Language and Literacy for People with Low Vision and Dyslexia

SPEVI
Brisbane
January 2017

What we'll cover

- What are SPEDs?
- Accessibility features of iOS devices
- Apps and accessories made to support individuals with a special need
- Apps which can be repurposed to support individuals with a special need
- Resources

Specific Learning Disabilities/Disorders/Difficulties/Differences

- Dyslexia (reading), Dysgraphia (written expression – motor based or language based), Dyscalculia (mathematics)
- Executive Functioning
- ADHD
- In common: neurological in nature
- Often in common: attention difficulties, poor working memory, poor organisation
- Impacts not just spelling and reading but background knowledge, comprehension, vocabulary, speed, ability to complete assessment, self esteem.
- Best practice is early intervention with evidence based methods and accommodation
- UDL – Universal Design for Learning

Why iPad?

- Apple showcases accessibility
- Market share – availability and quality of apps and devices
- Other devices – Android, smart phones, Windows

Vision

Hearing

Physical and Motor Skills

Learning and Literacy
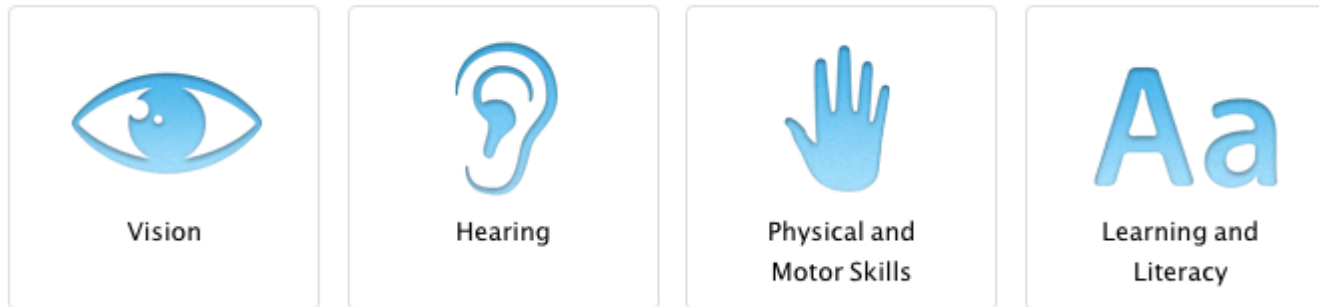
Jargon/Practicalities

- iOS
- Accessibility
- Basic navigation
- Wi-Fi or no Wi-Fi?
- Cellular or no cellular?
- Storage capacity
- Apple Care and Apple Care +
- App Store (and Categories)
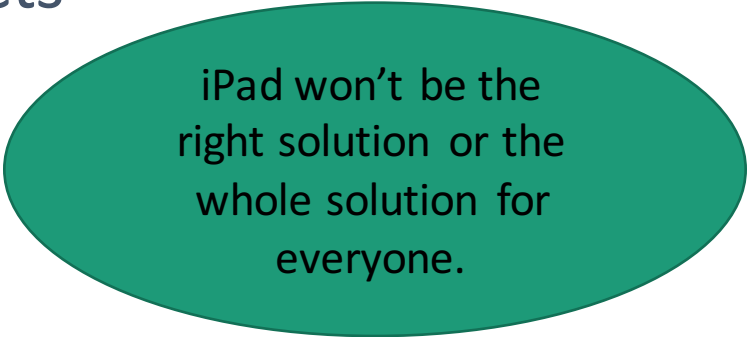- Apple ID
- Work vs play

Designing AT solutions

Edyburn - five essential variables must be taken into account:

- the person,
- the task,
- the context/environment,
- the technology tool,
- the outcome

Edyburn, D.L. (2009). Using research to inform practice. *Special Education Technology Practice*, 11(5), 21-28.

Designing AT solutions

- the person – particular challenges and strengths

- the task – what are they trying to achieve in this instance?

- the context/environment – school/home/work, Wi-Fi or no Wi-Fi, quiet or noisy, support or no support, rules to abide by

- the technology tool – cost, portability, ease of use

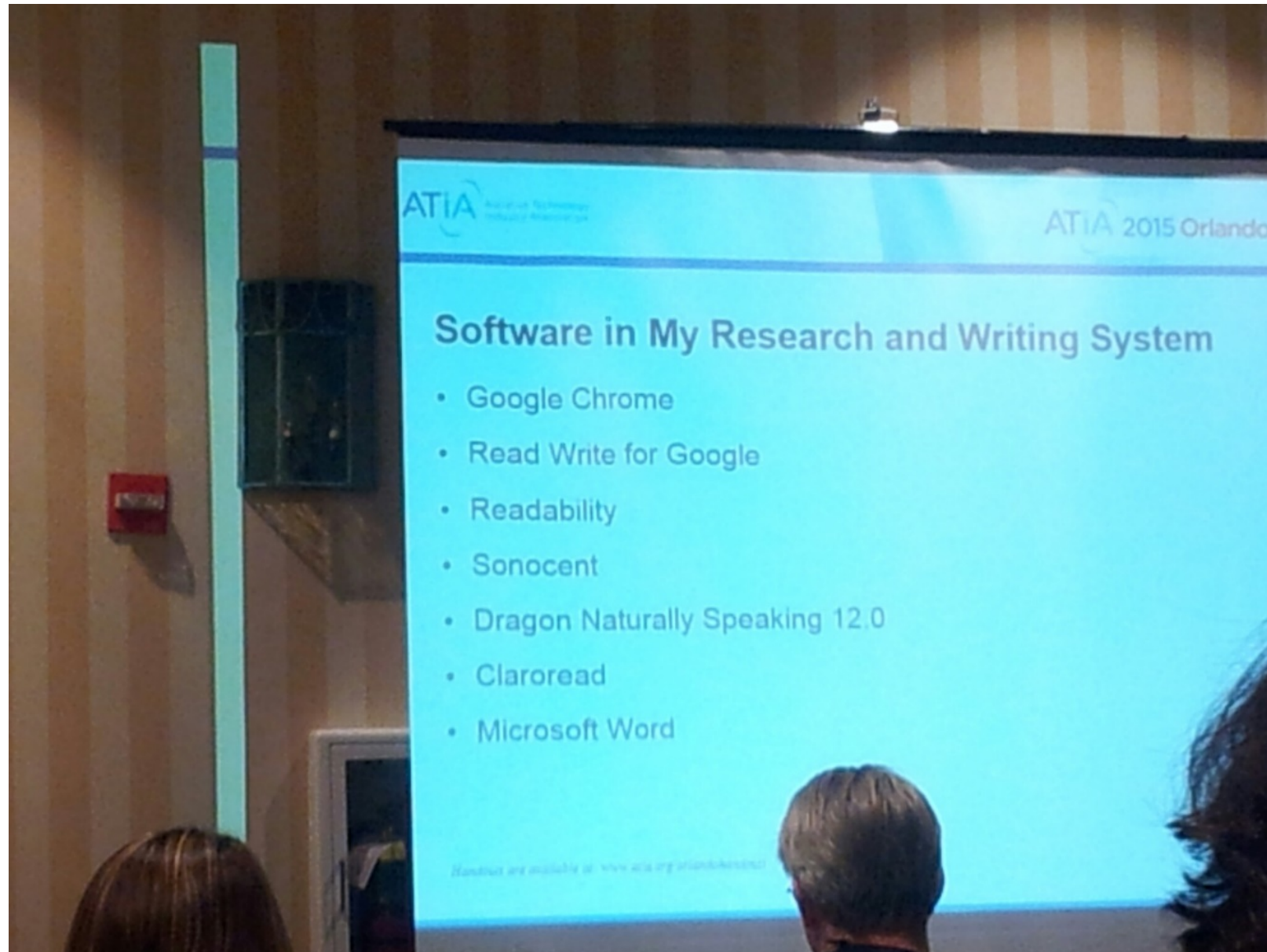- the outcome – longer term or deeper effects

iPad won't be the right solution or the whole solution for everyone.

