

New Developments in Tablets - iDevices

Accessibility Options
Hardware access equipment
Alternative access

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with Support From Dynamic Europe

NHS



Kent Communication & Assistive Technology Service



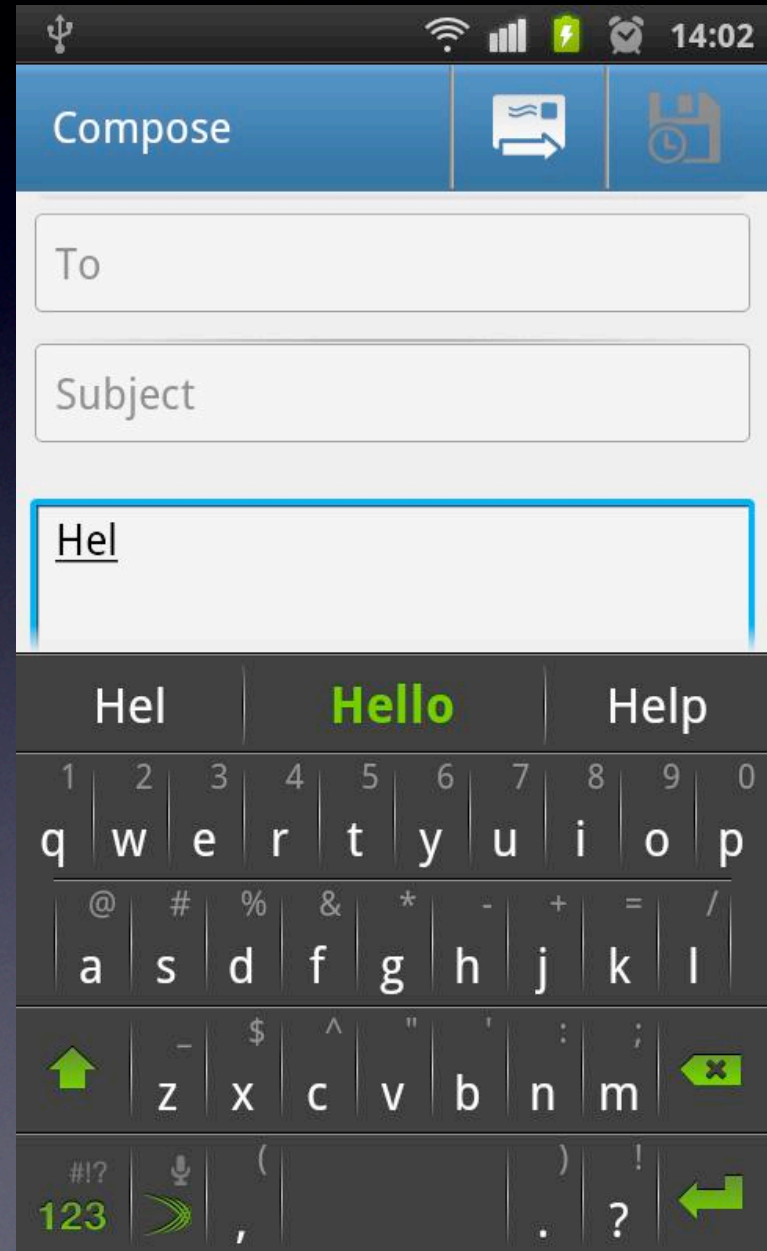
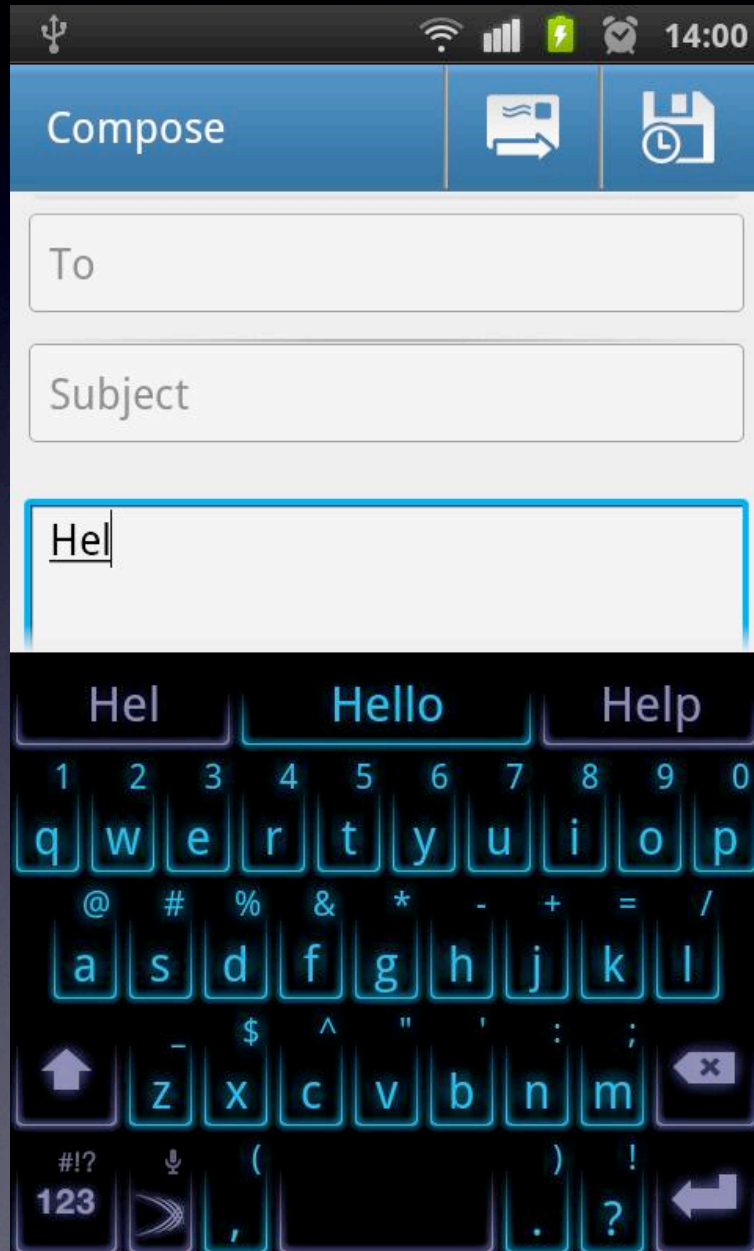
Access on new tablets

