-Fi or 3G and vice versa. And if you delete an app from your device, you can always download it again.

www.store.apple.com/ca/
iDevice Basic Operations:

- **Getting Started**: Click Home button and slide to unlock
- **View most recent apps**: double tap home button
- **Navigating**: flick to scroll (up/down, side/side)
  - tap to make a selection
  - tap an app’s icon to open it
- **Zoom in/out**: pinch finger together/part (love this for maps!!)
- **View**: portrait or landscape
- **Lock Orientation**: double click home button – flick bottom of screen then tap rotor icon to lock position
- **Rearranging Icons**: touch/hold and icons jiggle; then drag icon to desired position

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iDevice Basic Operations:

**Folders**:
- Drag one App onto another then rename the folder and add more Apps
- Click home to exit folder

**Deleting Apps**
- Tap and hold an App
- The App can be moved once it “wiggles”
- To delete, tap the “X”
- To remove “x’s” click home button

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Accessibility Features of iPad

- **Vision**
- **Hearing**
- **Motor skills**
  - On device go to Settings-General-accessibility
  - Zoom magnifies the entire screen of any app
  - White on black inverts the colours
  - Large text enlarges text in calendar, contacts, messages and mail

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YouTube Video Clip
Study of Autism and iPads on
CBS 60 Minutes
http://www.youtube.com/watch?v=oFOknupazK0

Issues to Consider for successful Implementation

According to AAC clinic Staff:
- In order to compete with present inappropriate behaviours
  - Must use relevant (context-based) vocabulary that the person may want to say. For example, when bowling they may want to say "I want the yellow shoes."
  - Relevant vocabulary must be immediately accessible to the person, i.e., they do not need to go hunting for what they want to convey
  - Device or system must be readily accessible/modifiable for person and staff

Possible Way How to Proceed in Introducing an iDevice?

- Watch: “Mobile Devices and Communication Apps: Current Trends and Future Directions.” Dec. 3011 Howard Shane and Jessica Gossell
- Learn how to screen for the use of iDevices
- Teach “First/Then” concept immediately if device is going to be used for multiple purposes
- Teach Choice making
- Choose Applicable Apps
Proloquo 2 Go – P2G

Proloquo2Go – App
- provides a full-featured augmentative and alternative communication solution for people who have difficulty speaking.
- provides natural sounding text-to-speech voices
- $190

Case Study: James
- 19 years old
- Autism
- Not encouraged to use his iPad at family home
- School did not know how to use P2G
- Referral for communication supports
- Difficulties at school resulted in suspension
- Difficulties at home resulted in loss of placement
- James went into crisis
James

- Specialized Accommodations
  - Supported and encouraged use of iPad and P2G
  - Established regular routine using Choice Works

Video of James using P2G and Choice Works

YouTube Demo. of Various P2G Applications

- SNApps4Kids Intro to Proloquo2Go:
  
  [http://www.youtube.com/watch?v=ALrlF8DERw](http://www.youtube.com/watch?v=ALrlF8DERw)

Case Study Ref: Apps for Autism by Jean Brady

- A highly sociable sensitive teenager whose speech was highly unintelligible.
- He used a Pathfinder effectively but after a year stopped because it made him look different. He was not comfortable showing others his weaknesses.
- When he learned that he could use Proloquo2Go on an iPhone he was so ecstatic that he cried.
- When it was customized to fit his needs, and pictures were added he was able to communicate with his mother from the bus on the way home saying "I will be home soon. I had a good day."
Sample YouTube Presentations FOR iPad/Proloquo2Go

<table>
<thead>
<tr>
<th>Title</th>
<th>Length</th>
<th>Evaluation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNApps4Kids Intro to P2G, Usage, Folders, Pg. layouts</td>
<td>6:33</td>
<td>Excellent</td>
<td>Lists and demos. Various classroom purposes</td>
</tr>
<tr>
<td>How to Modify the P2G Homepage into a Pragmatically Organized Dynamic Display</td>
<td>6:42</td>
<td>Excellent</td>
<td>Shows all the steps on how to clean home page, add a new category and add words within the category. Also shows the challenges for normal people using a small devise.</td>
</tr>
<tr>
<td>P2G Getting Started Part 1 Skills</td>
<td>8:30</td>
<td>Good</td>
<td>Knowledgeable mother demo. Set up for laughter. Tells about necessary skills.</td>
</tr>
<tr>
<td>P2G’s Professional – Introduction to P2G- Assistive Ware</td>
<td>17:35</td>
<td>Good</td>
<td>Good adaptations for fine motor control difficulties</td>
</tr>
</tbody>
</table>