Aim

- Smooth and seamless
- Personalised
- Able to be self-operated and self-maintained as much as possible

This takes time, negotiation and adjustment along the way!
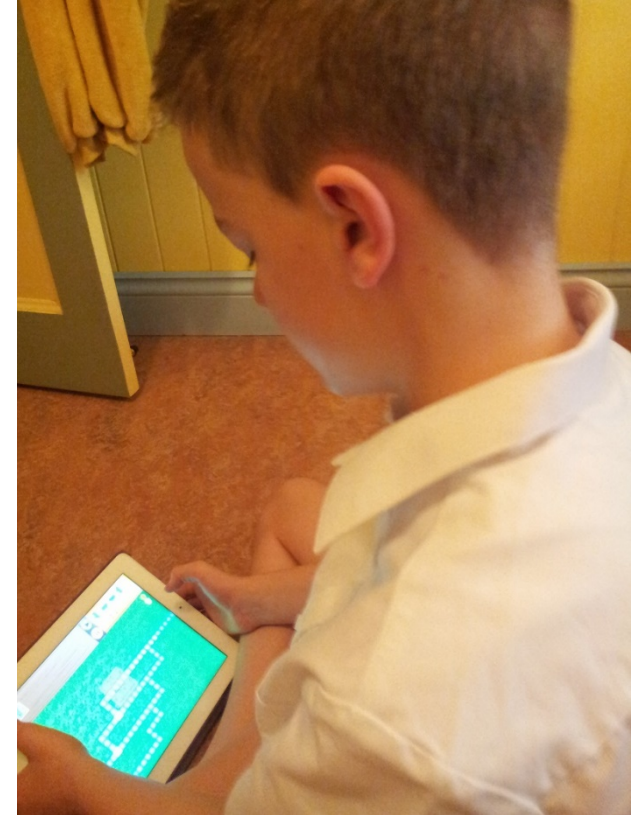
Jacqui Kirkman Mac & PC Doctors

Inbuilt Accessibility Features - Vision

- Voice Over (with Braille option)
- Speak Screen and Speak Selection
- Siri
- Dictation
- Magnify and Zoom
- Display Accommodations
- Font Sizes
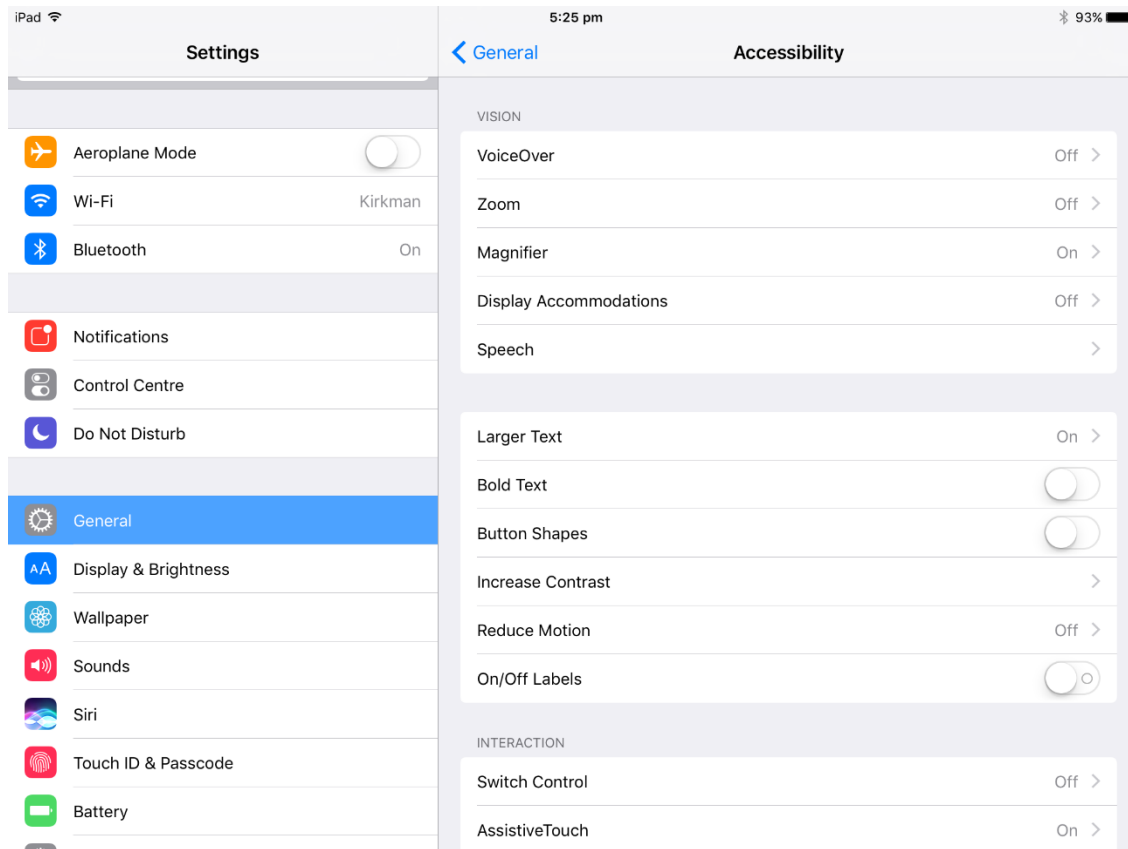- Pronunciation Editor
- Clips on website here http://macandpcdoctors.com.au/accessibility/vision/
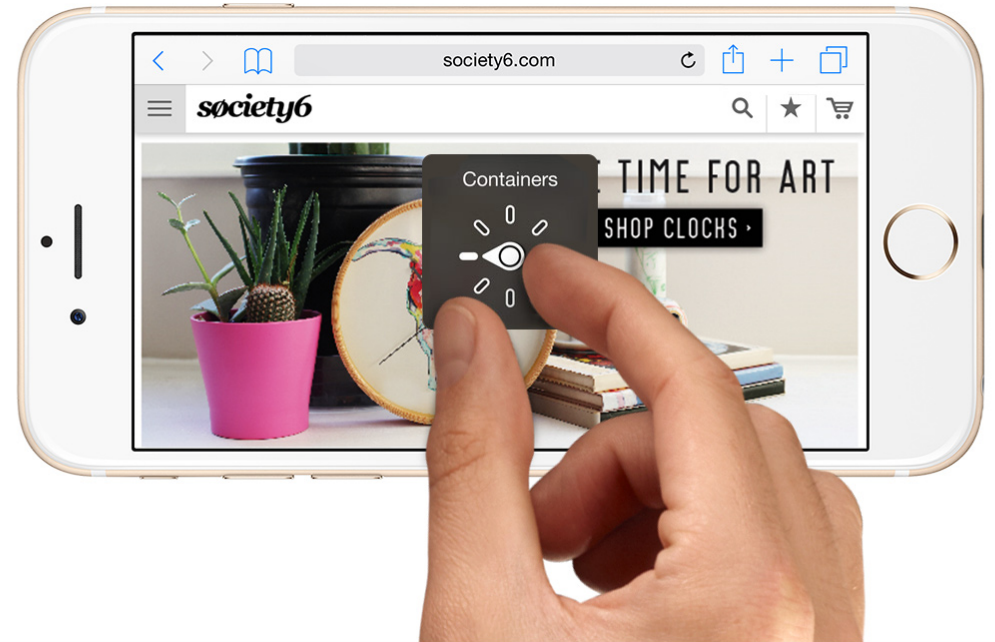
Inbuilt Accessibility Features – Learning and Literacy

