

UTILIZING ASSISTIVE TECHNOLOGY TO ASSIST IN THE RTI PROCESS

ISHA CONVENTION
February, 2010

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RTI & AT

I Response to intervention

- Identify students at risk for poor learning outcomes
- Provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness

I Assistive Technology

- Anything that helps someone to do something they otherwise could not do.

CATEGORIES OF A.T.

- I Writing
- I Computer Access
- I Composing Written Material
- I Communication
- I Reading
- I Learning/Studying
- I Math
- I Recreation & Leisure
- I Electronic Aids for Daily Living
- I Mobility
- I Vision
- I Hearing
- I Vocational

ACCESSIBILITY OPTIONS BUILT INTO YOUR COMPUTER

WINDOWS XP

- Start all programs...accessories...accessibility...accessibility wizard
- Visual Accommodations-narrator, high contrast, magnifier, mouse accommodations

Hearing Accommodations – sounds for visual warning when system makes a sound and display captions for the speech and sound they make.

Physical Accommodations – mouse options such as sticky keys, filter keys and toggle keys. Also keyboard options such as the onscreen keyboard

ACCESSIBILITY OPTIONS BUILT INTO YOUR COMPUTER VISTA

The Ease of Access Center includes: Quick access to common tools. Magnifier, Narrator, On-Screen Keyboard, and High Contrast. They will remain on until you log off. Also, the Quick access section is read aloud while it is highlighted allowing you to select a tool by pressing the SPACEBAR when the tool name is either read or highlighted.

Get recommendations. This questionnaire asks about routine tasks and provides a personalized recommendation of the accessibility settings and programs that are likely to improve your ability to see, hear, and use your computer. *

The Ease of Access Center also lets you explore seven categories of accessibility tools and options. When you select these tools and options, they will automatically start each time you log on.

Start, Control Panel, Ease of Access, Ease of Access Center

LOW & MID TECH INTERVENTIONS ACROSS THE CURRICULUM

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
- | Removable Highlighter Tape
- | Erasable Highlighter by Crayola
- | Magnifiers
 - Magnifying Bar
- | Spell Checkers
 - Handheld spell checkers
 - Franklin Spelling Ace
 - Built into software programs
- | Random House Bad Spellers Dictionary

WRITING

Pencil Grips

Specialized Pens

- Dr. Grip Pen
- Easy Grip Pen
- Evo Pen
- Note Taking Pen

Specialized paper

- Colored paper
- Carbonless Notebook
- Note Taking Paper
- Raised paper

Software & Websites for Writing

- | **StartWrite:** software to create customized handwriting worksheets & lessons in cursive and manuscript startwrite.com
- | <http://www.handwritingworksheets.com> - create your own worksheets
- | <http://www.montgomeryschoolsmd.org/departments/hiat/resources/tools.shtm> Printable adapted paper
- | www.incompetech.com
- | www.abouthandtyping.com

On-Screen Keyboards

- | Click 'n Type: free on-screen virtual keyboard
 - www.lakefolks.org
- | <http://www.march-of-faces.org/resources/vkt.html>
- | <http://www.comfort-software.com/on-screen-keyboard.html>
- | <http://www.download3000.com/download-bekey-virtual-on-screen-keyboard-count-reg-11621.html>
- | www.rjcooper.com

WRITING

| PORTABLE WORD PROCESSORS

Alpha Smart

- Neo
- Dana
- www.renlearn.com

| Fusion

- www.writerlearning.com

MATH

| Portable Calculators

- Talking Calculators
- Coin-u-lator
- Money Calc
- Calculator with large numbers
- Fraction Calculator
- On Screen Calculator

| Talking watches and 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
- | Electronic Organizer

ORGANIZATION / STUDYING

- | Digital Voice Recorder
- | Low Tech Organization
 - Colored Notebooks
 - Post It Notes
 - Page Markers
 - Mini Flags
 - Color-Coded Folders

