Exploring the Use of the iPad for Literacy Instruction

Think different.

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Nicole Feeney, *Assistive Technology Specialist*
860-286-3101
feeneyn@ciboakhill.org

Steve Famiglietti, *Blind Services Vocational Manager*
860-286-3100
famigliettis@ciboakhill.org

The NEAT Center at Oak Hill
New England Assistive Technology
Resource & Education Center

Must-Know General Settings

Siri is a voice activated personal assistant that helps you complete tasks on your iDevice. The choice of male or female voice has been added to Siri's features.

Text Size will allow you to increase or decrease the text size within Apple apps such as Notes, Mail, Messages, and Reminders, but not in Contacts or Calendar.

Accessibility
> ### Vision
Voice Over is a screen reader. Adjustable speech rates and various dialects/languages are included. It can be supported by wireless braille displays
Zoom allows for screen magnification.
Invert Colors will change the color contrast of the screen.
Speak Selection is a built-in text to speech application. Adjustable speech rates and voices are included. If enabled, it will highlight as it reads.
Larger Type will increase even more than "Text Size" within General Settings.
Bold Text will make text bold and more legible.
Increase Contrast will make text more legible.
Reduce Motion will reduce the parallax effect on the iDevice screen.
> ### Hearing
Subtitles & Captioning can be provided when available.
Mono Audio allows the user to adjust the audio volume balance between earphone channels.
> ### Learning
Guided Access limits the user to one app by disabling the Home button, as well as restricting touch input on certain areas of the screen.
> ### Physical and Motor
AssistiveTouch lets you enter multi-touch gestures using one finger or a stylus.
Switch Control allows people with motor impairments to access all aspects of the iPad through the use of switches. Once this is turned on the iPad will automatically moves the cursor from one choice to the next until the individual presses the switch to select the desired option.
Some different methods for access are:
- using an external Bluetooth switch
- using the entire touch screen of the device as a switch
- moving their head to the left and right (the front facing camera on the device watches your movement)
Home-click Speed can adjust the speed required to activate Double and Triple-click of the Home button.
Accessibility Shortcut – Triple-click the Home button for easy access to enabled Accessibility options.

Multitasking Gestures allows the user to implement multi-touch finger gestures to carry out specific iPad functions.

- Five finger pinch on the screen while exit an app.
- Four finger swipe up or double click the Home button to view the most recently used apps. They will appear across your screen---swipe up on the app to close it down or scroll across and select the desired app. This is extremely helpful for student who disabilities because it allows them to quickly access recently used app, instead of swiping pages or searching folders.
- Four finger swipe across an app to revisit the last used app.

Lock Rotation allows the user to lock the orientation of the iDevice screen so that it does not rotate. This can be helpful for students with Learning and Physical Disabilities and Visual Impairments.

Auto-Lock will automatically put your iPad in sleep mode. This can be difficult for students with Physical Disabilities and Visual Impairments because they will continuously need to awaken their iDevice.

Accessibility: VoiceOver

Voice Over is a gesture-based screen reader that allows you to physically interact with items on the screen and hear the item's description. It also provides information about your iPad including battery life, time of day and Internet connection signal.

- Adjust the rate of speech in Voice Over so that it suits individual needs. The volume of Voice Over is distinct and will always be heard above background noise in your iPad, such as music. It can speak in 36 languages.
- Voice Over will echo each character and/or word as you type to confirm your selection. Word prediction and spellcheck are also included with Speak-Auto Text enabled.
- Screen Curtain – While using Voice Over, a black curtain can be pulled over the screen so others cannot view what you are accessing.
- The Rotor is a virtual control that allows the user to change the way Voice Over moves through a document based on a setting you choose. For example, a flick up or down might move through text word by word. But when you choose the character setting, each time you flick up or down Voice Over moves through the text character by character.
- The rotor can also be used to navigate web pages. When on a web page, the rotor contains the names of common items, such as headers, links, form elements, images, and more. The user would select a setting, and then flick up and down to move to the previous or next occurrence of that item on the page, skipping over items in between.
- Wireless Braille Displays – Built in support is included for refreshable braille display that use Bluetooth wireless technology. You can use them to read Voice Over output in contracted or non-contracted braille. Braille displays with input keys and other controls can be used to control the iPad when Voice Over is turned on.