- Speak Screen and Speak Selection

- Siri

- Dictation

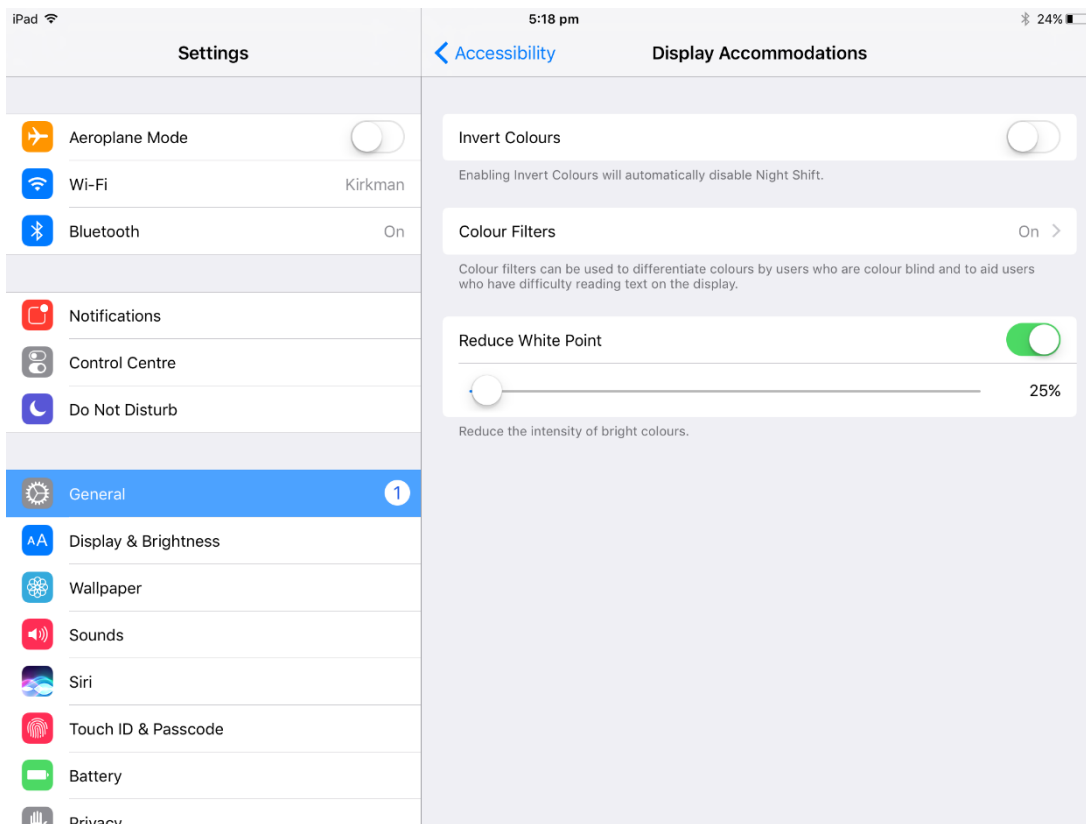- Predictive Text

- Typing Feedback

- Dictionary

- Safari Reader

Jacqui Kirkman Mac & PC Doctors
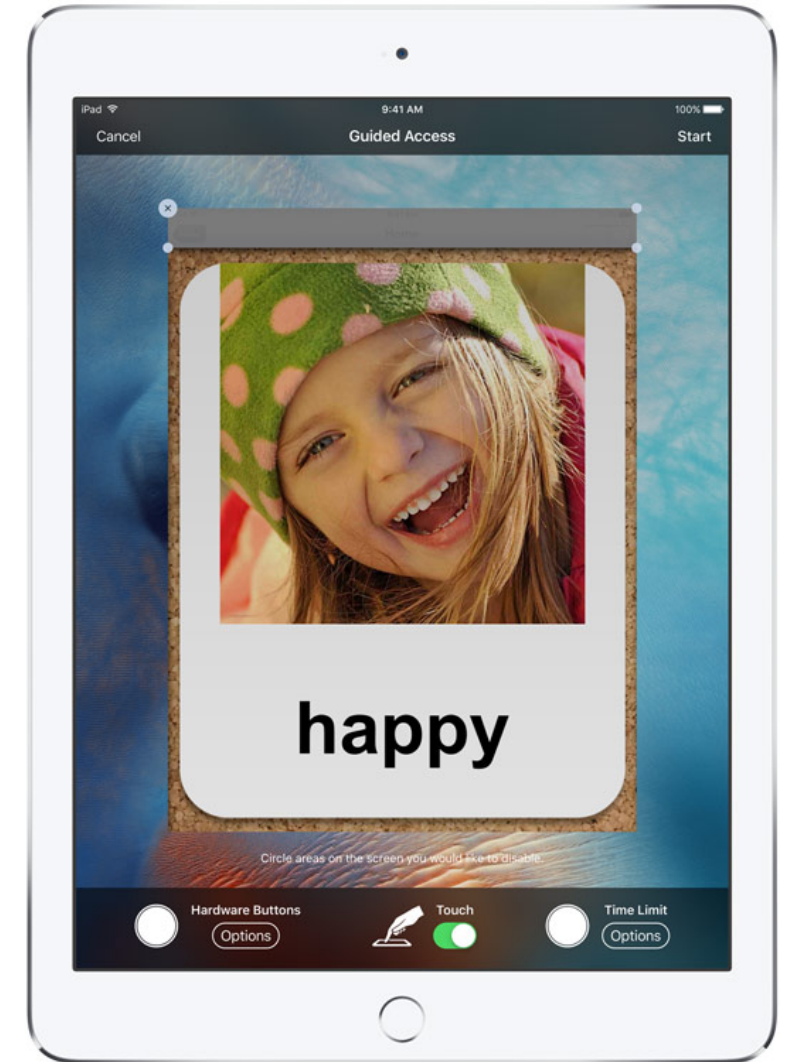
Display accommodations

