

Technology Tools to Support Students with Complex Needs

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Creating Content - Downloading Content

- **Book Creator** (for iPad, Android, Windows 10)
 - eBooks created will run on any platform
 - Can export to Padlet, Google Drive, more from app
 - Can create invisible hotspots on images, record/import audio, video, images, add text fields, layer text over images, add hyperlinks, callouts, comic book template layouts
- **iPACT** - (iPad app) 200 templates within four different modules (Learn, Read, Write and Talk About) allows you to create a base activity, then clone and import resources into new template to progress activities through learning and reading about topic, writing about topic, and then communicating. Can create Shared folders in Dropbox or Google Drive to save/share activities. Add images, video, audio, text.
- **Explain Everything (iPad), ShowMe, Educreations** - Use whiteboard tools to create learning activities. Explain Everything can import video.
- **Know Recorder** (iPad/iPhone only) Use whiteboard tools to create activities, import video, images, PDF file, take pictures/video live to import, activities can be exported to camera roll, Dropbox, YouTube, then used anywhere.
- **Stage** (iPad)
- **Creative Book Builder** - (iPad/Android app) can import ePub files, add other elements to books such as video, image, audio, text, etc. and then export. Can import from Google Drive, Dropbox. Can export edited book directly to iBooks, or export to Dropbox, Google Drive, OneDrive, Box, iCloud, Scan QR Code, others. Export to various options also. Using Creative Book Builder allows you to add additional supports to PDF, ePub files.
- **Tarheelreader.org** - with a free log in can create basic reading stories for low incidence students, download or read already created stories.
- **iPevo Whiteboard** (iPad) - import images or video, or record/take live, use draw tools, add text to screen, use blank whiteboard screen to create learning activities. Can connect wirelessly to the iPevo Ziggy HD Wireless document camera to record/import from
- **iPevo Presenter** (iPad app) - can use to connect to and view broadcast from iPevo Wireless Ziggy HD document camera
- **Goformative.com** - drag and drop content on the fly to students, see results

- **SnapScene** (49.95 - iPad) quick, easy to use app to create audio or popup text hotspots on any image from photo library, or take from camera.
- **Touchcast Studio** - free iPad app, use green Screen technology, video in video, picture in video, have web page popup during recording, save video to camera roll.
- **Do Ink** - iPad app for creating video using Green Screen effects
- **Kids Flashcards Maker** - iPad app - create video flashcards (2.99)
- **iCabMobile** - download YouTube videos to camera roll of iPad (1.99)

Resources for Downloading

- **CK12.org** - (iPad app also) curriculum books and related subject materials can be downloaded or viewed from website. Books can be edited, compiled, added to and saved for differentiation. Downloading books into apps places the multimedia player in file, tapping opens YouTube to play. Cannot pinch and zoom in the app but can double tap on images to enlarge, change font and font size as well as line spacing.
- **Khan Academy** - Khanacademy.org - download learning modules onto devices so no need to be online. Caption content, can incorporate videos into CK-12 books. Link video content in a Symbaloo page for shared access by class.
- **CommonLit** - <https://www.commonlit.org/> - free collection of news articles, poems, short stories, and historical documents for grades 5-12. Can create classes to post assignments. Search can display Lexile Reading and grade level. Can download files as a PDF.
- **Unique Curriculum** - n2y.com - curriculum topics for Science, Health, Social Studies, Reading, can search by level or topic, books can be read online using TTS, or download as a PDF, can be read online in Chrome web browser using PDF app such as Kami and the Snap&Read Universal (subscription based) Chrome extension
- **Tarheel Reader** - www.tarheelreader.org - free eBooks for low incidence

ePub Readers

iPad - iBooks, Voice Dream Reader- (eBook reader, opens and reads ePub, PDF, Word, RTF,PPT, Google Docs, Daisy, audio books in MP3. Highlighting as it reads, control voices, adjust background color, font. Ability to highlight text, extract to notes)

Chromebook - Radiator, Google Play Books (doesn't play multimedia files)

Mac or PC - Radiator in Chrome, Adobe Digital Editions

Android - Roxio MediaBook Reader

LiveScribe 3 Pen for iPad or Android

- Create and export the Pencast as a video
 - Can save video or Pencast to Google Drive
 - Can play video back on any iPad, or export the Pencast to Google Drive and choose "Open in" from drive to the Livescribe+ app.
 - Can open Pencasts on computer using online player - www.livescribe.com/player
 - Can play video on Chromebooks directly from Google Drive
 - Can post MP4 video from LiveScribe to YouTube, then add link as a Tile in Symbaloo - set tile to Embedded (opens in Symbaloo) for easy access.

