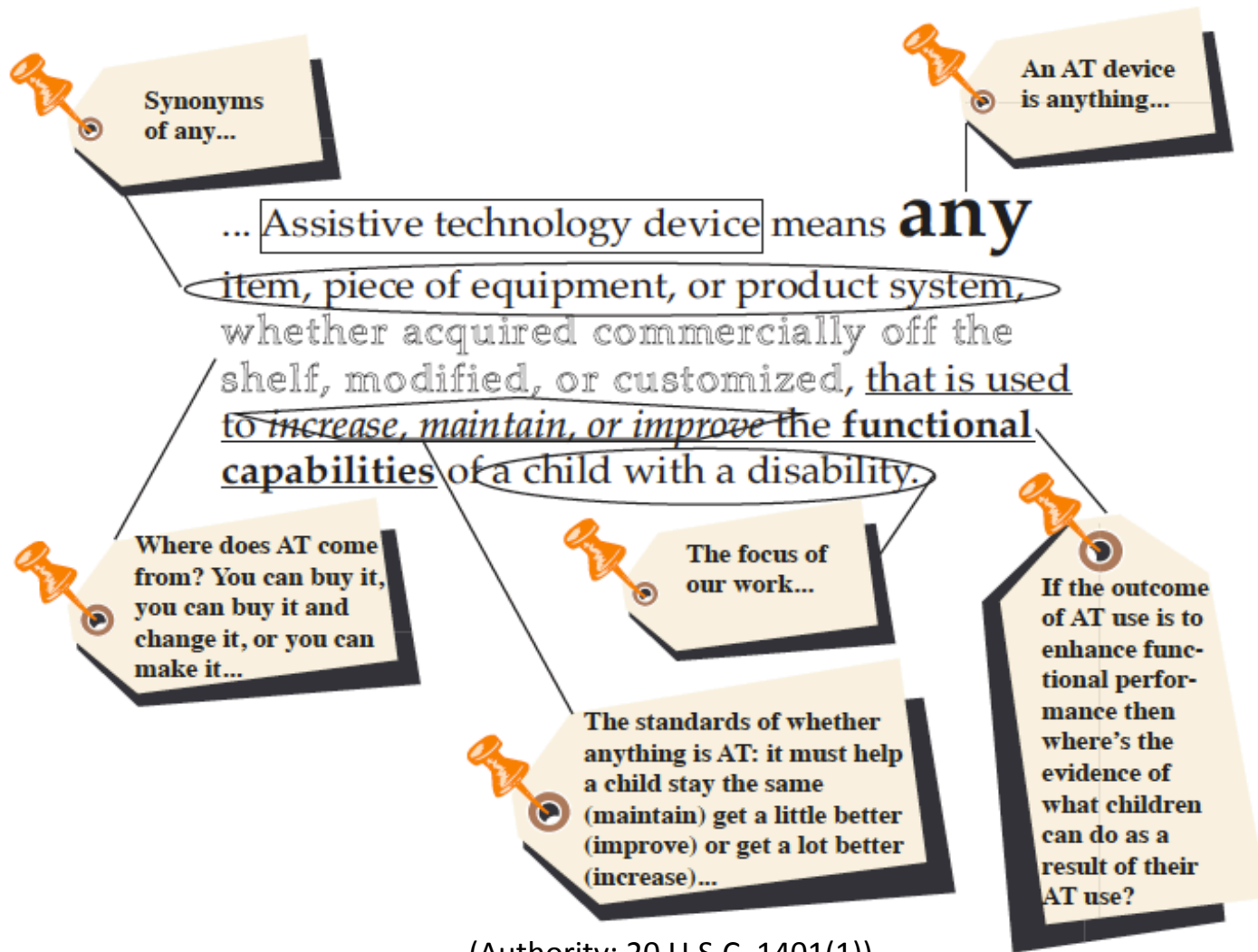


Third Thursday

An Assistive Technology Overview

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Dissecting the Definition of Assistive Technology



(Authority: 20 U.S.C. 1401(1))

Edyburn, D.L. (2004). Rethinking assistive technology. *Special Education Technology Practice*, 5(4), 16-23

AT helps to bridge or scaffold a skill deficit or difficulty



AT may contribute to remediation but that is not the primary purpose

Challenges indicating the need for possible AT support

- communicating
- accessing the environment
- hearing and listening
- navigating and moving
- working with numbers
- participating in self care
- playing
- reading and writing
- remembering
- seeing
- working
- organizing