- Touch the main Interface method. Why did Apple do well? Because it's designed for touch ONLY rather than mouse, keyboard (Indirect access) and touch.. .
- Bad for AT.
- But are some options..

iDevices.. But Android?

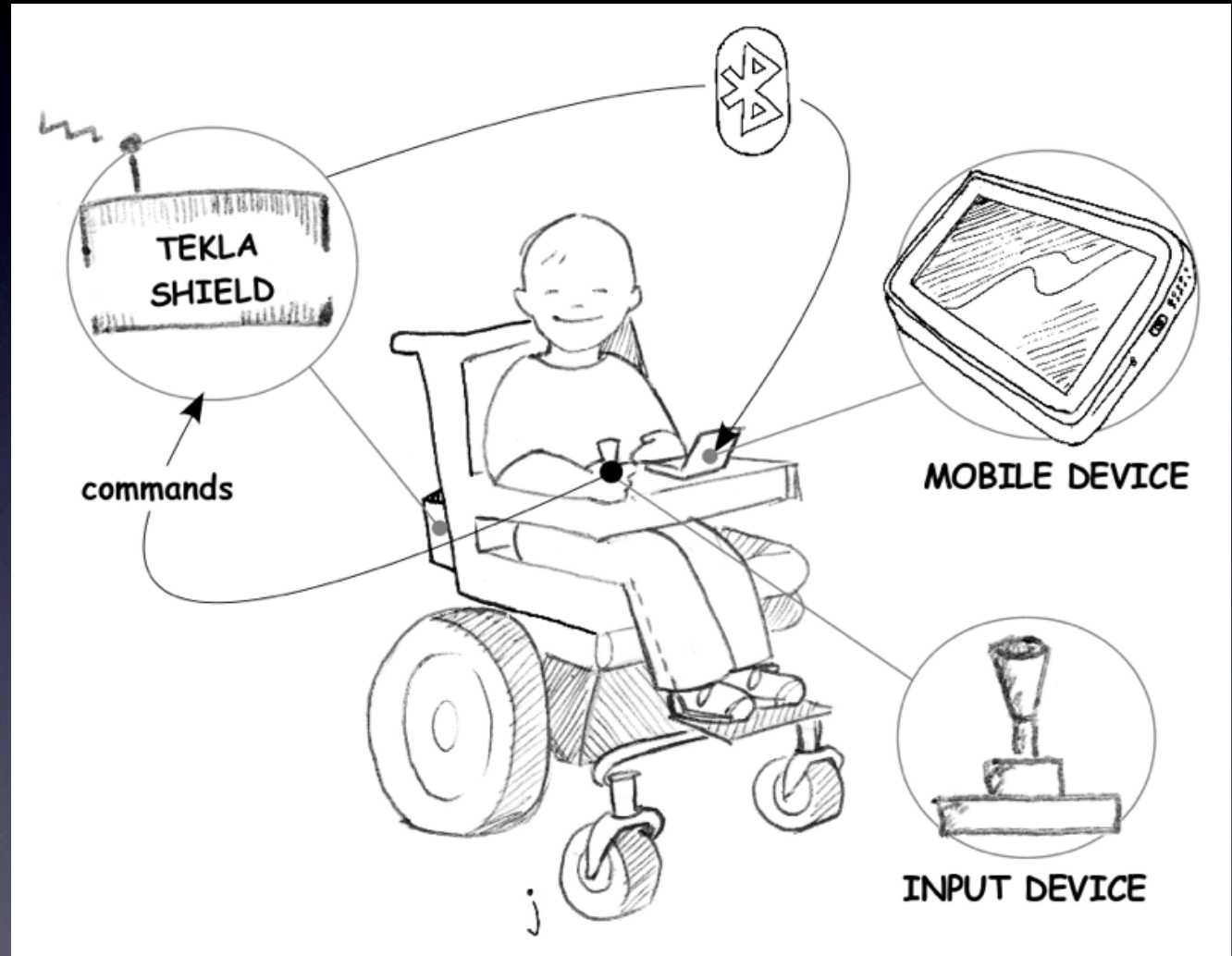
- Android - more phones. Less tablets.
- Not been an easy platform for software scaling
- 2 Advantages over Apple in respect to access:
 - Can change the software keyboard/input method
 - Input method consistent across the device

iDevices.. But Android?



iDevices.. But Android?

- Tecla
- Not very everyday consumer ready yet
- Promising



iPod Touch, iPhone, iPad



- No real competitor to iPod touch for Android
- Very Affordable

- 10 hr of video / surfing the web / AAC usage (1 month standby)
- 600g



Many many apps

- AAC (I50)
- Mobility (iPortal)
- Education
- Environmental Control
(EvoAssist, RedEye, LSRemote for example)
- ..But there are problems and issues!!