Sample YouTube Presentations FOR iPad/Proloquo2Go

<table>
<thead>
<tr>
<th>Title</th>
<th>Length</th>
<th>Evaluation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to Restore your P2G Vocabulary – Proloquo 2 Go</td>
<td>2:30</td>
<td>Good</td>
<td>Part of a series of demonstrations from Proloquo2Go</td>
</tr>
<tr>
<td>How to Backup Your P2G Vocabulary – Proloquo 2 Go</td>
<td>2:07</td>
<td>Good</td>
<td>As above</td>
</tr>
<tr>
<td>How to Transfer Your P2G Vocabulary</td>
<td>4:02</td>
<td>Good</td>
<td>As above</td>
</tr>
<tr>
<td>P2G and the iPad</td>
<td>5:34</td>
<td>Fair</td>
<td>Shows difference in volume output between iPhone, iPod, and iPad. Shows use with a 27 yr old man with Autism who signs.</td>
</tr>
</tbody>
</table>

Sample YouTube Presentations (cont’d)

<table>
<thead>
<tr>
<th>Title</th>
<th>Length</th>
<th>Evaluation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2G Speech App Love that Max.com</td>
<td>2:47</td>
<td>Fair</td>
<td>Shows need to print, and go to several pages. Also in doing so how the child's frustration mounts when they miss obtaining the correct symbol.</td>
</tr>
<tr>
<td>P2G and P2G in class</td>
<td>1:53</td>
<td>Fair</td>
<td>Shows the autism in using accessing program when motor movements are slow and imprecise. Shows giving the info for date in class.</td>
</tr>
<tr>
<td>Ryan uses P2G for a book report</td>
<td>2:16</td>
<td>Fair</td>
<td>Shows use of a holder for the device</td>
</tr>
<tr>
<td>Ryan uses P2G for a book report</td>
<td>2:16</td>
<td>Fair</td>
<td>Shows use of a holder for the device</td>
</tr>
<tr>
<td>P2G and P2G in Speech Therapy</td>
<td>1:52</td>
<td>Poor</td>
<td>Video is not showing speech therapy but rather object - symbol recognition.</td>
</tr>
</tbody>
</table>
Useful Apps:

How to Choose an App for People with Intellectual Disabilities

It is a jungle out there...

Look for the following features:

- Derived from a reputable source (e.g. Mayer Johnson.com, www.AutismFamilyOnline.com)
- Uses simple pictures/symbols
- Is not too busy/ no additional distracting features
- Has ‘analytics’ (Ways to analyze results)
- Has email connection to email results of work done, learning
- Has an Internet reference

Most apps address basic communication skills: then follow with specific apps

- Turn taking
- Joint attention
- Following directions
- Choice making
- Attending
- Cause and effect
AUGMENTATIVE AND
ALTERNATIVE COMMUNICATION

iPad with Proloquo2Go App:

- $189.99
- Access funding through level 3 augmentative communication clinic (ADP will cover 75% of cost)
- Proloquo symbols are SymbolStixs (very similar to PCS)
- Natural sounding voices
- 7000 item vocabulary
- Can add photos

My First AAC

- $24.99
- Beginner App
- Organized by categories that reflect natural speech development
- 250 words

Why I like this:
- Colourful pictures
- Clear voice
- Lots of categories
Expressive

- $25
- Synthesized voice

Why I like this:
- Very simple to use
- Simple to add photo images
- Colour coded categories

Expressive allows users to select from a pool of images with audio files, create their own folders and arrange the images as they please.

iCommunicate:

- $49.99
- iCommunicate lets you design visual schedules, storyboards, communication boards, routines, flash cards, choice boards, speech cards, and more. It is customizable to your needs.

Why I like this:
- Not just communication App –
  - good for schedules
  - can print (remember air printing)

My Talk:

- Free lite version
- Full version: $49.99
- My Talk workspace – on computer - drag-and-drop tool that simplifies design and backs up MyTalkTools content when you sync.
  - Full-sentence communication with the Phrase Bar feature
  - Switch capability with visual scan

Why I like this:
- simple clear photos
My Voice

- MyVoice has the power to present useful words and images based on a user’s physical location. At home, work, school, and a thousand other places; MyVoice users can access contextually-relevant vocabulary in seconds.

- Why I like this:
  - Recognizes user’s location and gives vocabulary for that place

How I Feel

- Cost $2.99
- Feelings are separated in three colors – Green positive feelings, Yellow and red negative feelings. The app contains common feelings. It can be used as an app to teach students vocabulary for feelings as well as an alternative communication application.

