

LOW TECH ASSISTIVE TECHNOLOGY

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ASSISTIVE TECHNOLOGY

- Anything that helps someone to do something they otherwise could not do
In school, home, or the community.

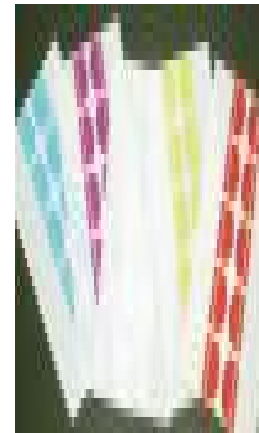
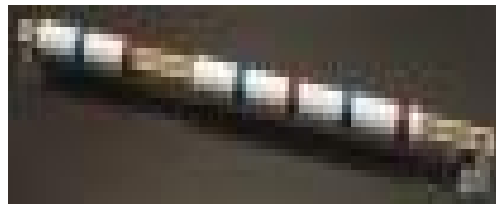
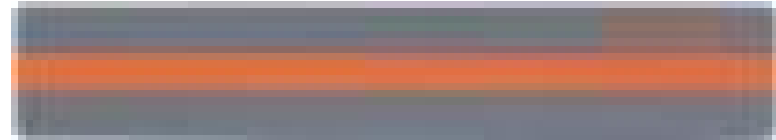
ASSISTIVE TECHNOLOGY DEVICE

- Any item, piece of equipment or product system, whether acquired commercially off the shelf, modified or customized, that is used to enhance, improve or maintain the functional capabilities of individuals.

TECH IS A MEANS TO ACHIEVE GOALS

- Is the technology that is being considered necessary for the student to meet one or more of the goals of the IEP.

LOW & MID TECH INTERVENTIONS ACROSS THE CURRICULUM



Lottie Kits

- LOW & MID TECH INTERVENTIONS
 - Many of the following items are available from LoTTIE Kits which are created by Judi Sweeney @ Onion Mountain Technology
 - www.onionmountaintech.com

LITERACY

Reading, Writing, Spelling

- **Colored Filters / Overlays:** Can help students read/copy with greater accuracy

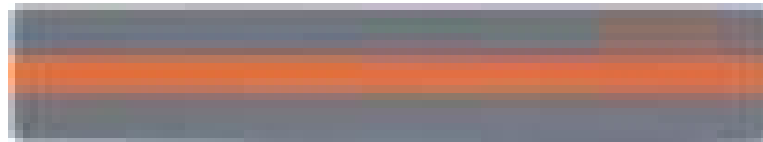
Fuzzy or moving letters

Reversals & spacing while copying

Slow reading & copying



- **Plastic Reading Guide**



COLOR FILTERS

- Students with Language Based Learning Disabilities (Dyslexia)
Blue Filters (36%) or Green Filters (19%)
- Students with ADD/ADHD
Often choose high contrast colors (e.g. bright pink & lime green)
- Students with Developmental Delays
Often choose the color red on the computer as either background, text, or highlighting color.
- Students with a diagnosis w/i the Autism spectrum
Often prefer blue filters
- Students with visual impairments
Often choose yellow text set against dark navy or black background
- Students with behavioral or emotional problems
Often choose darker filter colors



LITERACY



- **Templates/Signature Guide**-surrounds word and blacks out words above and below
- **Removable Highlighter Tape**-used to highlight any text and can be removed without damage
- **Erasable Highlighter** by Crayola
- **Magnifiers**-Magnify words being read and help student keep focused
- **Handheld Spell Checkers**
 - Franklin Spelling Ace and Children's Talking Dictionary
- **Random House Bad Spellers Dictionary**



WRITING



Specialized paper

Carbonless Notebook-used to get a copy of student peer's notes for various subjects.

Note Taking Paper-Heavy weight notebook paper with dark blue lines and additional pale blue shading. Helps older students keep writing within the lines.

Raised paper-raised_line embossed papers for students beginning to control the size of their letters and stay within the lines.

Magnetic Paper-Print your own magnetic letters, numbers, symbols and use with the Stickin' Place Magnetic Sheets

Slant Board-lightweight bookstand that opens to 5 different angles, holds books open & stores flat to carry easily. Can also be used to carry papers, pens, and pencils when closed.

