Welcome to the Webinar

- Remember for sound use a phone and call in using:
  1-866-516-5393
  and enter pass code:
  80927889

- Everyone will be on mute

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CHAMPIONS FOR CHILDREN WITH DISABILITIES

What Parents and Professionals Need to Know about Assistive Technology

Tuesday, May 5, 2009

Presented by Annette Cerreta
PACER Simon Technology Center

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Upcoming Webinars

- **Tuesday May 19th 1:00 - 2:30 CT**
  How to Consider Assistive Technology in the Individual Education Program (IEP)

- **Tuesday June 2nd 1:00 - 2:30 CT**
  AT for Reading, Writing and Math

- **Tuesday June 16th 1:00 - 2:30 CT**
  Building Capacity for Assistive Technology

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Registration Information

www.PACER.org/workshops/emails/2009atseries.htm

For information on this Webinar series, please call PACER Center at 952-838-9000.

This series is funded by a grant from the
Minnesota Department of Education.

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About this Webinar series

- All webinar trainings will be archived and made available on the PACER website 1 - 2 weeks following the date of the original training along with support materials

- Participants from MN that attend 3/4 of the live core trainings will receive a membership to the STC lending library

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Today's Learning Objectives

Participants will:
- Learn about a wide range of assistive technology tools for students in education settings
- Find out about useful AT resources
- Understand the basic legal requirements under IDEA regarding AT and the IEP (Individualized Education Program)

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Asking Questions & Chat

- **Please ask questions at any time!**
- Ask questions by typing your question into the "Question" box on the Webinar toolbar and clicking "send."
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PACER Center

- Not-for-profit advocacy organization
- Serving parents of children with disabilities
- Primarily staffed by parents of children with disabilities
- Over 30 different programs.

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Simon Technology Center

The STC is dedicated to making the benefits of technology more accessible to children and adults with disabilities.

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STC Services

- ❑ **Assistive Technology Information and Referral**
- ❑ **Lending Library**
- ❑ **Free Consultations**
- ❑ **Individualized Trainings**
- ❑ **Workshops and In-services**

*Most of our services are provided **free of charge** to Minnesotans with disabilities.*

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What is Assistive Technology?

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Assistive Technology is…

As defined by **IDEA (Individuals with Disabilities Education Act)** and other legislation:

- **Any item, piece of equipment, or product system** purchased commercially, off the shelf, modified, or customized that is used to **increase, maintain, or improve the functional capabilities of a student with a disability.**

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Assistive Technology Can Be…

Low-tech and inexpensive….

High-tech and more expensive!

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Assistive technology can help a child with a disability…

Walk, move, sit

Use a computer

Communicate

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Assistive Technology Can help a child…

Read

Write

Learn

Focus

Eat

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Poll Time!

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Assistive Technology Categories

- **Daily Living Aids**
- **Mobility & Positioning Aids**
- **Recreation and Sports**
- **Vision & Hearing Technology**
- **Computer Access**
- **Reading and Writing**
- **Communication Tools**
- **Sensory Aids**

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Aids to Daily Living

Examples:
- Dressing Aids
- Eating Aids
- Bathing & Toileting Aids
- Grooming Aids

www.sammonspreston.com

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Mobility and Positioning Aids

- Wheelchairs/Scooters
- Seating/standing systems
- Transfer aids
- Canes/Walkers
- Gait trainers

www.rifton.com
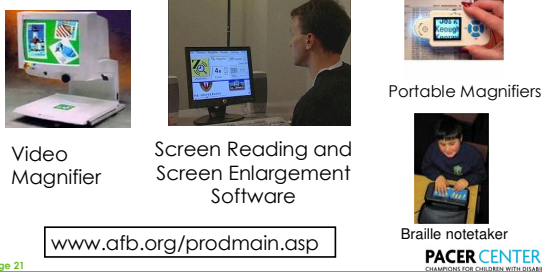
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Recreation & Sports

