Assistive Technology for Students with Disabilities

New York State Education Department
Office of Special Education
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Overview of Assistive Technology Topics

- Assistive Technology Devices and Services
- The Assistive Technology Process
  - Consideration
  - Evaluation
  - Documentation
  - Provision and Implementation
  - Family Involvement
  - Training and Professional Development
  - Student Involvement
- Assistive Technology, Accessible Materials and Universal Design for Learning
- State-of-the-Art Assistive Technology
Students engage in self-advocacy and are involved in determining their own educational goals and plan.

Parents, and other family members, are engaged as meaningful partners in the special education process and the education of their child.

Teachers design, provide, and assess the effectiveness of specially designed instruction to provide students with disabilities with access to participate and progress in the general education curriculum.

Students’ individualized needs for assistive technology devices and services are considered and accommodated.

Schools provide multi-tiered systems of behavioral and academic support.

Schools provide high quality inclusive programs and activities.

Schools provide appropriate instruction for students with disabilities in career development and opportunities to participate in work-based learning.
What is an Assistive Technology Device?

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

- **Not** a medical device that is surgically implanted, or the replacement of such device
What is an Assistive Technology Service?

- Any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. The term includes –
  - Evaluation
  - Acquisition
  - Necessary modifications and customization
  - Coordination of assistive technology (AT) with other services
  - Training
What Educational Challenges Can Assistive Technology Address?

- Seating, Positioning and Mobility
- Reading
- Writing
- Computer Access
- Communication
- Mathematics
- Organization
- Vision
- Hearing
- Recreation and Leisure
- Feeding
The Assistive Technology Process

- Assistive technology is a *process*.

- Assistive technology is driven by the student, not the device.

- The process does not stop when a student is provided with a device.
The Assistive Technology Process: Essential Components
The Assistive Technology Process: Consideration

- Effective consideration of assistive technology for a student with a disability should include a team discussion that is focused on the student’s individual needs.

Assistive Technology Consideration Checklist

This checklist was designed to support Committees on Special Education (CSEs) and Committees on Preschool Education (CPSEs) in their thorough consideration of AT devices for students with disabilities. The AT devices included on the checklist are not exhaustive, so CSEs and CPSEs are encouraged to make other student-specific considerations outside of the items on this checklist if necessary. This checklist is for consideration purposes and may be used to support the assessment of an assistive technology device(s) for an individual student.

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<td><strong>Mathematics:</strong></td>
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<td><strong>Organization:</strong></td>
<td>Independent or Consider AT</td>
<td>Organizational software, time management application, ...</td>
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**Environments and Tasks**

- **Vision:** Independent, Consider AT
- **Hearing:** Independent, Consider AT
- **Recreation and Leisure Activities:** Independent, Consider AT
- **Fees:** Independent, Consider AT

**Possible AT Devices**

- Print devices
- Voice output devices
- Speech recognition software
- Braille devices
- Tactile feedback devices
- Hearing aids
- Accessible keyboards
- Adaptive mouse
- Digital magnifiers
- Speech recognition software

Adapted from the Kentucky State Assistive Technology Consultation Model and the Wisconsin Assistive Technology Initiative (WATI) Assistive Technology Assessment Checklist with acknowledgement to the Wisconsin Department of Public Instruction.
The Assistive Technology Process: Evaluation

- Student Input
- Multiple Trials
- Meaningful Contexts
- Collaboration
- Discuss Results
Consider: Assistive Technology Consideration and Evaluation

- How is assistive technology considered for students with disabilities in my school or school district?
- What processes are used to guide CPSEs/CSEs through effective consideration for assistive technology?

- How does assessment information help determine next steps in the assistive technology process for each student?
The Assistive Technology Process: Documentation

- Assistive technology must be documented appropriately in a student’s individualized education program (IEP).

- The IEP must describe any assistive technology devices and/or services needed for the student to benefit from education, including whether the use of a school-purchased assistive technology device is required to be used in the student’s home or in other settings.

- Document the specific assistive technology support required by the student in the IEP, even if the device is generally available in the student’s classroom.

- The continuing need for assistive technology devices/services and recommendations for how assistive technology can assist the student in his or her post-school activities should be included in the Student Exit Summary.
The Assistive Technology Process: Provision and Implementation

- Define Roles and Responsibilities

- Acquisition
- Direct Support
- Customization
- Data
- Maintenance
- Home Use
Consider: Assistive Technology Provision and Implementation

- How does the CPSE or CSE plan for device acquisition and implementation?
- Is assistive technology meaningfully integrated in all necessary contexts, including extracurricular activities and home as appropriate?
- How is progress monitored in order to determine the ongoing effectiveness of assistive technology for individual students?
- How are the responsibilities of device management and maintenance determined?
The Assistive Technology Process: Professional Development

- Includes special education staff, general education staff, support personnel and administrators

- Supports an understanding that assistive technology facilitates students’ progress and access to the general curriculum

- Covers all aspects of the assistive technology process

- Includes ongoing opportunities for learning

- Leads to changes in practice
The Assistive Technology Process: Family Involvement

- Families play an active role throughout the assistive technology process.

- Family members provide support for assistive technology at home.

- Families provide essential insights and perspectives about assistive technology use for their child.

- Families should be provided with information and support as necessary related to the use of assistive technology.
Meet Molly

The individuals and events described in this case study are fictitious. Any resemblance to actual persons or events is purely coincidental.
Meet Molly: SETT Framework

Student

- Strong comprehension
- Challenges in reading
- Strong ideas/organization for writing
- Challenges in writing
- Both strengths and needs in typing skills
- Understandable speech

Environments

- Classroom
- Resource room
- Home
- Student council

Tasks

- Classwork
- Homework
- Tests and quizzes
- Note-taking, creating flyers and writing letters for student council

Tools

- Word processing device
- Dictation software
- Text-to-speech software
Meet Molly: Assistive Technology Evaluation Results and Recommendations

- Evaluation results discussed
- Assistive technology considered
- Recommended assistive technology devices, services and trainings documented in the IEP
Assistive Technology in Practice

Access

AT  UDL  AEM
State-of-the-Art Assistive Technology

“THE TEACHER TOLD US TO BRING A PENCIL TO CLASS TOMORROW. WHAT’S A PENCIL?”
Consider: Assistive Technology in Practice

- Consider how assistive technology is incorporated into schoolwide or districtwide technology initiatives.
- Are CPSEs or CSEs considering a student’s need for materials in alternate formats in conjunction with consideration for assistive technology devices and services?

- Note some examples of the effective integration of both universal design for learning and assistive technology in your school.
- Are “state-of-the-art” assistive technology devices considered for students with disabilities in your school or district as appropriate to meet a student’s individual needs?
Summary: Assistive Technology

- Consider assistive technology for each student with a disability.

- Evaluate assistive technology for individual students.

- Document the assistive technology recommended for the student.

- Provide training and professional development.

- Assistive technology is driven by the student, not the device.
assistive technology
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