Adjustable font size
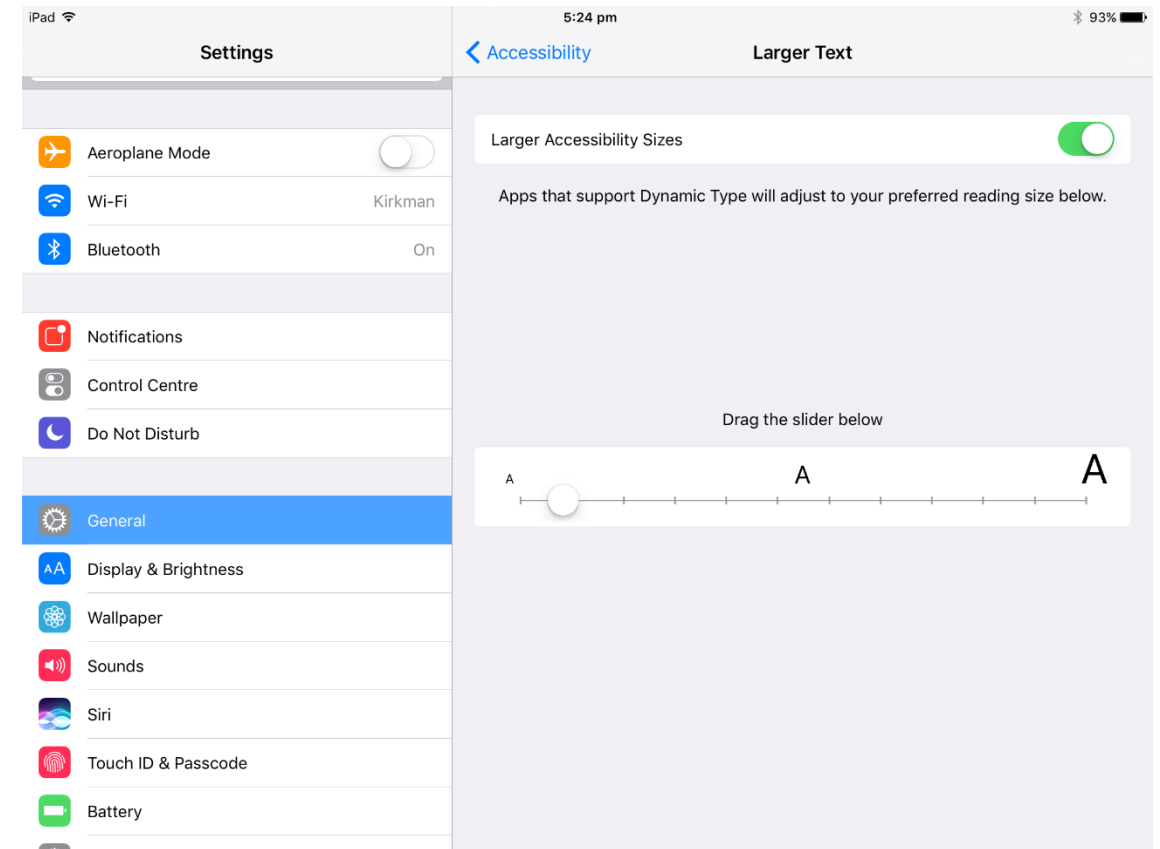
Display accommodations - colour

Reduce white point

Colour filters

Jacqui Kirkman Mac & PC Doctors
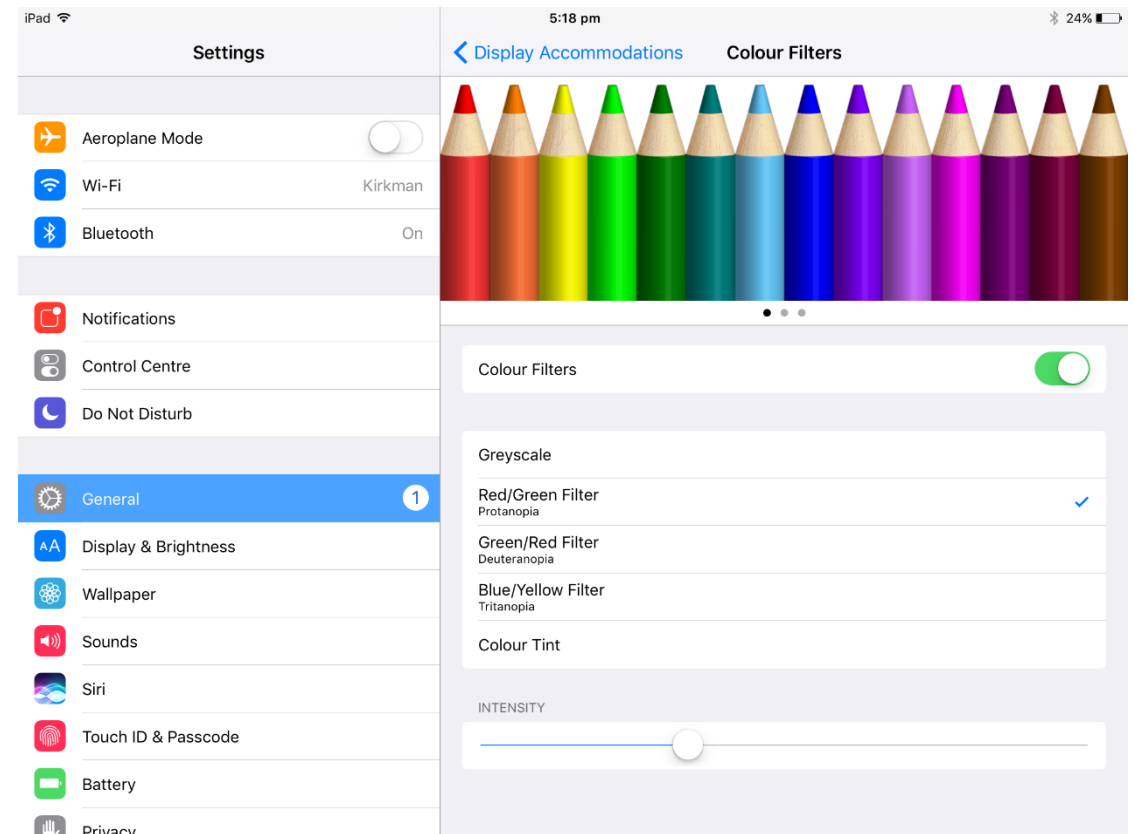
Display accommodations - colour
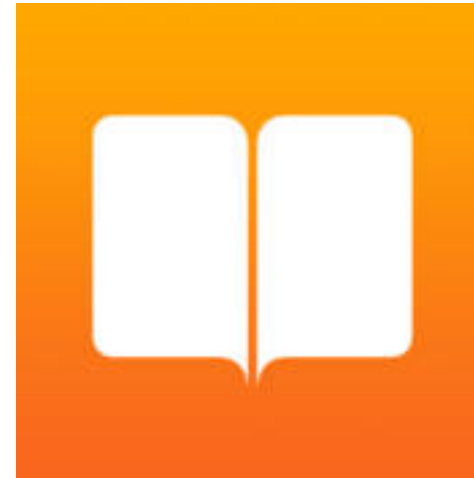
Invert colours
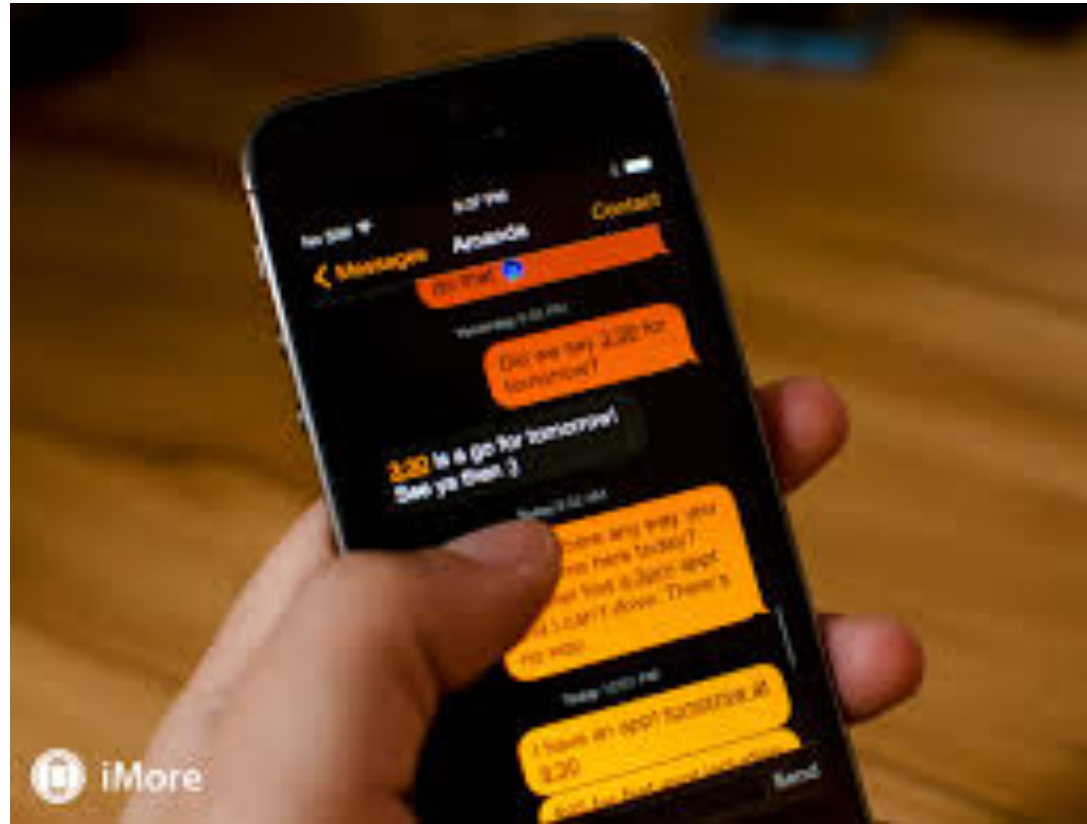
Photo courtesy of iMore.com.

