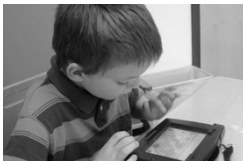


Overview of Assistive Technology (AT) for Writing

Jenn Skalitzky



What is Assistive Technology(AT)?



Legal Definition of AT **DEVICE**

- Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability....
(Authority: 20 U.S.C. 1401(1))



Any Item



Product System



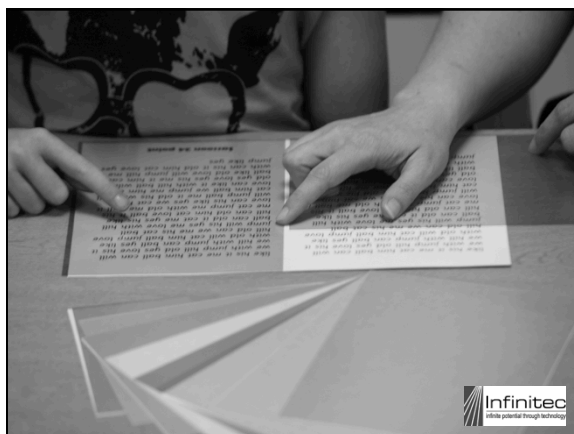
Acquired commercially off the shelf, modified or customized

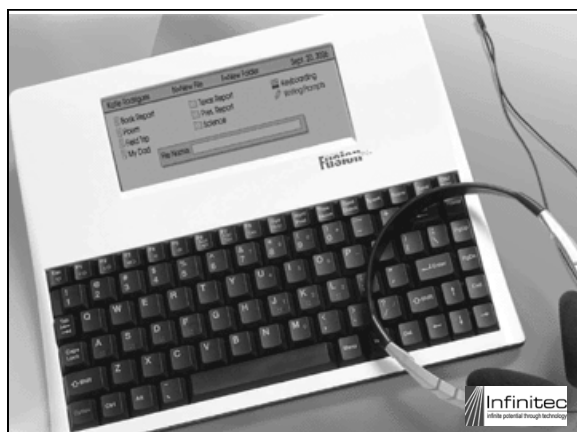


Increase, maintain or improve functional capabilities of child with disability











Legal Definition of AT Service

Any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. *Such term includes:*

- (A) the evaluation of needs including a functional evaluation, in the child's customary environment;
- (B) purchasing, leasing or otherwise providing for the acquisition of assistive technology devices;
- (C) selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;



- Assessed
- Assistance in acquiring
- Tools are individualized

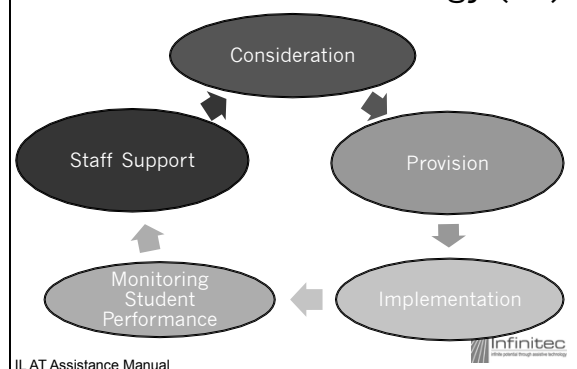
Legal Definition of AT **Service**

- (D) coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- (E) training or technical assistance for a child with disabilities, or where appropriate that child's family; and
- (F) training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers or others(s) who provide services to employ, or are otherwise, substantially involved in the major life functions of the individual with a disability



- Working with other professionals
- Training

What is Assistive Technology (AT)?



When does technology become AT?

- With regard to students receiving services under IDEA, there is a two prong test:

When the technology is used as a compensatory intervention.

When an IEP Team decides that the technology is needed by the student.

Infinitec

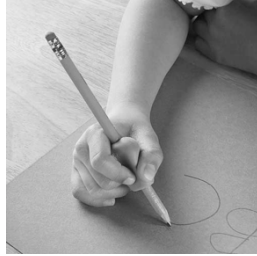
When does Technology become Assistive Technology?

- Technology used to help a student complete their academic tasks that they cannot currently complete, due to their disability.
- Increase, improve, or maintain functioning
- Documented in the IEP

Infinitec

A Fine Semantic (and Legal) Line

- Assistive Technology for one student may just be technology for another.