Standard Options

- (NB: iOS 5 for this talk)
- Settings -> General -> Keyboard
- Shortcuts
- Keyboards (Emoji - symbol writing!) (3 layouts for software)
- Essentials: . Shortcut.
- Settings -> Sounds - Lock Sounds and Keyboard clicks
- Settings -> Sounds - Change with Buttons



Accessibility

Settings ->
General ->
Accessibility



VoiceOver

- Screenreader on Steroids
- Only Change voice if you change Country (Don't do!)
- Play with the VoiceOver practice
- Read <http://www.apple.com/accessibility/voiceover/>
- Rotor
- Works with Braille displays
- Big improvements with Safari

AssistiveTouch



- Menu to enable generate gestures more easily. Access to hardware buttons from screen.
- Really useful for external devices.. But do they exist?
- iPortal only hardware that currently exists

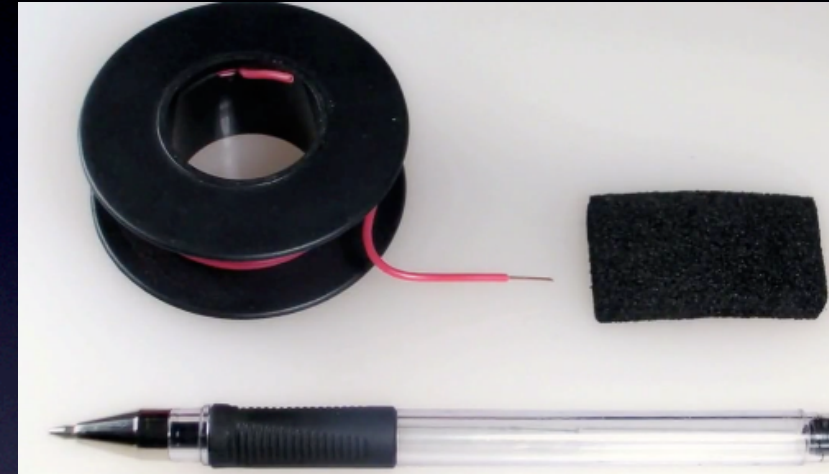
iPortal

- Joystick control
- Gestures been developed with joystick.
Configurable.
- David to talk more about this!



Physical help with touch

- Stylus
- Not traditional stylus - needs to be **capactive**
- e.g. Pogo Stylus, Griffin
- Adapt as you see fit (mouth sticks etc)



Manage Apps For Ease of Access

- Position on same page.
Non-essential bundle far back
- Use IconProject for shortcuts to contacts and Preference settings

```
prefs:root=General&path=ACCESSIBILITY  
prefs:root=General&path=Bluetooth  
prefs:root=General&path=AUTOLOCK  
prefs:root=General&path=DATE_AND_TIME
```



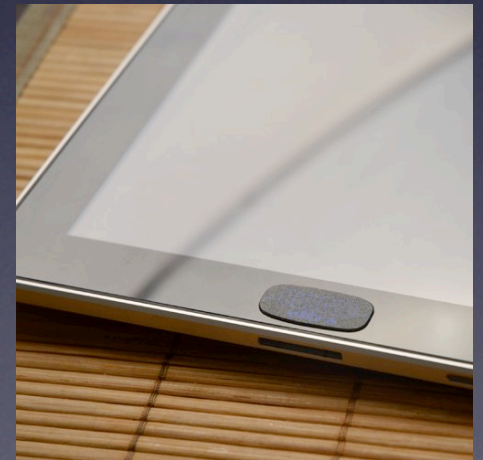
Always remember..

- Positioning and Posture management!
- Angled writing boards
- Mobile arm supports
- Keyguards - possible to make easily due to flat screen (and capacitive). But who and what size?
 - Smartbox for GridPlayer packages £65 each
 - LaseredPics.biz - US maker of guards. Also coloured.
- E-Tip glove - restricts to 2 fingers (might get a bit warm though!) £39 T-Box



Wandering Hands..