Overview of Assistive Technology

It is helpful to classify AT according to the task it enables the student to perform. Here are some examples (not all-inclusive):

Seating and Positioning

Augmentative Communication

Mobility

Alternate Access

Reading

Writing

Math

Learning/Studying

Listening

Visual Aids

Activities of Daily Living (ADL' s)

Environmental Control

Physical Fitness/Sports, Leisure, and Play

Seating and Positioning

- typical classroom desk and chair fitting
- typical classroom desk and chair modification
- custom-order adapted seating
- specialty seating (long, corner, bolster, etc.)
- adapted desks and tables
- side-lying frames
- standers



Mobility

For individuals with motor limitations

- walkers
- grab rails
- manual or powered wheelchairs
- powered recreational vehicles
- building modifications and adaptations



For individuals with vision impairments

- white canes
- electronic image sensors
- telescopic aids



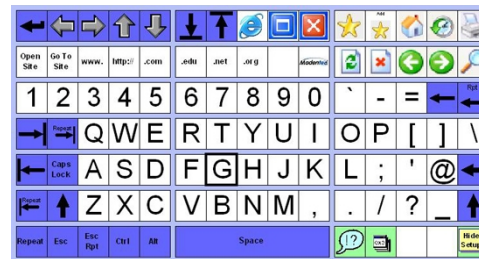
Augmentative Communication

- Communication boards and wallets with pictures, words or letters
- Eye gaze board
- Simple voice output device
- Electronic communication device
- Speech synthesizer for typing
- Communication enhancement software
- Computer based communication system



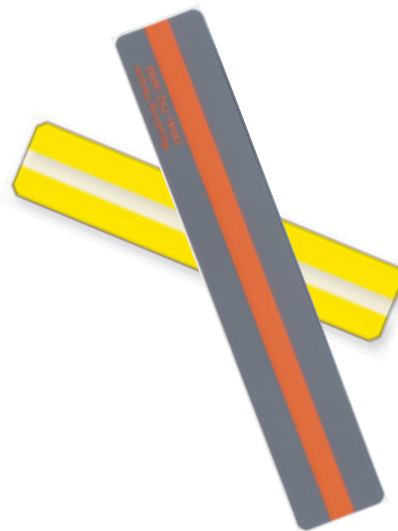
Alternate Access

- Built-in universal access features
- Arm support
- Track ball/ track pad
- Joystick with onscreen keyboard
- Alternate keyboard/key guard
- Mouth stick/head pointer
- Head controlled mouse (e.g. head master, tracker)
- Touch screen
- Voice recognition software
- Switch with Morse code
- Switch with scanning
- Screen reader
- Word prediction/abbreviation-
- Expansion
- Eye Gaze



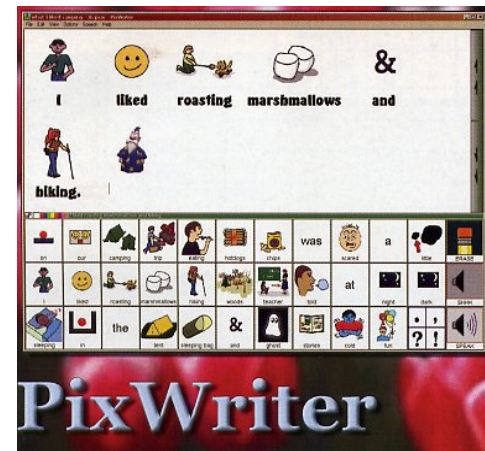
Reading

- change in text size, spacing, color, background color
- use of pictures with text
- adapted page turning
- book stands
- talking electronic dictionary
- scanner with talking word processor
- electronic text books
- highlighted text
- recorded material
- multimedia presentation formats
- books on tape, CD, or MP3
- optical character reader
- braille books
- CCTV
- screen reader/text reader