Gathering Information



What is SETT?

- SETT is...

- A process to help IEP teams gather information and make collaborative decisions about AT.



- SETT is not...

- An assessment/evaluation



Additional Resources on SETT and Assessment

Sharing the SETT Framework
<http://www.joyzabala.com/>

Assessing Students' Needs for Assistive Technology -
 Wisconsin Assistive Technology Initiative
www.wati.org

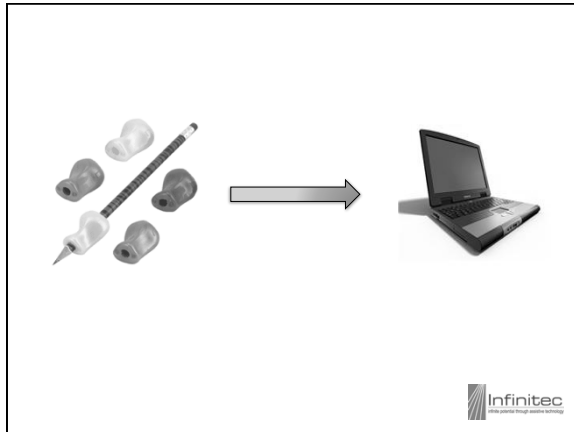


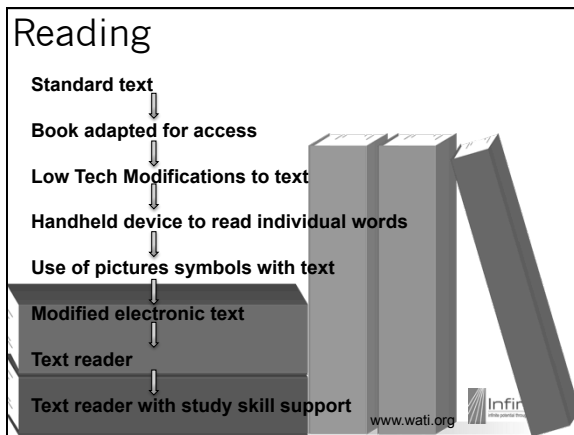


Assistive Technology Tools for...

- Seating and Mobility
- Electronic Aids for Daily Living
- Students who are Blind/Have Low Vision
- Students who are Deaf/Hard of Hearing
- Computer Access
- Recreation and Leisure
- Organization
- Math
- Reading**
- Writing**
- Communication







Standard Text

What strategies and supports does the student have to read and comprehend standard text?

Strategies

- Think how the book is like me.
- Think how the book is like another book.
- Think how the book relates to what I know.
- Ask Questions
- Make a picture in your mind.
- Tell it in your own words.

Low Tech Modifications to Text

- Modifications made to text
 - Enlargement
 - Increased spacing
 - Change text and/or background
 - Modify vocabulary
 - Changing the ability to manipulate the book



Handheld Devices to Read Individual Words - Mid Tech Supports

Talking Dictionary –
www.franklin.com



Reading Pens
Wizcom – www.wizcomtech.com

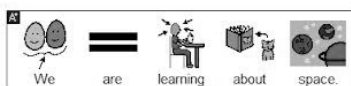


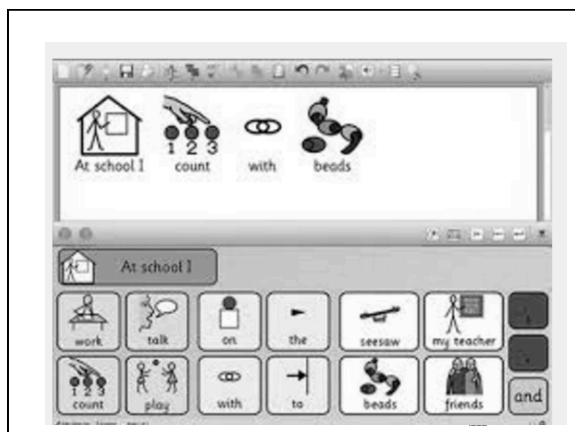
www.wati.org



Use of Picture Symbols with Text – Mid Tech Supports Software to Create

- Boardmaker Plus/ Boardmaker Online – www.mayer-johnson.com
- Clicker - www.cricksoft.com
- IntelliTools Classroom Suite - www.ablenetinc.com





