# Introduction to iPad Accessibility Features for Blind and Low Vision Students Version 1.2

Diane Brauner
Teacher of the Visually Impaired
Certified Orientation and Mobility Specialist

Ed Summers

Manager, Accessibility and Applied Assistive Technology

SAS Institute

#### **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

#### **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 up to 500 percent. 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 from 20 point to 56 point in alerts, Calendar, Contacts, Mail, Messages and Notes. With iOS 6, VoiceOver and Zoom work seamlessly together.

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 created with iPad screenshots and descriptions; however, most of the information will generalize to all iOS devices.

This manual has been created specifically to be used in conjunction with the training course "Basic iPad Accessibility Features for Teachers of the Visually Impaired" offered by SAS Institute. For more information about these trainings, go to:

http://support.sas.com/misc/accessibility/education/

#### **Outline**

### **Chapter 1: Settings**

- 1.1 Update iOS Software
- 1.2 Rotor Settings
- 1.3 Multitasking Gestures
- 1.4 Triple-Click Home
- 1.5 Speech Rate
- 1.6 Auto-Lock
- 1.7 Side Switch: Lock Rotation/Mute
- 1.8 Connect Wi-Fi
- 1.9 Passcode Lock

#### **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 Notes
  - o Share: Emailing/Printing a Notes Document
- 2.8 Maps
- 2.9 Reminders
- 2.10 Safari
  - Open/Close Web Page; Open/Close Links on a Web Page
  - o Tabs
  - Copy/Select All/Define/Speak
  - o Reader
  - Bookmarks/Reading List
- 2.11 iBooks
- 2.12 Review/Homework
- 2.13 Pairing a Bluetooth Keyboard

# **Chapter 3: iPad with VoiceOver**

- 3.1 Practice VoiceOver Gestures
- 3.2 Navigate the Home Screen Apps
  - Opening/Closing Apps
  - Move Apps/Create Folds
  - Move between Home Pages
- 3.3 Screen Curtain/Speech On/Off
- 3.4 Basic Rotor Settings: Speech Rate
- 3.5 Basic Rotor Setting: Typing Modes
- 3.6 Basic Rotor Setting: Editing
- 3.7 Basic Rotor Setting: Safari
- 3.8 Basic Gestures in iBooks
- 3.9 Pairing iPad with APH 18 Refreshabraille
- 3.10 Hard Reset/Reboot

# **Chapter 4: iPad with Low Vision Features**

- 4.1 Mainstream Magnification
- 4.2 Zoom
- 4.3 Large Text
- 4.4 Invert Colors
- 4.5 Viewing Interactive Whiteboard with Join.Me App
- 4.6 Screenshot