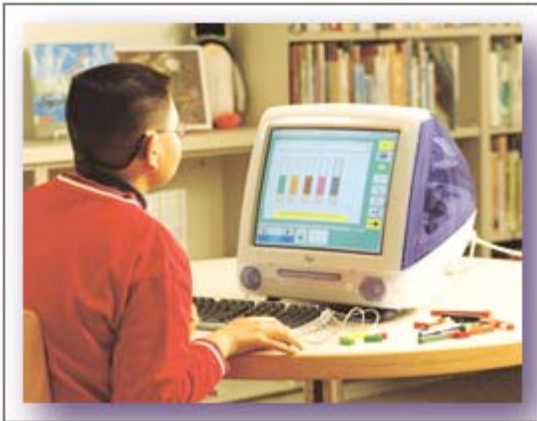
Writing

- pencil with adaptive grip
- adapted paper (e.g., raised lines, highlighting)
- slant board
- typewriter
- portable word processor
- talking word processing
- computer with word processing
- word processing with spell/grammar checking
- word prediction
- electronic dictionary/thesaurus/spell check
- word cards/ word book/ word wall
- voice recognition software
- braille keyboard or notetaker
- braille printer



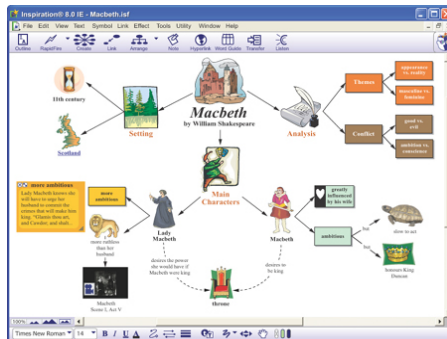
Math

- Math manipulatives
- Adapted math tools
- Computer math manipulatives
- Special paper grids
- Large calculators
- Talking calculators



Learning/Studying

- picture/print schedules
- low-tech aids (e.g., page tabs, color coding)
- highlighted text
- voice output reminder
- electronic organizer
- low or mid-tech timer
- software for organizing ideas
- software for concept development



Assistive Listening

- personal hearing aids
- personal FM system
- classroom amplification system
- TV closed captioning
- signaling devices
- screen flash on computer
- TDD/TTY
- Phone Relay Service
- phone amplifier



Visual Aids

Visually Impaired

- increased contrast
- enlarged images
- use of tactile and auditory materials
- audio books
- eye glasses
- magnifier
- large print books
- screen magnifier
- CCTV



Blind

- computer screen reader
- braille keyboard or notetaker
- braille translator software
- braille printer/embosser
- brailled reading materials



Activities of Daily Living (ADL' s)

- adapted eating utensils
- adapted drinking devices
- adaptive dressing devices
- specially designed toilet seats
- restroom modifications
- aids for grooming
- robotic and electronic feeders
- adapted cooking tools
- universal cuff to hold items



Every student with an IEP must be considered for AT at their annual IEP meeting

2 SPECIAL INSTRUCTIONAL FACTORS

Items checked "YES" will be addressed in this IEP:

- | | | |
|--|------------------------------|-----------------------------|
| Does the child have behavior which impedes his/her learning or the learning of others? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Does the child have limited English proficiency? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Is the child blind or visually impaired? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Does the child have communication needs (required for deaf or hearing impaired)? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Does the child need assistive technology devices and/or services? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| Does the child require specially designed physical education? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

IDEA 2004; 300.324 (a)(2)(v)

Brief discussion questions

What school activities and tasks are a challenge for the student to complete...

at grade level,
independently?

What supports are currently provided for the student including...

specialized instruction
accommodations,
modifications,
“people supports”?

Could technology support help to reduce the barriers...

greater access to the curriculum and school activities
a scaffold for further skill development
a more independent means of participation

Discussion outcomes

Student is currently using AT as an accommodation and it is effective.

- No assessment needed

Student is using AT but it is not effective.

- Reassessment or follow up needed

More information about the student is needed to determine if AT is needed.


- Assessment Needed

Resources for AT Consideration

AT Assessment

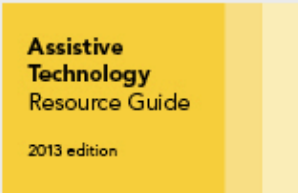
AT Consideration Process

AT should be considered for every student with an IEP. Consideration goes beyond simply checking "yes" or "no" on the IEP documents, but is a careful and thoughtful discussion that focuses on the student's needs and abilities, environments, tasks and how they might be supported by AT. The results of the AT consideration discussion may indicate the need for a more indepth AT assessment. The following resources will help define the AT consideration process.




AT Consideration in the IEP Process

This module will assist educational professionals and IEP team members in considering and determining student need for assistive technology.