- Sports and outdoor wheelchairs
- Accessible Games
- Adapted Bicycles
- Adapted Art Tools

www.rjcooper.com
www.orientaltrading.com
www.everykidmobility.com

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Vision Technology

Video Magnifier

Screen Reading and Screen Enlargement Software

Portable Magnifiers

Braille notetaker

www.afb.org/prodmain.asp

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Hearing Technology

Assistive Listening Devices

Vibrating Clock & Alarms

Flashing Door Knock Alert Device

Text Telephone

www.harriscomm.com

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Computer Access

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Alternative Keyboards

- **Alternative Layout**
  - **ABC layout**
  - Easier layout to learn for some

  Dvorak layout
  - Designed to optimize speed
  - and comfort

    www.chestercreek.com
    www.bigkeys.com

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Alternative Keyboards

- Membrane keyboards
  - Flat membrane surface
  - Comes with ready made overlays or you can make your own
  - Membrane sensitivity can be adjusted

Intellikeys Keyboard

www.cambiumlearning.com

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Alternative Keyboards

- **Alternative Sizes**
  - **Large Key**

  - **Mini**

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Alternative Keyboards

- **One-handed keyboards**
  - **Many still prefer to use a standard keyboard**

www.enablemart.com

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Alternative Keyboards

- Ergonomic
  - Split, adjustable
- On-screen
  - Adjustable sizes, layouts, some have word prediction
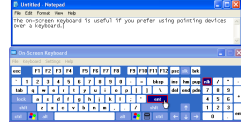
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Mouse Alternatives

- Trackballs
- Joysticks with Different Handles

Both sold by Inclusive Technologies
www.inclusivetlc.com

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Mouse Alternatives

- Touch Pad
- Touch Screen

www.touchwindow.com

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Mouse Alternatives

- **Speech Recognition**
  - Using voice to control the computer, type, surf the Net, etc.
  - May need to create custom commands to have full hands-free control

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Mouse Alternatives

- **Electronic Tracking Devices** that track head or eye movement
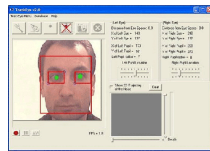
www.tobiiati.com

www.naturalpoint.com

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Switch and Switch Software

- Wide range of sizes & Types of switches
- Switches be activated by hand, arm, head, foot, breath, voice etc. as long as person has voluntary control
- Requires special hardware and "scanning" software

www.ablenetinc.com

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AT for Reading – Low Tech

- Colored Overlays
- Colored Reading Guides
- Highlighter Tape
- Hand held Magnifier

Resources:
- www.thereadinghelper.com
- www.irlen.com
- www.seeitright.com
- www.onionmountaintech.com
- www.integrationscatalog.com

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Text Reading Programs

- **Text Reading Programs:**
  - Convert e-text into computer speech

- **Scan & Read Programs:**
  - Convert printed text into digital text using scanner, scanning software.
  - These programs also "read" aloud the text and offer additional study aids, such as graphical organizers

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Text Reading Programs

In general:
- Read documents, email, and Internet pages aloud
- Convert text to audio files
- Generally affordable –
  - Free to under $100
- **Don't have ability to scan print books**

Examples:
- TextAloud
- Natural Reader
- Read Please
- Ghost Reader (mac)
- Victor Reader
- Read Outloud

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Scan and Read Software Programs

In general:

- Scan print materials into the program

- Read most any e-text format

- Usually Include study tools - highlighting, voice notes, sticky notes, bookmarking, annotation extraction, talking dictionary and spell check, graphic organizers, homonym support, etc.

