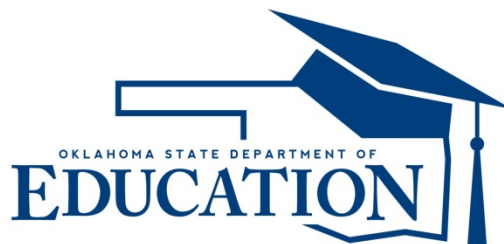


Assistive Technology Professional Development Module



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Overview

This module is intended to assist local educational agencies (LEAs) in providing professional development for educators by addressing assistive technology for students on an individualized education program (IEP). The contents of this module include resources to assist educators in providing assistive technology and a PowerPoint presentation over the basics of assistive technology, entitled *Assistive Technology 101*.

All modules include relevant background information, activities/materials, and a scripted PowerPoint presentation for a particular topic area. These modules are intended for use in a workshop or other professional development setting (e.g. faculty meeting, PLC meeting). Presenters are free to use the modules in whichever way they choose.

Background Information

Assistive technology is defined by the IDEA as, “technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.” Assistive technology must be considered for every student with a disability during the development, review, and revision of the IEP. This includes the Initial, Interim, Subsequent, Amended, and Modified IEP or when a team member deems it necessary.

The Oklahoma State Department of Education, Special Education Services (OSDE-SES) division is committed to assisting school personnel and ensuring students with disabilities assistive technology needs are met. OSDE-SES contracts with Oklahoma ABLE Tech to provide statewide assistive technology services to students served under Part C and Part B of the IDEA.

Statewide assistive technology services are provided for the areas of short-term device loans, assistive technology consultations, trainings, webinars and assistance in providing accessible educational materials. Technical assistance documents are also available for the areas of assistive technology and accessible instructional materials. These resources are only available online in order for changes to be made as federal and State requirements are updated or revised, and according to suggested “best practice” changes by various stakeholders.

Individuals with Disabilities Education Act (IDEA) Regulations

This section provides excerpts from the Individuals with Disabilities Education Act (IDEA), as related to assistive technology. Additional resources are provided to assist educators, parents and students in the acquisition and use of assistive technology, as it relates to students on an IEP.

Sec. 300.105 Assistive Technology (a) Each public agency must ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in Sec. 300.5 and 300.6, respectively, are made available to a child with a disability if required as a part of the child's--

- (1) Special education under Sec. 300.36;
- (2) Related services under Sec. 300.34; or
- (3) Supplementary aids and services under Sec. 300.38 and 300.114(a)(2)(ii).

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP Team determines that the child needs access to those devices in order to receive FAPE. (Authority: 20 U.S.C. 1412(a)(1), 1412(a)(12)(B)(i))

34 CFR §300.5 Assistive Technology 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. The term does not include a medical device that is surgically implanted, or the replacement of such device.”

34 CFR §300.6 Assistive Technology Service “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) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child’s customary environment;
- (b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;
- (c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- (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 a disability or, if appropriate, that child’s family; and,
- (f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child.”

Materials/Resources

Copies of materials for the presentation are found in a separate file. All materials are optional. Presenters may encourage participants to bring laptops or other devices to download the Policies, Handbook, and Process Guide documents at relevant points during the session. Alternatively, presenters may request that participants download these documents prior to the session.

Handout/Activities

The activities aligned to this module are not required. However, the activities do allow the audience an opportunity to interact with the content. The presenter should expect the activities to take at least an additional 30 minutes, as compared to the presentation without activities.

The handout is a two page document, which is part of the materials. The Handout is designed to supplement the presentation. The audience should be encouraged to explore the resources in the Handout independently. The Handout is appropriate for either presentation. The materials include documents referenced in the presentations. The contents of the materials packet include the *Handout*, an FAQ, *AT at a Glance*, and examples of assistive technology tools.

Presentation

This presentation is intended to engage staff in meaningful professional development. Presenters should become familiar with the PowerPoint notes and other materials/resources included in this module, as well as additional resources related to the topic. There is space after each slide's presentation where the presenter may note any additional information related to LEA/school expectations or procedures.

Slide operation: Slides load completely. No clicks are necessary (except to advance to the next slide). Under each slide are presenter discussions, questions to draw in the audience and activity opportunities.

Presentation Length

There are two PowerPoint presentations; one contains activities and one does not. The presentation containing activities is intended to be a 90 minute session; the presentation without activities is intended to be a 60 minute session. Presenters will choose the presentation that best fits the audience's needs. The length of the presentations may vary according to the amount of time spent modeling how to access/utilize documents and addressing questions that are raised during the presentation.

Frequently Asked Questions

Q. What is the purpose of assistive technology?

A. The purpose of assistive technology is to facilitate the student's participation in his or her education program and to enable the student to receive a free and appropriate education (FAPE). For example, the technology may provide an alternative means of accessing the curriculum, an alternative means of learning, or it may provide access to the school program. Assistive

technology should support the student in the general curriculum and in the least restrictive environment to the greatest extent.

Q. Should AT be considered for all students with disabilities?

A. Yes. Under consideration of special factors, the IDEA states “that the IEP team shall consider whether the student requires assistive technology devices and services.”

Q. Is AT required for all students who have an IEP?

A. No. AT must be considered for all students with an IEP. The IEP team will determine if AT is required.

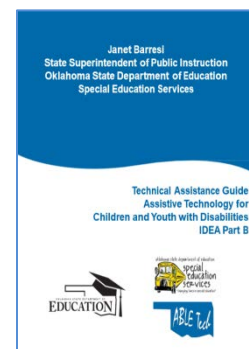
Resources

Technical Assistance Guide

Assistive Technology for Children and Youth with Disabilities IDEA Part B

The guide contains information and resources related to all components of the assistive technology service process.

