



Region 4 Education Service Center

Access on the fly to Printed Materials

Scan and Read Apps for iPad

Best to use an iPad 3 or better with scanning apps as the iPad 2 rear facing camera is only .92 MP - far less than most digital cameras and phones. The iPad 3 and the iPad Air have a 5 MP camera, and the iPad Air 2 has an 8 MP rear facing camera.

Prizmo - Scanning, OCR and Speech (9.99 plus 2.99 for each voice) Can adjust what the OCR sees as text (editing the underlying text) This app runs OCR on the image *and produces a true PDF document* that PDF readers with TTS can now highlight the text and read aloud. App can also read text by choosing Export, then choose Read Text Aloud. Best choice for on the fly - snap, OCR and then read aloud of books, pages. Turn off Detect Page option in Settings. Works well sending the file to Claro PDF (iPad app) allowing you to now type on the document and more.

Text Detective (free - listed under iPhone apps) takes picture, processes text then saves in History. Can then open, select text and have iPad Read Selected Text feature read aloud. **OCR**

Scanner with LeadTools - choose PDF, OCR to PDF, select text choose Speak

Text Grabber + Translator - (4.99) take picture, extracts text from image via OCR, does not save image as a PDF file so you lose images. Does a good job of scan/OCR, can read with TTS directly in app with iPad "Read Selected Text" option turned on, can translate to another language, export text.

Lectio (4.99) Scan, OCR, then reads aloud any word that you select (tap on) in the document

GoWorksheet (free for student player/19.99 for teacher creating) take picture of page, add fields for typing on lines, auditory support to worksheet, create drop down word lists for multiple choice, drag and drop answers, more. Send worksheet to student player with teacher version.

Genius Scan+ (6.99) scan multiple pages and save a single PDF file

Claro ScanPen (6.99) take picture of printed page, select text on screen, reads aloud

FineScanner Pro (3.99) scan multiple pages, save as single PDF file, upload

Scan and Translate Apps for iPad

Text Grabber + Translator - (4.99) extracts text from image via OCR, does not save image as a PDF file so you lose images. Does a good job of scan/OCR, can read with TTS directly in app with iPad "Read Selected Text" option turned on, can translate to another language. Export text.

KNFB Reader - (99.00) excellent job of scan and read, removes images and formatting, fast and easy to customize.

ZoomReader - (19.99) for iPhone but will run on iPad Air 2, OCR and TTS within app, does better on non-standard books with pictures and large font sizes than some of the others do.

Google Drive (free) - allows you to take pictures (JPG) of printed pages and save to Drive.

Once in Google Drive programs such as:

- Kurzweil 3000 or the Firefly web app by Kurzweil can open the image file, perform OCR on it and then read the text aloud
- Snapverter by Texthelp can convert the image to a PDF that can be opened by Read&Write for Google or other PDF readers
- Can be opened by Google Docs, OCR process will convert text in image to selectable text that can be read aloud by screen readers

iPad PDF Readers/Editors for typing, draw tools on PDF documents

- **Claro PDF** (3.99 plus 1.99 for each voice) - TTS in PDF files, can open and annotate on PDF files, type on forms, draw tools, record voice, record video file directly into PDF
- iAnnotate PDF (9.99) TTS, type, highlight, draw
- ezPDF Reader (3.99 plus in app for voices) TTS, type, highlight, draw

Android Scan and Read Apps

Text Fairy - free, take image, performs OCR, will read loud but doesn't highlight as it does, can create PDF

TextGrabber & Translator (by ABBYY, 4.99) take picture of page, crop, choose Read (upper right) which runs OCR and converts to text. Can then open in apps such as Voice Aloud Reader, Easy Text to Speech Pro, Natural Reader, others for TTS. Can also save to OneDrive via share icon in upper right of document. Best overall for quick scan and read.

OCR Instantly Free

Take picture, OCR, copy to clipboard and use with another app to read

Scan and Translate apps for Android

ABBYY TextGrabber + Translator - take picture of printed text with camera, performs OCR, translates, internet connection required

PDF Readers/Editors for Android - typing, draw tools for PDF documents

- iAnnotate PDF (free) TTS, type, highlight, draw
- ezPDF Reader (free/3.99 plus in app for voices) TTS, type, highlight, draw

Virtual Printing to Kurzweil 3000

Printing apps such as PrintCentral (iPad 4.99/7.99) or Print n Share Pro (8.99) allow you to take a picture of a page using iPad scan apps such as Prizmo, save the image as a text or PDF file, and then Export to the PrintCentral app where you can then virtual print directly (via WiFi) to your computer and directly into Kurzweil 3000 (when already opened).

