

# iPads and Beyond

Marvin Williams  
Priscilla Danielson  
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# Introduction

- Who we are?
- Why we are here—new tool, but understanding the tool
  - Proloquo2Go is not the iPad, it is on the iPad
  - If you have the iPad, you don't necessarily need.....
    - The question is: “What do you want?”
    - What can the individual use
      - What is the app—same questions as you ask for what is the right SGD
      - SETT Process

# iPad

[http://manuals.info.apple.com/en\\_US/iPad\\_User\\_Guide.pdf](http://manuals.info.apple.com/en_US/iPad_User_Guide.pdf)

Read this chapter to learn about iPad features, how to use the controls, and more.

## Overview



# What can my iPad do?

- “The thing I found is that many of my younger students who have been very difficult to assess with regards to even comprehension are very happy to do the applications on the iPad...and they are showing me and their teachers much more with this technology than they have otherwise shown us. VERY exciting.”
- “This is also a tool that might be fun and exciting for a variety of people, but not educationally necessary.”
- “Like many of you, I'm frequently asked by parents or teachers "Should I get him/her and iPad?" to which I respond "It depends -- what are you trying to do?".
- “What I see with the iPad is the removal of a barrier that exists without intent in dedicated communication devices. iPads have some intuitive features that allow use without "training".
- Although I love what the iPad is doing for public understanding about AT, AAC, autism and such, I still believe that the least intrusive supports are the first to consider AFTER determining what needs to happen. After all, the T for tools is the last letter of SETT. We can't sidestep the process for sexy and cool.

# What can my iPad do?

- Surf Net
- Listen to music
- Watch a movie
- Send e-mail
- Play games
- Type notes
- Read a book
- Calendar
- Facilitate communication
- Apps!
- <http://www.thedaily.com/page/2012/01/16/011612-news-orangutan-ipad-video-page/>

# Why It Works

- Cool
  - UDL
  - Touch technology
  - Apps with different strategies
- Inputting text in different ways
  - Different than worksheets, essays
  - Dragon Dictation
  - ShapeWriter for kids with dysgraphia, single-handed input, spelling support, maintain engagement
- Interactive content
- Elimination of textbooks and backpacks
- Color coding to organizing folders
- Limiting tasks for those who can't multitask
- Lightweight, instant access
- Form → easy to see, good size, light, easy to share when passing around
- Can use camera and video on iPod/iPad to engage students in conversation about activities/actions
  - Photos are conversation starters
  - Reveal social skill strengths and weaknesses

# Why Do I Want an iPad as SGD

- That's the larger question
  - Smaller ? Is: “Why do I want the iPad?”
  - Let's look at the public view
    - 60 Minutes iPad piece—
      - <http://www.proloquo2go.com/News/article/proloquo2go-and-ipad-covered-in-60>
      - <http://www.proloquo2go.com/News/article/proloquo2go-and-ipad-covered-in-60>
      - <http://www.cbsnews.com/video/watch/?id=7385686n&tag=contentBody;storyMediaBox><http://www.cbsnews.com/video/watch/?id=7385686n&tag=contentBody;storyMediaBox>
    - Let's look at how the user progressed to the iPad—was there really progression
      - Does the iPad cure Autism?
      - What was the assessment
      - Are we only using an iPad
        - » Person first
      - Where is the SLP
      - What does the individual need—Integrated Devices
      - What is the research saying—Where is the standardization—What do people really want—What does the individual NEED
      - Are we really assessing what we need

# Understanding the Device

- Switch accessibility
  - It's now not the hardware
    - It's the software
    - Who has the responsibility to make the system work
- Understanding who makes apps?
  - Individual users—Not always Apple
  - Comparing iPad with Android
    - Different operating systems
- Wifi Signal to use some apps--

# Concerns

- School versus home syncing and adding apps
  - Download apps without syncing
  - Backing up apps not purchased by syncing iTunes account
    - Use g-mail to store files to access or synch
    - Using synch when manually transferring AAC back-up from iPad to computer
    - Do app updates through app store wirelessly
- It is still all about the SETT process

# iPad and AAC Concerns

- Fracturing of apps/devices/software—impeding individual from becoming independent
- Mismatch of features to needs
- Letting \$\$ force SLP to create a device that looks like something else
- Potential for disposability
- Not informing families re: intervention, support, programming
- Becomes a cool toy—OK at some level