Electronic Text



Electronic Text - Free

- StoryNory – www.storynory.com
- Newsela - <https://newsela.com/>
- Project Gutenberg - <http://www.gutenberg.org/>
- Bookshare – www.bookshare.org
- NIMAS/NIMAC – National Instructional Materials Standard - <http://www.nimac.us/>



Electronic Text - Commercial eBooks

- Start to Finish series – www.donjohnston.com
- Tumblebooks - <http://www.tumblebooks.com>



Text Readers

Hand Held Readers

- Kindle – www.amazon.com
- iPad/iPod – www.apple.com
- Intel Reader - amazon



Text Readers

Online Resources with Text to Speech Supports

- Literative (free) – www.literative.com
- Tarheel Reader (free) – www.tarheelreader.com
- CAST UDL Book Builder (free)–
<http://bookbuilder.cast.org>



Text Readers

Computer Based Text to Speech – FREE Programs

- Acrobat Reader – (built into Adobe Reader) – www.adobe.com/AcrobatReader
- Natural Reader - <http://naturalreaders.com>
- Chrome extensions: Chrome Speak, Speak It!
- Flame Reader – www.flamereader.findmysoft.com



Infinitec
Data driven design. Infinite technology.

Text Readers with Study Skill Support

Text to Speech – Paid Programs

- Kurzweil – www.kurzweilededu.com
- Read and Write – www.texthelp.com
- WYNN – www.freedomscientific.com
- Snap & Read – www.donjohnston.com



Writing – Motor Aspects

Environmental & seating adaptations

↓
Variety of pencils/pens

↓
Adapted pencils/pens

↓
Adapted paper

↓
Writing templates

↓
Prewritten words/phrases

↓
Label maker

↓
Portable talking dictionary



www.wati.org

Infinitec
Data driven design. Infinite technology.

Writing – Motor Aspects

Portable word processor
 ↓
 Computer with accessibility features
 ↓
 Computer with word processing software
 ↓
 Alternative keyboards
 ↓
 Computer with word prediction
 ↓
 Computer with speech recognition software



www.wati.org 

Low Tech – Motor Aspects of Writing

- Variety of pencils/pens
- Pencil/pens with adapted grip
- Adapted paper
- Slant board



Evo Pen





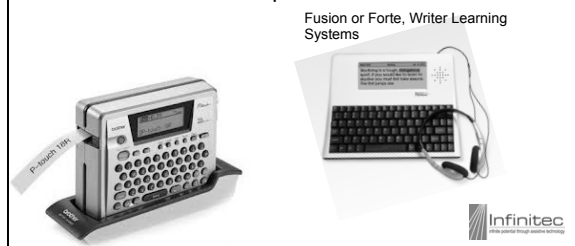
Low Tech – Motor Aspects of Writing

- Adapting worksheets/writing templates
- Use of prewritten words/phrases
- Rubber stamps



Mid Tech – Motor Aspects of Writing

- Label Maker
- Portable word processor



High-tech – Motor Aspects of Writing

- Accessibility Features – Windows & Mac
 - Magnifier
 - Onscreen keyboard
 - Narrator
 - High contrast
 - Keyboard options
 - Mouse options
 - Voice recognition



Where to Find More Information about Accessibility Features?

- Microsoft Accessibility – www.microsoft.com/enable/products/chartwindows.aspx
- Apple in Education – <http://www.apple.com/accessibility/>



High-tech – Motor Aspects of Writing

- Word processing programs can provide...

Formatting options

Clean product



High-tech – Motor Aspects of Writing

- Alternative Keyboards



Logitech diNovo mini



Big Keys

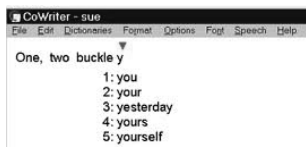


iDevices



High-tech – Motor Aspects of Writing

- Word Prediction
- Speech Recognition





Questions




Writing - Composition



- Picture supports
- ↓
- Pictures with words
- ↓
- Word cards/word banks/word wall
- ↓
- Pocket dictionary/thesaurus
- ↓
- Writing templates
- ↓
- Portable, talking, spell checkers, dictionary, thesaurus
- ↓
- Word processing
- ↓
- Word prediction
- ↓

