

# ITOD 2011

## Technology for students with hearing impairments and additional diverse learning needs

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# Today...

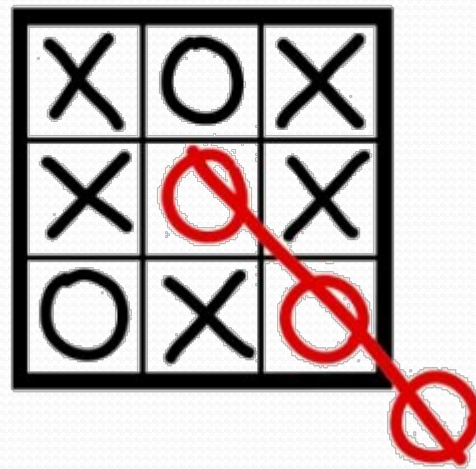
- Quick update – What is happening ‘Out there’?
- Programming & Justification
- iOS built-in accessibility features
- Case Study –
- Look at some hardware & apps
- Open discussion & Question time

# Couple of Cautions

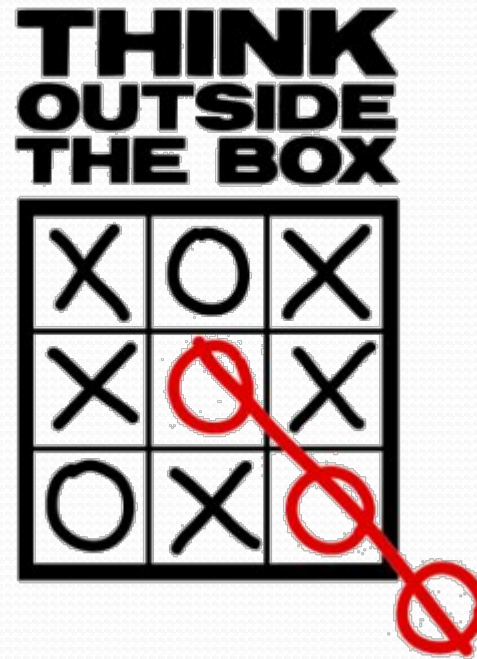
- Technology must make your life easier or more manageable.
- Needs to be useful and serve a purpose.
- There's always a 'learning phase'.



# Today...



# Today...



# Quick Update

- Where are we in August 2011?
  - Various education Systems trialling in range of settings
  - Victorian iPad trial
  - Large number of individual schools private & public
  - Teachers taking initiative
  - Other professionals such as Speech Therapists

# Quick Update

- Some observations
  - Moving from trials to implementing
  - Results more or less purely observational
  - Moving from this to formalising findings

# Some quotes

- *“People were drawn to it because it was a “recognised” or “known” piece of technology rather than being standoff-ish with an unknown communication device”*

*Glenda Watson Hyatt – Adult with Cerebral Palsy*

<http://www.doitmyselfblog.com/>

# Some quotes

- *“With iPads, we have found them to be so powerful in personalising learning for our students. It's been fantastic seeing the applications that have been released, catering for so many needs we have at our school. Where other technology has failed in engaging students in meaningful learning, I can positively say iPads have succeeded.”*

***Dawn Hallett – iPad Coach Warringa Park SSP  
Victorian iPad Trial***

# Some quotes

- *“ I have found some great apps that supplement most of my sessions. These apps cover a wide range of skills such as articulation, syntax/grammar, vocabulary/semantics, pragmatics, literacy and augmentative and alternative communication (AAC). As a consequence, I am doing less printing and laminating which is better for the environment! The graphics of apps are very appealing to most children, so it sometimes motivates children more than a photocopied “worksheet.”*

***T. Ellaby  
Private Speech Therapist***

# Programming Issues

- What sort of goals?
- What do you want to achieve? (student engagement ok... but there has to be more to it)
- Why do you want to use iPads? (or any technology for that matter)
- What about developing training for teachers... sort of doing that now.