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **READ NATURALLY:** Audio CDs to improve reading fluency and comprehension
- | Research-Based
 - Combines teacher modeling, repeated reading, assessment & progress monitoring
 - Supports and reinforces the essential components of reading as outlined by the National Reading Panel.
 - phonemic awareness, phonics, fluency, vocabulary, & comprehension.

www.readnaturally.com

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **Earobics:** 3 levels; ages 4 – adult
 - www.earobics.com
 - Phonological awareness, auditory processing & phonics training

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **Simon Sounds It Out**
 - 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

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **Word Maker** www.donjohnston.com
 - www.donjohnston.com
 - Researched-based software which follows the four-block model to learn phonics patterns to develop word decoding skills
 - 140 sequential & systematic phonics instructions

Spelling Software Tool Factory

- | Two Wise Owls-Rhythm Helps Your Two Hips Move! That's how you spell Rhythm! Two Wise Owls is bursting with tons of mnemonic devices like this to help students remember difficult spellings! The program has been created to target pupils aged 7 and beyond as well as learners with specific learning difficulties (including dyslexia)
- | **SuperSpell: A Day At The Beach** -Students build sandcastles while building spelling skills in this comprehensive three-part program. Includes detailed placement tests, drill-and-practice sets, and printable worksheets. It's a whole spelling kit for work at the computer, or away from the lab.
- | Letter Olympics-help with discriminating between b and d. Students with dyslexia and young learners alike will love taking the sporting challenges while working on b and d reversals.
- | Spell Track -Learners ranging from pre-school to dyslexic adults will appreciate Spell Track's expertly designed, multi-sensory activities in: phonemic awareness, left-to-right tracking, word recognition, sequencing, segmenting, blending, and proofreading.

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **SOLO Literacy Suite** www.donjohnston.com
 - This literacy software integrates a word prediction (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

Free Text to Speech

- | <http://www.naturalreaders.com> free text-to-speech software program which converts any written text to speech (Word, pdf, websites, emails)
- | <http://clickspeak.cicworld.net>: a free Firefox extension that reads the Internet and highlights phrases and sentences as it reads
- | <http://www.cross-plus-a.com/balabolka.htm> -Free text-to-speech download, can also download a portable version that runs off a USB thumb drive can save as wav or MP3 file.
- | <http://www.readthewords.com/> Register first, upload file or choose text or website to read, a recording is generated which you can listen to online or download to an mp3 player, upload to a blog, etc. Very Cool tool worth letting your students explore.
- | <http://www.cross-plus-a.com/balabolka.htm>- Free text-to-speech download, can also download a portable version that runs off a USB thumb drive.can save as wav or MP3 file.
- | <http://fullmeasure.co.uk/powerTalk/> -PowerTalk- free text-to-speech for PowerPoint presentations
- | <http://readplease.com/> -there is a free version and a pay version
- | <http://www.wordtalk.org.uk/Home> Free plugin for all versions of Microsoft Word. It highlights and contains a talking dictionary

SOFTWARE FOR LITERACY & MATH (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
- www.cambiumlearning.com

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

SOFTWARE FOR LITERACY (Reading, Writing, Spelling)

- | **Kidspiration / Inspiration**
 - www.inspiration.com
 - www.inspiration.com
 - Graphic Organizers
 - Kidspiration is created for K-5 learners
 - Inspiration is created for students in grades 6 – 12

GRAPHIC ORGANIZERS

- | <http://www.eduplace.com/graphicorganizer>
- | <http://www.learnalberta.ca/content/ssass/html/graphicorganizers.html>
- | http://interactives.mped.org/view_interactive.aspx?id=127&title=
- | <http://www.readwritethink.org/files/resources/interactives/storymap/>

BIBLIOGRAPHER

| **Citation Machine** citationmachine.net

| Free website which guides users through the process of creating citations in MLA or APA formats

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.

Tool Factory Software Literacy

| **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.