AT Consideration in the IEP

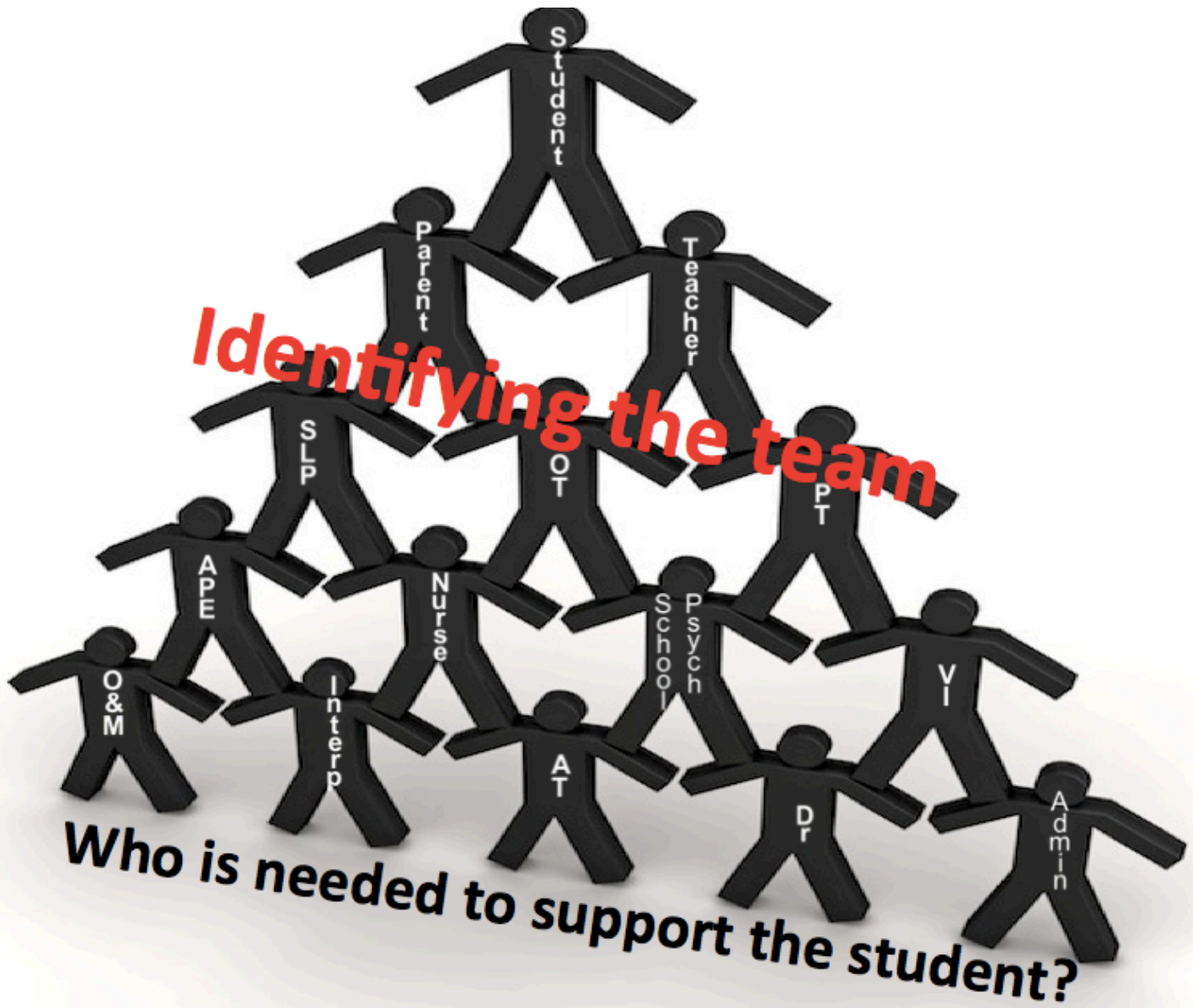
Information and forms to assist school IEP teams in considering a student's AT needs in an effective and meaningful way during the annual IEP process.



AT Consideration Video

This video will assist educational professionals and IEP team members in considering and determining student need for assistive technology.

http://www.ocali.org/project/at_assessment



SETT =



Student



Environment

Text



Tasks



Tools

Zabala, J. S. & Reed, P. (2000-2005). Assessing AT student need. Retrieved from <http://atto.buffalo.edu/registered/ATBasics/Foundation/Assessment/index.php>

Traditional Process of AT assessment (Individualistic)

Consideration

ID Student Strengths and Needs

ID Tasks

ID Environments

Feature Match

ID AT with needed features

Trials

Implementation

Follow-up

Follow-Along






Resources for AT Assessment


AT Assessment Process

The AT Assessment process is a comprehensive and thorough evaluation of the student's needs, their environments, the tasks or goals they are wanting to achieve and the possible AT tools that may help facilitate these goals. The AT process does not end with tool selection, but also includes follow-up and ongoing assessment as tasks and environments change and new tools are developed. The following resources provide information about the AT assessment process.