# Programming Issues

- **SETT** framework (*Joy Zabala 2005*)
  - Student
  - Environment
  - Tasks
  - Tool(s)
- See [www.joyzabala.com](http://www.joyzabala.com)
- *Spectronics Inclusive Learning Technologies Conference  
May 2012 – Gold Coast.*

# Programming Issues

- No need to ‘reinvent the wheel’
- Make use of the internet to find information about how other teachers use technology/specific apps
- Write your own reviews and share!
- See all of the [Victorian iPad Trial Documents](#)
- Kids might end up teaching you a little

[Click here to go view iPad app  
rubric – by Kathy Shrock](#)

[Click here to view](#)  
[eskillslearning.net app rubric](#)

To access the sample app  
evaluation document by Kathy  
Schrock click here

- <https://sites.google.com/site/schrockipad/>

# Accessibility Options

<b>Name of Function</b>	<b>Purpose</b>	<b>Accessed through:</b>
<b>Closed Captioning</b>	The iPad can display subtitles and closed captioning when playing movies and podcasts that support this feature.	When searching for a specific genre in iTunes, there is an option to search for media that contains closed captioning only.
<b>Mono Audio</b>	Re-route both the left and right channel-audio into both headphones so they can be heard in either ear.	Settings- Accessibility- Mono Audio.

# Accessibility Options

<b>Speak Auto-text</b>	If this function is enabled, as you're typing, a suggested word will be spoken to you at the same time as being shown on the screen.	Settings- Accessibility- Speak Auto-text.
<b>VoiceOver</b>	VoiceOver speaks items on the screen at a selected speed.	Settings- Accessibility- VoiceOver.

# Accessibility Options

<b>White on Black</b>	To achieve a higher contrast, the iPad screen can be set to display white text against a black background.	Settings- Accessibility- White on Black.
<b>Zoom</b>	Allows you to magnify the screen up to five times its size.	Ensure the zoom function is set to On through Settings- Accessibility- Zoom. Double tap on the screen with 3 fingers, then slide them up the screen until you have zoomed in to your required size. Reverse this action to change the screen back to the normal size.



ABC iView



# Diverse Learning Needs

- Quite challenging to find solutions that fulfil EVERY need
  - Do we deal with each need separately?
  - Do we have a holistic view of student?

# Diverse Learning Needs

- What are we actually trying to achieve?
  - PLP/IEP Goals
  - Use of technology
    - Supporting Access to Curriculum
    - Fostering independence
- What do others on the 'team' think or want?

# Student – Vision & Hearing

- Has CHARGE Syndrome
- Genetic Condition
- Wide range of birth defects
  - Mild-Severe H/L
  - Poor vision
  - Other aspects not educationally relevant

# Be careful with...

- Posture of student when using ANY technology
- Keyboard colour/contrast
- Technology becoming a distraction

# Some solutions

- Prop up or mount device in a suitable location
- Use USB keyboard via Camera Connection Kit that has different coloured keys
- Hide device if needed

# Apps in use

- Super Duper Publications – Story Starters
- Corkulus
- Pages
- ABA – Flash Cards ([kindergarten.com](http://kindergarten.com))
- Australian Oxford Dictionary

# Story Starters



# Corkulus

New



Old



Mean



Handsome

Purple



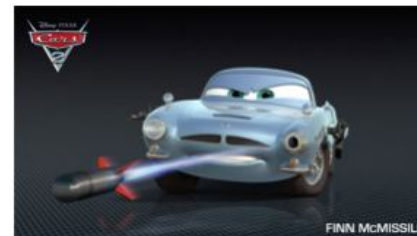
Beautiful



Kids story about cars 2  
 what i remember from the story was that there  
 were new characters. The two new characters  
 are Finn and Holley.  
 Finn and Holley were secret agents .



My favourite  
 character is  
 Lightening Mc queen because he's very fast.  
 Lightening and Mater are friends.



Pages

Australian Oxford Dictionary — Second Edition

school

Matched whole words

**school** >

Partial matches

school age >  
→ school<sup>1</sup>

school board >  
→ school<sup>1</sup>

school camp >  
→ school<sup>1</sup>

school leaver >  
→ school<sup>1</sup>

school leaving age >  
→ school<sup>1</sup>

school ma'm >  
→ school<sup>1</sup>

school marm >  
→ school<sup>1</sup>

school marmish >  
→ school<sup>1</sup>


School of Art >  
→ Mechanics' Institute

School of Arts >

school of hard knocks >  
→ school<sup>1</sup>

School of the Air >

1 2

**school**<sup>1</sup> /sku:l/ 

→ *n.*

- (a) an institution for educating or giving instruction, especially for children, or (US) for any level of instruction including college or university.

(b) [*attrib.*] associated with or for use in school (*a school bag*; *school socials*).
- (a) the buildings used by such an institution.

(b) the pupils, staff, etc. of a school.