NOTE: A downloadable version of the entire document as well as a synopsis may be found at www.ok.gov/abletech/Resources/Children_&_Youth/index.html or <http://ok.gov/sde/assistive-technology>.



Statewide Assistive Technology Services

Oklahoma ABLE Tech



Oklahoma ABLE Tech is the statewide Assistive Technology Act Program. Oklahoma ABLE Tech offers statewide assistive technology and information services for children and youth being served under IDEA Part B and C. Their services include assistive technology consultations, device demonstrations, short-term device loans, trainings, webinars, and assistance in providing accessible instructional materials (AIM).

Phone: 888.885.5588 | www.ok.gov/abletech/

AIM Center at the Oklahoma Library for the Blind and Physically Handicapped (OLBPH)



Located at the Oklahoma Library for the Blind and Physically Handicapped, the AIM Center provides AT as it relates to reading books in accessible digital and audio formats.

Phone: 800.523.0288 | www.library.state.ok.us/aim/

Liberty Braille

Provides no-cost school term loans of textbooks in accessible formats such as large print, braille, and digital books on iPad, to print-disabled students served under an IEP.



Phone: 800.920.3369 | www.libertybraille.com

Oklahoma State Department of Education, Special Education Services

Oklahoma State Department of Education, Special Education Services is committed to providing guidance and support in order to promote excellence in education. This mission is accomplished by providing meaningful resources and accurate technical assistance.



Phone: 405.521.3351 | <http://ok.gov/sde/special-education> | <http://ok.gov/sde/assistive-technology>

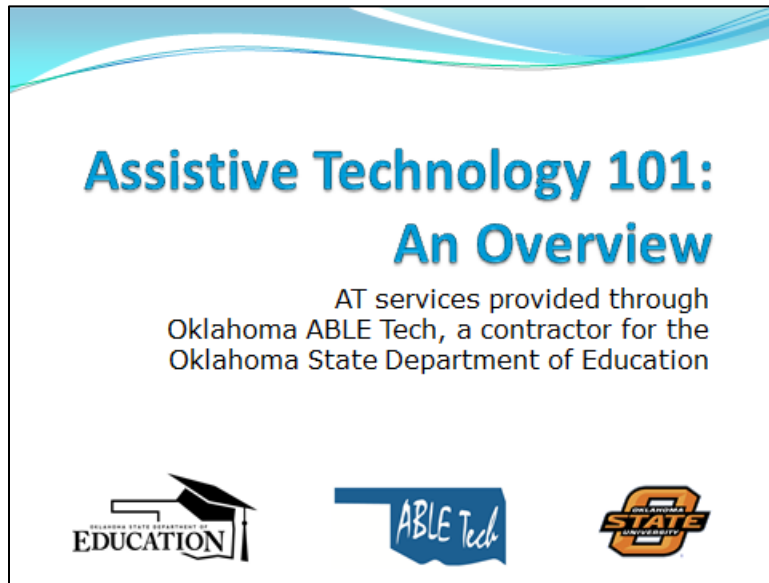
National Professional Development Resources

IRIS Center

The IRIS Center is a national center dedicated to improving education outcomes for all children, especially those with disabilities birth through age twenty-one, through the use of effective evidence-based practices and interventions. IRIS resources cover topics having to do with the education of all children, particularly those with disabilities, birth through age twenty-one. Phone: 800.831.6134 iris.peabody.vanderbilt.edu/iris-resource-locator/



PowerPoint: 60 Minute Version



Welcome to *Assistive Technology 101: An Overview*

AT services are provided through Oklahoma ABLE Tech, a contractor for the Oklahoma State Department of Education. ABLE Tech provides a variety of statewide assistive technology services including short-term device loans, assistive technology consultations, trainings, webinars, and assistance in providing accessible educational materials.

Materials needed: Laptop, Tablet, or Smart Phone with internet access

Materials suggested: A copy of an IEP and a copy of the AT TA Guide

Notes

Did You Know...?

- Assistive technology (AT) is used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.
- The Individuals with Disabilities Education Act (IDEA) requires that AT be considered for each child receiving special education services.
- Assistive Technology solutions range from low-tech to high-tech devices.

Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.

The Individuals with Disabilities Education Act (IDEA) requires AT be considered for each child receiving special education services.

Assistive technology solutions range from low-tech to high-tech.

A list of common examples of assistive technology tools can be found here:

<http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTools.pdf>

Notes

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 disabilities."

34 CFR §300.5 Assistive Technology Device



To begin, we will discuss the laws relating to assistive technology in the schools.

According to number 34 Code of Federal Register Section 300.5, 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 disabilities.

Notes

Low Tech AT Examples

- Color overlay/filter
- Velcro under desk for sensors
- Sticky notes to reduce visible text
- Pencil grip
- Slant board
- Handheld magnifiers
- Large print text
- Using paper and pen to communicate

Low tech AT devices or equipment do not require much training, may be less expensive and do not have complex mechanical features. Examples of low tech AT devices include:

- Color overlay/filter
- Velcro under desk for sensors
- Sticky notes to reduce visible text
- Pencil grip
- Slant board
- Handheld magnifiers
- Large print text
- Using paper and pen to communicate

For a handout, a list of common examples of assistive technology tools can be found here: <http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTools.pdf>

Notes

High Tech AT Examples

- Computer
- iPad/iPod
- Communication software or device
- Talking word processor
- Screen reading software
- Word prediction
- Literacy software to assist with reading and writing

High tech AT are generally come complicated and more expensive than low tech devices. Many of the devices are electronic or computerized and require training to learn how to use. Examples of high tech AT devices include:

- Computer
- iPad/iPod
- Communication software or device
- Talking word processor
- Screen reading software
- Word prediction
- Literacy software to assist with reading and writing

For a handout, a list of common examples of assistive technology tools can be found here: <http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTools.pdf>

Notes

AT Device Is Not...