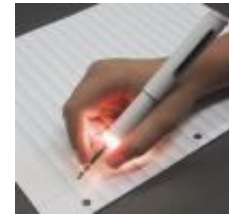
Page Up-holds up to 20 sheets of paper in an upright position

Writing

- *Rubber Stamps*
- For students who have difficulty with handwriting tasks, stamps with lower and upper case stamps give them a way to answer in workbooks, on quizzes, or for homework without having to hold a pen or pencil and without having to put all of their effort and time into the production of correctly shaped letters.
- When deciding under what circumstances a student should use the stamps, it's not realistic to expect the student to stamp more than several letters/numbers per answer. However, the stamps can be very useful for multiple choice questions, true and false (using just the T or F stamp), for math, or for adding punctuation to the end of printed sentences or workbook exercises.



WRITING



Pencil Grips-may also assist an individual to write with less fatigue and increased control.

Specialized Pens

Dr. Grip Pen-built-up circumferences

NiteWriter Pen -The pen lights up as one writes for better lighting, improved tracking, and temporary highlighting. It increases attention to letters being written and helps with visual perception needs.

Evo Pen-ergonomic shaped pen fits perfectly into palm of a hand

Keystick Keyboard Labels Adhesive letters and key functions are Color Coded for accommodations using a keyboard.

WRITING

- PORTABLE WORD PROCESSORS

- Neo

- www.renlearn.com

- Fusion

- www.writerlearning.com



▶ NEO 1 and NEO 2



MATH



- **Portable Calculators**

Talking Calculators-Providing auditory and visual feedback for students

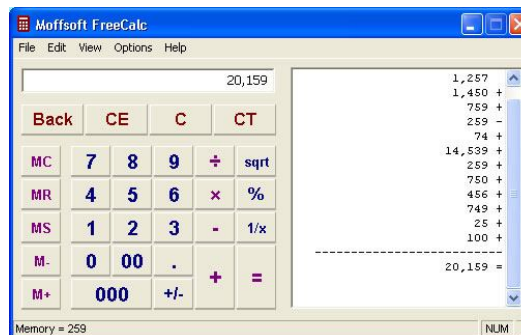
Coin-u-lator/Money Calc-helps students recognize coins and learn how to add money amounts together. It has keys shaped exactly like coins and a small dollar bill. You can also figure out the tax.

Fraction Calculator

On Screen Calculator

Moffsoft FreeCalc

- **Adjustable calculator size**
- **Tape** - Save, print, or clear the simulated paper history tape
- **New keys** - Clear Tape {CT}, double zero {00}, triple zero {000}, and memory subtract {M-} keys have been added
- *<http://www.moffsoft.com/downloads.htm>*



MATH

- Stamp Set
 - Clock Stamp Set
 - Fraction Stamp Set
- Wipe-Off Clock
- Talking watches
- Talking clocks



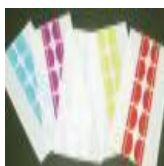
MATH

- Highlighter Tape
 - Column by Column
 - Row by Row
- Math Tables
- Math Line
- Math Grids
- Abacus
 - Coin Abacus
- Specialized rulers
 - Finger Grip Ruler



ORGANIZATION / STUDYING

- Timers
 - Watch Timers
 - Visual Timers (Time Timer)
- Calendars / Project Planners
- Picture or Visual Schedule
- Checklist for home / school



ORGANIZATION / STUDYING



- **Digital Voice Recorder**-provides a way for auditory learners and poor fine motor skills, to record their assignments. . A small voice recorder can also be used as a communication tool between teacher and parents on a daily or weekly basis.
- **Colored Notebooks/Paper**-for students who can see and edit their work better on a colored paper
- **Post It Notes, Page Markers, and Mini Flags**-Note taking can be simplified and reduced by attaching Post-Its to the page with the important information. Use them to summarize or write key words and phrases. Draw arrows to point to main ideas. **Pink - Important vocabulary** , **Green - Names to know**, **Purple - Picture/map**, **Yellow – Dates**, **Blue - Chapter questions**
- **Color-Coded Folders**-Use these transparency files to evaluate student needs for color in reading and copying, helping students with poor spacing between letters and words while copying, and with making documents visible for easy viewing.