- Include talking word processor and word prediction

- Cost between $250-1500

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Scan and Read Programs

WYNN Wizard

- www.freedomscientific.com

ClaroRead

- www.claroread.com

Scan and Read Pro

- www.readingmadeez.com

- Read & Write Gold

  – www.texthelp.com

- Kurzweil 3000

  www.kurzweiledu.com

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Devices for Playing E-Books

Classmate Reader:

– A portable device that reads e-text out loud

– Highlights text

– Touchscreen

– Has some study tools:

  – Highlighting and bookmarking

  – Talking dictionary

  – Text/Voice Notes

Sold by:
www.Humanware.com
www.Donjonnston.com

- Cost: $479

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Devices for Playing E-books

Amazon Kindle 2:
www.amazon.com/Kindle
Reads Amazon and other book formats.
Text to speech enabled if publisher allows it.
Can download e-text or audio book files from Amazon
Wireless transfer of books
Cost: $359

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E-Books for Students with Print Disabilities

Bookshare.org

- Must have a certified print disability
- Books are current and many under copyright
- Many textbooks and other instructional materials are available
- Available in format called "DAISY" that is designed for easier access students with disabilities
- Membership is free to U.S. Students with qualifying disability
- Organizational, school, and individual memberships available
- Membership includes free book playing software that reads the text out loud

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Free E-Text Books On the Internet

- **Project Gutenberg**
  - www.gutenberg.net
  - Over 27,000 free e-books
  - Viewable Online
  - Most books are not copyrighted, some are
- **Open Library**
  - http://openlibrary.org
  - Over one million books with full text
  - Scanned full text available online or some as downloadable PDF

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Free E-Text Books
On the Internet

- **NetLibrary**
  - www.netlibrary.org
  - Over 170,000 materials
  - Viewable online or downloadable
  - Provides accessibility features
  - Also have Audiobooks available to loan (MP3 player compatible, NOT iPod compatible)

- Public Libraries
  - Hennepin County Library
    - http://www.hclib.org

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Audio Books

- Books you listen to, no visible text.
- Play on MP3 players, CD player

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Where to Find Audio Books

- Internet
- Local Library
- Purchase

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FREE Audio Books Online

- www.librivox.org
  - Audio files are available in downloadable mp3 or ogg files.
- www.podiobooks.com
  - Subscribe to a book then it is delivered to your podcatcher according to your designated schedule

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Audio Books Online For Purchase

- www.audible.com
  - Over 50,000 titles
  - Several membership plans available
  - down loaded then transferred to device
- www.amazon.com
  - Over 670,000 Titles
  - Formats: cassette, CD, MP3, download
- iTunes
  - Search the online iTunes Store from within iTunes program
  - Audiobooks, Podcasts, iTunes U (free university lectures & more)

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Recordings for the Blind & Dyslexic

- Downloadable or CD audio books
- **Person must have certified print disability**
- Individual or institutional memberships available for a fee
- Many instructional textbooks available
- Different membership levels/costs
- For more information contact:

RFB&D
learning through listening

Membership Services: 800-221-4792

Website: www.rfbd.org

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AT for Writing

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AT for Writing – Low Tech

- Pen & Pencil Grips
- Large barrel pens & pencils
- Adapted Pens & Pencils
- Writing Guides & Stencils

Resources:
- www.usschoolsupply.com
- www.thewritingpenstore.com

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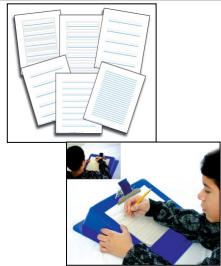CHAMPIONS FOR CHILDREN WITH DISABILITIES.

AT for Writing

- **LegiGuide paper $15**
  (or purchase cheap handwriting paper and highlight)
- **Raised Line Paper**
- **Slant Boards** –price varies $17 up
  (Make your own with a cardboard box or clip board and Pringles can)
- Clips with Velcro to hold paper in place

Resources:
- www.onionmountaintech.com
- www.theraproducts.com

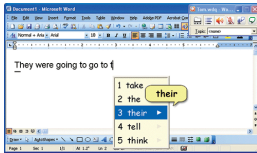**PACER** CENTER
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Portable Talking Spell Checkers

- Made by Franklin
  - www.franklin.com
- Phonetic spell checker
- Talking – reads words and definitions
- Cost: $50-200

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Word Prediction

- CoWriter
  - www.donjohnston.com
  - Mac/Windows
- WordQ
 - www.wordq.com
  - Windows only
  - Free trial

