TECHNOLOGY FOR SPECIAL EDUCATION

SUCCESSFUL AND EXCITING TEACHING ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Maria L. Nahmias, Ph.D.



Why Use Technology in Education?

- It's Fun!
- Students Love it!
- More teacher power in the classroom.
- Uses best practices and best teachers.





Assistive Technology



 Teachers, students and families use assistive technology to interface and facilitate learning and communication and collaboration.

 IDEA classifies assistive technology as a related service. It's defined in the law.

Turnbull, Turnbull, Erwin, Soodak, Schogren (2011)

ACCESSIBILITY: WEBSITES & COMPUTERS

- http://trace.wisc.edu/world/web/
- Trace at University of Wisconsin



- Accessible.org (Bobby)
- http://www.accessible.org/bobby-approved.html
- COMPUTERS:
- Go to start menu and right click accessibility

Resources for the Blind, Visually Impaired, & Dyslexic Students

http://www.learningally.org/Learning Ally



(Previously RFB & D: Recordings for Blind and Dyslexics)
Provides books on tape for students and professionals all ages.

Alpha Smart Mini Computers and Neo Computers for Students

http://en.wikipedia.org/wiki/AlphaSmart
 Alpha Smart Mini Computers

- www.alphasmartpro
- http://www.neo-direct.com/intro.aspx
- http://www.neo-direct.com/intro.aspx
- NEO Laptop Computers for Classrooms

Technology-mini computers

Alpha Smart Neo



Apple I PAD, I PAD 2

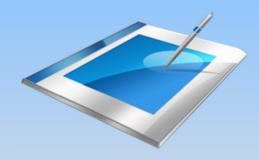


- http://www.apple.com/education/ipad/
- 2011-2012: New IPAD 2

- http://www.apple.com/ipad/videos/
- Ipad 2 (offers reading with adaptations)
- Live podcast of new Ipad 2
- 2012 New IPADs 2, 2S
- I Phone 4GS, 5

I PAD in Classroom Learning 2012

 http://technologizer.com/2011/12/09/goodby e-textbooks-hello-ipad/



Iphones' Accessibility Features

- http://pogue.blogs.nytimes.com/2011/11/10/ap ples-assistivetouch-helps-the-disabled-use-asmartphone/
- Assistive Touch for Iphones
- Benefits individuals with spasticity and physical disabilities.
- IPhone was already pretty good at helping out if you're blind or deaf. But until iOS 5 came along, it was tough rocks if you had motor-control problems. How are you supposed to shake the phone (a shortcut for "Undo") if you can't even hold the thing? How are you supposed to pinch-to-zoom a map or a photo if you can't even move your fingers?
- One new feature, called AssistiveTouch, is Apple's accessibility team at its most creative. When you turn on this feature in Settings->General->Accessibility, a new, white circle appears at the bottom of the screen. It stays there all the time. All you have to be able to do is tap with a single finger even a stylus you're holding in your teeth or fist.

Livescribe Smart Pens



- http://www.livescribe.com/en-us/howto/
- http://www.youtube.com/watch?v=8Ev-MICE8-Y
- www.livescribe.com
- Pulse Pen (Livescribe)
- Echo Smart Pen (Livescribe)



IRIS Notes 2

- IRIS Notes 2 Executive
- Lets student handwrite
- Converts to digital format via pen
- Battery powered pen
- Text and Doodles, Drawings
- No special paper; export to PC, Mac, IPad
- \$149. <u>irislink.com Digital-Pen</u> <u>irislink.com</u>
- https://www.irislink.com

LOW TECH STRATEGIES

- Assistive Pencil Grips
- Larger Paper
- Larger Pencils, Pens, Markers



- These promote fine motor coordination for some students with writing and motor difficulties.
- These low tech ideas are good for class tests.

