# iPad Apps Accessible for Totally Blind Students

## Switch Interfaces, Bluetooth Keyboards, Braille Keyboards, And/or Gestures

Bruce McClanahan, Assistive Technology

Washington State School for the Blind

Vancouver, WA

August 2023

### Bluetooth Switch Interfaces

* Switch2Scan: <https://www.inclusivetlc.com/switch2scan> VoiceOver Switch Scanning
* APPlicator: <https://www.inclusivetlc.com/applicator> iOS Switch Scanning
* Blue2: <https://www.ablenetinc.com/blue2-bluetooth-switch/> iOS Switch Scanning
* ISwitch: <https://www.inclusivetlc.com/iswitch> iOS Switch Scanning

The Switch2Scan device from Inclusive Technologies is accessible for totally blind teachers working with totally blind students. This device is made by Pretorian Technologies and sold by Inclusive Technologies in the United States. <https://www.inclusivetlc.com/switch2scan> The APPlicator is the current version.

The iPad apps listed below work very well with VoiceOver or iOS Switch Scanning which is more current. These apps can easily be controlled with VoiceOver gestures, a Bluetooth keyboard, Braille keyboard, or with a iOS Switch Scanning or VoiceOver enabled switch interface.

**Tactualizing the iPad**

An excellent way to access Book Creator, and apps such as Bus HD & Old Mac HD with totally blind students is to place tactual items on the iPad screen. We are using the Feel and Peel Stickers from the American Printing House for the Blind to tactualize the iPad, Catalog Number 1-08843-00. We have found that the iPad does not activate well if we use tactual items of greater thickness than the Feel and Peel stickers. The locations of the items to tactualize on the iPad screen frequently change with different apps, so one way tactualize the iPad is to have multiple overlays available.

## Apps for Totally Blind Students Using a iOS Switch Scanning or VoiceOver Switch Interface

The apps listed below are also accessible with a Bluetooth keyboard, Braille keyboard, and/or Gestures.

|  |  |  |
| --- | --- | --- |
| App | Vendor | Description |
| Cough Drop | AAC App: <https://www.mycoughdrop.com/> | AAC app, cloud based, works on all platforms |
| Aesop for Children | Aesop’s Fables  U. S. Library of Congress | Very accessible iPad app with VoiceOver or iOS Switch Scanning |
| Bus HD | Duck Duck Moose  <http://www.duckduckmoose.com/>  This app is now free, Duck Duck Moose is part of the Khan Academy. | The Wheels on the Bus  This app is accessible with VoiceOver, but the left and right buttons are **not** labeled, they just say button. This is a good app to tactualize. |
| Book Creator | Red Jumper Studio  <http://www.redjumper.net/bookcreator/> | Book Creator is used to create age appropriate classroom content material. This is a good app to tactualize. |
| Go Talk NOW | Attainment <http://www.attainmentcompany.com/gotalk-now> | Full-featured, customizable AAC app for the iPad, works with built-in switch interface or VoiceOver switches |
| I Hear Ewe | Claireware Software: <http://claireware.com/> | I Hear Ewe teaches preschool children animal names and their sounds. When a specific animal icon is selected the name of the animal is announced and a recording of the animal’s natural sound is played. |
| Ballyland | Ballyland CosmoBally in Space, Ballyland Magic, VO Lab, Ballyland Rotor, Ballyland Sound Memory, Ballyland Code 1: Say Hello, Ballyland Code 2: Give Rotor, Ballyland Code 3: Pick Up  <https://www.sonokids.org/> | These apps are specifically designed for children who are blind or have low vision, awesome. |
| MathMelodies | Everyware Technologies  <https://apps.apple.com/us/app/math-melodies/id713705958> | This app is designed to help primary school children practice mathematics. It is designed for both sighted children or low vision or blind children. Awesome educational app. |
| Old Mac HD | Duck Duck Moose  <http://www.duckduckmoose.com/>  This app is now free, through the Khan Academy | This is a good app to tactualize. Some of the buttons are not labeled. |
| Proloquo2Go | <http://www.assistiveware.com/product/proloquo2go>  This company also makes Keeble, an alternative on-screen keyboard. This keyboard can help low vision individuals with large labels, high contrast, etc. | Excellent communication app to promote language development and communication skills. Supports VoiceOver. |
| Read2Go | BookShare  <http://read2go.org/> | Read2Go is an accessible e-book reader that provides easy access to all of your BookShare books. |
| SoundingBoard | AbleNet  [www.ablenetic.com](http://www.ablenetic.com/) | SoundingBoard is a free augmentative and alternative communication app. |
| SoundTouch 1 | <https://itunes.apple.com/us/app/sound-touch/id348094440?mt=8> | Descriptions of animals, wild animals, birds, vehicles, musical instruments, and household items. |
| SoundTouch 2 | <https://itunes.apple.com/us/app/sound-touch-2/id504519249?mt=8> | Descriptions of animals, nature and weather, human sounds, and professions. |
| Voice Dream Reader | Voice Dream Reader  <http://www.voicedream.com/> | Universal access e-reader app. Able to read PDF, ePub, DAISY, Word, Text files, and more. |
| What’s That Sound: Learning to Listen to and Identify Sounds | Different Road to Learning  <http://www.difflearn.com/> | This interactive game develops auditory discrimination and processing skills. Students match objects and their associated sounds. |