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Symbol Supported Writing

- Symbol Supported Writing Software
  - Clicker
    - www.cricksoft.com
  - Pix Writer
  - www.slatersoftware.com
  - Writing with Symbols
    - www.wigit.com
  - Most have text-to-speech
  - Some switch accessible

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Speech Recognition Software

- Dragon Naturally Speaking
  - www.nuance.com
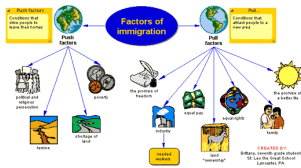
- MacSpeech Dictate
  - www.macspeech.com
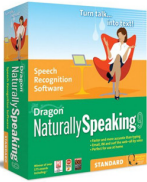
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Mind Mapping Software

Capture all learning styles, organize ideas, understand concepts, create a well-developed product.

Inspiration	www.inspiration.com	free trial
Spark Learner	www.spark-space.com	free trial

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Voice Recorders

- Students can use voice recorders as a backup when taking notes in class.
- Need to get permission to record.

- Digital Recorders

- Pulse Smart Pen
  - www.livescribe.com
  - The pen links the recording to the notes written by the student.

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Communication

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Communication:
Low-Tech

- Simple solutions
- Created by professional or parent
- Schedule charts, communication overlays, communication books
- Incorporate symbols
  - www.imaginesymbols.com
  - Purchased programs such as Boardmaker
  - Digital Photos

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Communication: Mid-Tech

- Static display or overlay
- Digitized Speech (recorded speech)
- Interchangeable Grids
- Multiple recording levels
- Volume Adjustment
- Battery powered
- Some are switch accessible

www.enablingdevices.com

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Communication: High-Tech Options

- Computer-based
- Dynamic display
- Branching
- Synthesized and digitized voice
- Eye Gaze Access

www.dynavoxtech.com

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Sensory Aids

- Increase Attention
- Reduce Aggression
- Decrease Anxiety
- Help Calm
  - Weighted blankets & vests
  - Squeeze balls
  - Rubber band bracelets
  - Chew tubes
  - Textural toys
  - Vibrating toys and objects
  - Therapy balls and discs for sitting

www.abilitations.com

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AT Resources

- **Assistive Technology Training Online**
  - free series of trainings and tutorials
    http://atto.buffalo.edu/
- **AbilityHub**
  - www.abilityhub.com
  - Site designed to help you find information about AT
- **Abledata.com**
  - Largest searchable online database of AT products and resources
  - www.abledata.com
- **Alliance for Technology Access**
  - www.ataccess.org
    - Family and school focused AT resources

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Consideration of Assistive Technology and the IEP

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Individuals with Disabilities and Education Act (IDEA)

- **IDEA is the federal special education law** that addresses services for children with disabilities.

- **IDEA requires that assistive technology be CONSIDERED** for all students with disabilities.

- **The IEP/IFSP team members consider** whether assistive technology and related services are needed by the student to achieve IEP/IFSP educational goals.

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What is "Consideration?"

- **Consideration** is a process not to be confused with an **evaluation**.

- **Consideration** is not defined by federal law.

- The MN AT Manual defines consideration as, "a relatively short process in which IEP team members use information analysis and critical decision making to determine student needs for AT."

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The Minnesota AT Manual

The Minnesota Department of Education AT Manual
- Five Step Process for AT Consideration
- Incorporates the SETT Framework
- includes worksheets
- Not mandated

Download your copy of the AT Manual at:
http://education.state.mn.us/MDE/Learning_Support/Special_Education/index.html

Select "Assistive Technology" from links on the right then

select "AT Resources"

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Contact Information

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  - acerreta@pacer.org

- Simon Technology Center
  stc@pacer.org

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Thank you for attending

- This webinar will be archived (saved and posted on the website; file is too large to send via email)

- Please take a minute to fill out the evaluation at the conclusion of the webinar; it will appear automatically when you exit the Webinar
  - We appreciate it!

- Have a great day.

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