LiveScribe Pulse and Echo Pens (saving to computer) www.livescribe.com

- Can print pages from any application onto the Livescribe paper and create interactivity by adding audio hotspots
- Can export and open Pencast on iPad in Livescribe+ app
- Can export a page as a Pencast with audio/video (of drawings and writings) to Google Drive (save to computer then upload to Drive), then open with the online player - www.livescribe.com/player - open the online player on a Chromebook, select the Choose Your Livescribe PDF button, choose Google Drive, My Drive to open file

Digital Pens - Smart Pens

Equil Smart Pen 2 <http://www.myequil.com> (\$169.00)

Runs on: iPad, Android, Mac, PC

Download Equil Sketch and Equil Note apps to use

- Connect Pen via Bluetooth, launch app (double tap on paper to activate)
- Write on plain paper, convert handwriting to text, save file in app or export via Open In



LiveScribe 3 Smartpen - www.livescribe.com (\$99.00 - 129.00) -

iPad 3 or higher and Android - use with LiveScribe+ app from iTunes App Store or Google PlayStore

- Launch app, turn on pen, connect and "pair" device in Bluetooth - Device Pairing icon can be found on cover page in the notebook - double tap on it to pair - Need to use special paper, transfers what is written on page to iPad, record audio along with file via the microphone on iPad (no microphone on pen) can open exported Pencast in the online player - <http://www.livescribe.com/player/>



LiveScribe Echo Smartpen - (\$119.00)

www.livescribe.com/ can be used with Mac or PC. Use

special paper to save recorded files (text, drawings and audio) onto pen, sync onto computer, can export as PDF Pencast for playback of file from online player in the Chrome web browser - www.livescribe.com/player or on iPad in LiveScribe+ app from iTunes App Store



Neo Smartpen N2 - <http://www.neosmartpen.com/en> (\$169.00) For IOS devices (iPad/iPhone IOS 8.1 or higher) or Android (OS 4.1.2 or higher)



- Record and playback voice memo, record and playback notes
 - Transcribe handwriting, exporting as PDF, Text, of handwritten notes
 - Replay recorded pen strokes back as video (audio recorded when Voice Memo is chosen in the app)
 - Export file from app as PDF, Image, Text, "Open In" to other apps
- Download app from iTunes app store, can print out pages to use with pen instead of purchasing notebooks (download app on website for PC)

C-Pen ReaderPen - www.scanningpenshop.com/en/c-pen-reader.html
Other models available on Amazon.com
Pen scanner - swipe pen across page, lift up from page, reads aloud text.
Can scan entire document for reading back, scan to computer



Sharing - Creating Shared Content

- **Symbaloo** - can share a webmix page. If you update (add tiles) and choose update, all users you have shared it with will see the updates. They cannot edit your tab.
 - Use for creating a bookshelf of online books, research sites, videos,
 - Can also embed code on a website - see sample on <http://classtechstorage.weebly.com/books1.html>
 - Can embed video from YouTube or TeacherTube that will open and play from the tile - could post MP4 video from LiveScribe to YouTube for access by copy/pasting the URL into a Symbaloo tile and choose embedded from the dropdown right next to where the web address goes
 - Can embed Khan Academy videos stored on YouTube
 - Sample Shared Symbaloo page:
<http://www.symbaloo.com/shared/AAAAASlvi-cAA41-4YoBjw==>
- **LiveBinders** - www.livebinders.com add content and resources to provide student for research, articles, websites, eBook sites, etc.
- **Showbie** - create class, students, class assignments. Can upload files, images, video, audio for students, students can reply with uploading files, audio, video, images, etc.
- **Actively Learn** (Chrome App)
- **Padlet** - www.padlet.com - apps and online. Can create a shared class "note wall" that you can upload Pdf, files, video, images, audio files, type text, more. Students can have access to either view or contribute. Can lock for view-only access after class, and unlock allowing students to contribute to during class. Can password protect and create walls for multiple classes.
- **Today's Meet** - www.todaysmeet.com - class discussion board
- **Lucid Charts** (free Google, iPad App) shared brainstorm/mindmaps
 - Can embed code for a chart on a website