(c) the time during which teaching is done, or the teaching itself (*no school today*).
- (a) a branch of study with separate examinations at a university; a department or faculty (*the history school*).





(b) (Brit.) the hall in which university examinations are held.

(c) [*in pl.*] (Brit.) such examinations.
- (a) the disciples, imitators, or followers of a philosopher, artist, etc. (*the school of Epicurus*).

(b) a group of artists etc. whose works share distinctive characteristics.

(c) a group of people sharing a cause, principle, method, etc. (*school of thought*).
- a group of gamblers or of persons drinking together (*a poker school*).
- (*colloq.*) instructive or disciplinary circumstances, occupation, etc. (*the school of*

#  
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# Which does not belong?



# Kindergarten.com ABA Flash Cards

# Mounting iPad

- Images removed for privacy reasons

# Other mounting options

- Huge range of cases, stands etc.
- Depends on needs



# Hardware

- Switch access for iPad
- Is 'app' dependent



# Hardware

- Independence – music listening



# Stylus Options

- Few different types available
- Some good – others not so much
- Can use rubber grips to make easier to grip




c u p

# iWriteWords









# AAC apps

- Range of Augmentative & Alternative Communication apps available
- Some fairly cheap/free
- Very good ones cost \$200 and up
- **Some** switch access available

Words Phrases Upgrade **verbally** 8:41 PM  

a	at	can	have	I	like	of	please	that	they	was	we
about	are	do	he	in	me	off	said	the	this	want	were
all	be	every	had	is	my	on	she	their	to	will	you
an	but	for	help	it	need	only	some	them	us	with	your
and	by	feel	his	know	not	or	thanks	think	up	YES	NO

Q	W	E	R	T	Y	U	I	O	P	
A	S	D	F	G	H	J	K	L	<b>Speak</b> 	
	Z	X	C	V	B	N	M	!	?	 Repeat
.?123	Speak each word	<input type="text"/>						.?123		



**TapToTalk Starter Album.**



**Go**



**Play**



**Hungry**



**Drink**



**Emotion**



**Bathroom**



**Home**



**Back**



**Text**



**Speaker**



**Albums**



It's time for school.



Home



School



Playground



Shopping



Movie



Restaurant



Beach



Home



Back



Text



Speaker



Albums

Proloquo2Go: AAC in your pocket

Home

 Basics	 Categories	 Comments	 Help
 Hi, Bye	 I need	 I want	 Keyboard
 Manners	 My Spaces	 Questions	 Quick Sets
 Spaces	 Starters	 Word Spaces	 Yes, No, Maybe

Bottom navigation: Home, Punctuation, Pencil

I want to listen to music

Back Listen to Music Activity

 listen to music	 My Music
 pick out music	 turn it down

Bottom navigation: Home, Punctuation, Home, Pencil

# Emotions

- Range of apps available designed to teach or display emotions
- May be useful for certain students

# FEELING FINDER

How are you feeling today?



Gassy



Hiccupy



Happy



Hungry



Sleepy



Sneezy



Sickly



Burpy



Angry



Surprised



Nervous



Sad

# EXPRESSION QUESTION

Which expression is...

## SURPRISED



SCORE: 0

HIGH SCORE: 0



# ShowMe

- Allows teacher to explain concepts with audio
- A little like a mini-Interactive Whiteboard
- Can be uploaded to Internet for student to view at home



MENU



# Discussion Time & iPad Feedback

- What have you seen or done?
- What are your ideas?
- What do first-timers think?

# Apple Accessibility Ambassadors

- Dawn Hallet – iPad Coach Warringa Park SSP Victorian iPad Trial  
[hallett.dawn.l@edumail.vic.gov.au](mailto:hallett.dawn.l@edumail.vic.gov.au)
- Jeanette Davies – Wollongong CEO Inclusive Technology solutions for students with disabilities  
[Jeanette.Davies@dow.catholic.edu.au](mailto:Jeanette.Davies@dow.catholic.edu.au)
- Greg Alchin – NSW DEC – Distance & Rural Education Collaborative Learning Technologies Officer  
[Gregory.Alchin@det.nsw.edu.au](mailto:Gregory.Alchin@det.nsw.edu.au)
- David Woodbridge - Senior Adaptive Technology Consultant at Vision Australia - [www.visionaustralia.org](http://www.visionaustralia.org)

# Final Note

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- [www.mrharrison.net/itod2011](http://www.mrharrison.net/itod2011)