How to Make VoiceOver Read Using Finger Gestures

Tap: Speak item.

Flick right or left: Select the next or previous item.

Flick up or down: The effect varies depending on the Rotor Control setting.

Two-finger tap: Stop speaking the current item.

Two-finger flick up: Read all, from the top of the screen.

Two-finger flick down: Read all, from the current position.

Three-finger flick up or down: Scroll one page at a time.

Three-finger flick right or left: Go to the next or previous page (for example, on the Home screen or in Safari).

Three-finger tap: Speak the scroll status (which page or rows are visible).

Four-finger flick up or down: Go to the first or last element on a page.

Four-finger flick right or left: Go to the next or previous section (for example, on a webpage).

Refreshable Braille Displays

VoiceOver allows the user to navigate the iPad using finger gestures, a Bluetooth keyboard, or a Refreshable Braille display.

A refreshable Braille display…
- is an electronic device that displays visual information (text) as Braille (text) on a Braille display.
- can also be used as a Braille Keyboard. Utilize six-key entry (similar to a Perkins Brailler), to navigate your iOS device, input/enter text, using contracted or un- contracted Braille.
- can be used as your visual display like a monitor. It tactually displays information as Braille text.
- can also be used to move the VoiceOver cursor or open Apps much like a computer mouse. Move the VoiceOver cursor anywhere within line displayed by pressing the corresponding router key.
- also functions as your touch screen. Open Apps, type in forms, move sliders, and click buttons using the router keys. For example, to send an email you tap the send button. The same is true while using a refreshable Braille display. Visually I see a button on the screen that says send. Tactually on the refreshable Braille display, the word "send btn" is displayed in Braille. Simply press any router key within the word to activate the "send button".

YouTube Video: Refreshable Braille Display and the iPad

Built-In Apps

Notes – A note pad for creating to-do lists, reminders, or jotting down good ideas.

Mail – Add and sync all your email accounts.

Calendar – Manage your appointments and meetings on the calendar and iCloud keeps them in sync across all your devices.

Reminders – Create a list of to-dos and reminders will notify you.

Messages – Send unlimited text or picture messages. (need WiFi access)

Dictation – Talking is the new typing. Write an email. Send a text. Search the web. Or create a note. And do it all with only your voice. Instead of typing, tap the microphone icon on the keyboard. Then say what you want to say while your iPad listens. Tap Done and, just like that, your spoken words become written words. Dictation also works with third-party apps. (need WiFi access)

Camera/Video Camera – Capture pictures or video with this app and then store them on your device or share them with friends. Crop, rotate and enhance your photos. Use the camera as an electronic magnifier. To take a Screen Shot – Hold down sleep (on/off) button and simultaneously, push home button…it will take a picture and then go to photos.

Facetime – Make video calls from one iDevice to another, for free. (need WiFi access)

Safari – Use your internet to access information from around the world. (need WiFi access)
- Collect Bookmarks of your favorite websites.
- Store articles in a Reading List.
- Review or clear Website History.
- Google Reader – a feed reader that allows you to subscribe to RSS and Atom feeds. You can manage feeds, label them, and even share your feed collection with others. For students with Visual Impairments, select Reader when VoiceOver says that it is available to you.
- Save Images – Tap and hold on the image. A dialog box will appear with two options – Save Image and Copy. Selecting "Save Image" will save it to the library within your Photos app.
- Saving a PDF – First, you need to download a PDF reading app (For example: iBooks or PaperPort Notes). After that, when your PDF is displayed in safari you can tap on the document and you'll have an option to "Open in ..." the PDF program.   After selecting the appropriate app, the document will be sent to and opened in that app. Begin your work!
- Create a folder on your iPad's homepage with shortcuts to your favorite websites. To save a website as an app on your home screen, when on the desired web page, select the (arrow in box) icon in upper left hand corner. Select Add to Home Screen.

Tips and Tricks

To copy and paste text, just tap and hold a word, then use your finger to drag to select more text, and then Copy it. Go to another application, tap and hold in the input box, and then use Paste. (Want to select an entire paragraph, tap it 4 times to highlight the entire paragraph, then use Copy.)