- **Mindmeister** - brainstorm/mindmaps , can Share, Edit, View
- **Popplet** - www.popplet.com (use online for sharing component) free online mind mapping program. Can share for collaboration.
- **Google Docs, Folders in Google Drive** - Drive.google.com - can share files, folders as: Read Only, or Can Edit
- **Diigo.com** - Share web links, outlines, PDF files, Bookmarks, Notes
- **OneNote** - www.onenote.com - Share Online Notebook or files. Apps for all devices and access online
- **Classkick** - iPad app, real time collaboration - add assignments, watch students working on assignments in real time all on one screen. Assignment can contain image, video, audio, type text, add a text box for students to use
- Casting a Screen from Chrome - using the Cast feature - go to Customize and Control menu, Cast.
- **FTVS HD** (iPad & Android) - visual scheduler with ability to add image, video, caption
- **Academics Math Worksheets Maker** (iPad) can export worksheets
- **Collaborize Classroom** - <http://library.collaborizeclassroom.com/> (free) - create classroom interactive discussions with brainstorm, debate, prioritize, decide, discuss windows for topic class discussion. Can add assignments, attach image, video, documents to assignments.

iPad Shared Whiteboard Apps

- Whiteboard Collaborative Drawing
- iBrainstorm - searches for collaborators
- BaiBoard - collaborative Whiteboard, can broadcast to URL (think of broadcasting to Chromebooks)
- Doceri - screencast computer screen to iPad, control from iPad. Can create projects and save to camera roll. Can utilize videos in Book Creator, other apps.
- Mind42 - <https://mind42.com/> - online shared mind mapping program. Can export in multiple formats including PDF

Reduce Text Complexity, Leveled and other Reading Resources

- **Snap&Read Universal** - Chrome Extension (subscription)
- **Rewordify.com** - can create dictionaries, copy/paste in copied text, in Settings can set level of complexity
- **Text Compactor** - <http://textcompactor.com/> - paste text, drag slider to summarize
- **Newsela.com** - current event articles in multiple Lexile Reading Levels, can use screen readers to read text aloud.
- **<http://www.route66literacy.org/>**
- **Tarheelreader.org** - can read books online, download as ePub or PPT. Can download onto iPad and "Open In" iBooks to create bookshelves of books that can be read offline. Can edit books, create and post with a free account log in.
- **Read&Write for Google** - Chrome extension, Simplify Page tool on toolbar to create a reduced summary using + or - tool to reduce or expand

- **CommonLit** - <https://www.commonlit.org/> - free collection of news articles, poems, short stories, and historical documents for grades 5-12, create classes to post assignments. Search can display Lexile Reading and grade level.
- **Readworks.org** - current events articles, reading units, reading passages in multiple reading levels. Can download as PDF file.
- **<http://www.clarkness.com/index.htm>** - books for read&print, read on tablet, computer or online
- **<https://freekidsbooks.org/>**
- **Mercury Reader** - extracts main article from web page and displays in a new window making it easier to read. Adjust font, size, colors. Use Google Cloud Print to save as PDF.
- **Just Read** - Chrome extension that extracts main article from web page and displays in a new window making it easier to read.

Writing Supports - Word banks, Images in Word Banks

- **Clicker Connect** (30.99) iPad, word banks for writing with picture supports
- **AbiliPad** (19.99) - iPad, create word banks for writing with picture support
- **Clicker Docs** (30.99) (iPad & Chrome) create word banks to support writing, word prediction
- **Clicker Sentences** (iPad,Chrome) word banks to support writing
- **Sentence Maker** (iPad - free,.99) Create your own word sets and model sentence or phrase, sound
- **Sentence Builder App** - (iPad,5.99) Create your own word sets and model sentence
- **Clicker 7** - www.cricksoft.com - (Mac/PC) create word banks and word banks with picture support for writing

Building Custom Vocabulary Dictionaries

- **Kurzweil 3000** - www.kurzweiledu.com use highlighters to select text, choose File, Extract, to Vocabulary Study Guide - creates text based only, can export
 - Using the online version firefly - can use highlighters to select individual words, extract to new document, then use Dictionary from toolbar and drag and drop definitions into document next to the word list.
- **Read&Write for Google** (Chrome extension -subscription) - select words with highlighter, choose Vocabulary button on toolbar, creates dictionary in a new Google Doc with text and symbol support
- **Read&Write Gold** - www.texthelp.com