Computers and Chromebooks - on the fly

Using a Hovercam T3 (or Solo 8) document camera (www.thehovercam.com)

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

- Launch the Chrome 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)
 - From the Read&Write for Google toolbar (Chrome extension) choose the **ScreenShot Reader tool**, select text displayed on screen

Using a Computer or Chromebook & Google Drive

- **With a cell phone, iPad or Android tablet and Google Drive and Google Docs**
 - Download the Google Drive app for your cell phone or tablet - launch the app and log into your account
 - Choose the + button at the bottom of the screen and choose the camera option to take a picture of the printed page, choose Use Photo to upload it to Google Drive
 - On a computer or Chromebook open Google Drive, right click on the image and choose Open with, choose Google Docs. Google Docs will perform OCR on the image, and converted text will be displayed beneath the image. You can then delete the image and use TTS extensions to read the converted text aloud

Chromebook using Snap&Read or Screenshot Reader

Launch Chrome Browser

- Connect Hovercam and launch 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

Chrome Extensions & Apps

Kami - a Chrome app - will open PDF files, can type, annotate, draw, more, use TTS extensions such as SpeakIt! to select and read aloud text

Chrome Extensions

- Read&Write for Google - TTS, dictionary, highlighters, more - free for teachers, subscription based for students - can use in conjunction with Snapverter (app) which converts JPG image of printed page to a PDF file
- Kami - extension to open PDF files online
- Readability & Just Read - extract article from web page to clear out advertising
- Snap&Read Universal - simplify text, TTS of selected text, language translation, subscription based
- Premier Chrome Toolbar (29.00 per year) - floating toolbar with TTS, dictionary, voice recognition, text summary tool
- SpeakIt - Chrome extension for text to speech of selected text on the screen

Reading Pens

- C-Pen Reader - <http://www.readerpen.com/> and at Enable Mart - www.enablemart.com - scan text (line, paragraph or page,) TTS built into pen will read back



Adobe Acrobat Pro & Scanners connected to computers

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, etc.

Acrobat Pro DC - Student and Teacher Edition is approx \$119.00 from Best Buy, Amazon and other office supply companies.

Scanners mentioned

- **Canon CanoScan LiDE scanners** - a search on them will bring up various models. The one I mentioned and use, a fairly inexpensive low quality model is the CanoScan LiDE 210. The 220 is the current model replacing mine.

Programs that can scan documents using a scanner to create electronic files.

Kurzweil 3000 www.kurzweiledu.com
Read&Write www.texthelp.com
Scan and Read Pro www.readingmadeeasy.com

Scanning and OCR software to use with a scanner:

ABBYY Fine Reader - <http://www.abbyy.com/>
Omnipage and other programs - www.nuance.com/
ReadIris Pro - <http://www.cadandgraphics.com/>

Stands and mounts for iPad

Standscan - <http://standscan.com/> - \$34.95
Juststand - <http://ipaddocumentcamera.com/> - \$89.00
Fopydo Scanning Stand - www.amazon.com - \$12.00
<http://www.modularhose.com/Assistive-Technology> - \$35.00 - 50.00 for a variety of portable solutions

Working with cell phone, tablets and Google Drive

With high quality cameras (8mp or better) in the latest tablets and cell phones, many apps can use the camera to take a picture of a printed page and save it as a PDF, or save the image directly to Google Drive as a JPG image, where it can be shared, and accessed by students, or simply uploaded to Google Drive for you to process, save and distribute later.

Programs such as Kurzweil 3000 (both the installed and the firefly web version) can import and convert JPG and PNG images of printed pages that were taken with the camera and exported from the Photo Library to Google Drive for example. In Kurzweil 3000 from the file menu you can choose Open from Google Drive, open the JPG image and Kurzweil will then process the image, convert to readable text and read aloud highlighting word by word.

Snapverter (an add-on for Read&Write for Google) will convert images uploaded into the Snapverter folder within Google Drive to a PDF file and can then be opened using Read&Write for Google.

Sample scenarios

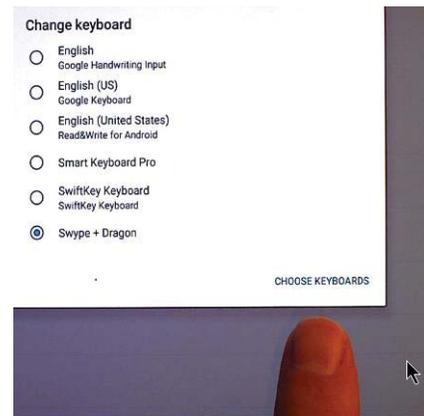
With my iPad, using Prizmo, I can:

- Take pictures of multiple pages, saving them all in one document
- Choose Export as File, export the file as a PDF (Image + Searchable Text) to GoogleDrive (if you choose a Shared folder in Google Drive to save it into this allows students how have access to that folder to open it later)
- On a computer or Chromebook:
 - Open Google Drive - you can now download (or Open) the file into an app or program capable of opening PDF files, and also has TTS to read the document aloud, or even annotate on it. Examples include:
 - The free **Adobe Reader** (on a computer), which has built in TTS (no highlighting word by word though) and the ability to annotate or type on PDF documents
 - **Kami** - the free PDF reader for Chrome - you can then also use the Chrome extension SpeakIt to read the text - Right-click on the file in Google Drive and choose Open with: Kami. Also has typing and annotating tools allowing you to type on a PDF document.
 - **Kurzweil 3000** (installed version) or the **Firefly** web version - allows you to import PDF or image files (png, jpg) from Google Drive from the File menu in Kurzweil 3000 or the Google Drive button in Firefly. Will convert image files - such as taking a picture of a printed page with your iPhone and saving to Google Drive, and read aloud, allow you to type on document.
 - **Read&Write for Google Chrome** (in the Chrome browser) - if you have this subscription based Read&Write for Google extension for Chrome installed you can open the file into it to have it read and to annotate on it - Right- Clicking on the file in Google Drive, choose Open with: Read&Write for Google Chrome

Keyboards

Downloading and Activating Keyboards - Android

Download keyboards for the Android tablets from the Google Play Store (play.google.com). To add keyboards you have downloaded to the list of keyboards you can use choose: Language & Input, then Current Keyboard, (top of list) select Choose Keyboards at the bottom of the window to see a listing of all your keyboards.



Turn on or off any keyboard you would like to make available then choose the back button to return to the Language and Input screen.



When a keyboard is displayed on-screen choosing the keyboard icon at the bottom right on screen will bring up the pop-up list of keyboards to change in the fly.



As many of the Android keyboards are updated by the developers you will find the globe symbol on the keyboard similar to the one on the iPad keyboards, allowing you to toggle from keyboard to keyboard, between those that have the globe icon.



Additional keyboards for iPad:

- Lowercase Keyboard - This keyboard displays the OpenDyslexic font
- The Math Keyboard - use this keyboard to type fractions and other math symbols and functions
- MyScript Stylus - This keyboard allows you to use your stylus to write and has handwriting recognition ability
- SuperKeys Assistive Keyboard - SuperKeys allows students 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.
- 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

Android

On the Google Play Store you can find many similar keyboards for Android tablets including:

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

Additional Chromebook On-Screen Keyboards:

Comfort On-Screen Keyboard Pro

Google Input Tools - change language

Virtual Keyboard

<http://onlinekeyboard.org/> - online virtual keyboard, multiple languages, need to copy/paste text from editor

Loderi - virtual keyboard, multiple languages

Computer

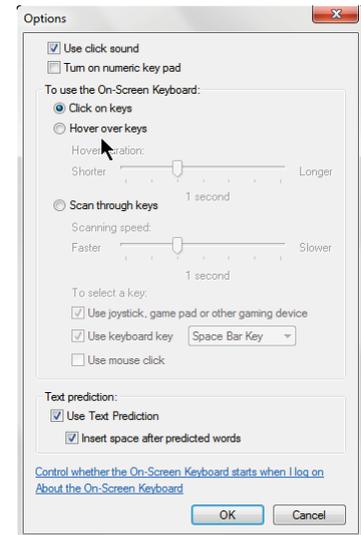
Click-N-Type (switch settings in the options menu)

<http://cnt.lakefolks.com/>

<http://cnt.lakefolks.com/portable.htm>

Windows on screen keyboard

- Control Panel, Ease of Access, Ease of access Center – Start on-screen Keyboard
- Resize, Move, Word Prediction



Choose the Options button found in the lower right on the keyboard -can turn on Dwell to Select, Hover over keys, Scanning by turning on Scan through keys

Mac - can download a keyboard as a dashboard widget

To activate the built in keyboard:

- System preferences
- Keyboard
- Make sure Keyboard tab is selected, choose Show Keyboard & Character Viewers in menu bar
- In the menu bar at top of screen choose the keyboard icon, Show Keyboard Viewer

- Use Switch Control in **OS X El Capitan (10.11)** or higher - Cross scanning www.typeterra.com - virtual online keyboard

Switch Accessibility

iPad - Settings, Accessibility, Switch Control - Turn on "Group Items" so that a row of keys will be highlighted at a time for choice, so a student does not need to scan each key on the keyboard to get to the one they need. Also, under "Tap Behavior" turn on Auto Tap or Always Tap.

Mac OS X 10.11 (El Capitan) and higher - Switch Control - use with on screen keyboards - Cross Scanning

- KeyStrokes by Assistiveware – access with head mouse, trackball, mouse
- SwitchXS – scanning using one or two switches (www.orin.com)

Android - Settings, Accessibility, Switch Access, Settings then choose Scanning Method. Choose Row-column.