Split the Keyboard on the bottom of your screen, so that you can hold the iPad in both hands and type more efficiently. Tap and hold on the keyboard icon in the lower right and drag up to split the keyboard.

Double tapping the space bar on the keyboard of your iDevice will automatically insert a period and a space.

Turn off keyboard clicks by going into Settings > Sounds > and then change Keyboard Clicks to OFF.

Use the magnifying glass to fine tune the insertion point of your blinking cursor. Touch and hold your finger in the right area until the magnifying glass appears.

To add an apostrophe without having to navigate to the second screen on your keyboard, just tap and hold on the exclamation key and a hidden apostrophe will appear, then just slide one finger up to access it.

Turn iPad caps lock on by double tapping the shift key on your keyboard. Settings > General > Keyboard > Enable Caps Lock.

Tapping and holding on normal letters will reveal their special character versions instead.

Create typing shortcuts for frequently used phrases within Keyboard Settings (General).

Tips and Tricks for Students with Visual Impairments

Add most important apps to the Dock or the Home Screen for easy to access.

Use Wiki Sticks as a tactile reinforce for teaching what the iPad screen looks like.

A wireless Bluetooth display can be used in conjuction with the iPad's VoiceOver for input and output. Or the use of Apple's wireless Bluetooth keyboard can be used in conjuction with VoiceOver to input gestural commands.

The iPod may be easier for students with visual impairments to navigate with VoiceOver gestures because the screen is smaller.

Tips for Education

Disclaimer:

With thousands of apps and resources available for the iPad, the possibilities are endless but remember less is more! Find the apps that meet your goals and stick with those! It is best to start small and slowly integrate additional apps. Don't overwhelm YOURSELF or your student!!!

Plan Ahead

Determine the type of activity you would like to introduce to your students.

- Play and Informal Learning
- Planned and Formal Learning
- Drill and Practice vs. Customized Content

Decide…

- What do I want my students to learn about?
- What are the desired tasks I would like them to complete?
- How will successful learning be demonstrated?
- What apps can help me achieve my goal?

Considerations

- Individualizing and customizing the content being viewed and interacted with on the iPad is extremely important for student to make meaningful connections.
- The iPad is not always intuitive for new learners, although once learned there is a unique ease of use.
- Email and cloud computing for the exporting/storage of files.
- Printing from the iPad will require the use of an Air Print Ready Printer (Wireless with Wi-Fi).
- Various Assistive Technology apps, iPad cases, stylus and keyboards should be considered for easy access.
- Use Kathleen Shrock's "Evaluations for the iPad" tool to help you make some educated decisions about the usefulness of apps. http://www.schrockguide.net/critical-evaluation.html
- Allow more students to view your iPad screen by using the mirroring feature from your iPad. The following options are how you may achieve this…
    - VGA adaptor
    - Document Camera
    - Reflector App (available online only…see below)
    - Apple TV (must have an HDMI connection on the TV or Projector)

Building and Supporting Literacy: Writing

Interactive Books

Peanut Butter
E I E I O
Dirty Duds
Hurry! Hurry!
- These activities increase; attention to story books, independence within a fun, engaging and motivating environment, beginning AAC (Augmentative Alternative Communication) skills, beginning touch skills and/or beginning switch skills.
- Creative Communicating – Patti King DeBaun
- $5.99
- Switch Accessible

Phonics

Phonics Studio
- Over 2,500 flashcards to help students master pronunciation of words.
- GrasshopperApps.com
- Free

Flashcards and Study Tools

Bitsboard

- Customize several educational games using your own audio, pictures and text.
- GrasshopperApps.com
- Free

Spelling

Spell-A-Word
- Large-print, errorless learning method working on identification, spelling, & word recognition. Also contains a special feedback for blind learners.
- RJ Cooper
- Lite-$4.99
- Switch Accessible

A+ Spelling Test
- Setup your own spelling tests with multiple pay modes, track progress, and submit homework by email.
- Innovative Mobile Apps
- Free