- Why I like this?
  - Dedicated to just feelings
  - Appropriate voice intonation for each feeling

Alexicomm AAC

- Free
- Pages uploaded to Alexicom server so can access from another device
- 1300 premade pages
- 7000 images

- Why I like this:
  - Photos
Verbally

- Free!!
- Speaks typed sentences
- Core Words Grid offers over 50 essential words

Why I like this:
- Its free
- Word prediction

Talk Assist

- Free
- Speaks typed text
- Phrases can be saved

Why I like this:
- Its free

Assistive Chat

- $24.99
- Test based (type)
- Word prediction
- Text based
Yes-No app

- $1.99
- Developer: Geek SLP
- Basic yes/no answers app. Helpful in the medical field when attempting to get yes/no answers.
- Male and female voice output

Why I like this:
- simplicity

Social Skills

The Social Express

- $89.99
- Video modelling
- Teaches how to think about and manage social situation
- Fully animated interactive lesson
- Based on work of Michelle Garcia Winner and her Social Thinking Curriculum
- Student is presented with two video sessions and then they choose the one that demonstrates the skill
Pictello

- $18.99
- Create talking photo albums and talking books.
- Each page can contain a picture, up to five lines of text, and a recorded sound or text-to-speech using high-quality voices.
- Stories to teach social skills or to recall events.
- Photo albums allow non-speaking people to share their news and interests.

Videotape

- Record video of expected behaviour or of social situations.
- Videotape place/activity will be doing (i.e., new house, camp, etc).
- Reduces anxiety.
- Allows planning for situation.

How to Videotape:

- Select camera app.
- Bottom of screen slide video button ON.
- Press red Record button and record.
- To view on left of screen select camera roll.

Everyday Social Skills

- Video clips of everyday social skills.
  - i.e., waiting in line.
  - Walking.
  - Using a restroom, etc.
  - Contains 6 categories with a total of 75 videos.
Model Me Going Places - free

- Free
- visual teaching tool for helping child learn to navigate challenging locations in the community.
- Each location contains a photo slide show of children modeling appropriate behaviour.

Sosh App

- $39.99
- for individuals with Asperger's Syndrome
- focuses on five essential abilities for social skills development: Relate, Relax, Reason, Regulate, and Recognize
- for high functioning students to work on self-regulation, social skills in a manner that fosters independent application of such strategies.
- can also be a great teacher tool to use with other for students who require feedback on behaviours such as voice loudness, calming techniques or reducing perseverative behaviours.
- As reviewed by http://otswithapps.wordpress.com

EMOTIONS
ABA Flash Cards & Games - Emotions

- Free
- Fun, simple, and easy way to learn to recognize emotions
- Record own voice and add own pictures!
- 8 unique game modes including find the item, listening, and reading games

Time Timer

- $6.99
- For clients who have difficulty waiting
- Visual – see time decreasing
Choiceworks

- $14.99
- 3 boards: Schedule, Waiting, and Feelings
  - 165+ images and audio
  - can add own images and record audio
  - Speaks boards out loud with professionally recorded audio

Why I like this:
- social story "type" book to go with boards
- Can add photos to schedule

Visual Routine

- $5.99
- Add real photos
- Check mark system with auditory feedback for completed tasks
- Picture only option for non-readers (with written Routine title)
- Text only option for readers

Visual Cue (Lite)

- Free
- Provides visual cue for
  - First-then
  - Visual schedule
  - Visual timer
  - Choices
  - No stock library – add own photos

Why I like this:
- lots of visuals within one App
Visual Schedule Planner

- $14.99
- Visual Schedule Planner is a completely customizable visual schedule iPad app that is designed to give an individual an audio/visual representation of the "events in their day".
- In addition, events that require more support can be linked to an "activity schedule" or "video clip" to help model the task even further.

First/Then Visual Schedule

- $9.99
- First/Then visual schedule
- Use your own photos or add photos from the built-in Internet image search feature.
- *Record your own voice to the images.
- *Create as many schedules as you need.