- Restricting the home button
- Only Apple have ability to develop apps that ignore home button! Boo!
- Use a dedicated case: iAdapter from AMDi
£158/208 (Inclusive, Therapy Box)
- Reverse some cases
- Use Tape or buy a BubCap(.com)



Siri (Voice Recognition)

- Only available on iPhone 4s
- Utilises some components of Nuance's system
- Similar system available on Android
- Allows for text dictation with punctuation (like Dragon).
- Mileage may vary

Keyboards

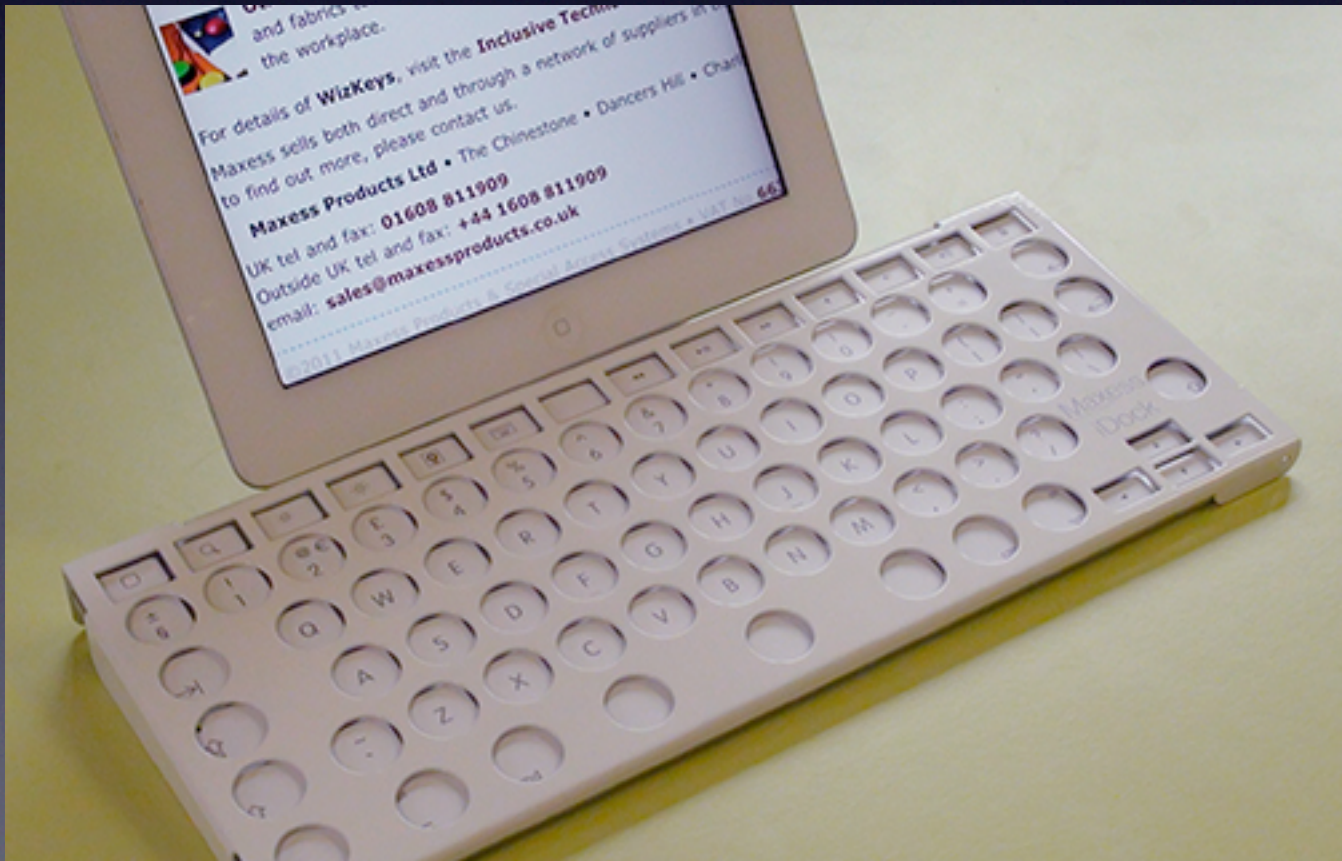
- Camera connection Kit
 - Designed to transfer photos
 - 2 parts - either for SD card or USB cable
 - The USB Cable also allows keyboards And USB Audio (in/out)