Captioning

- **Camtasia Studio** - (Mac and PC) www.techsmith.com - caption, add video in video, picture in video, voice over, export for any platform
- **Touchcast Studio** - free iPad app, use green Screen technology, video in video, picture in video, web page popup during recording, save video to camera roll.
- **Perfect Video** - (iPad) add captions to video from camera roll
- **YouTube** - www.YouTube.com - (free) Sign in to YouTube using a Google Sign-in, Create a (free) personal channel with your name. You can then upload and

store videos on YouTube as Private, Shared or Public. Easy to use tools to add captioning to uploaded videos.

Scan & Read, Scan & Save (iPad/iPhone)

- **Prizmo** - (9.99) take picture of page, runs OCR, can export to Google Drive, other apps, file can be read aloud using TTS in any app or program that can open PDF files with TTS capabilities or Chrome extensions that can read selected text.
 - Open file from Prizmo in iPad apps such as ezPDF Reader, ClaroPDF Pro. Both have TTS and annotating tools to type on document, draw tools, highlight, etc.
- **GoWorksheet Maker** - (19.99) GoWorksheet - (free student player) to create accessible worksheets take picture of worksheet, use tools in app to create fields for typing, drag and drop word banks, drop down word banks, TTS, more. The student player allows students to import, use test taking features.
- **SnapType Pro** (4.99) Take a picture of worksheet, student can then type on document to answer. No TTS capabilities - saves as image only.
- **Claro ScanPen** (6.99) take picture of printed page, select text on screen, reads aloud
- **Google Translate** (iPad & Android app) Take a picture of printed page, tap on word to see translation, drag finger across lines of text to translate lines and paragraphs.
- **Text Fairy** - free, take image, performs OCR, will read loud but doesn't highlight as it does, can create PDF
- **Adobe Acrobat Pro**
Adobe Acrobat Pro is the paid version of Adobe Reader. It has much more functionality for editing, using a scanner to import documents and create PDF file, add fill in boxes on forms, audio, etc. Acrobat Pro DC - Student and Teacher Edition is approx \$119.00 from Best Buy, Amazon and other office supply companies.

Converting Text files to MP3 audio Files

- **Kurzweil 3000** - (www.kurzweilededu.com) From the file menu in Kurzweil 3000 choose Audio File, Create Audio File. This will create an MP3 audio file of the current document. Can select voice, adjust reading speed before saving.
- **Read&Write for Google (Chrome extension)** - select text on any web page, click on the Speech Maker button on the toolbar, creates an MP3 file of the selected text being read aloud by current reading voice and speed
- **Read&Write** (installed version www.texthelp.com) Speech Maker button on toolbar. Select text, click on the Speech Maker button on the toolbar, creates an MP3 file of the selected text being read aloud by current reading voice and speed.

Use Voice Notes in Kurzweil 3000. Select text, choose Tools menu, Notes, Add voice Note. Record your own voice paraphrasing selected text, or in the example of a Shakespeare play translating to common day English. Use for parts of speech, selection in poems to denote irony, etc.

Homework

- **My Homework Reminder** - Chrome extension, syncs across Chrome on computers or Chromebooks
- **Google Calendar** - sharing the calendar allows students to access homework assignments listed on calendar
- **myHomework Student Planner**
- **Wunderlist** - online and apps for all platforms, free, add assignments and lists, can share. Once an assignment or task is completed can check off the list - and the educator sharing the list can observe what has been completed, add to, reorder or prioritize.

Document Cameras

iPevo - www.ipevo.com

- iZiggyHD Wireless Document Camera (159.00) - can broadcast anything displayed under document camera to iPad, Android, computers, Chromebooks, Apple TV by connecting to the WiFi network it creates and an via IP address on the camera.

Hovercam - www.thehovercam.com

- Hovercam T3 (199.00) or Solo 8 (349.00) document cameras - can use for on the on the fly TTS to print materials.