Can't get a screenshot!

Other "out of the box "Accessibility Features

- Reminders
- Notifications
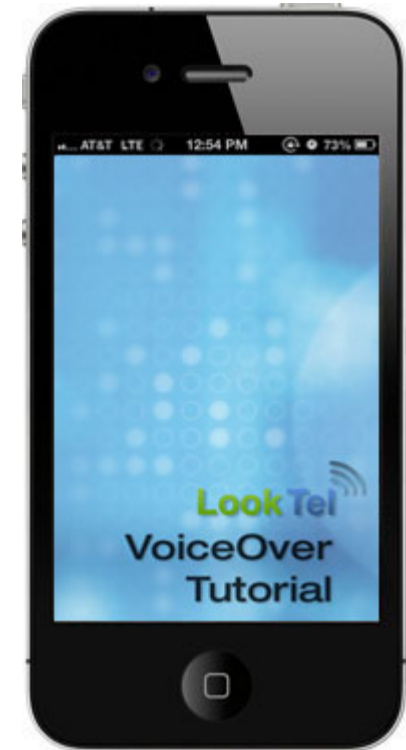- Integration with other Apple devices including Apple Watch
- iBooks

Apps/Online tools for Developing Spelling and Reading

- Nessy (online) and Hairy Phonics apps
- Reading Doctor
- OzPhonics
- Reading Eggs

Apps for Learning Voice Over

- VO Starter
- LookTel VoiceOver Tutorial
- Ballyland Magic App
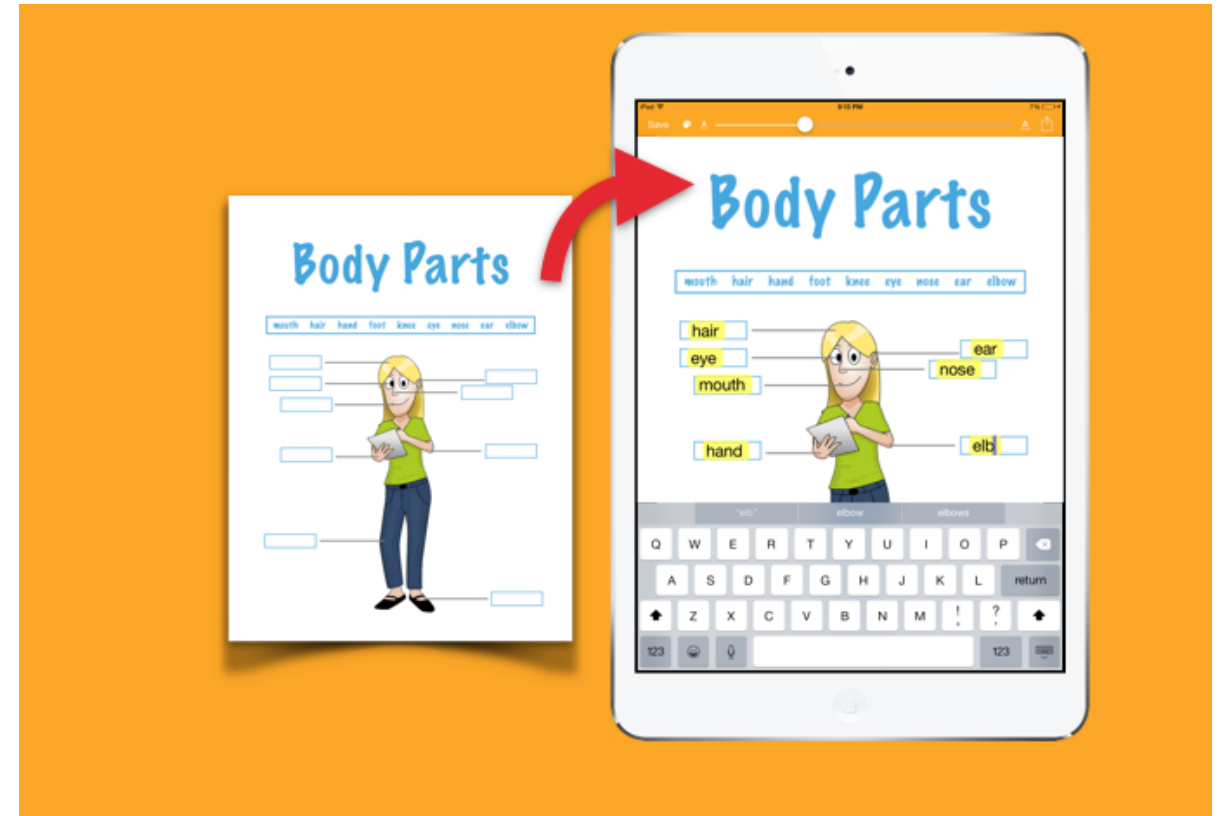
Working with text - Writing

- Think about workflow- handover to different devices, exporting, access to wifi/data, keyboard

- Inbuilt accessibility features in Notes or Pages.

- Speech to text: Dragon (free), Voice Dream Writer ($14.99), Proloquo4Text ($179.99)*

- Text prediction: Read & Write for Google by TextHelp (subscription), iReadWrite, Ginger Page, Typ-O-HD! ($22.99), Spell Better (free).