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- **Simon Sounds It Out I & II**

www.donjohnston.com

Research-based phonics program for beginning readers, using a personal tutor

33 levels of instruction with eight activities at each level

http://www.donjohnston.com/media/flash/product_demo/simonsio/index.html

Word Q

- Simple, easy-to-use writing support increases productivity, independence, self-confidence & motivation
- Work directly within any Windows® 98 – Vista standard application
- Use predicted words as you write to help you spell
- Hear predicted words spoken to help you choose
- Select predicted words with a single keystroke or a mouse
- Hear what you type for spell checking and word flow
- Proofread your writing with highlighting and speech
- Use a self-adapting prediction vocabulary that matches your age and writing level
- Expand, focus, or limit your prediction vocabulary
- Customize how you see predictions
- You may download *WordQ 2* and *SpeakQ* for a free 30-day evaluation which begins from when it is installed. All features are available during this evaluation with the exception of certain high quality voices. *WordQ* must be installed before installing *SpeakQ*.

Speak Q

- Enjoy all of the existing benefits of *WordQ*
- Train using speech prompting if you have difficulty reading the training text Work directly within any standard application (e.g. Microsoft Word, Wordpad, Outlook)
- Dictate either continuously into a document or discretely into the word prediction box
- Dictate in phrases or individual words Hear what the computer recognizes
- Type, use word prediction, or speak-to-write at any point in your writing Make corrections using speech-enabled word prediction Back-up and restore your speech profile
- Use speech recognition without having to learn and memorize speech commands –Demo 30 day evaluation

Tool Factory Software

Literacy and Math

- **ABC CD** Gr. K-1, Inclusion Have you ever seen the letter 't' turn into a tadpole? The talking animated alphabet will bring all 26 letters to life for young children. Their delightful guide does flips, twirls, grins and congratulates kids with "All Right!" as they progress through the program.
- **Sound Stories** Gr. K-2, Inclusion Read a story for every letter of the alphabet and digraphs. Thirty interactive books include activities to identify sounds, develop alphabetical awareness, recognize letters, and read and spell words. Teachers can target specific letters, abilities, and track progress.
- **Sound Activities** Gr. K-2, Inclusion The friendly spider from Sound Stories is back to cheer, "Well done!" Activities reinforce sound identification, letter recognition, listening, phonological awareness, sound/symbol correspondence, segmenting and blending, and alphabet knowledge.

Tool Factory

Literacy and Math

- *Tool Factory*

- **Number Train** Grades K-1 Ride to a new understanding of counting, place value, adding, and subtracting. Roll a dice and play an adding game with an elephant. Learn about odd and even numbers with the Fandango Frogs. Subtract with ducks as they dive into the water and swim away.
- ***Numeracy Bank Series 4-CD Set*** Each CD contains over 200 short, structured activities that cover the core math curriculum for grades 3-8 ability levels. Progress is automatically tracked and differentiation is easy to configure based on ability levels or learning styles. The mature graphics are ideal for adult learners.
- **Fizzy's Number Skills-** practicing basic number concepts with Fizzy and friends. Behind each gate in the Number World garden lies an engaging mathematical adventure with numbers ranging 0-10.

RECORDING FOR THE BLIND AND DYSLEXIC

- **RFB&D Individual Membership is now FREE.**
- Thanks to major funding from the U.S. Department of Education, Office of Special Education Programs, Grant #H327D090001 and support of private donors, RFB&D Individual Membership is now free to individuals with proper certification*.
- **FREE** access to the nation's largest audiobook library of textbooks and literature titles
- Human-narrated audiobooks with descriptions of images, tables and graphs
- Works with Bookshare.org
- 24/7 online member services and phone support
- Various audiobook downloadable formats, including DAISY and WMA (Windows Media Audio) www.rfbd.org

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- **SOLO Literacy Suite** www.donjohnston.com