# Device Management

- Single user device
  - Requires frequent updating—set up for user to do updates
    - How was Apple's idea of user using the device
      - Single versus Multiple Devices
  - How do you do for 20
  - RESET—Oh great!
- What apps do you want
  - Who makes these decisions

# What Do Educators Want

- Inclusion of curriculum
- Take data from child's use of app
- Use of central apps to connect with students individually
- Safety
- Access to "The Cloud"
- Technology assist
- Reflect goals of learning
- Tools do not define experiences—want students to be engaged and resourceful
- Weaving technology with learning
- Increased collaboration
- Let technology mature to be useful-cameras
- Make the technology invisible to the student
- Challenge students and engage them in competitive world
- Maintenance of rigorous education
- Implementation of Bloom's taxonomy
- Use them for learning

# What do Parents Want

- Entertainment
- Practice and drill
- Assist for students with disabilities
- Mainstream identification
- Social skills
- Portability

# Plus & Minus

- (-) Does not run Flash or Silverlight—Disney.com
- (-) Older one doesn't have switch inputs
- (+) Does run AAC software
- (-) Needs external speaker to be effective AAC
- (+) can use with Bluetooth speakers
- (-) Can't use pointers—have to use stylus or finger
- (-) Too accessible Menu button—can cover now or reverse in case
- (-) Older versions not use flash drive
- (-/+ ) Keyboard: Any Bluetooth keyboard will work
- (+) Long battery life (shortened with use of additional features like Bluetooth, Wifi, and 3G)
- (+) Instant start up
- (+) Apps and Camera
- (+) Wifi and 3G capability

# Plus & Minus

- (+) Crisp screen
- (+) Rotating Screen
- (-) One function at a time
- (-) No DVD or CD port
- (+) Built in accessibility
  - VoiceOver—touch screen, describe what is under finger—e-mails, what you type, Web content, settings
  - White on Black feature for improved screen resolution
  - Mono Audio—to route both left and right audio channels to each ear
  - Zoom—allows magnification up to 500%
- (+) Acceptability
- (+) No more notebooks (actually, you would need an app that does handwriting recognition. It does not do it on its own)
  - Reading own handwriting
- (+) Can multi-task
- (+) Lightweight, Portable, Small
- (+) Engaging

# Plus and Minus

- Consumption more than production device (currently)
- Storing and moving files a bit more difficult than regular computer
- Editing Google docs and Wikkis in Safari Browser
- No text to speech—
- An individual tool-not a system tool
- Drill and practice apps
- Some great educational apps not in educational category
- Apps for revenue can impact updates and ads which can be annoying
- Easy to switch between apps (even when we don't want the student to switch)
- Low cost high-tech AAC

# Concerns

- Autism
  - Not the magical tool all individuals with autism need
  - Not all parents can afford one
  - How does the school use the iPad with the student?— does it meet the child's individual needs
  - May be a stimulating activity—not a developmental activity
  - Does not replace Rx services
  - Apps change as students developmental skills change—evolving process
  - Digital technology is not only technology—keep child interested in more than just technology

# Apps that Remember and “I like it that way”

- With iOS 4.2, iPad apps will save to current state
  - Resumes from place → not just start over
    - Double press home button
    - Screen turns translucent
    - Swipe right to left to see ribbon of apps you’ve used recently
    - Can switch to an app or return to previous app
- File Sharing using iTunes
  - <http://support.apple.com/kb/ht4094#>
- iCloud
  - Hard drive in the sky
  - Access everything on devices
  - Secure
  - Keeps e-mail, contacts, calendars across devices
  - Get 5 GB free—can purchase more
  - Store music, mail, documents, account information

# Potential

- Digital Texts
- PDFs and Presentation information
- Assessment
- Increase participation
- Application for UDL (multiple methods of engagement, presentation, expression)
- Useful with struggling learners

# What Do SLPs Want

# What SLP's Want— Consider These First

- Accessing the Curriculum
  - Accessing and Understanding Core Standards
    - Cite--
  - What are you using now—Just know there is other technology
    - Nooks and Nook-Study, Kindle Fire, MP3 Players, Netbooks
    - Bookshare
- App Features