"The term does not include a medical device that is surgically implanted, or the replacement of such device."

34 CFR §300.5 Assistive
Technology Device



Many children have assistive technology for feeding, hearing or other medical needs. However, the definition does not include a medical device that is surgically implanted, or the replacement of such a device.

Notes

Assistive Technology Service Is...

“any service that directly assists persons with a disability in the selection, acquisition, or use of an assistive technology device.”

- evaluation
- purchasing or providing
- selecting, designing adapting or fitting
- maintaining, repairing, replacing
- training
- coordinating with other therapies



34 CFR §300.6 Assistive Technology Service

Assistive Technology Service is defined as “any service that directly assists persons with a disability in the selection, acquisition, or use of an assistive technology device.” This can include training for teachers, para-professionals and other school staff, parents and students.

In a moment we will go over the IDEA and where to document AT in the Individualized Educational Program (IEP).

First we’ll look at some examples of AT devices and software.

Notes

IDEA 2004

(a) Each public agency must ensure that assistive technology devices or assistive technology services, or both ... are made available to a child with a disability if required as a part of the child's-

- (1) Special education under Sec. 300.36;
- (2) Related services under Sec. 300.34; or
- (3) Supplementary aids and services under Sec. Sec. 300.38 and 300.114(a)(2)(ii).

34 CFR § 300.105 Assistive Technology

(Continued)

IDEA 2004, Continued

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE."

34 CFR § 300.105 Assistive Technology

The image shows a thumbnail of a standard Individualized Education Program (IEP) form. The form is titled 'INDIVIDUALIZED EDUCATION PROGRAM (IEP)' and contains various fields for student information, including name, address, and school. It also includes sections for 'Present Levels of Academic Achievement and Functional Performance', 'Annual Goals', and 'Special Education and Related Services'. The form is partially filled out with text, but the content is mostly illegible due to the small size.

(The following two slides are together)

The IDEA requires IEP teams to consider five special factors. The IEP team must determine if any of these five factors are relevant for the child and, if so, address the factor in the child's IEP. Assistive Technology is one of these special factors.

In this process of considering assistive technology, IEP teams should consider whether or not the student will need the AT in settings other than the classroom, including the playground, lunch room, and at home (for example).

Notes

Development, Review, and Revision of IEP(2) Consideration of Special Factors.

"The IEP Team shall – (v) Consider whether the child needs assistive technology devices and services."

34 CFR §300. 24(a)(2)

Section 300.24 relates to Development, Review, and Revision of the IEP, and it is the section of IDEA that specifically states that assistive technology must be considered for all students receiving special education services.

The next two slides provide resources helpful to the consideration of AT and AT Examples to address functional impairments.

Notes

Helpful Resources for the Consideration of AT

- Special Factors/accommodations from previous IEP
- Present levels of academic performance
- Teacher/student/parent feedback on current AT effectiveness
- List of district resources (equipment inventory)
- Evaluation results from AT consideration checklists

When considering AT as an IEP team, it is beneficial to look at these specific areas. These areas will help the team gain a better understanding of the student's needs.

- Special Factors/accommodations from previous IEP
- Present levels of academic performance
- Teacher/student/parent feedback on current AT effectiveness
- List of district resources (equipment inventory)
- Evaluation results from AT consideration checklists

Notes

AT Examples to Address Specific Disability Categories



- Visual impairment
- Hearing impairment
- Physical impairment
- Speech impairment
- Learning impairment

AT is available to address a variety of needs. Specific disability characteristics and examples of AT to promote access to curriculum will be discussed in more detail in the following slides.

Notes

AT Examples: Visual Impairment

- magnification device or software
- screen reading software
- tactile graphics
- accessible instructional materials with refreshable braille display device



Refreshable Braille Display

AT for visual impairment includes:

- Portable magnifier such as a Ruby, VisioBook, or magnification software such as ZoomText;
- Screen reading software such as Jaws or the NVDA free or open source screen reader (NonVisual Desktop Access is a free or open source “screen reader” which enables blind and vision impaired people to use computers.); and
- Tactile graphics- along with the software and hardware needed to produce them and accessible educational materials used in conjunction with a refreshable braille display.
- Tactile Graphics 1.35 min video from Perkisn Vision
<https://www.youtube.com/watch?v=OUc3-cCTAus&list=PL62D62E1F24108E4C>

Notes

AT Examples: Hearing Impairment

- voice-to-text software
- vibration alert device
- personal sound amplification system
- hearing loop system

Digital amplification system (Comfort Contego)

The image shows a hand cupping an ear, symbolizing hearing. Below it is a digital amplification system (Comfort Contego) consisting of a small device and a pair of earbuds.