This literacy software integrates a word predication (Co-Writer), a text reader (Read Out Loud), graphic organizer (DraftBuilder), & a talking word processor (Write Out Loud)

Ability grade level: 3 – 9

Interest grade level: 3 -12

CoWriter/Write Outloud

- **CoWriter-** Talking word prediction program that works with any conjunction with any application you write in like MS Word, Online, Blogs, Email, etc. As you type, Co:Writer interprets spelling and grammar mistakes and offers word suggestions in real time.

http://www.donjohnston.com/media/flash/product_demo/cowriter6/index.html

Helps Students with:

- Illegible handwriting
- Very poor phonetic or inventive spelling
- A physical disability makes typing difficult
- Difficulty translating thoughts into writing
- **Write Outloud-** Talking word processor, simple to use and reads words as they are written, providing real-time auditory feedback. Writing tools, including Franklin's Talking Spell Checker, homophone checker, and dictionary help your students confirm their word choice in language they understand.

http://www.donjohnston.com/media/flash/product_demo/writeoutloud6/index.html

BOOKSHARE

Bookshare is a free online subscription for accessible books for all U.S. students with qualifying disabilities.

Federal Grant to provide free access

Downloadable free reading tools

Can be played on the computer, CD, or converted to play on a Mp3 player. Students can have access at home.

Offers more than 50,000 digital books, textbooks, teacher-recommended reading, & periodicals

- www.bookshare.org

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- **Start to Finish Books** www.donjohnston.com

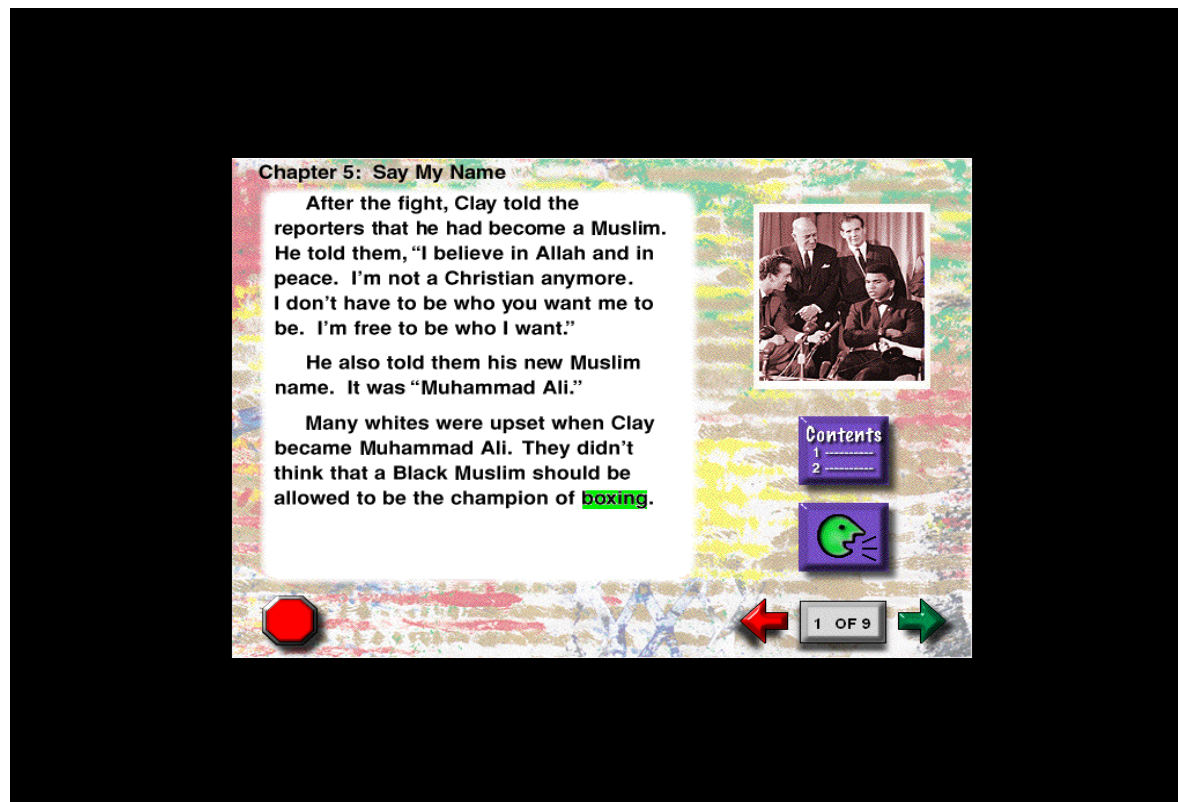
Age-appropriate narrative and informational texts that are written at two readability levels and delivered in three media formats (paperback book, computer book, audio book)