- *sometimes used as AAC
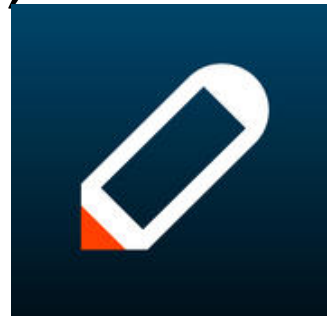
Working with text – writing on forms/worksheets

Filling in Forms

- SnapType (lite or $7.99)
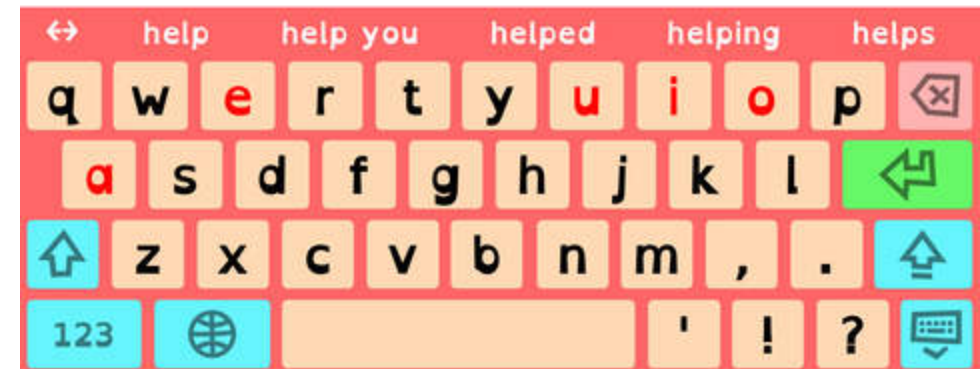- Adobe Acrobat Reader
- iAnnotate ($14.99)

iPad keyboards

- Physical keyboards
ClamCase Pro,
Logitech Keys to Go

- Third party app keyboards –
Keedogo Plus ($4.49), Keeble ($38.99),
DyslexiaKey (free)

Working with text - Reading

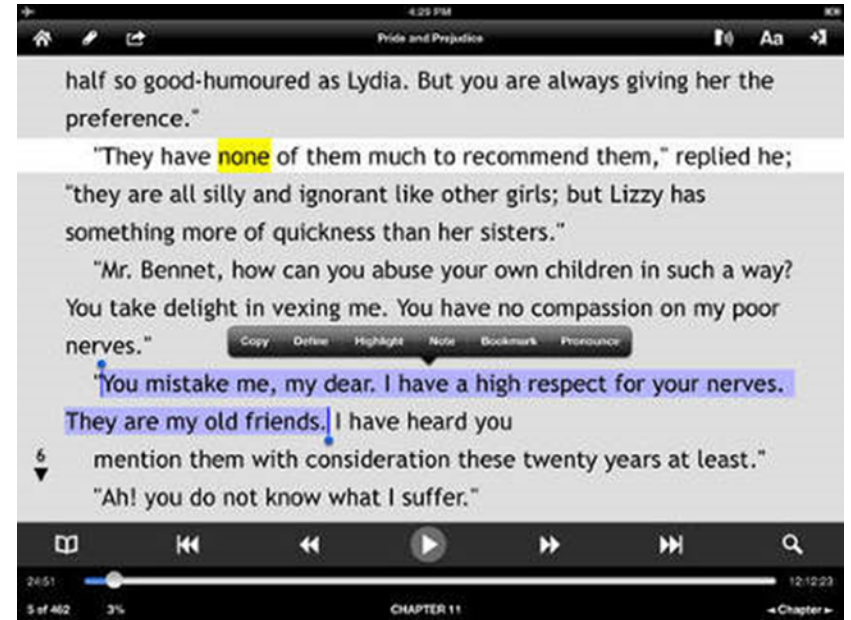## OCR

- Hard to find a good free one for iPad (Office Lens for iPhone, OneNote for desktop)
- Prizmo ($14.99), IRIScan toWord ($4.99)
- Portable scanning device such as IRIScan Book 3 ($129)
- Fiddly, multi-step, formatting sometimes lost
- Find/Use a digital version

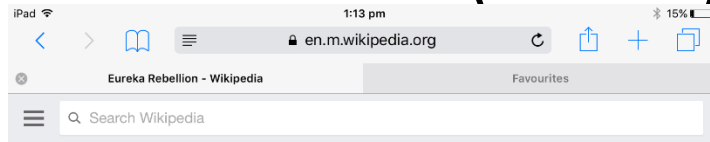# Working with text - Reading

Text to speech

- can use Speak Screen, change font, voice, change display, pause, reread

- iBooks

- OverDrive (BCC Libraries have membership)

- BorrowBox (BCC Libraries have membership)

- Voice Dream Reader ($22.99)

- Read2Go ($30.99)

- Voice of Daisy ($25.99)

- Kindle

- Audible audio books

- Vision Australia library

Working with text - Reading
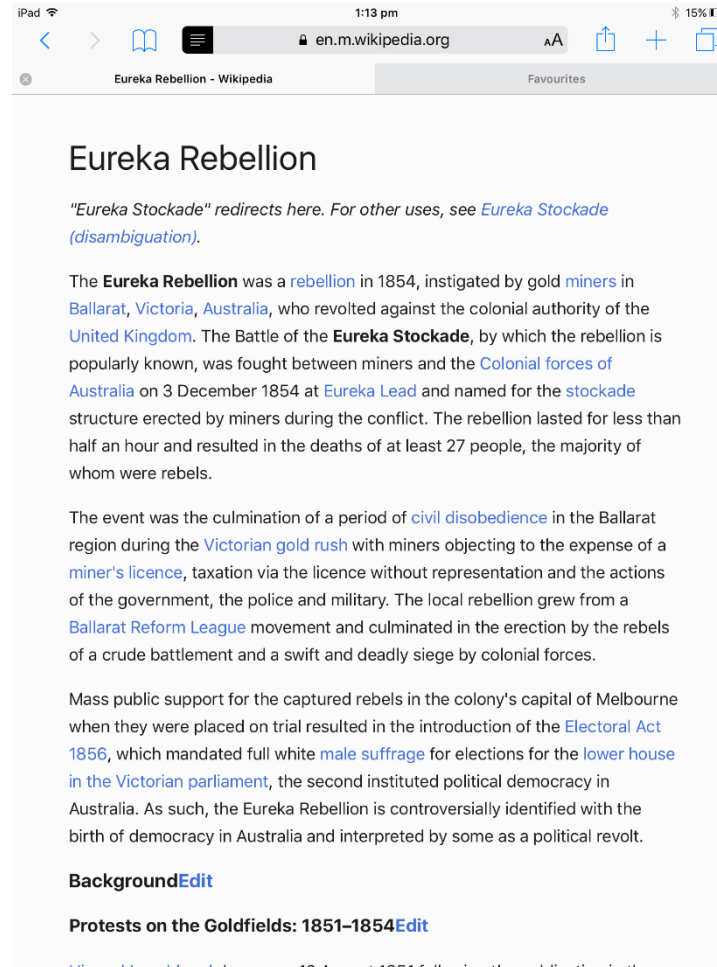
Readability

Safari Reader (built in)

