Assistive Technology Overview

Assistive Technology Overview
- What I’ll do today
  - Provide overview information about assistive technology - what it is, what the law says, who it’s for, etc.
  - Show how assistive technology has impacted the lives of two (or three or four) people with disabilities
  - If time, show particular technologies

Assistive Technology...
- means any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

S.1248 Individuals with Disabilities Education Improvement Act of 2003 (Reported in Senate)
Section 602. Definitions

(1) ASSISTIVE TECHNOLOGY DEVICE: The term ‘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 functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the post-surgical maintenance, programming, or replacement of such device, or an external device connected with the use of a surgically implanted medical device (other than the costs of performing routine maintenance and monitoring of such external device at the same time the child is receiving other services under this Act).

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Assistive Technology Overview

S.1248 Individuals with Disabilities Education Improvement Act of 2003 (Reported in Senate)
Section 602. Definitions
(25) RELATED SERVICES- The term ‘related services’ means transportation, and such developmental, corrective, and other supportive services (including speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, social work services, school health services, counseling services, including rehabilitation counseling, orientation and mobility services, travel training instruction, and medical services, except that such medical services shall be for diagnostic and evaluation purposes only) as may be required to assist a child with a disability to benefit from special education, and includes the early identification and assessment of disabling conditions in children. The term does not include a medical device that is surgically implanted, or the post-surgical maintenance, programming, or replacement of such device, or an external device connected with the use of a surgically implanted medical device (other than the costs of performing routine maintenance and monitoring of such external device at the same time the child is receiving other services under this Act).

Assistive Technology Service

• Any service that directly assists an individual with a disability in the selection, acquisition or use of an assistive technology device

(PL 100-407)

IDEA 1997

• Expanded strength of AT when it said AT had to be considered for every child with an IEP and that AT services and equipment could continue to support the child outside the school environment (home, etc)
Assistive Technology Overview

Assistive Technology

• Can be grouped into several categories (for example)
  – communication
  – academics
  – environmental control
• Can be high or low tech
  – low tech - glasses, stool, etc.
  – high tech - computer, augmentative communication

General Educational Technology

• Hardware
  – computers (Mac, PC)
  – media (projectors, monitors)
• Software
  – computers
    • content area specific (literacy, math, science)
    • utility (word processing, graphics, internet)
  – media
    • film strips, films, videotapes, audio tapes, etc

Assistive Technology and Educational Technology

• Educational technology can sometimes be assistive (literacy program which has scanning)
• Assistive technology can sometimes be educational (word prediction software)
• Both types of technology can have a positive impact on the learning environments of all students but in some cases is necessary for a FAPE for students with exceptional education needs
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Kid Pix

Kidspiration

Bailey's Bookhouse

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Communication
- Augmentative Communication
  - Self-contained unit
    - Liberator
    - Dynavox
  - Computer-based systems
    - Speaking Dynamically
    - Gus
    - Boardmaker

Academics
- Physical access
- Cognitive access

Physical Access
- Alternate Keyboards
  - Discover
  - Intellikeys
- Switch Access
  - switch
  - headmouse
  - trackball

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Access

• Craft Tools

• Typing Tools, Reading Tools

No/Lo Tech Devices

• These can be solutions which allow for success without the use of higher-tech items and are less restrictive. Examples include…
  • Highlighter tape
  • Removable tabs
  • Talking calculators
  • Light pens

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Text to Speech Software

Write Outloud

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Word Prediction Software

This is a talking word processor. It has a great spell checker.

Math

Access to Math

Big Calc

Blocks in Motion

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Assistive Technology Overview

Brian

• Attractive
• Kind
• Sensitive
• Loves animals, video games and sports

Brian

• Born to impoverishment
• Delayed speech/language
• Early intervention began prior to age 2
• Impulsive
• IQ assessed at 63, 68, 90 and a subtest of 115 (within a three year period these scores were reported)
• EMH, LD, OHI, LD and OHI, ADOLESCENT
• Predicted to never learn to read at 6 by teacher
• Predicted to never learn to read at 11 by a developmental pediatrician

Brian’s Strategies

• Notebook
• Tape recorder
• Laptop computer
  – scanned text
  – screen reader
  – word prediction
  – graphic organizer
Assistive Technology Overview

Mike Phillips


Resources/Links

- Atto.buffalo.edu

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