Dock Keyboard

Docks the iPad but also provides
a second dock connector £56

Maxess iDock for £50



Bluetooth

- Apple devices support Bluetooth but not all varieties (e.g. Sharing of contact info won't work)
- BT keyboards & Audio will work
- Apple keyboard has the shortcuts for device



Bluetooth keyboards



- Lots exist! (NuU Minikey below)



Keyboard + Voiceover

- Apple supports more than 30 wireless braille displays
- Voiceover command: Control-Option (alt)
- See page 243 of iPhone User guide for full shortcuts
- VO-H : Home button, VO-Right arrow: Next item, VO-Space: Tap an item
- Can speed things up with Quick Nav
- Tip: Turn triple click home button into VO on/off

Speed dots

Screen protector with bumps outlining feature points on display for VO users

www.speeddots.com

Approx 10 Euro



Switch Access

- Apps that support Switches:
- Predictable, TapSpeak Button, TalkBoard, PicBoard, GoTalk Now, (Attainment Switch)
- Switch accessible reading apps? ??
- Switch accessible enviro control??
- Switch accessible phone calling??

Switches!

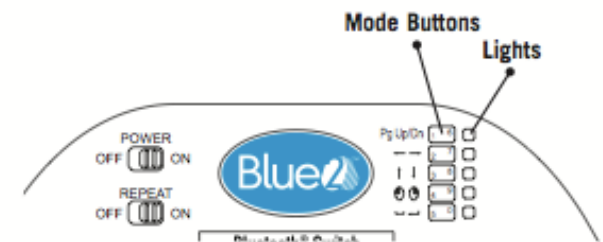
- (Ablenet Blue2 switch / PageFlip Cicada)



- (AirTurn)
- SwitchBox from TherapyBox £89



1. Press a **MODE** button to select which keyboard or mouse commands to emulate – light will flash the selected mode.



Mode	Description
Pg Up/Dn	Page Up / Page Down
← →	Left / Right Arrow
↑ ↓	Up / Down Arrow
⊘ ⊙	Click Left / Right (Mouse)
⌘ ↵	Space / Enter

NB: The T-Box one is the ONLY one currently working with a limited range
(Look out for Tornado Switch box from Origin Inst)

Switch Problems

- Keeping a device awake
 - You can change lock screen time but power will decrease
- Hit and miss. Very reliant on developers developing own interfaces. (Which key commands should a developer listen to as switch presses?). Little scanning options.
- Ideally a switch box should VO+Right arrow and VO+Space - None have!

Touch Features of Apps

- Have started to appear
- Proloquo2go, Grid Player, Predictable, iTalker, SoundingBoard, TapSpeak range, TapToTalk, Alexicom, TouchChat, all have some access options for touch/switch
- NB: Turning on voiceover can (if the app been developed correctly) provide auditory cuing

Cases / Speakers



- AMDi iAdapter Speaker / Case
- 10 hr run time
- Covers front button
- Inclusive and Therapy Box: £158, £208 for iPad 2 case

Otterbox

- Approx £50. 3 layers; rubber, hard plastic, silicone
- (Stand using screen protector) (Maxess angled rest £20 (Inclusive))
- 1cm height difference from screen



TIP: Don't bother with film screen protectors.

Cases / Speakers

Consider child and hand grip/function

iMainGo 2 / X

- 12 hr battery life
- Lion rechargeable battery
- Can daisy chain for extra volume
- Can use headphones without removing from case
- Cut out the plastic screen!
- £40-60



Speakers



Gear 4 Blackbox Mini

Bluetooth, Loud, Needs a bag!



Veho Portable 360

4 hrs of battery life
(constant use)



SuperTooth Buddy
Handsfree
Bluetooth
Visor Car-Kit
20 hrs talktime,
1000 hrs
standby.
Clippable.
(Jabra SP700)



Xmini
Wired,
Small, £13

Its continually growing...

Nothing is perfect for AT users but it is developing..

Keep up!

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