Accessing Smart Devices
With a Vision Impairment
Objectives of workshop:

• Go through accessibility features for Apple and Android Operating systems
• Useful apps for students
• Useful accessories for students
What is a Smart device

- A **smart device** is an electronic device, generally connected to other devices or networks via different protocols such as Bluetooth, NFC, WiFi, 3G, etc., that can operate to some extent interactively and autonomously.  (Wikipedia, 2014)
Smart devices

- Smart phones
- Smart Tablets
- Smart watches
- Smart glasses
- Smart boards
- Smart appliances
Jargon demystified

- Apple
- Android
- Windows
- Google
- Apps
- OS
- iOS 7
- KitKat, JellyBean, Lollipop
- AppStore
- PlayStore
- Talkback
- VoiceOver
Basic gestures

• Tap
• 2 finger double tap
• Drag
• Flick
• Swipe
• Double tap, triple tap
• Drag and lift
• Down and left
• Up and right
Apple Accessibility
Apple Accessibility

- Text options (Large text, bold text)
- Button shapes
- Invert colours
- Zoom (pinch zoom, Zoom)
- VoiceOver
Font Sizes
Standard Vs Large

This standard font

Large font
Bold text

Large font

Bold
Pinch zoom

- Place 2 fingers together in the middle of the photo and then spread them away from each other.

- Place 2 fingers apart in the middle of the screen and move them towards each other.
Zoom

- 3 fingers double tap to toggle zoom on and off.
- Use 3 fingers to move around the screen when zoom is on.
Speak Screen

• IOS8 operating system has a function that enables vision impaired users to listen to what is on the screen, without using VoiceOver.

• Activate function in settings under accessibility
  • swipe down with 2 fingers from the top of the screen to hear the content that is displayed on the screen.
VoiceOver basic

To activate go to: Settings > General > Accessibility > Voiceover

VoiceOver speaks items on the screen:
• Tap once to select an item
• Double-Tap to activate the selected item
• Swipe three fingers to scroll
Voiceover - advanced navigation features

The rotor is a gesture that allows you to choose navigation, input and output options whilst VoiceOver is activated.
Android Accessibility
Android Accessibility

- Font sizes
- Bold text
- Invert colours
- Magnification
- Talkback
Talkback Basics

How to activate TalkBack (can vary slightly) –
Settings → Accessibility → Talkback

Some things to consider –
- Phones running on OS 3.0 and earlier may require talkback to be downloaded (IDEAL accessibility)
- OS 4.2 and above has magnifier and talkback
- Older android phones can not be updated
Basic gestures

• Magnification
  – Triple tap to activate (a blue border will come up)
  – Pinch to zoom further
  – 2 fingers to navigate around screen

• Talkback (explore by touch recommended)
  – Tap – listen
  – Double tap – select
  – Swipe – to go to next element
  – 2 finger swipe to navigate/scroll
Additional gestures

• Gestures can be customised
• Down and left – back
• Up and left – home

• ‘quick navigation rotor’ (available on 4.3 and newer)
• Up and right – granularity rotor
• Down and right – pause feedback (top left), talkback settings (top right)
Quick navigation bar
Siri/Google Now

• Make phone calls
• Send and read text messages and emails
• Create appointment in calendar or set reminders
• Do mathematical calculations
• Set alarm or timer
• Open up an app
• Search the web
• Turn accessibility features on/off *
• Use maps to locate nearby places or navigate to a destination *
Dictate

Ensure Siri is turned on for this feature to work

• Dictate works whenever a keypad comes up on screen and when the device is connected to internet.

• Enables you to speak into the device which is then converted into text

• Useful in Messages, notes, safari.
Shortcuts, Apps, Tips and Tricks
Accessibility short cuts

Answering calls
Double tap with 2 fingers to answer and end incoming calls

Turning On /Off Voice Over
Triple click home button or if you have IOS 7 ask Siri to turn it on/off for you.
Accessibility Shortcuts

Answering calls
Select function in settings for power button to answer and terminate calls

Talk Back
You can add an accessibility shortcut from the home screen.
Accessibility short cuts

What does shaking the device do?

Undo function removes the last typing/dictation

Reads the whole screen when in talkback in some phones
Simplified phone options

- Hide unwanted apps
- Simplify background
- Lock rotation
- Altering lock times
- Password controls (iPhone 5s fingerprint scanner)
- Widgets
Specialised Apple Apps

- Color ID Free
- CamFind
- Prizmo
- KNFB reader
- VoiceDream reader
- VO Calendar
- MagLight
- VO Tutorial

Formerly the Association for the Blind WA

www.visability.com.au
Specialised Android apps

- BIG Launcher
- PointFinder
- Big SMS
- Nova Launcher
- Stop Announcer
- Zoom PLUS
Non-specialised Apps

Food Switch
Woolworths
Non-specialised Apps continued

Paper

STO card

CVS

123 456 78

Problems scanning?
Non-specialised Apps continued

- Camera
- iBooks
- AudioNote
- Log me in
- Audible
- Tune In Radio
Accessories

Formerly the Association for the Blind WA
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Thank you & Any Questions?

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