

Introduction to iPad Accessibility Features for Blind and Low Vision Students Version 9.3

Diane Brauner
Educational Assistive Technology Consultant
Teacher of the Visually Impaired
Certified Orientation and Mobility Specialist

Ed Summers
Senior Manager, Accessibility and Applied Assistive Technology
SAS Institute

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Introduction

Curriculum Objectives

- Learn the basics of how to use an iPad
- Learn the iPad low vision features (Zoom, Large Print, Invert Colors)
- Learn the basic iPad VoiceOver gestures and features
- Learn how to apply these basic iPad accessibility features with academic students with visual impairments in mainstream classrooms

The *Introduction to iPad Accessibility Features for Blind and Low Vision Students* manual is being shared on the Paths to Technology website with permission from SAS Institute Inc.

Overview

The iPad is a handheld tablet computer with a multi-touch screen. Accessibility features for many types of disabilities are included in the iPad at no additional cost to the consumer. This manual will specifically address the accessibility features related to vision.

The target audience of this manual is teachers of the visually impaired. The goal of the manual is to provide an introduction to the material so that teachers of the visually impaired can enable academic students with visual impairments to use an iPad in mainstream classrooms.

VoiceOver: VoiceOver is a screen reader. With VoiceOver, you use simple gestures to physically interact with items on the screen. Simply touch the screen to hear an item's description, double tap to select an item, drag or flick to control or maneuver around the iPad. VoiceOver allows you to interact directly with the item in physical space on the iPad which allows you to understand the item's location and context within that space. When using VoiceOver, the iPad can be paired with a Refreshable Braille Display.

Zoom: Zoom is a screen magnifier. With Zoom, you can use simple gestures to zoom the entire screen or use Zoom Window to zoom a portion of the screen. Many iPad applications allow you to zoom in and out of images; only Zoom allows you to magnify the entire screen at any time –

everywhere, including the Home page. You can also choose various font sizes in Alerts, Calendar, Contacts, Mail, Messages and Notes.

Invert Colors: Invert Colors provides a higher contrast with the converted white on black display. Inverted Colors can be used with Zoom and VoiceOver.

All iOS devices (iPad, iPod Touch, iPhone) use the same operating system. This manual is specifically for the iPad; however, the majority of the information will generalize to all iOS devices.

This manual has been created specifically to be used in conjunction with the training course “Intro iPad Accessibility Features for Blind and Low Vision Students” offered by SAS. There are additional iPad accessibility trainings available.

Chapter 1: Settings

- 1.1 Connect Wi-Fi
- 1.2 Update iOS Software
- 1.3 Siri
 - “Hey Siri”
- 1.4 Spotlight Search/Siri Suggestions
- 1.5 Multitasking Gestures
- 1.6 Side Switch: Lock Rotation/Mute
- 1.7 Storage & iCloud Usage
- 1.8 Auto-Lock
- 1.9 Enable Restrictions
- 1.10 Keyboard
 - On-Screen Keyboards
 - Shortcuts
 - Keyboard Options: Split Keyboard, “.” Shortcut, Enable Dictation, Auto-Capitalization, Auto-Correction, Check Spelling, Enable Caps Lock, Predictive
- 1.11 Language and Region
 - iPad Language
 - Calendar
- 1.12 Invert Colors
- 1.13 Grayscale
- 1.14 Speech
 - Speak Selection
 - Speak Screen
 - Voices
 - Speaking Rate
 - Highlight Content
 - Speak Auto-Text
- 1.15 Larger Type
- 1.16 Bold Text
- 1.17 Button Shapes
- 1.18 Increase Contrast
 - Reduce Transparency
 - Darken Colors
 - Reduce White Point
- 1.19 Reduce Motion
- 1.20 On/Off Labels
- 1.21 Switch Control
- 1.22 Assistive Touch
- 1.23 Touch Accommodations
 - Hold Duration