Ability grade level: 1.5 – 5.5

Interest grade level: 5 – 12

START TO FINISH BOOKS

http://www.donjohnston.com/media/flash/product_demo/stflibrary/index.html




Chapter 5: Say My Name


After the fight, Clay told the reporters that he had become a Muslim. He told them, "I believe in Allah and in peace. I'm not a Christian anymore. I don't have to be who you want me to be. I'm free to be who I want."

He also told them his new Muslim name. It was "Muhammad Ali."

Many whites were upset when Clay became Muhammad Ali. They didn't think that a Black Muslim should be allowed to be the champion of **boxing**.



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2



1 OF 9

SOFTWARE FOR LITERACY

(Reading, Writing, Spelling, Math)

- **IntelliTools Classroom Suite**

Researched-based software that can be used to differentiate instruction across the curriculum

Templates available to modify and “publish” that correlate to learning standards

Web based “ACTIVITY EXCHANGE” of over 3000 interactive activities

www.cambiumlearning.com

www.intellitools.com

Ginger Software

- *<http://www.gingersoftware.com>*
contextual spell and grammar checker, automatically corrects severe spelling and grammatical mistakes, It enables users to produce error-free texts, quickly and easily. The product operates as an online service and supports Microsoft text editors such as Word and Outlook, and will soon support Internet Explorer as well.

Boardmaker / Plus / SD-Pro

- www.mayer-johnson.com

Boardmaker allows you to create printed materials using Picture Communication Symbols (PCS) and other pictures and graphics.

Boardmaker Plus and SD-Pro allow you to create interactive activities with voice, sound, animations, and video capabilities.

Boards can be shared on www.adaptedlearning.com

Adaptedlearning.com

- This free web resource from Mayer-Johnson and DynaVox combines file sharing, powerful search capabilities, implementation articles, open discussion forums, and community functions
- AdaptedLearning.com enables you to find a variety of adapted curriculum, tasks schedules, communication boards and activities that are print-based or interactive
- Search for specific activities by entering keywords (e.g. subject, author, grade level)
- Boards are shared; however, they can be private (specific group) or public (available for everyone to use)
- You must register at adaptedlearning.com to use this free resource
- This resource works with Boardmaker, Boardmaker Plus or Boardmaker SD-Pro

Read and Write Gold

- Allows struggling students to access any curriculum and complete reading, writing, and research assignments as well as take tests independently.
- Word Prediction, Talking Word Processor, Phonetic Spell Checker
- Works with Dragon Naturally Speaking
- Reads PDF's and Daisy Books
- Speaking Dictionary
- Can be used with any text
- Internet Compatible
- Speech enabled calculator
- Short videos to demonstrate

PREMIER ASSISTIVE TECHNOLOGY SOFTWARE SUITE

- The Mission of Premier A.T. “is to enrich and improve the lives of millions of people worldwide by making information truly accessible through the use of affordable technology”.
- **Breaking Down Barriers to Assistive Technology Grant**
Established in 2002 “to help bridge the gap between education budgets and the need for educational organizations to deploy sufficient resources to serve the needs and requirements of not only special education programs, but broader based literacy initiatives across their organizations”.

www.readingmadeEZ.com

PREMIER ASSISTIVE TECHNOLOGY SOFTWARE SUITE

- Scan and Read Pro (**WP)
- Universal Reader
- Talking Calculator
- Talking Word Processor (**WP)
- Text to Audio
- Text Cloner Pro
- Scan and View
- Complete Reading System
- Ultimate Talking Dictionary
- PDF Magic Pro
- Talking Checkbook
- E-Text Reader