A student with a hearing impairment may benefit from:

- Voice to text software to provide the student a readout of what the teacher says;
- A vibration alert device;
- A hearing loop system that works with a student's cochlear implant; or
- A personal sound amplification system.
 - Digital amp for Preschool 1:38
<https://www.youtube.com/watch?v=o3GoxldPLgc&index=4&list=PLB543500314012645>
 - Primary/secondary school uses 1:34 video
<https://www.youtube.com/watch?v=vQ6asbuU4Hw&index=5&list=PLB543500314012645>

Notes

AT Examples: Physical Impairment



- switch input for computers or environmental controls
- dictation software
- a tablet computer to read accessible educational materials

Individuals with physical impairment may benefit from:

- The use of dictation software to complete assignments;
- The use of a lightweight mobile device like an iPad or other tablet computer to read accessible digital textbooks; and/or
- A switch input for computer access or environmental controls- a student might use a switch to operate scissors.
 - Other AT in Action videos – Brody, 6th grader using AT to write and participate in class. <https://www.youtube.com/channel/UCOmFlteIOXvxWs7TNJOwJ1g>

Notes

AT Examples: Speech Impairment

- picture communication system
- speech generating device
- recorded message playback device



Examples of AT for speech impairment include:

- picture communication system- these range from low-tech to high-tech;
- speech generating device- there are many brands and models, as well as an ever-growing number of mobile device apps to consider; and
- recorded message playback device- such as an iPod or even a cell phone with a voice recording app.
- In your handout is a list of web-based resources. If you visit ABLE Tech's website, you will find a variety of resources. Included on their YouTube channel is a 15 min video, *The Basics of AAC (Augmentative and Alternative Communication)*
<https://www.youtube.com/watch?v=hWefkLfeGv4&index=11&list=PL0gW6noozmWFHWQrxHql4dSHnCcOlenjh>

Notes

AT Examples: Learning Impairment



- manipulatives
- visual timer
- literacy apps or software with dual color highlighting and read aloud features

with mild disabilities, such as a learning impairment, may often be overlooked when considering assistive technology. However, students can benefit from the use of assistive technology, as well.

AT for instructional or learning purposes includes:

- manipulatives, tactile objects for math or other activities
- a visual timer to help the student stay on task and anticipate events
- Students with learning difficulties may also benefit from literacy apps or software with dual color highlighting and read aloud features.

So, that's a look at some possible devices a student might need. Now let's look at what is required by law.

Notes

IEP Examples: Goals and Objectives

- Through the use of a computer-based word processing program, Dillon demonstrate his knowledge of grade-level grammar, spelling, and writing objectives with at least 70% accuracy.
- Dillon will use a dual switch system to select the correct context of vocabulary words 7 out of 10 trials.

(IEP - Goals Page)

Now, we will look at where assistive technology fits in the Individualized Educational Program (IEP).

The first section we will consider is Educational Goals and Objectives.

For example, you might report that “Through the use of a computer-based word processing program, Dillon demonstrate his knowledge of grade-level grammar, spelling, and writing objectives with at least 70% accuracy.”

Another example is: “Dillon will use a dual switch system to select the correct context of vocabulary words 7 out of 10 trials.”

Notes

IEP Example: Related Services

- As part of his speech therapy program, Mark will receive instruction and learn to effectively use a speech generating device during social conversation in the general education classroom environment.

(IEP - Services Page)

Under Related services the team may report that “As part of his speech therapy program, Mark will increase his ability to interact appropriately with peers and adults in the school environment through the use of a speech generating device.”

This example fits the provision of related service, rather than a goal because Mark will use a speech generating device as part of his speech therapy program. The speech language pathologist will be responsible to see Mark uses this device during speech and within the general education environment.

Notes

IEP Examples: Supplementary Aids and Services

- Maggie will make oral presentations and participate in class discussions using an appropriately programmed speech generating device.
- Suzie will use a refreshbraille display to read educational materials and provide responses to assignments.”

(IEP - Services Page)

An example of supplementary aids and services would be “Maggie will make oral presentations and participate in class discussions using an appropriately programmed speech generating device.”

Another example is: “Suzie will use a refreshbraille display to read educational materials and provide responses to assignments.”

Notes

It May Be Appropriate To Take AT Home For...

- access to educational materials
- practice using device for daily activities and/or multiple settings
- other purposes as determined by IEP Team

As discussed before, IDEA 2004 Section 300.105 on Assistive Technology says each public agency must ensure that assistive technology devices or assistive technology services, or both, are made available to a child with a disability if required as a part of the child's IEP.

So, when would it be appropriate for AT to go home with a child?

The IEP team may determine that a student can take their AT devices home:

- if they need at-home access to educational materials in a specialized format that requires an assistive technology device,
- if they need practice using a device in daily activities and multiple settings
- other purposes as determined by the IEP Team.

Notes

Take Home Examples...

- A student with a learning disability may need access to a tablet computer with literacy software to complete her assignments at home.
- A student who is non-verbal may need to use his speech communication device in activities in multiple settings in order to become competent using the device and make adequate progress in the curriculum.
- A student with impaired hearing may need to use his personal sound amplification system at home in addition to at school in order to acquire language skills.

Some examples of situations where a student may take an AT device home are:

A student with a learning disability needs access to a tablet computer with literacy software to complete her homework.

A student who is non-verbal may need to use his speech communication device in activities in multiple settings in order to become competent using the device and make adequate progress in the curriculum.

And, a student with impaired hearing uses his personal sound amplification system at home, in addition to school, to acquire language skills.

Notes

A Few More Important Points...

- The **features** of the needed AT device should be incorporated into the student's IEP; it is optional to include specific product names.
- If AT is determined **not** to be needed, that decision should be explained in the IEP.
- AT should be considered in Early Childhood Transition and in Post-High School Transition.

A few more points to note...