Reading and Writing with Symbols

SymbolSupport
- Add symbols and speech to text. Documents can be read with a high quality text-to-speech voice while text is highlighted word by word. This app is intended to help learners with an intellectual disability or autism access important information like class assignments, step-by-step instructions, and social stories. Documents created in SymbolSupport can also be read with the free SymbolSupport Viewer app.
- Attainment Company
- $59.99

Reading Fluency

Speech Journal
- Customizable voice recorder that lets you pair recorded messages with your own imported images and image sequences.
- Mobile Education
- $1.99

Comprehension
Story Pals
Also available is Story Pals – Basic (no Text –to-Speech) $9.99

- 24 original stories with colorful artwork, that are whimsical and highly interactive. Stories can be read independently, read aloud with professional narrations, or read aloud using high quality Acapela text-to-speech with word highlighting. Each story is accompanied by a vivid illustration that supports the meaning of the story via a variety of slick interactions that come to life with entertaining voiceovers and sound effects. Following each story is a 10 question quiz containing WH questions (who, what, where, when, why) to assess story comprehension. You can easily track student progress of comprehension goals with automatic scoring for individual students or a small group, and export scores for access outside the app.
- Eric Sailers LLC
- $19.99

Learning Concepts

See.Touch.Learn
- Create your own picture-based learning activities.
- Brain Parade
- Free-$39.99

Creating Books and Social Stories

Pictello
- Create and edit stories with photos, audio, text to speech and more.
- AssistiveWare
- $18.99

My Story – Bookmaker for Kids
- Create eBooks with tools for drawing, photography, voice recording, writing, and sharing.
- HiDef Web Solutions
- $1.99

Photo/Video Tools

Pic Collage
- Create a collage of your own pictures on the iPad.
- Cardinal Blue
- Free

AudioBooks

Learning Ally
- As a member you can explore a library of more than 64,000 audiobooks
- Learning Ally
- Free
  Membership is required.

Tales2Go
- Audiobooks for kids.
- Tales2Go, Inc.
- Subscription
- Free 30 day trial.

iBooks
- Download books and textbooks from the store; ranging in price from free to $49.99.
  Create folders on your bookshelf to organize your materials.
  Import and view PDF files into iBooks
  Use the interactive reading tools to define words, annotate and take notes.
  Voice over and Speak Selection can be used to read materials.
  iBooks has a new "read aloud" feature in some of the children's books. It uses a real narrator to read select 'enhanced' children's books on iOS devices.
- Apple
- Free

eBooks

Blio
- eBook reader. It allows you to enjoy the same layout, fonts, and full-color images that you enjoy in the print version of your favorite titles.
- K-NFB Reading Technology, Inc.
- Free

Read2Go
- Accessible DAISY book eReader for iOS. From within the app, you can browse, search, download, and read books directly from Bookshare using your Bookshare membership, as well as read DAISY books from other sources. The app gives you control over visual choices for font size and color, background and highlighting color, and text-to-speech preferences. The newest update allows you to download books with images, using the "Open In" function, without having to transfer books via iTunes.
- Benetech
- $19.99
  Need membership from Bookshare.org.

Voce Dream Reader
- Text to speech app imports content from other sources to read aloud (PDF, web pages, PPT, doc).
- Voice Dream LLC
- $9.99

Study Tools

Google Search
- Search Google, hands-free with voice commands.
- Google, Inc.
- Free

Dictionary.com
- A dictionary and thesaurus. NO INTERNET CONNECTION IS NEEDED TO SEARCH WORDS. The app includes nearly 2 million words, definitions, synonyms and antonyms. It also features audio pronunciation, voice-to-text search.
- Dictionary.com, LLC
- Free-$4.99

Dictionary!
- Easy-to-use dictionary with no Wi-Fi needed.
- Catlin Software, LLC
- Free-$0.99
- VoiceOver Compatible

PaperHelper
- This app splits your iPad screen in half providing you with an Internet Browser and a Document writer. You can have your source and paper right next to each other.
- RumbleApps
- $1.99

Side by Side
- Allows several views of websites on the iPad screen at the same time. Move between the screens, allows copy and paste.
- Guoqiang Lei
- Free

Web Browser

ER Browser
- An Internet browser designed to help those with vision and reading difficulty navigate the web.
- Celf Creative Ltd.
- $0.99