Why I like this:
- Can add real photos

Doodlecast for Kids

- $1.99
- Drawing app that records your voice as you draw.
- Play back your drawing and export it to share with friends and family.
- Comes with more than 20 drawing prompts

Why I like this:
- Encourages following directions
PhatPad

- $4.99
- Writing, brainstorming tool
- Load stock picture of photo
- Client writes own story

Audiobooks by Cross Forward

- Over 4000 classic audiobooks for FREE.
- Great resource for clients that cannot read but like to hear stories

AppShopper

- Free
- Keeps you up to date on the newest App Store apps, sales and freebies.
- Organize Apps in your own customized Wish List and automatically get notified via push notifications when there is a sale or update.
- Ratings and reviews
Case Study: Mitch

Tap to Talk: Speech generating
K-3 Sight words: $0.99

Model me Going Places: - Free
Video modeling of social situations

My Choice Board: $9.99
Display of choices

Dragon Dictation: free – needs Wi-Fi – Speech to text

Visual Cue Lite:
Schedule – timer – first/then

COMMON PITFALLS IN USE OF iDEVICES

Person does not have prerequisite skills/interests

Those teaching its use, start at too high a developmental level

The device is used first for entertainment purposes

Common Pitfalls in the Use of iDevices for Communication Purposes
Technological Challenges

- Itunes account
- Charging device
- Unintentional changes of settings in customization
- Fear of the unknown
- Updating operating system and Apps

Why are iDevices so Appealing

- They are visual
- Motivating
- Stepping stone to reality
- Increase independence
- Increase attention
- Increase engagement
- Increase verbalizations
  - Participation
  - Social interaction
  - Attention span
  - Motivational
  - Independence
  - Confidence
  - Focus

Reference: Identifying Key Uses & Benefits from Apps for iPads for Autism Spectrum Disorders

Results From a Survey of “In the Trenches” SLPs, Educators & Parents of iPad Users

Linda Hodgdon, M.Ed., CCC-SLP

ENSURING SUCCESS THROUGH EFFECTIVE COORDINATION WITH SPEECH-LANGUAGE PATHOLOGISTS
AAC Clinic Mandates

- Ontario Augmentative and Alternative Communication Services designated by the Assistive Devices Program
- Accept referrals from ??
- Resource

Ensuring Success

- Caregiver support
- Members of community to support
- Clinics to support
- SLPs need to stay involved

Consequences of Not Getting it Right…

- Person may reject use of device
- Person may become frustrated in the use of the device
- Person may perseverate in the use of the device only for entertainment purposes
- Person may throw the device
- The device may end up the way of some hearing aids… in a drawer
- Person may be soured in desire to improve his/her ability to communicate
Review of Afternoon Content...

- Considerations for setting up iDevices
- Demonstrated how to set up an iDevice for communication
- Considerations for choosing effective Apps
- Demonstration/discussion of some Useful Apps
- How to adapt Apps to meet your purposes
- Common Pitfalls in Using iDevices
- How to ensure successful implementation through service co-ordination
- Handouts

Resources/Tools/References

- **Books:**
  - Brady Lois Jean, *Apps for Autism*, $18.87 on Amazon.ca

- **Devices:** Info@Bridges-canada.com (1-800-353-1107)

- **Tools:** Erinoak Kids Centre for Treatment and Development
  - www.erinoakkids.ca
  - Potential Reinforcers- for Students in Secondary School
  - Potential Reinforcers Work Co-Op
  - Potential Reinforcers Elementary
  - Expanding your Student’s Reinforcer Repertoire

Resources/References

- **Videos:** YouTube
  - Applications for speech and Language pathology Practice –
  - Picture Exchange Communication System - PECS Websites by Kidscandream
  - Autism Teaching Tools: PECS
    - http://www.youtube.com/watch?v=eTzedhezar8
  - YouTube Video Clip: Study of Autism and iPads on CBS 60 Minutes
    - http://www.youtube.com/watch?v=ofOknupazK0
  - SNApps4Kids Intro to Proloquo2Go:
    - http://www.youtube.com/watch?v=ALrlF8DERw
Websites to check out

- www.assistiveware.com (support for Proloquo2Go)
- www.autismpluggedin.com
- www.geekslp.com – great resource and app listing under documents
- smartyearsapps.com – apps geared to communication
- mobile-educationstore.com/ipad-apps – educational apps
- www.goodkarmaapplications.com – apps
- www.oneplaceforspecialneeds.com/resources_online/resource_online_results.html?category=&words=autism+specific+app
- ipadacademy.com – includes tutorials and tips

…and More Websites to check out

- www.proactivespeechtherapy.com
- www.AutismFamilyOnline.com
- www.Appannie.com – top free, paid and grossing Apps for each category
- Conovercompany.com – Educational Apps
- All4mychild.com – Excellent blog and review of Apps
- www.scribd.com/doc/24470331/iPhone-iPad-Touch-Apps-for-Special-Education

Questions

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