# Who Is In Charge

## Think About as SLP with an iPad

- Over reliance on apps
- Building goals around an app
- Not using EBP of sequential, cumulative, interwoven goals
- Boring, tedious, repetitive vs intensive practice and practicing intensely
- Not individualizing materials
- Buying technology for sake of technology—being ineffective
- Keeping an eye on Formative Assessment and Common Core Standards
- Leaving what you know for what you don't know—take time to research
- Abandonment vs Integration

# Accessibility

- Voice Over
- Triple-Clicking Home Button
  - ¼ macros
    - White on Black—VI
    - Black on White—Nite reading
- Double tap 3 fingers
  - Zoom (Accessibility)
    - Tap area to be zoomed
    - 3 finger dragging to move zoomed area
- Assistive Touch Feature
  - Create own gesture to accomplish gesture you have motor difficulty achieving
- Don't forget:
  - Head Sticks/Chinstick/Mouth Stick
  - Stylus
  - Telescoping Stylus
  - <http://www.tenonedesign.com/products.php?application=iPad>
    - With Apps that use joystick model

# Mounts & Stands

- <http://www.breffo.com/>
- <http://www.theradapt.com/Store/ShowProduct.aspx?ID=85>
- <http://www.modularhose.com/applications/mh-at-kits>
- <http://www.ram-mount.com/NewProducts/wheelchairipadmounds/tabid/3968/Default.aspx>
- Mount'n Mover
- Daessy
- [www.gpscocity.com](http://www.gpscocity.com)
- [www.beyonadaptive.com](http://www.beyonadaptive.com)
- Deluxe iPad Arm Kit
- <http://cjtmounting.com>
- R J Cooper
- Heckler Designs—heavy, not portable
- Use the sleeve of 3 or 4 inch 3 ring binder—touch screen accessible, slant pad for positioning, papers in binder, velcro speakers

# Cases

- GumDrop
- GripCase
- Safe n Sound Mobile for iPod
  - Harness
- Screen Protectors, Desinfectant wipe
  - [http://www.marymaxim.ca/webapp/wcs/stores/servlet/product\\_10003\\_50001\\_30744573456\\_16823283\\_-1\\_3074457345616687780\\_30744573456166](http://www.marymaxim.ca/webapp/wcs/stores/servlet/product_10003_50001_30744573456_16823283_-1_3074457345616687780_30744573456166)
    - iKlear cleaner solution with a microfiber cloth.
  - <http://itunes.apple.com/us/app/clean-my-screen-lite-free/id320161181?mt=8>
  - <http://otswithapps.wordpress.com/2011/10/22/stop-spreading-the-germs/>
- Otterbox Defender
- Griffin Survivor for iPod
- Big Grips
- iAdapter 2
- Omnifer—Braille iPad case indevelopment
- Addycase

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# Switch Accessibility

- Switches
  - RJ Cooper's iPad Switch
  - RJ Cooper's Super Switch
  - Ablenet's Blue 2
  - Switchamajig—control 6 switches from iPad
  - iPortal by Dynamic Controls—paired with wheel chair DX2 joystick can control apps, phone
- Switch Accessible Apps
  - Sounding Board
  - RadSounds
  - Tap to Talk
  - Alexicom AAC
  - TalkBoard
  - TapSpeak
  - Go Talk Now
  - Scene & Heard
  - Sounding Board
  - MyTalk Tools Mobile
  - Predictable
  - RJ Cooper's apps
    - Radsounds
    - Spell A word
    - Point to Picture
- iPortal Accessibility
  - Environmental Control when integrated with switch and head array
  - Application upgrade
  - \$100.00 at Apple Store

# VoiceOver

- Describes aloud what is onscreen
- Tells about each element on screen as selected
  - Black rectangle around it—cursor
- Touch screen or drag fingers to hear different items
  - Speak Hint—tells name of item
  - Select control and provides instructions of what to do
- Plays a sound when you go to new screen
  - Automatically selects and speaks first element
    - Typically upper-left corner
  - Tells you if changing orientation or screen is locked or unlocked
- Speaks in language specified in international settings
- Turn VoiceOver on through Gen→Accessibility→VO on/off switch
  - From iTunes: iPad selected→Options of Summary pane→Configure Universal Access→VoiceOver
  - Scroll to where you want to start reading, Triple tap Home button→Voice Over On→tap paragraph to start→stroke screen with two fingers in downward motion, which tells to start reading and continue onto each element that follows last
- Give spoken hits, increase/decrease rate, typing feedback
  - Can turn spoken hints on/off through General→Accessibility features