BigBrowser
- An Internet browsing application designed to help Low Vision users more easily navigate the web on their iPads. It's extra large keyboard and controls, expanded pinch zooming, and multiple color themes make content easy to read.
- Braille Institute
- Free

Building and Supporting Literacy: Writing

Letter Formation / Handwriting

School Writing
- Trace pre-handwriting shapes, uppercase and lowercase letters, numbers, words or whiteboard images that you import with the touch of a finger. Hear and see letters, words and numbers with customized associated images and sounds.
- Demografix pty ltd
- $3.99

Write My Name
- Practice writing letters, words, names and phrases. It meets some of the basic reading and writing Common Core State Standards for kindergarten such as the introduction and mastery of print and word recognition concepts.
- Injini
- $3.99

Writing Process / Composition

Magnetic Alphabet HD
- iPad edition of the old fashioned magnetic board.
- Dot Next
- Lite-$3.99

Draw and Tell HD
- Use the tool to draw, color, decorate with stickers, create animations and record stories.
- Duck Duck Moose
- $1.99

Doodlecast for Kids and/or Doodlecast Pro
- Record your voice as you draw to create quick presentations or answer questions.
- zinc Roe
- $2.99

Sentence Maker
- Learn to make and complete sentences all with just the touch of their finger. Ideal for ages 1 to 6 but FULLY customizable!
- GrasshopperApps.com
- Lite-$0.99

Mobile Education Apps

SentenceBuilderTeen
- Helps teenage children learn how to build grammatically correct sentences.
- $5.99

QuestionBuilder
- Students practice answering questions about pictures in the app.
- $5.99

StoryBuilder
- Helps improve paragraph formation; integration of ideas; and improve higher level abstractions by inference.
- $7.99

RainbowSentences
- Construct grammatically correct sentences by using color coded visual cues.
- $7.99

Graphic Organizers

Inspiration Maps
- Visual thinking and learning for brainstorming, analyzing and organizing information, planning projects, and studying.
- Inspiration Software
- Lite-$9.99

Kidspiration Maps
- Helps young readers and writers in grades K-5 learn to organize and classify information, gain sight word knowledge and expand their ideas into written and verbal expression.
- Inspiration Software
- Lite-$9.99

Tools 4 Students
- 25 pre-made, graphic organizers for students to use to organize their thinking while reading or preparing to write.
- Mobile Learning Services
- $0.99

Typing Practice / Keyboards

Flesky
- Text input system so powerful that you can type without even looking at the screen. For the first time ever, sighted, visually impaired and blind people are able to quickly and easily type on touch screen phones and tablets.
- Syntellia
- Free

Word Processing

Pages
- Apple's word processing app.
- Apple
- $9.99
- VoiceOver Compatible

Quickoffice Pro HD
- Create and edit ALL Microsoft® Office document, spreadsheet, and presentation formats, as well as view PDF files, on the go.
- Quickoffice, Inc.
- $19.99

iA Writer
- A plain text writer and editor. Supported by Dropbox.
- Information Architects Inc.
- $4.99
- VoiceOver Compatible

Talking Word Processor (some will have word prediction)

Clicker Sentences

- Develop emergent writers' skills and build struggling writers' confidence with Clicker Sentences - the definitive early writing tool that enables you to build sentences with whole words.
- Crick
- $20.99

Clicker Docs
- The writing tool that provides differentiated support for students of all abilities including a talking word processor and customizable word banks.
- Crick
- $25.99

Abilipad
- Combines the functionality of a notepad with word prediction, text-to-speech and a customizable keyboard, putting advanced writing tools within everyone's reach.
- Cheryl Bregman
- $19.99

iReadWrite
- It will make it easier to write an email, read an article or complete your research and then export it to email, messenger, Facebook or Twitter. Some features include Text-to-Speech, Word Prediction, Spell Checker, Homophone Checker, Dictionary, Picture Dictionary, and customizable colors and fonts.
- No Wi-Fi necessary to access this app.
- Texthelp Ltd.
- $19.99

Co:Writer
- A word prediction tool that aides in phonetic/inventive spelling, grammar, and topic-related vocabulary.
- Don Johnston
- $17.99