AT Assessment Process in the School Environment

This module introduces the process of AT assessment including the composition of different types of AT teams, guiding documents and frameworks, and feature-matching.



AT Assessment Tools

This module will introduce the reader to a wide variety of tools that can be used to guide the assessment process.



Assistive Technology Resource Guide

2013 edition

The AT Assessment Process in the School Environment

A review of the AT assessment process. The SETT framework, as well as other AT assessment tools and supports are also discussed.

http://www.ocali.org/project/at_assessment

Local Lending Library Resources

OCALI Lending Library

<http://forms.ocali.org/>

AT Ohio Lending Library

<http://www.atohio.org/devices.html>

AT Ohio Toy Libraries Projects

http://www.atohio.org/adaptive_toys.html

Nisonger Toy and Technology Library

<http://nisonger.osu.edu/ttlibrary>



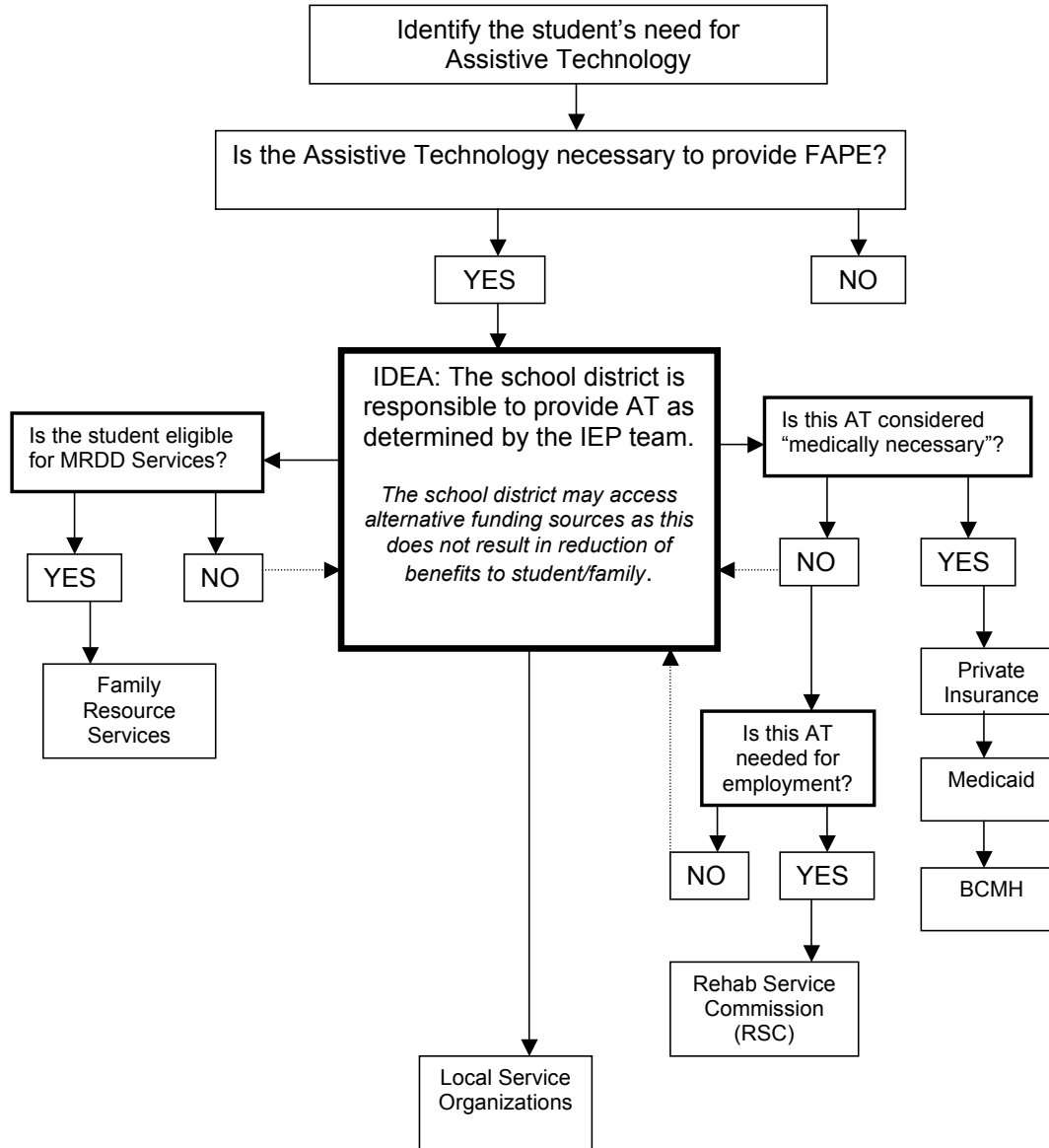
Fund

vs.



Provide

Funding at a Glance



AT Services

Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes-

- (a) functional evaluation of the child in the child's customary environment
- (b) Purchasing, leasing, or acquisition of AT devices
- (c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing AT devices
- (d) Coordinating and using other therapies, interventions, or services with the AT
- (e) Training or technical assistance for a child and child's family
- (f) Training or technical assistance for professionals involved in the major life functions of that child

(Authority: 20 U.S.C. 1401(2))

The Assistive Technology Center at OCALI

The Assistive Technology Center at OCALI features resources, supports, professional development, and a short-term lending library to assist in the effective implementation of assistive technologies for persons with disabilities. Assistive technologies can assist those with disabilities to more independently access school, work, and life activities.

AT Basics

AT Basics

Start here to get the big picture. General AT information that is quick and easy to understand.

Assessment

AT Assessment

Explore resources and forms to help teams understand and implement effective AT assessments, as well as SIFTS, an exciting new OCALI tool to support the AT feature matching process.

AT Tools

AT Tools (Apps, Software, Hardware)

Access information and resources about AT tool selection, lending libraries for device trials and purchasing, and funding options.

AT Implementation

AT Implementation

Ideas for implementing AT to improve access to life tasks (learning, independent living, and work) as well as considerations for systems planning for AT implementation.

AT Professional Development