www.wati.org

Writing - Composition

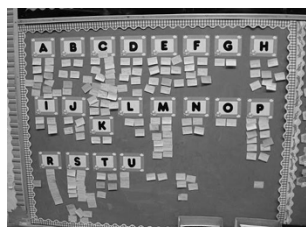
- Digital templates
- ↓
- Abbreviation expansion
- ↓
- Word processing with digital supports
- ↓
- Talking word processor
- ↓
- Multimedia software with alternative expression of ideas
- ↓
- Tools for citations and formats
- ↓
- Speech recognition software

www.wati.org

Low Tech – Composing Written Materials

- Picture supports
- Pictures with words
- Word Cards/Word Banks/Word Wall



Infinitec
Interactive Design Institute

Mid Tech – Composing Written Materials

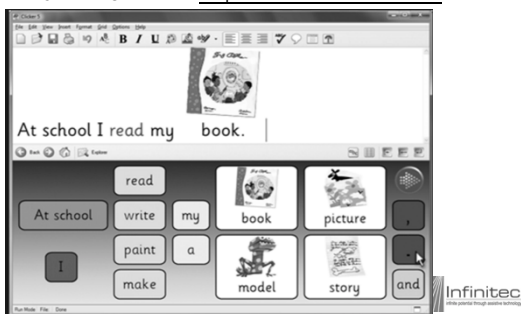
- Pocket Dictionary Thesaurus
- Portable electronic, pocket dictionary/thesaurus
- Portable word processor



Infinitec
Interactive Design Institute

High Tech – Composing Written Materials Beginning Writers

- Clicker Software- <http://www.cricksoft.com/>



Infinitec
Interactive Design Institute

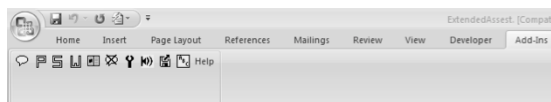
High Tech – Composing Written Materials Beginning Writers

- First Author- www.donjohnston.com



High Tech – Composing Written Materials

- Text to Speech
 - WordTalk (free) – www.wordtalk.org
 - Read & Write for Google – <https://rw.texthelp.com>
 - Write Outloud - www.donjohnston.com
 - Talking Word Processor - www.readingmadeez.com



High Tech – Composing Written Materials

Organization

- Inspiration - www.inspiration.com
- DraftBuilder – www.donjohnston.com
- Bubbl – www.bubbl.us
- Lucid Charts - <https://www.lucidchart.com/>
- Free downloads - <http://www.thinkport.org/graphic-organizers.html>



[illegible]

My First Car

For years I have been driving an old used car with a lot of mileage and I hate it. It gets me where I need to go, but I'm tired of fixing leaks and broken parts all the time. Its annoying every times I need to take it to mechanic. Even when they takes care of everything, I know I'll just end up going back there in a few weeks. I have finally decided that I am not going to do it anymore. I have decided to buy a new car! Unfortunately, I have a problem. I have no idea what car to get. Do I want something big? Do I want something stylish? Something economical? I have so many choices that I don't even know where to begin.

I am not sure if I will be able to make a decision on my own. I don't have not a lot of money, either, so I probably don't have many options. After I did some research, I knew that I would need some expert advice. Eventually, I went to a local dealership to check out some new models. I talked to the saleswoman and listened at she carefully. Her honesty and professionalism were really impressive. She had a lot of vary helpful suggestions and showed myself some safe, affordable choices. After a long discussion I finally decided which one I wanted.

years,

Possibly confused word: its

every times → every time

a mechanic or the mechanic

takes → take

not

did → had done

listened at → listened to

she → her

really

10 GENERAL COMMENTS 100% 22 CRITICAL ISSUES 0/100-100

Questions



Infinitec
Advanced Design Assistive Technology

Resources

ISBE & Infinitec website – www.at4il.org

Wisconsin Assistive Technology Initiative - www.wati.org

Georgia Project for Assistive Technology – www.gpat.org

Infinitec – www.myinfinitec.org

Infinitec
Advanced Design Assistive Technology

For more information,
please contact

Jenn Skalitzky
UCP-Infinitec
jskalitzky@ucpnet.org