Path Input
- Input a word by drawing its path on the keyboard instead of typing it. it includes word prediction and prefix prediction.
- TopApp
- $3.99

Dictation / Voice Recognition

Dragon Dictation
- Dictate a short message which is translated to text and can be sent as an e-mail.
- Nuance
- Free

PaperPort Notes
- Digital note taking tool for the iPad that is transforming the way people create and share information. Now you can combine documents, web content, audio, typed text as well as hand written notes into a single document that you can easily organize and share with anyone.
- Nuance
- Free

<u>Taking Notes</u>

Notability
- Note-taker. From simple text to logical outlines to media-rich notes with linked audio recordings.
- Ginger Labs
- $1.99
- Can't be used with Speak Selection!!!

SoundNote
- Take notes in meetings, lectures, and interviews. It tracks what you type and draw while recording audio, so you'll never worry about missing an important detail. During playback, just tap a word: SoundNote will jump right to the proper time in the audio.
- David Estes
- $4.99
- Can't be used with Speak Selection!!!

GoodNotes
- Allows you to take handwritten notes, use with Dropbox, sketch diagrams, mark-up PDFs and organize them on a beautiful bookshelf. Turn pages with a swipe, highlight or add notes to any page, and share your notes with anyone.
- Create a worksheet or matching activity in Microsoft Word (on your computer) or an app that allows for document creation…then import the file or picture into GoodNotes for a hands-on activity.
- Time Base Technology Limited
- Free-$4.99

<u>Scanning / OCR</u>

Prizmo
- Scan and recognize text documents, business cards, bills, and whiteboards, then share the results across your computers and with other people through the Cloud.
- Creaceed
- $9.99

<u>Screen Share</u>

join.me
- View someone's screen from your iPhone, iPad or iPod Touch. Pinch to zoom in and out of the shared screen for a better view.
- LogMeIn, Inc.
- Free

My Favorite Accessories

Camera Connection Kit
- Gives you two ways to import photos and videos from a digital camera: using your camera's USB cable or directly from an SD card.
- Apple
- $29.00

VGA Adaptor
- Put your slides, movies, photos, and everything else that fills your iPad or iPhone 4S screen on an even bigger screen — a VGA-equipped TV, monitor, or external projector for video mirroring. The Apple VGA Adapter mirrors exactly what you see on your screen so that everyone in the room can enjoy it.
- Apple
- $29.0

Headphone Splitter
- A headphone splitter allows you to plug two sets of headphones in to one output, such as an iPad.
- Dollar Store
- A Dollar ☺

Earphone with Remote and Mic
- Allows you to adjust volume, control music and video playback and even dictate into an iDevice.
- Apple
- $35.00

Suck UK Touch Screen Stylus
- Designed like a classic writing tool but used to navigate or "write" on an iDevice.
- Suck UK
- Approx. $12.00

Bluetooth Keyboard
- Cable-free keyboard uses Bluetooth technology to connect with your Mac or iPad.
- Apple
- $69.99

ZooGue Case Genius
- Adjustable to any angle with its Velcro design. The adjustable straps allow you to hang your iPad 2 just about anywhere. Securely mount it to your headrest in the car, or use it as a secure hand strap.
- ZooGue
- $50.00

Apps as a Resource

Appsfire Deal
- Update to free apps every day.
- Appsfire
- Free

Kindertown
- Learn about educational apps.
- Kindertown
- Free

Autism Apps
- A comprehensive list of apps that are being used with and by people diagnosed with autism.
- Touch Autism
- Free

Common Core Standards
- A great reference for students, parents, and teachers to easily read and understand the core standards.
- MasteryConnect
- Free

ViA
- Designed to help identify apps that are useful for adults and children who are blind or have low vision, including those with additional disabilities.
- Braille Institute
- Free

Great Online Resources

http://www.apple.com/education/special-education/
http://www.snapps4kids.com/
http://a4cwsn.com
http://www.funeducationalapps.com/
http://appsineducation.blogspot.com/
http://www.otswithapps.wordpress.com
www.appymall.com
http://www.wonderbaby.org/articles/ipad-apps
http://www.applevis.com/

Resource compiled by:
Nicole Feeney, Assistive Technology Specialist
860-286-3101
feeneyn@ciboakhill.org