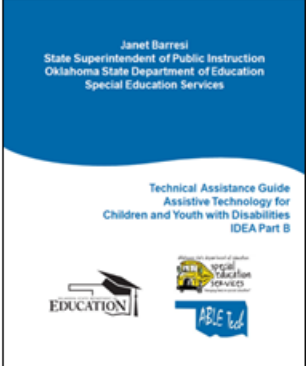
- The **features** of the needed AT device should be incorporated into the IEP wherever possible.
- If AT is determined **not** to be needed, that decision should be explained in the IEP.
- AT should be considered in Early Childhood Transition and in Post-High School Transition.

Notes

For Help Considering and Assessing Students' AT Needs...

Assistive Technology
Technical Assistance Guide
for Children and Youth
IDEA Part B

Visit
www.ok.gov/sde/assistive-technology



For AT resources, or help considering and assessing students' AT needs visit ok.gov/sde/assistive-technology.

The technical assistance document contains references the IDEA, as well as resources concerning Universal Design for Learning, AT assessment, IEP team decision making, choosing the appropriate AT device, and accessible instructional materials.

Notes

**Contact Oklahoma ABLE Tech:
Assistive Technology and Information
Services Program for Children and Youth**

Toll Free 800.257.1705 or 888.885.5588

Email: abletech@okstate.edu

www.okabletech.okstate.edu

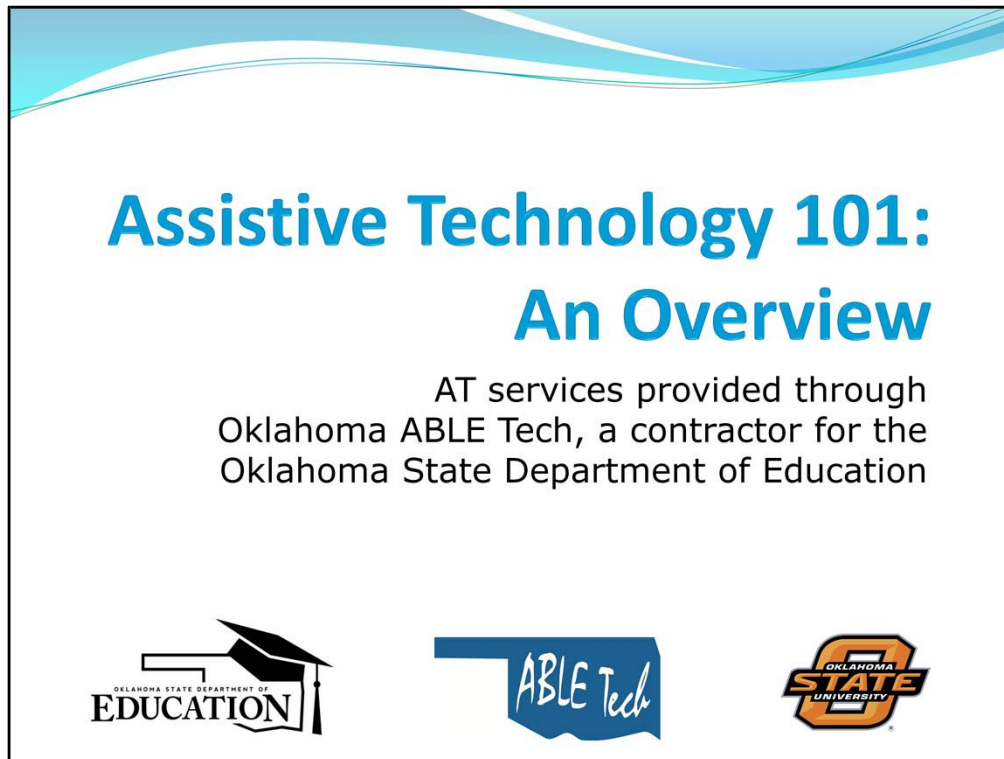
AT services provided through Oklahoma ABLE Tech,
contractor for the Oklahoma State Department of Education.



Oklahoma ABLE Tech is the statewide Assistive Technology Act Program. They provide a variety of services including an Information Services Program for children and youth served under the IDEA, which is contracted through the Oklahoma State Department of Education.

You can call toll free at 800-257-1705 or 888-885-5588, send an email to abletech@okstate.edu or visit the website at www.okabletech.okstate.edu.

Notes



Welcome to Assistive Technology 101: An Overview

AT services are provided through Oklahoma ABLE Tech, a contractor for the Oklahoma State Department of Education. ABLE Tech is the state's Assistive Technology Act Program and provides services including short-term device loans, assistive technology consultations, trainings, webinars, and assistance in providing accessible educational materials.

Materials needed: Laptop, Tablet, or Smart Phone with internet access

Materials suggested: A copy of an IEP and a copy of the AT TA Guide

Notes

Did You Know...?

- Assistive technology is used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.
- IDEA requires that AT be considered for each child receiving special education services.
- Assistive Technology solutions range from low-tech to high-tech.

Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.

The Individuals with Disabilities Education Act (IDEA) requires AT be considered for each student receiving special education services.

Assistive technology solutions range from low-tech to high-tech. For a handout, a list of common examples of assistive technology tools can be found here:

<http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTo ols.pdf>

Notes

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 disabilities.”

34 CFR §300.5 Assistive Technology Device



To begin, we will discuss the laws relating to assistive technology in the schools.

According to number 34 Code of Federal Register Section 300.5, 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 disabilities.