## Switch Adapted Apps Accessible for Totally Blind Students

Enabling Devices has a list of switch adapted apps that work with children with usable vision. Most of the apps in this list are not accessible for totally blind children with significant additional impairments. <https://enablingdevices.com/wp-content/uploads/2018/09/Switch-Accessible-Apps-2018.pdf>

|  |  |  |
| --- | --- | --- |
| App | Vendor | Description |
| Adapted Play Book - EIEIO! | Creative Computing  <http://www.creativecommunicating.com/> | This book has four parts; Read, Learn, Explore, and Sing. In each of the four parts of this app the information being presented on the screen **is not essential** to the concepts being taught. |
| Breath Music | GroovTube  <http://www.groovtube.nl/> | Breath Music is an app for GroovTube Breath Controller device, but this app is also completely accessible for totally blind students using switches |
| RadSounds Cause/Effect App | R. J. Cooper  <http://www.rjcooper.com/>  On iTunes | Cause/effect music program for special needs learners. The playlist can be customized or new music can be sung into your iPad. Two switch access. |
| Sound Box | Cognable  <http://soundbox.cognable.com/> | Developmental touch skills app, made for individuals with complex needs |
| Counting Songs 1  &  Counting Songs 2 | The “Five” series from Inclusive Technologies provide meaningful accessible content for totally blind children accessing these activities with a switch interface.  <http://www.inclusive.co.uk/apps> | Each “Five” app has a Song, an Activity 1 Counting Up, and an Activity 2 Counting Along.  Or just purchase “Counting Songs 1 & Counting Songs 2” which contain all the “5” apps. |
| Bookshare Reader | <https://www.bookshare.org/cms/get-started/bookshare-reader> | Bookshare Reader is a free reading app from Bookshare. |

## Elementary iPad Apps

Several of the Alligator apps are excellent when used with a Braille display. The A+ Spelling Test from Alligator Apps can be used to create a spelling quiz for your student. Students can take this test using VoiceOver switches, a Bluetooth keyboard, or a Braille display.

### Tar Heel Reader and Tar Heel Gameplay

Tar Heel Reader is a collection of free, easy to read, and accessible books.  
Tar Heel Gamplay is a collection of free, easy to read, and accessible books.  
It can take some time researching Tar Heel Reader to locate books where the visual content of the book is not essential. <https://tarheelreader.org/> <https://tarheelgameplay.org/>

|  |  |  |
| --- | --- | --- |
| App | Vendor | Description |
| Voice Dream Reader | Very accessible awesome reading tool.  https://www.voicedream.com/reader/ | An awesome universally designed reading tool that does not require an asterick. |
| Alligator Apps | <http://www.alligatorapps.com/> | A+ Spelling Test, Food Words, Fry Words, Phonics Genius |
| Dolphin Easy Reader | <https://yourdolphin.com/products/individuals/easyreader-app> | Awesome accessible app designed for readers with dyslexia, low vision and blindness. |
| Math Robot | <http://www.aph.org/> | Math program accessible for blind and low vision students |
| Talking Typer | <http://www.aph.org/> | Accessible keyboarding program |
| Slapstack Math | <http://www.aph.org/> | Action and memory game that uses math flash cards |
| iA Writer | <https://ia.net/writer> | A very accessible text editor program for blind and low vision students. Files can saved in Microsoft Word format. |
| Cough Drop | <https://www.mycoughdrop.com/> | AAC app, switch accessible, that is accessible across all platforms |

## Switch Progression Skills for Totally Blind Students with Significant Additional Impairments

There are only a very few switch apps accessible for totally blind students, so it can be difficult to develop a switch progression plan. Accessible software for totally blind students with significant additional impairments is the most underserved population. And often when software says that it is for the visually impaired this only means low vision students. Use a VoiceOver Switch, such as Switch2Scan.

<http://www.inclusive.co.uk/Lib/Doc/pubs/switch-progression-road-map.pdf>

|  |  |
| --- | --- |
| Cause and Effect: Single Switch | RadSounds, SoundBox, BreathMusic |
| Using Three Switches to Navigate Basic Stories | Bus HD, Old Mac HD, Aesop for Children, Book Creator books, Adapted Play Book EIEIO, and selected Tar Heel Reader books. |
| Using Three Switches to Navigate and Select Items | I Hear Ewe, Math Melodies, What’s That Sound, SoundTouch 1, and SoundTouch 2 |
| Using Three Switches to Navigate AAC apps | Go Talk NOW, SoundingBoard, Proloquo2Go, Cough Drop, and other AAC apps if they are VoiceOver or iOS Switch Accessible, or self-voicing & switch accessible |
| Using Four Switches to Access Classroom Work (Switch 4 activates the Home button) | Dolphin Easy Reader, Read2Go, Voice Dream Reader, etc. |
| Using Three Switches | Access Sounding Board or AAC apps |
| Using Three Switches & Alexa | Using Sounding Board or AAC apps to access Alexa content |

## iOS Switch Control: APPlicator Switch Interface

1. Switch Control: Turn on or have shortcut enabled
2. Switch Control: Configure two switches. Before configuring have the switch content of switch 1 set to Spacebar and the switch content of switch 2 set to Enter. (The switches will continue to work with software that is designed for switch access.)
3. Set switch 1 to “Move to Next Item.”
4. Set switch 2 to “Select”
5. Scanning Style: Manual
6. Tap Behavior: Always tap
7. Gliding Cursor: Single, set at fastest speed, it’s less annoying
8. Sound Effects: On
9. Speech: On
10. Group Items: Off

## Gliding Cursor Issue

Unfortunately sometimes iOS Switch Control will default to having the Gliding Cursor Active. This is completely inaccessible for totally blind students. The only way to switch this back is to use the switch interface itself and navigate to Switch Control. Then navigate to and select Item Mode.