ATIM and other AT Professional Development

Learn about assistive technology through on-line modules (ATIM), webinars and webcasts. Explore information on AT university certification, advanced degree programs, and credentialing.



Assistive Technology Internet Modules (ATIM)

Learn about assistive technology through online learning modules on a broad range of topics for educators, professionals, families, persons with disabilities, and others.

LEARN

AT Funding: Who Will Pay?

An interactive PowerPoint show that presents student scenarios and potential options for funding.



ASSISTIVE TECHNOLOGY
INTERNET MODULES

Funding Assistive Technology

Understanding the various funding alternatives for assistive technology (AT) can be challenging particularly in the educational setting. This module provides an overview of funding options for the purchase of AT devices. It includes basic information about the laws authorizing funding streams and the point when the school district, Medicaid, or private funding might be appropriate.

Approximate time to complete module: 1 1/2 hours

Author(s): Penny Reed, Ph.D.

[Enter Module](#)

 <http://www.atinternetmodules.org>

http://www.ocali.org/project/at_tools







Dashboard

Module Navigator	Professional Development Certificates	Continuing Education Credits	College and University Course Credit
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Module Navigator

[Print Assessment Results](#)

Welcome to the Assistive Technology Internet Modules (ATIM)! ATIM is designed to provide high-quality information and professional development on assistive technology (AT) for educators, professionals, families, persons with disabilities, and others. ATIM modules are available at no cost. Each module guides you through case studies, instructional videos, pre- and post-assessments, a glossary, and much more. If you would like to receive credit for your time on ATIM, certificate and credit options are coming soon, for a fee. **Need assistance?** Visit the [help page](#).

 AT for School Age	AT for School Age
 AT Problem Solving Across the Lifespan	AT Assessment Process in the School Environment ▼
 AT for Early Childhood	AT Consideration in the IEP Process ▼
 AT for Adult Life	AT for Administrators ▼
 Using the WATI Assessment Process	AT Implementation ▼
 Browse Alphabetically	AT Supports and Services in the IEP ▼
	Automatic Speech Recognition (ASR) / Speech-to-Text ▼
	Navigating Accessible Instructional Materials ▼



What is SIFTS? How does it work?

**Welcome to the Student
Inventory for Technology
Supports (SIFTS). The SIFTS is
a tool to assist school teams in
matching a student's needs
with assistive technology (AT)
features.**



GET STARTED