Apps:
- Read & Write for Google by Texthelp (subscription)
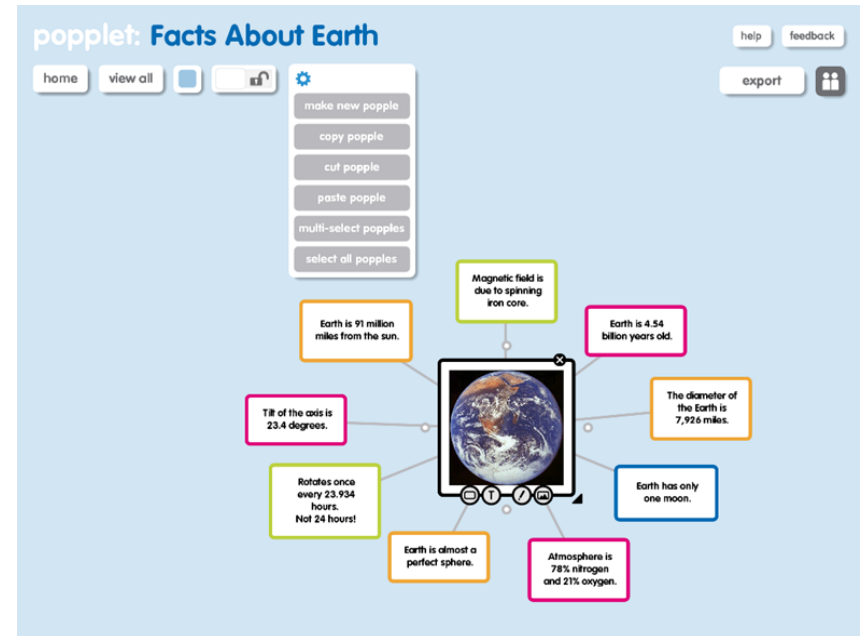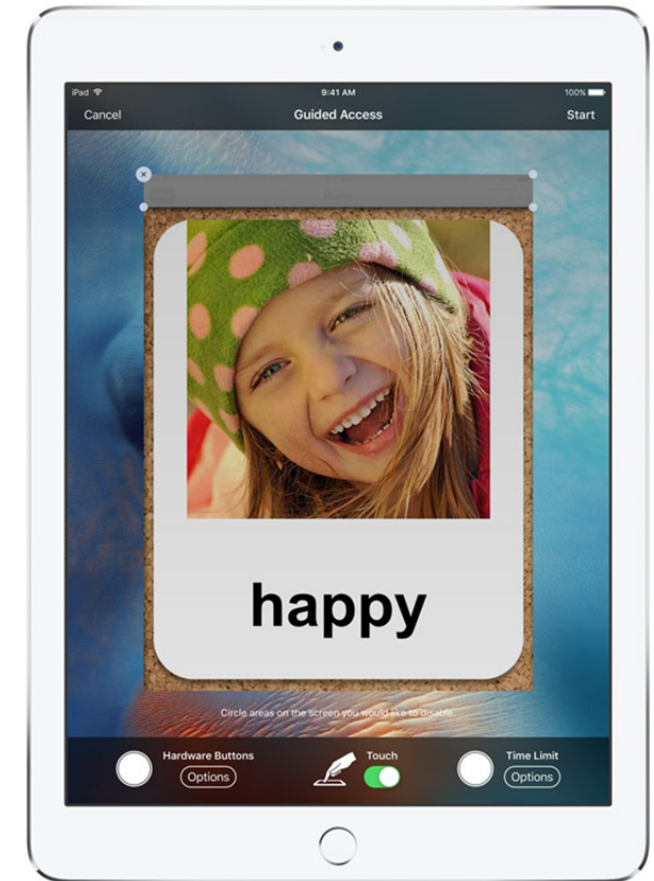- Readability ????

Organising and planning work – Mind mapping

- Popplet

- Kidspiration/Inspiration* (lite and pro versions)

- Tools4Students ($1.49)

* compatible with Voice Over, Jaws and Orca

Organising and planning work - Workflow
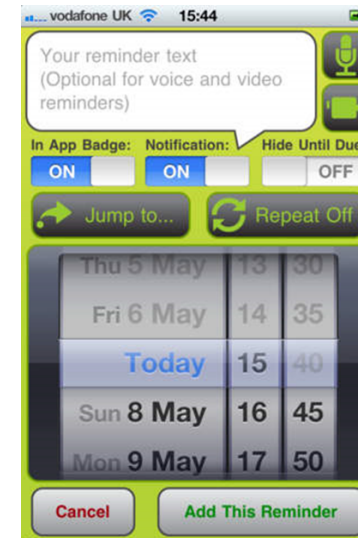
- Workflow – OneDrive, Google apps, iCloud

- Make your own icons

- Make Siri work for you

- Spotlight search

- Guided access

Reminders and life

- Reminders and Notification (inbuilt)
- Google notifications synched with Google Calendar
- Alarmed
- Forgetful?
- Remember the Milk
- Wunderlist (collaboration)
- Clue
- Medication reminders
- Email tags and categories
- Find my iPad, Tile

Reminders and life - CanPlan

- promotes independence and builds confidence
- helping people with cognitive challenges complete tasks successfully
- virtually any activity can be broken into a sequence of easy-to-follow steps, illustrated by photos and reinforced with optional text and audio
- scheduling and reminder features ensure each task gets done on time
- free

Reminders and life - Todoist

- can categorise
- GMail extension
- gamified
- alerts for time or place,
- pay for constant synchronising, free for once a day synchronising between devices
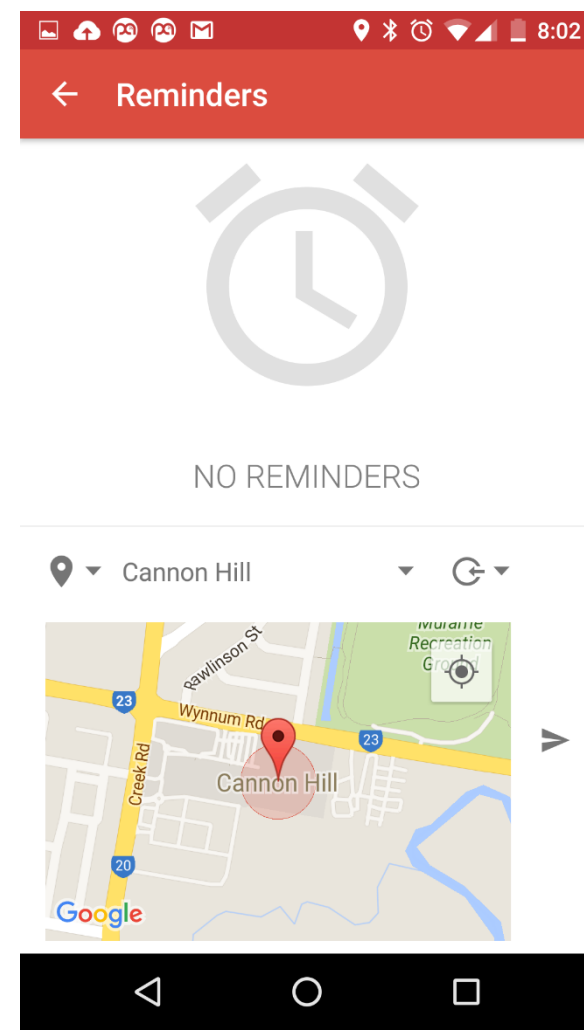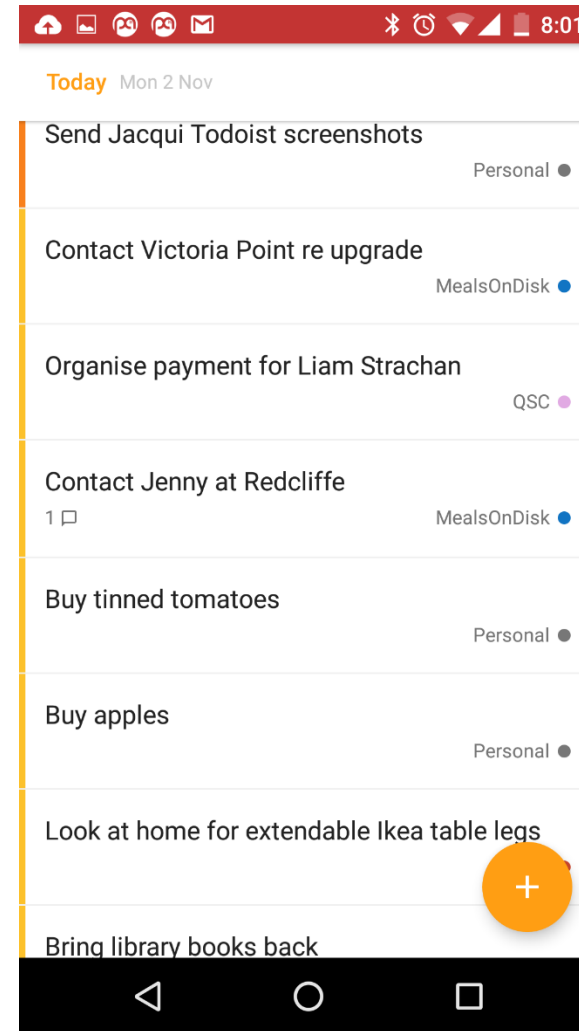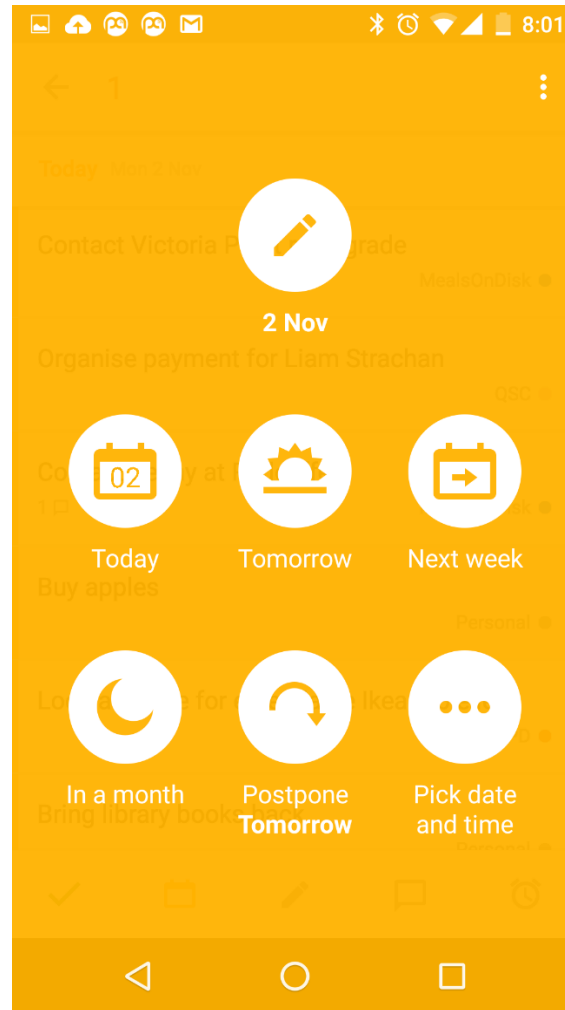
Reminders and life - IFTTT