ACTIVITY:

Watch Oklahoma ABLE Tech video, “Assistive Technology 101” 4 minutes

Notes

Low Tech AT Examples

- Color overlay/filter
- Velcro under desk for sensors
- Sticky notes to reduce visible text
- Pencil grip
- Slant board
- Handheld magnifiers
- Large print text
- Using paper and pen to communicate

For a handout, a list of common examples of assistive technology tools can be found here:
<http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTools.pdf>

Notes

High Tech AT Examples

- Computer
- iPad/iPod
- Communication software or device
- Talking word processor
- Screen reading software
- Word prediction
- Literacy software to assist with reading and writing

For a handout, a list of common examples of assistive technology tools can be found here: http://ok.gov/sde/sites/ok.gov.sde/files/Assistive%20TechnologyTo_ols.pdf

Complete the following activities either individually or in pairs/small groups

ACTIVITY: After reading Slide 5, spend 5-10 minutes to complete and share some ideas as a group.

Go to the ABLE Tech website www.okabletech.okstate.edu

Under “Services”, go to “Device Demo and Loan”, then Search the Inventory for a low-tech AT example (slant board, magnifier, large print, etc.). Write down the name of a device that a student may be able to use. Then search the inventory for a high-tech example (computer, iPad, communication device, screen reader, word prediction, etc.)

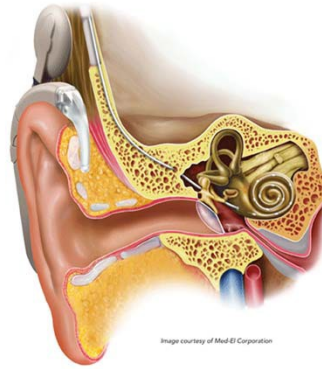
Write down the name of a device that a student may be able to use.

Notes

AT Device Is Not...

“The term does not include a medical device that is surgically implanted, or the replacement of such device.”

34 CFR §300.5 Assistive Technology Device



Many children have assistive technology for feeding, hearing or other medical needs. However, the definition does not include a medical device that is surgically implanted, or the replacement of such a device.

Notes

Assistive Technology Service Is...

“any service that directly assists persons with a disability in the selection, acquisition, or use of an assistive technology device.”

- evaluation
- purchasing or providing
- selecting, designing adapting or fitting
- maintaining, repairing, replacing
- training
- coordinating with other therapies



34 CFR §300.6 Assistive Technology Service

Assistive Technology Service is defined as “any service that directly assists persons with a disability in the selection, acquisition, or use of an assistive technology device.” This can include training for teachers, para-professionals and other school staff, parents and students.

In a moment we will go over IDEA and where to put AT in the Individualized Educational Program.

First we’ll look at some examples of AT devices and software.

Notes

IDEA 2004

(a) Each public agency must ensure that assistive technology devices or assistive technology services, or both ... are made available to a child with a disability if required as a part of the child's-

- (1) Special education under Sec. 300.36;
- (2) Related services under Sec. 300.34; or
- (3) Supplementary aids and services under Sec. Sec. 300.38 and 300.114(a)(2)(ii).

34 CFR § 300.105 Assistive Technology

Schools should consider whether or not the student will need the AT in settings other than the classroom.

This includes the playground, lunch room, and at home, for example. It is an IEP team

decision, and the goal should be to help the student achieve a free and appropriate public education.

Notes

IDEA 2004, Continued

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE."

34 CFR § 300.105 Assistive Technology

Schools should consider whether or not the student will need the AT in settings other than the classroom.

This includes the playground, lunch room, and at home, for example. It is an IEP team decision, and the goal should be to help the student achieve a free and appropriate public education.

Notes

Development, Review, and Revision of IEP(2) Consideration of Special Factors.

“The IEP Team shall — (v) Consider whether the child needs assistive technology devices and services.”

34 CFR §300. 24(a)(2)

Presenter:

Section 300. 24 relates to Development, Review, and Revision of the IEP. It is the section of IDEA that specifically states that assistive technology must be considered for all students receiving special education services. Notes: the next two slides provide resources helpful to the consideration of AT and AT Examples to address functional impairments.

ACTIVITY:

Complete the following activities either individually or in pairs/small groups. After reading Slide 10, spend 5-10 minutes to complete and share some ideas as a group. Go to the OSDE website or pull out a copy of an IEP to find the page that encourages you to consider the student’s need for AT. Answer: Special Factors Page

Where could you expand on details about AT within the IEP? Answer: Special Factors Page, Add a blank page, Present Levels section, Supplementary Aids and Services section, etc.)

Notes

Helpful Resources for the Consideration of AT

- Special Factors/accommodations from previous IEP
- Present levels of academic performance
- Teacher/student/parent feedback on current AT effectiveness
- List of district resources (equipment inventory)
- Evaluation results from AT consideration checklists
- AT technical assistance guide

Section 300.24 relates to Development, Review, and Revision of the IEP. It is the section of IDEA that specifically states that assistive technology must be considered for all students receiving special education services.

ACTIVITY: Watch the “Oklahoma ABLÉ Tech, Considering the Need for AT in the IEP”

12 minutes

Notes

AT Examples to Address Specific Disability Categories

- Visual impairment
- Hearing impairment
- Physical impairment
- Speech impairment
- Learning impairment

The next few slides will address examples of AT categorized by the functional impairment that each addresses.