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

Learning.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

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

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

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.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.cariscorner.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

Literacy Websites

Speaking of Speech.com is an interactive forum for speech/language pathologists

Writing is Fun writingfun.com

Cast.org/teachingeverystudent

Provides info on UDL along with models and tools to create and adapt lessons that increase access and participation in the gen ed curriculum

- | **Book Builder** allows you to create, share, publish & read digit books

www.mrcoley.com

Mr. Coley's 5th grade classroom website! He has created video tutorials and given websites to create flashcards and to put them on your iPod. Use your iPod to study flash cards. Mr. Coley has created specially designed PowerPoint presentations that can serve as color flash cards to help you review some of the concepts studied in class. Using iPod's "Photos" feature, you can transfer the images to your iPod and study on the go! Do you own a Microsoft Zune? These flash cards can be viewed on a Zune as well! If you don't have an iPod or a Zune, that's okay too. You can download the PowerPoint presentations and view them on your computer.

Teachers can learn how to create your own iPod flash cards by visiting the iPod Flash Cards web Resource page.

Miscellaneous Websites

<http://www.kpronline.com> –keyboard assessment

www.techmatrix.org The TechMatrix is a powerful tool for finding educational and assistive technology products for students with special needs www.startwrite.com.

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.

Miscellaneous Websites

www.cast.org/learningtools/index.html
Supports for 6-12th grade students who struggle with writing science reports

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

<http://www.zacbrowsers.com>
This Web Browser was designed by a grandfather for his grandson who is on the Autism Spectrum. It is appropriate for young children or those with developmental disabilities. (Windows only)

Miscellaneous Websites

- | www.edhelper.com
- | <http://www.pppst.com/themes.html> free interactive activities and powerpoint presentations
- | <http://dpi.wi.gov/SPED/at-wati-forms-fillable.html> -WATI now has there forms fillable in microsoft word
- | www.scholastic.com/tbwwidget The *Teacher Book Wizard*Widget is a quick, easy-to-use tool that helps you find just-right books for all ages, grades, and reading levels
- | <http://www.mcedservices.com/phonics/phonics.html> These **simple stories and activities** are designed for older students and adults. Stories are read aloud. Accompanying PDF's of story text and cloze activities also available – Downloaded Hot Rod story and Time Bingo Calendar Flashcards

Miscellaneous Websites

- <http://cameramouse.org> Camera Mouse is a program that allows you to control the mouse pointer on a Windows computer just by moving your head.
- <http://www.thinkingmoves.com> This is a multi-sensory program for children with Autism Spectrum Disorder, Asperger's, Sensory Integration Disorder, ADD/ADHD, anxiety and or depression.
- <http://kidsweatherreport.com>- a simple way to show young children the weather forecast for the current day so that they can dress themselves appropriately.

Photo Story 3

- | Photo Story 3 is a free tool from Microsoft.com. Teachers can use it to introduce new topics, writing assignments, reports, or just a fun and creative way to teach. You can import over 300 photos, add titles, and music. The slide show can be saved for playback over the Web, in DVD players, in PowerPoint presentations and more.

Math Software

- | **IntelliTools.com**
- | **Classroom Suite**
- | **Math Pad** – Grades K-2 This is an electronic worksheet that enables students to add, subtract, multiply, and divide directly on the computer
- | **Math Pad Plus** – Fractions & Decimals Grades 3 - 8
- | **Number Concepts 1** Grades K-2 counting, adding, subtracting, and greater than
- | **Number Concepts 2** Grades 3-5 skip counting, place value, and factoring

- | **Timezattack** – <http://big.brains.com> Multiplication game

Tool Factory MATH SOFTWARE

- | **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.

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 Websites

- | 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://nlvm.usu.edu> - National Library of Virtual Manipulatives
- | www.mathslice.com
- | www.visualfractions.com
 - Online tools for learning fractions: Power Points to help teach fractions, downloadable worksheets & games
- | <http://illuminations.nctm.org>
 - A collection of online, standard-based virtual manipulatives and lessons available from the national teachers of mathematics

Math Websites

- | www.webmath.com-students can get answers and step-by-step study help for math problems
- | http://www.harcourtschool.com/glossary/math_advantage/index.html K-8 animated glossary of common mathematical terms, categorized [grade.htm](#)
- | www.touchmath.com