- Ignore Repeat
 - Tap Assistance
- 1.24 Keyboard (under Accessibility)
 - Key Repeat
 - Sticky Keys
 - Slow Keys
- 1.25 Shake to Undo
- 1.26 Call Audio Routing
- 1.27 Home Button
- 1.28 Video Descriptions
- 1.29 Guided Access
- 1.30 Accessibility Shortcut (Triple-Click Home)
- 1.31 Speaking Rate
- 1.32 Speak Hints
- 1.33 Use Pitch Changes
- 1.34 Use Sound Effects
- 1.35 Speech
 - Enhanced Voices
 - Rotor Languages
- 1.36 Braille
 - Braille Display Output
 - Braille Display Input
 - Automatic Braille Translation
 - Braille Screen Input
 - Status Cell
 - Equations use Nemeth Code
 - Show On-screen keyboard
 - Turn Pages when Panning
 - Braille Translation
 - Alert Display Duration
- 1.37 Rotor Settings
- 1.38 Typing Style
- 1.39 Phonetic Feedback
- 1.40 Typing Feedback
- 1.41 Always Speak Notifications
- 1.42 Navigate Images
- 1.43 Large Cursor
- 1.44 Double-tap Timeout
- 1.45 Zoom/Zoom Window
 - Follow Focus
 - Smart Typing
 - Zoom Window
 - Show Controller
 - Idle Visibility
 - Zoom Region

- Maximum Zoom level
- 1.46 Sounds and Alerts
 - Change with Buttons
- 1.47 Passcode Lock
- 1.48 Do Not Disturb
- 1.49 Display & Brightness
- 1.50 Wallpaper
- 1.51 Home Screen App Placement
- 1.52 Camera and Photos

Chapter 2: Mainstream iPad

- 2.1 Physical Features
- 2.2 Home Screen
- 2.3 Search Screen
- 2.4 Accessing Apps
- 2.5 Organizing Apps
- 2.6 Managing Apps
- 2.7 Control Center
- 2.8 Notification Center
- 2.9 Notes
 - Share: Emailing/Printing a Notes Document
- 2.10 Maps
- 2.11 Reminders
- 2.12 Safari
 - Open/Close Web Page;
 - Open/Close Links on a Web Page
 - Open/Close Tabs
 - Copy/Select All/Define/Speak
 - Reader
 - Bookmarks/Reading List
- 2.13 iBooks
- 2.14 Review/Homework
- 2.15 Pairing a Bluetooth Keyboard

Chapter 2: iPad with Low Vision Features

- 2.1 Mainstream Magnification
- 2.2 Zoom
 - Zoom Commands
 - Adjust Zoom Size
 - Navigate the Zoomed Page
 - Zoom in on a Specific Location

- 2.3 Zoom Menu and Zoom Controller
 - Zoom Menu
 - Zoom Controller
 - Zoom Controller Commands
- 2.4 Zoom Window
 - Zoom Window Menu
- 2.5 Large Text
- 2.6 Invert Colors
- 2.7 Viewing Interactive Whiteboard with Join.Me App
- 2.8 Screenshot
- 2.9 Annotation App – SAS Gloss App
- 2.10 Speak Screen

Chapter 3: iPad with VoiceOver

- 3.1 Practice VoiceOver Gestures
- 3.2 Navigate the Home Screen with VoiceOver
 - Activate (Open) an App with VoiceOver
 - Close an App with VoiceOver
 - Move an App/Create a Folder
 - Move between Home Pages
- 3.3 Expose/Dismiss the Search Screen, Notification Center & Control Center
- 3.4 Screen Curtain/Speech On and Off
- 3.5 Basic Rotor Settings: Speech Rate
- 3.6 Basic Rotor Setting: Typing Modes
 - Notes with VoiceOver
- 3.7 Basic Rotor Setting: Navigating and Editing
- 3.8 Basic Rotor Setting: Selecting and Text Manipulation
 - Text Selection Rotor Setting
 - Manipulating Text
- 3.9 Basic Rotor Setting: Safari
- 3.10 iBooks
 - iBooks with VoiceOver
 - iBooks with Low Vision
 - Highlight Text (without VoiceOver)
 - Glossary
 - My Notes
 - Study Cards
- 3.11 Pairing iPad with APH 18 Refreshabraille
- 3.12 Brief Intro to Refreshable Braille Display
- 3.13 Hard Reset/Reboot