- If this, then that
- Create "recipes" based on location, time, events or social media alerts

Jacqui Kirk
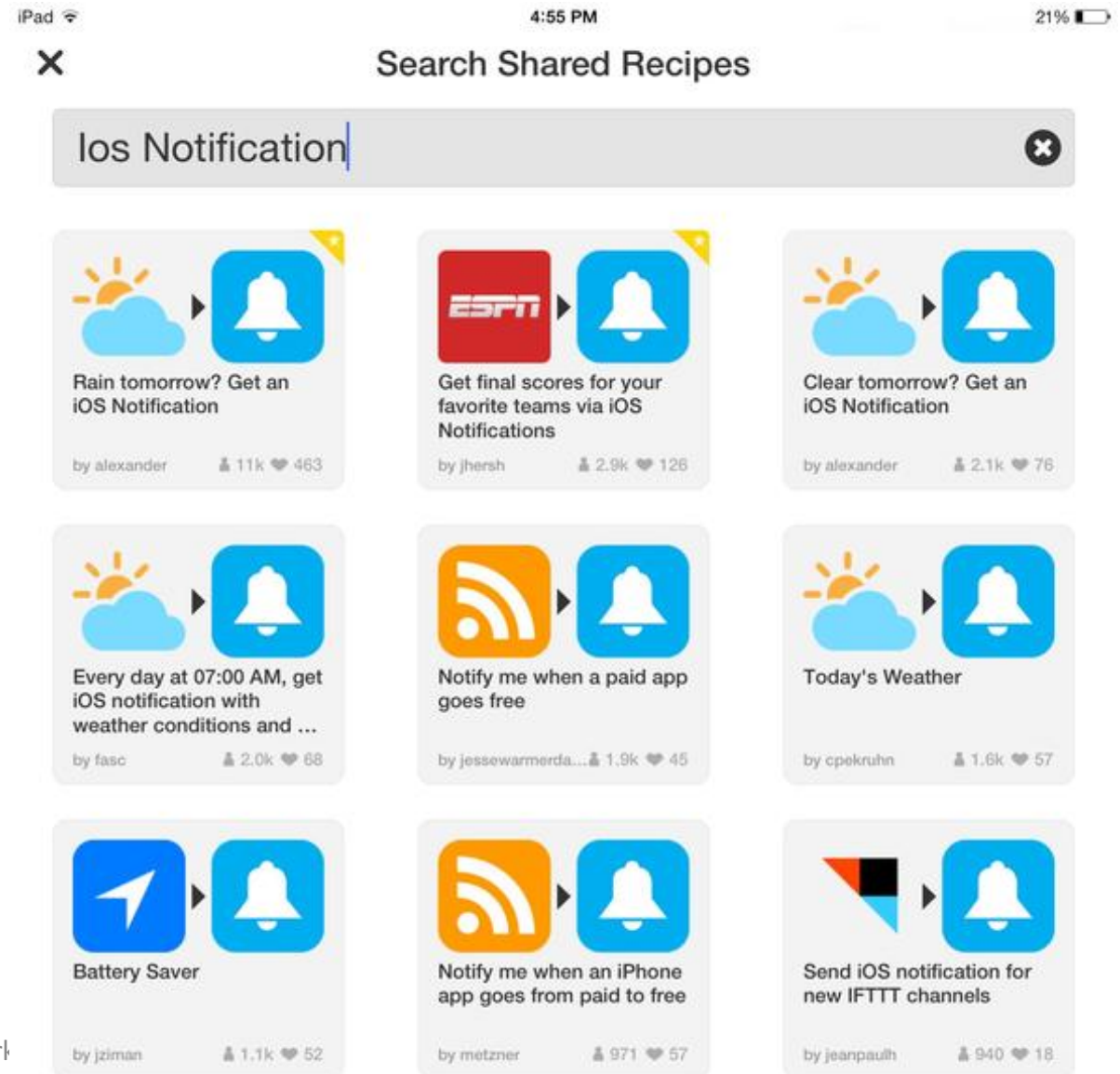
Reminders and life apps

- Habits: Habitica/HabitRPG, Proof
- Goals: LifeTick, Momentum
- Mental health and wellbeing: meditation, prayer
- Fitness and diet
- Health – medication reminders, blood sugar and blood pressure trackers

Resources

- Blogs
- Twitter (#AT)
- Facebook
- ATIA webinars and conference
- NDIS updates
- Disability advocacy associations
- Apple Consultants Network
- QIAT forum. Join at http://lsv.uky.edu/scripts/wa.exe?SUBED1=qiat&A=1

Resources

- Vision resources on our website
http://macandpcdoctors.com.au/accessibility/vision/

- Literacy and Learning resources on our website
http://macandpcdoctors.com.au/accessibility/learning-and-literacy/

- My ScoopIt! Feed on AT and Learning Disabilities
http://www.scoop.it/t/learning-disabilities-and-assistive-technology

- Accessibility section of Apple website
http://www.apple.com/au/accessibility/ios/

- Siri as personal assistant - http://www.apple.com/au/ios/siri/,
https://hey-siri.io/dl/Hey-Siri.pdf

- Forum about Apple products for vision impaired users -
http://www.applevis.com/

- Dyslexia iBook by Jeanette Davies

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