# KeyBoards

- Onscreen
- TouchFire—still in development
  - Goes over screen keyboard
- ZagMate
- Microsoft ARC USB
  - Need camera adaptor for USB
  - Tap and Ignore “Device not support
- Keyboards designed for iPad2

# Universal Access

- Universal access features—make iPad easy to use for everyone
  - Vision impairment
  - Deaf/H of H
  - Physical or learning disability
- Accessibility features of iPad
  - Support for playback of closed-captioned content
  - Voice Over screen reader—Built-in application and some 3<sup>rd</sup> part apps
  - Full-screen zoom magnification—all applications
  - White on Black—all applications
  - Mono audio—all application
  - Closed-captioning—movies and podcasts
- [www.apple.com/accessibility](http://www.apple.com/accessibility)
- Can turn accessibility features on or off in Accessibility setting
  - Can turn some off/on in iTunes when connect iPad
    - Connect iPad to computer
    - Select iPad in iTune Sidebar
    - In Summary pane, click Configure Universal Access in Options section
    - Select Accessibility features you want to use
    - OK
- Zoom Reader App--VI

# Alternatives

- Laptop (including tablets)
- Netbooks (now available as tablets)
- Windows-based tablets
- Android-based tablets
- Other e-Readers (Kindle, Nook, Kobo Reader, eDge, etc.)
  - Many have own archives and websites for support

# Things to Get

- Bluetooth keyboard and Dock
- Camera Connection
- Case
- iPad Dock Connector to VGA Adaptor
  - Videos, Photos, YouTube, Safari, Keynote
- [http://manuals.info.apple.com/en\\_US/iPad\\_User\\_Guide.pdf](http://manuals.info.apple.com/en_US/iPad_User_Guide.pdf)
- Use the sleeve of 3 or 4 inch 3 ring binder—  
touch screen accessible, slant pad for positioning,  
papers in binder, velcro speakers

# Unique Ideas

- Student response Systems—improve attentiveness, knowledge retention, inform instruction, provide immediate feedback
  - Can use
    - Google Docs uses Forms→teacher created questionnaire—once form completed, Google provides URL, which can be linked from or embedded in web page—students access the questions—responses collected in a spreadsheet teacher accesses online—students don't need to respond at same time—no feedback to students
    - Pool Everywhere→Free, but fee based to see individual student responses—can take messages through text messages using identifying codes—
    - QuestionPress→100% web-based—accessible on any Internet connected device—can be live, and teacher can control which questions are asked, when, in what order, when and how results sent to responder--?'s served at responder's pace—option to allow for scores and correct answers being displayed upon completion—can assign points, store question sets—session results organized—small Fee
    - eClicker Host—\$9.99—only teacher needs app—students use web browser or fee eClicker iOS app—Devices need to be on same WiFi network—teacher controls what question is displayed—screens change at same time—T/F or Multiple choice only—can compose or edit on computer—no management system for tracking over time—questions has a timer that cannot be turned off—lacks some options

# Apps Rubric

Domain	1	2	3	4
<b>Curriculum Connection</b>	Skill(s) reinforced in the app are not clearly connected to the targeted skill or concept	Skill(s) reinforced are prerequisite or foundation skills for the targeted skill or concept	Skill(s) reinforced are related to the targeted skill or concept	Skill(s) reinforced are strongly connected to the targeted skill or concept
<b>Authenticity</b>	Skills are practiced in a rote or isolated fashion (e.g., flashcards)	Skills are practiced in a contrived game/simulation format	Some aspects of the app are presented an authentic learning environment	Targeted skills are practiced in an authentic format/problem-based learning environment
<b>Feedback</b>	Feedback is limited to correctness of student responses	Feedback is limited to correctness of student responses and may allow for student to try again	Feedback is specific and results in improved student performance (may include tutorial aids)	Feedback is specific and results in improved student performance; Data is available electronically to student and teacher
<b>Differentiation</b>	App offers no flexibility (settings cannot be altered)	App offers limited flexibility (e.g., few levels such as easy, medium, hard)	App offers more than one degree of flexibility to adjust settings to meet student needs	App offers complete flexibility to alter settings to meet student needs
<b>User Friendliness</b>	Students need constant teacher supervision in order to use the app	Students need to have the teacher review how to the use the app on more than one occasion	Students need to have the teacher review how to the use the app	Students can launch and navigate within the app independently
<b>Student Motivation</b>	Students avoid the use of the app or complain when the app is assigned by the teacher	Students view the app as “more schoolwork” and may be off-task when directed by the teacher to use the app	Students will use the app as directed by the teacher	Students are highly motivated to use the app and select it as their first choice from a selection of related choices of apps