Using a Computer - options for the Hovercam T3 or Solo 8 document camera:

- Either launch the installed software for the Hovercam camera
- Or launch the Chrome web browser
 - Connect Hovercam and launch software - go to www.hovercamflex.com (create free account first and log in) or www.thehovercam.com/livecam
 - Place page under the document camera
 - Open either:
 - **Image Reader from Kurzweil 3000** - select text displayed on screen with Image Reader tool (in Read menu in Kurzweil 3000 or on Kurzweil Taskbar menu, Kurzweil will process and read aloud (www.kurzweiledu.com))
 - **Read and Write Gold** - select Screenshot Reader tool, select text on screen (www.texthelp.com)
 - **Snap&Read** (Chrome extension) - choose select tool on toolbar, select text on screen (www.donjohnston.com)
 - **Read&Write for Google** toolbar (Chrome extension) choose the **ScreenShot Reader tool**, select text displayed on screen

Chromebook using Snap&Read or Screenshot Reader

Launch Chrome Browser

- Connect Hovercam and launch online software - go to www.hovercamflex.com (create free account first) and log in
- Place page under document camera
 - a.) Open Snap&Read (Chrome extension) - choose select tool on toolbar, select text on screen
 - b.) or From the Read&Write for Google toolbar (Chrome extension) choose ScreenShot Reader, select text on screen

Other ideas:

- Create stations in classroom - videos could be TedEd, KhanAcademy, videos you created with explain everything, YouTube, NASA, etc.
- Provide a space for after class discussion so students that need more time to formulate responses can- such as Collaborize Classroom
- Students use technology to communicate with other students, but typically not to collaborate. Collaboration needs to be taught as a skill.
- Use Google Cloud Print to save files and assignments from apps or programs that are not linked to Google Drive, into Google Drive

Using Voice Recognition:

Start by creating content in MS word - example - copy/paste current event article, add questions and add an underscore at the end of each where the student would type an answer. Save as PDF.

- Can open on iPad in various apps, use Siri for voice recognition, word prediction on keyboard for supports to writing.
- Open on a Chromebook in Kami (free PDF app) and use the On-screen keyboard in Chrome, found under Accessibility features. The keyboard contains a voice recognition button, and also has word prediction to assist in writing.
- On a Macintosh turn on voice recognition, which can be then used in any program, in the System Preferences, Dictation & Speech. When activated, it will then place Start Dictation under the Edit menu in most programs to access.
- On a PC it can be found in the Control Panel under Ease of Access.

Alternate Keyboards for iPad

Lowercase Keyboard - This keyboard displays the OpenDyslexic font to increase readability for some users with Dyslexia. Holding down the shift key on the keyboard will toggle from lower to upper case letters.

The Math Keyboard - use this keyboard to type fractions and other math symbols and functions. There is an abc key on the keyboard to toggle to a qwerty keyboard to



type letters, a 123 button to change to numbers, a f(X) to change to functions. Using this keyboard you can swipe left or right to toggle between keyboards depending on the option you are in.

MyScript Stylus - This keyboard allows you to use your stylus to write and has handwriting recognition ability to translate your handwriting to typed text!

SuperKeys Assistive Keyboard - Some students may have physical difficulties making it difficult for them to select individual keys on the keyboard. SuperKeys allows them to press a targeted area containing the letter they are trying to select, and opens a pop up window with an enlarged section allow the student to better select the letter they are trying to type.

Read&Write for iPad - contains word prediction and a Read button that will read text in the document you are typing in.

Keedogo Plus - color coded vowels, word prediction.-

Swype - allows you to drag your fingers connecting the letters in a word instead of tapping on keys. For example holding down the letter S, dragging over to t, pausing, then dragging over to O, pausing then over to p will type stop.

Additional iPad keyboards:

SwipeKeys

ASL Swipekeys

Signily Keyboard - finger spelling symbols

Marlee Keyboard - ASL finger spelling - found in iPhone apps

Swiftkey Keyboard - advanced autocorrect

Hanx Writer - looks and sounds like a typewriter

MyScript Calculator

MyScript MathPad

Nebo - for the new iPad Pro and stylus, take notes with handwriting recognition,more

Android - On the Google Play Store

Google Handwriting Input

Math Keyboard

Std Math Keyboard

Chroma Keyboard containing various colored keyboards

Big Keyboard

SwiftKey Keyboard with voice recognition and swype capability

Read&Write for Android - word prediction and a read button, can also toggle Open

Dyslexic font for keys

Google Keyboard - has voice recognition key

Big Keyboard

A.I Type Tablet Keyboard - you can split keyboard, move on-screen and resize