Inspiration + Kidspiration

- http://www.inspiration.com/Kidspiration
- Inspiration Software Inc.— Webspiration 3
 Visual, Graphic Learning Tools for the Class
 30 day free trial available for teacher download *
- http://www.inspiration.com/Examples/Kidspir ation
- Sample Lesson Plans in Math, Reading and Writing, Science and Social Studies

Graphic Organizers and Thinking

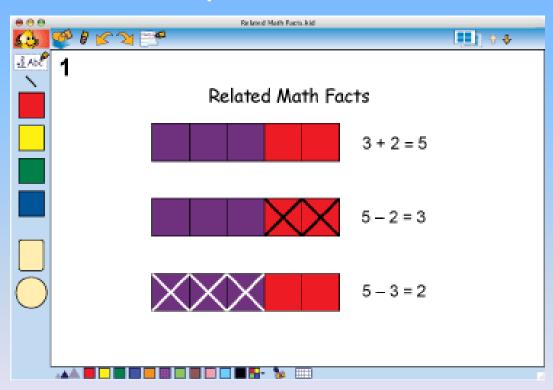
- Develop Strong Thinking Skills
- With Kidspiration, students use graphic organizers to express thoughts and explore ideas and relationships. They create graphic organizers including webs, concept maps and Venn diagrams to clarify thoughts, organize information, apply new knowledge and build critical thinking skills.
- 3,000+ symbols in Kidspiration's Symbol Library provide visual support for concepts taught in K-5 language arts, social studies and science. Students can also import symbols from other sources. Symbol Search helps students search and find just the right symbols to express their thoughts and ideas.
- Using Pictures to Represent Words and Ideas Helps Students Build Vocabulary and Comprehension Skills

KIDSPIRATION

- Strengthen Reading and Writing Skills
- With Kidspiration, students create, organize and explain ideas and information visually. They develop stories and descriptions using engaging visual tools and explore new ideas with thought webs and maps.
- Using Kidspiration, students combine pictures, text and audio to develop comprehension, organize ideas and create stories.

Inspiration – Kidspiration - Build Conceptual Understanding in Math

Visual Math Tools: Kidspiration Color Tiles™



Video Link on K -12 Class Use

- http://www.inspiration.com/WebspirationClassroom
- Inspiration Webspiration Classroom Video
- http://www.inspiration.com/visuallearning/graphic-organizers

Using Graphic Organizers on Inspiration video

Assistive Technologies

- http://www.parrotsoftware.com/default/default.aspx
- Parrot Software
- Designed for students
 With Language Disorders
 And Brain Injury

Internet Subscription Opening Screen of our Internet Subscription Choose ot Software Users Programs by Cumulative Deficit ion, Memory, Attention, Progress Appropriate programs in Cick on a category below one place **Personalized Programs** Many categories Cognitive Reasoning of programs; 74 **Functional Skills** programs in all. Memory and Attention Reading Vocabulary Word Recall Speech Recognition Return to the Main Menu

Ten Reasons why professionals choose Parrot Software

- We have the largest selection of treatment programs available. There are many companies who dabble in treatment software having one or two different programs; but none with the integrated treatment approach that we have.
- Our programs are designed and developed by treatment providers who are available to customers for consultation.
- Fanatical 800 number customer support and we can logon to your computer and solve your computer problems from our home office
- 4. We have software that actually listens to what you say and helps you communicate better
- Economical Home version for single users (\$24.95/month)
 Economical Professional version for treatment providers (starting at \$39.95/month)
- 7. Software available on CD or across the internet
- Tools to help you decide which programs are best for you
 Our software is used by almost every major hospital in the United States and Canada
- We have been in business since 1981 and offer our unmatched experience to each and every customer.

ONLINE VIDEOS

- Khan Academy
- (Mathematics, Science, Art History etc.)

http://www.khanacademy.org/



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Arizona Teacher Mentoring Project
http://www.uacoe.arizona.edu/mentoring/

SERP 301b

www.d2.l.arizona.edu