Notes

AT Examples: Visual Impairment

- magnification device or software
- screen reading software
- tactile graphics
- accessible instructional materials with refreshable braille display device



Refreshable Braille Display

AT for visual impairment could include:

- OK ABLE Tech video AT for Visual Impairments or blindness 8 min
<https://www.youtube.com/watch?v=34hBBYmhNLE&list=PL0gW6noozmWFHWQrxHql4dSHnCcOienjh&index=3>
- Portable magnifier such as a Ruby, VisioBook, or magnification software such as ZoomText
 - 2 min video: Ruby handheld portable magnifier by Freedom Scientific
<https://www.youtube.com/watch?v=D4VYancDSjc>
 - 3 min VisioBook video by American Printing House for the Blind
<https://www.youtube.com/watch?v=aw69TSYUuek>
 - ZoomText Demo video 2:31 min <https://www.youtube.com/watch?v=EEN79RRvKqE>
- Screen reading software such as Jaws or the NVDA free or open source screen reader (NonVisual Desktop Access is a free or open source “screen reader” which enables blind and vision impaired people to use computers.)
 - NVDA 2 min video <https://www.youtube.com/watch?v=3tY0Uot8LHU>
- Tactile graphics- along with the software and hardware needed to produce them and accessible educational materials used in conjunction with a refreshable braille display
 - Tactile Graphics 1.35 min video from Perkisn Vision
<https://www.youtube.com/watch?v=OUc3-cCTAus&list=PL62D62E1F24108E4C>

Notes

AT Examples: Hearing Impairment

- voice-to-text software
- vibration alert device
- personal sound amplification system
- hearing loop system

Digital amplification
system (Comfort Contego)



A student with a hearing impairment may benefit from:

- voice to text software to provide the student a readout of what the teacher says
 - Dragon Naturally Speaking 5 min video
<https://www.youtube.com/watch?v=kJKQmTumFP0>
- a vibration alert device
- a personal sound amplification system
 - [Digital hearing products for students with concentration difficulties](https://www.youtube.com/watch?v=IC2HzJHsm64&list=PLB543500314012645&index=7)
<https://www.youtube.com/watch?v=IC2HzJHsm64&list=PLB543500314012645&index=7>
 - Digital amp for Preschool video 1: 38
<https://www.youtube.com/watch?v=o3GoxldPLgc&index=4&list=PLB543500314012645>
 - Primary/secondary school uses 1:34 video
<https://www.youtube.com/watch?v=vQ6asbuU4Hw&index=5&list=PLB543500314012645>
- a hearing loop system that works with a student's cochlear implant.
- OK ABLE Tech 8 min video: AT Solutions for Students who are Deaf and Hard of Hearing
<https://www.youtube.com/watch?v=h1s8WkvhV8U&list=PL0gW6noozmWFHWQrxHql4dSHnC cOIenjh&index=7>

AT Examples: Physical Impairment



- switch input for computers or environmental controls
- dictation software
- a tablet computer to read accessible educational materials

Individuals with physical impairment may benefit from:

- Switch input for computer access or environmental controls- a student might use a switch to operate scissors for instance.
 - 3:54 min video AT in Action – Meet Jared a young man with CP who runs his own website/ad business through switch computer access.
<https://www.youtube.com/watch?v=bYKUxOdUAao>
 - Other AT in Action videos – Brody, 6th grader using AT to write and participate in class. 3.47 min
<https://www.youtube.com/channel/UCOmFlteIOXvxWs7TNJOwJ1g>
 - 1:06 video student using switch to access iPad
<https://www.youtube.com/watch?v=Mc6eygC5eQ8>
 - Meet Nick, young entrepreneur uses AT to run his own lawn care business
https://www.youtube.com/watch?v=n7oYSY_ttU4&list=UUOmFlteIOXvxWs7TNJOwJ1g
- A student unable to type may use dictation software to complete assignments.
- And a student might use a lightweight mobile device like an iPad or other tablet computer to read accessible digital textbooks.
 - Read2Go app reading a Bookshare book 2:44 min video
<https://www.youtube.com/watch?v=kcQOmPDjw9g>

AT Examples: Speech Impairment

- picture communication system
- speech generating device
- recorded message playback device



Examples of AT for speech impairment include:

- A picture communication system- these range from low-tech to high-tech;
 - speech generating device- there are many brands and models, as well as an ever-growing number of mobile device apps to consider; and
 - a recorded message playback device- such as an iPod or even a cell phone with a voice recording app.
- OK ABLE Tech 15 min video, The Basics of AAC (Augmentative and Alternative Communication)
https://www.youtube.com/watch?v=hWefkLfeGv4&index=11&list=PL0gW6noozmWFH_WQrxHql4dSHnCcOlenjh

Notes

AT Examples: Learning Impairment



- manipulatives
- visual timer
- literacy apps or software with dual color highlighting and read aloud features

AT for learning includes:

- manipulatives for math or other activities
- a visual timer to help the student stay on task and anticipate events
- Students with learning difficulties may also benefit from literacy apps or software with dual color highlighting and read aloud features.

So, that's a look at some possible devices a student might need. Now let's look at what is required by law.

OK ABLE Tech 6:45 min video AT for Learning and Cognition
https://www.youtube.com/watch?v=_ag0SrWJRi0&index=8&list=PL0gW6noozmWFHWQrxHql4dSHnCcOIenj

Notes

IEP Examples: Goals and Objectives

- Using a word processing program on a computer with a spell checker, Dillon will make satisfactory passing grades in the fourth-grade general curriculum for language arts.
- Taylor will use a dual switch system to select between a desirable choice and an undesirable choice in 8 out of 10 trials.

(IEP - Goals Page)

Now we will look at where assistive technology fits in the Individualized Educational Program.

The first section we will consider is Educational Goals and Objectives. For example, you might report that “Using a word processing program on a computer with a spell checker, Dillon will make satisfactory passing grades in the fourth-grade general curriculum for language arts.”