# Using an iPad for AAC

## Looks like.....

- For effective use
  - -sabotage/deliberate misunderstanding
  - pretend not to hear/understand
  - offer too few of an item
  - offer the wrong item
  - present a non-preferred item
  - use the prompt hierarchy
  - expand on student's communication by one thing
  - give descriptive feedback
  - step back
  - offer choices
  - allow independence
  - Model, model, model

# AAC apps

- TapSpeak Choice (Scanning)
- SoundingBoard (Visual scanning)
- TouchChat (Scanning): Full AAC → Multiple vocabulary sets
- PredictAble (Text/spelling only)
- TapSpeak Button (Accessible through external switch)
- Scene and Heard
- Tap to Talk: Basic AAC → expressing needs/wants → Runs on different devices
- Answers: Yes No (Simple yes/no)
- EZSpeech (text to speech, Expensive)
- Grace (PECS like): Symbol strip to build messages → No speech
- Small Talk (Designed for adults by Lingraphica)
- Small Talk (Adults w/ Stroke)
- Speak It!
- Proloquo2Go: Full Featured AAC
- TapTo Talk
- Tap Speak Button
- Tap Speak choice: Boards with 1-54 symbols → Recorded and natural text to speech → Boardmaker

# AAC apps

- iAssist Communicator
- iBliss Symbols
- iTake Turns
- Yes?No Bilingual
- Pictello
- Verbally
- One Voice: Categorically arranged→Basic needs→Text to speech
- Mintyvox
- SonoFlex: Full AAC→School age
- Expressive: Entry to mid level→picture based app→Recorded voice→Clip Art style icons
- Alexicomm AAC: Basic AAC→Expressing needs/wants→Web subscription service→Runs through internet
- MyTalk: Photos and voice recording
- Look2Learn AAC: Photos and preloaded voices→Basic needs/wants
- My Choice Board: Up to 6 items per screen→recorded speech
- SoundingBoard: Simple boards→1-9 buttons→Recorded speech
- Spanish apps
  - Picaa
  - Phrase Board
  - Proloquo2Go
  - Alixicom
  - Icommunicate—spanish voice
  - Speakpad—spanish voice

# AAC apps

- Scene & Heard: Scene-based
- Scene Speak: Scene-based
- Assistive Chat: Text-Only → Text-to-speech → Word prediction
- EZSpeechPro: text-to-speech → word prediction — store phrases in categories
- Predictable: Text-to-speech → natural voices → word prediction → save phrases
- Speak it!: Copy or type text for text-to-speech → Natural sounding voices
- Verbally → Text-to-speech → natural sounding voice → word prediction → Core words → Customizable phrase pages

# iPad and AAC

- <http://www.spectronicsinoz.com/article/iphoneipad-apps-for-aac>
  - Feature Match
- <http://www.aactechconnect.com/index.php/app-assistant>
  - Not free, Limited free to January 31, 2012
- <https://childrenshospital.org/clinicalservices/Site2016/mainpageS2016P19.html>
  - AAC feature matching

# iBooks

- Get books and view PDF files
  - iBooks app
    - Store
    - Top Charts—Star—Bottom of Page
    - Free—Get Book
  - Audio, video, animation
  - Organize books and PDFs
  - Adjust screen brightness
  - Highlight passages
  - Add notes
  - Add PDF documents
  - Accessibility features
- <http://itunes.apple.com/us/app/ibooks/id364709193?mt=8>

# iPad and Literacy

- Read2Go
  - Storychime series
  - Dr. Seuss book apps
  - Toy Story books
  - Berenstain Bears
  - Mercer Mayer
  - Milly Molly and ....
  - MeeGenius
  - Loud Crow
  - Qbooks
  - PicPocket books
- Many highlight word by word**

# iPad and PDFs

- Upload document to iBooks—use Voice Over
- Can annotate
- GoodReader
- Pages
- vBookz
- ZoomReader
- QuickOffice
- Evernote
- Notability
- iAnnotate PDF

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