Math Software

- **Timezattack**-<http://bigbrainz.com>- Multiplication game

www.Intellitools.com

- **MathPad - G R A D E S K – 2** this is an electronic worksheet that enables students to do addition, subtraction, multiplication, and division directly on the computer.
- ***MathPad Plus- Fractions and Decimals* 3 – 8** offers the same functionality as MathPad directly on the computer
- ***Number Concepts 1-*** Grades K-2, practice counting, beginning adding and subtracting, and greater than.
- ***Number Concepts 2-*** Grades 3-5 Skip counting, place value, and factoring

Math Websites

- *www.webmath.com*-students can get answers and step-by-step study help for math problems
- ***http://nlvm.usu.edu*** - National Library of Virtual manipulatives
- *http://www.mathslice.com* - Create worksheets to download and print
- ***http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml*** - games for ages 4-11 yrs
- ***http://www.bbc.co.uk/schools/websites/11_16/site/maths.shtml*** - games for 11-16 yrs
- *http://www.visualfractions.com* includes online tools for learning fractions, PowerPoints to help teach fractions, downloadable worksheets, and downloadable software for creating circle fractions
- *http://illuminations.nctm.org/*. a collection of online, standard-based virtual manipulatives and lessons, to make math come alive in the classroom and at home

Literacy Websites

- **<http://wordweb.info>**- Comprehensive English thesaurus and dictionary that sits in your tray.
- **<http://www.fcrr.org/activities>**- Florida Center for Reading Research
- **www.spellingcity.com**- Free online spelling practice program.
- **www.literactive.com**- website created by teachers and parents for practice reading skills
- **www.speakingofspeech.com**-is an interactive forum for speech/language pathologists and teachers to improve communication skills in our schools
- **www.hiyah.net**- This educational software is made for children 18 months to 4 years of age (or higher for children struggling with language delays due to autism or other causes). **Free** Software for Children who want to use the computer but can't yet use a mouse.
- **www.carlscorner.us.com**-this website has been created to provide resources and materials in the area of language arts.
- **[www.readwritethink.org/materials/Letter generator](http://www.readwritethink.org/materials/Letter_generator)**-practice letter writing

Miscellaneous Websites

[_http://www.kpronline.com](http://www.kpronline.com) —keyboard assessment

[www./bookbuilder.cast.org](http://www.bookbuilder.cast.org) Use this site to create, share, publish, and read digital books that engage and support diverse learners according to their individual needs, interests, and skills.

<http://lessonbuilder.cast.org>- provides educators with models and tools to create and adapt lessons that increase access and participation in the general education curriculum for all students.

- <http://www.zacbrowser.com>- Web Browser designed by a grandfather for his grandson who is on the Autism Spectrum. Appropriate for young children or those with developmental disabilities. (Windows only)
- www.watchknow.org Wikipedia, has launched a site that provides free access to a library of educational videos for students ages 3 to 18. 11,000 videos
- www.techmatrix.org The TechMatrix is a powerful tool for finding educational and assistive technology products for students with special needs
- <http://www.bbc.co.uk/schools>- activities for all curriculum areas
- http://schools.nycenet.edu/D75/literacy/adaptedbooks/catalog_by_software.htm#bm2 **Adapted books** in a variety of formats from New York City Department of Education, Special Education District 75. Many are age-appropriate for older students.

Infinitec

- *www.myinfinitec.org* - must register with school email
- *Resources:* AAC, Autism, Reading, Writing, Math, Science, Social Studies, Fine Arts, Rtl, Access
- *Video Classroom*
- *Lending Library* - (low-mid tech devices free of charge for a period of time)
- *Workshops*- free or minimal charge for Infinitec members
- *Group Buys* - for specialized software

MAKING IT WORK!

- Try before you buy
- **GIVE IT TIME**
- Less is more
- Learning to use the tools
- Using the tools to learn
- Multi-modality
- Getting started & defining a long term plan
- Trial & Error
- Training & **Support, Support, Support** to integrate the assistive technology across the curriculum