Another example is: “Taylor will use a dual switch system to select between a desirable choice and an undesirable choice in 8 out of 10 trials.”

Notes

IEP Example: Related Services

- As part of his speech therapy program, Mark will receive instruction and learn to effectively use a speech generating device during social conversation in the general education classroom environment.

(IEP - Services Page)

Under Related services the team may report that “As part of his speech therapy program, Mark will receive instruction and learn to effectively use a speech generating device during social conversation in the general education classroom environment.”

This example fits the provision of related service, rather than a goal because Mark will use a speech generating device as part of his speech therapy program. The speech language pathologist will be responsible to see Mark uses this device during speech and within the general education environment.

Notes

IEP Examples: Supplementary Aids and Services

- Maggie will make oral presentations and participate in class discussions using an appropriately programmed speech generating device.
- Suzie will use a refreshbraille display to read educational materials and provide responses to assignments.”

(IEP - Services Page)

An example of supplementary aids and services would be “Maggie will make oral presentations and participate in class discussions using an appropriately programmed speech generating device.”

Another example is: “Suzie will use a refreshbraille display to read educational materials and provide responses to assignments.”

Notes

It May Be Appropriate To Take AT Home For...

- access to educational materials
- practice using device for daily activities and/or multiple settings
- other purposes as determined by IEP Team

As discussed before

IDEA 2004 Section 300.105 on Assistive Technology says each public agency must ensure **that** assistive technology devices or assistive technology services, or both, are made available to a child with a disability if required as a part of the child's IEP.

So, When would it be appropriate for AT to go home with a child?

The IEP team may determine that a student can take their AT devices home:

- if they need at-home access to educational materials in a specialized format that requires an assistive technology device,
- if they need practice using a device in daily activities and multiple settings
- or other purposes as determined by the IEP Team.

Notes

Take Home Examples...

- A student with a learning disability may need access to a tablet computer with literacy software to complete her assignments at home.
- A student who is non-verbal may need to use his speech communication device in activities in multiple settings in order to become competent using the device and make adequate progress in the curriculum.
- A student with impaired hearing may need to use his personal sound amplification system at home in addition to at school in order to acquire language skills.

Some examples of situations where a student may take an AT device home are:

A student with a learning disability needs access to a tablet computer with literacy software to complete her homework. A student who is non-verbal may need to use his speech communication device in activities in multiple settings in order to become competent using the device and make adequate progress in the curriculum.

And, a student with impaired hearing uses his personal sound amplification system at home, in addition to school, to acquire language skills.

Notes

A Few More Important Points...

- The **features** of the needed AT device should be incorporated into the student's IEP; it is optional to include specific product names.
- If AT is determined **not** to be needed, that decision should be explained in the IEP.
- AT should be considered in Early Childhood Transition and in Post-High School Transition.

A few more points to note...

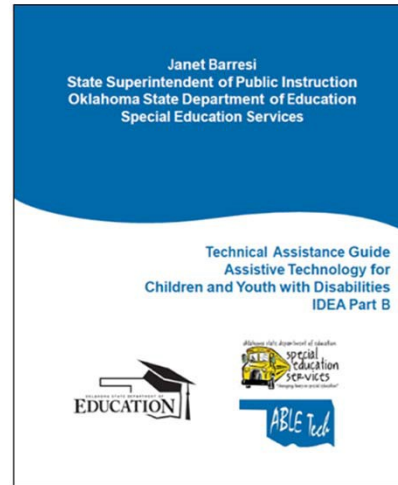
- The **features** of the needed AT device should be incorporated into the IEP wherever possible.
- If AT is determined **not** to be needed, that decision should be explained in the IEP.
- AT should be considered in Early Childhood Transition and in Post-High School Transition.

Notes

For Help Considering and Assessing Students' AT Needs...

Assistive Technology
Technical Assistance Guide
for Children and Youth
IDEA Part B

Visit
www.ok.gov/sde/assistive-technology



ACTIVITY: For AT resources or help considering and assessing students' AT needs... visit ok.gov/sde/assistive-technology.

Here you will find a variety of resources including the technical assistance document which contains references the IDEA, 504 Plans, Universal Design for Learning, and AT assessment.

ACTIVITY:

After reading Slide 24, Spend 5-10 minutes to complete and share some ideas as a group.

Access the Assistive Technology technical assistance guide either via the OSDE website or the ABE Tech website.

Write down a resource that would help with the AT Consideration or AT Assessment processes.

Notes

Contact Oklahoma ABLE Tech: Assistive Technology and Information Services Program for Children and Youth

Toll Free 800.257.1705 or 888.885.5588

Email: abletech@okstate.edu

www.okabletech.okstate.edu

AT services provided through Oklahoma ABLE Tech,
contractor for the Oklahoma State Department of Education.



Oklahoma ABLE Tech is the statewide Assistive Technology Act Program. They provide a variety of services including an Information Services Program for children and youth served under the IDEA, which is contracted through the Oklahoma State Department of Education.

You can call toll free at 800-257-1705 or 888-885-5588, send an email to abletech@okstate.edu or visit the website at www.okabletech.okstate.edu.

ACTIVITY

After reading Slide 25, spend 5 minutes going to the ABLE Tech website.

Write down the steps to filling out a request to borrow an AT device from ABLE Tech.

ACTIVITY

After reading Slide 25, spend 5-10 minutes going to the OSDE website and look at the professional development and technical assistance resources related to AT. Write down the different documents available as a guide for self-assessing your school's AT processes and implementation.

Notes