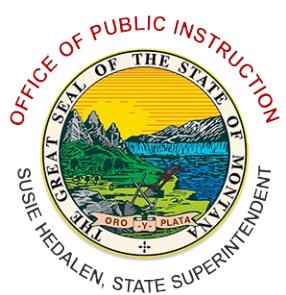


Special Education Guide to Assistive Technology



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Technical Assistance guides are developed by the Division of Special Education to provide guidance to schools, parents and advocates regarding eligibility for and the implementation of services to students with disabilities under the Individuals with Disabilities Education Act, the Administrative Rules of Montana, and Montana statutes.

This document contains recommended practices and procedures that may enhance the services to children and youth with disabilities. All policy statements regarding the delivery of special education and related services are contained in the current *Montana State Plan Under the Individuals with Disabilities Education Act*.

This guide was updated in August 2017. This document replaces the February 2004 edition of the Assistive Technology guide.

If you have questions after reviewing this guide, please contact the Division of Special Education at 444-5661 or 1-888-231-9393.

You can find an electronic copy of this guide and other OPI resource materials on our website at:

<http://opi.mt.gov/Educators/Teaching-Learning/Special-Education/Special-Education-Forms-Guides>

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Assistive Technology

**For all students, technology makes things easier.
For students with disabilities, technology makes things possible.**

The decision whether a student with disabilities requires an assistive technology service and/or tool(s) in order to benefit from her or his education program is an Individualized Education Program (IEP) team decision. In making this decision the IEP team must consider the student's strengths and needs in relation to his or her education program. Assistive technology (AT) services and tools are considered to enhance abilities and remove barriers to achievement. Application of assistive technology services and tools is related to a student's functional abilities rather than to a specific disability. Assistive Technology must be student-centered, task-focused and environmentally useful to be effective.

The term "Universal Design" means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are able to exchange and use information with assistive technologies (Assistive Technology Act of 2004. P.L. 108-364).

Principles of Universal Design for Learning (UDL) are foundational to accessing curriculum and activities of learning. These principles are the "what," "why" and "how" of learning. The UDL principles guide IEP teams in considering the means of presentation of content in multiple ways, that we afford students multiple ways to show us what they know through actions and/or expression and consider the engagement of a student given his/her unique interests or motivation.

As districts provide curriculum and content to students, they should consider the accessibility of the material from the beginning. It is much easier and more cost efficient to purchase and build accessible content from the beginning for all students rather than to alter content after it has been purchased or created. The Center for Applied Special Technology (CAST) provides guidance for developing accessible curriculum through principles of Universal Design for Learning. More information can be found at <http://www.udlcenter.org/aboutudl/udlguidelines>.

When purchasing curricular content, districts should consider requesting a Voluntary Product Accessibility Template (VPAT) from the vendor. A VPAT is a vendor-generated statement (using the required template) that provides relevant information on how a vendor's product or service claims to conform to the Section 508 Accessibility Standards (from the U.S. Access Board) for Electronic and Information Technology (EIT) Standards. The VPAT product is a tool developed by the Information Technology Industry Council

and Government Services Administration (GSA) to help facilitate the market research responsibilities of Federal IT professionals, by enabling government requestors to compare vendor products. The VPAT was designed to provide information on how a product or service conforms to the Section 508 in a consistent fashion and format. More information can be found at <http://www.itic.org/policy/accessibility>.

Assistive Technology

1. What is an assistive technology tool?

An assistive technology tool is any item, piece of equipment, or product system (software) used to increase, maintain, or improve the functional capabilities of a student with disabilities. An assistive technology tool considers the unique needs of students when accessing curriculum and activities of learning.

CFR 300.5 Assistive technology device

The terms “assistive technology” and “adaptive equipment” are sometimes used interchangeably. Adaptive equipment is considered to be “assistive technology” but not all assistive technology is “adaptive equipment.” Assistive technology is considered to be an “umbrella term” that includes “assistive,” “adaptive,” and “rehabilitative” tools. There is overlap between all of these terms.

Assistive technology tools come in many shapes, sizes, and levels of technical complexity. The terms “no-tech,” “low-tech,” “mid-tech,” and “high-tech” are used in reference to the degree of technical complexity involved in the design or use of the tool. Assistive technology devices/tools are not limited to advanced or computer-based technologies. The AT devices/tools can involve no technology component (e.g., pencil grip), a low-technology component (e.g., calculator), a medium-technology component (word processing software), or a high-technology component (e.g., text-to-speech software with study aides).

CFR 300.6 Assistive technology service

2. What is an 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 tool. 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.

3. Why is assistive technology important?

Assistive technology is important because, for some students, without assistive technology they would not have access to or be able to benefit from their educational program.

4. When should the assistive technology tools or services be considered for a student?

When the student is demonstrating need in his or her educational program to access curriculum and activities of learning within the least restrictive learning environment the IEP team should consider AT devices and/or services. The unique impact of the student's disability on access to LRE is considered specific to the environment in which they learn and participate and the tasks within those environments which constitute meaningful participation and educational benefit from the IEP. In the IEP under "consideration of special factors," there is a question to the team asking if the student requires assistive technology to participate fully in the IEP. The team will check either the "yes" box or the "no" box.

When an impairment or disability limits the student from independently accessing, participating or engaging in the curriculum or other school-related activities, the answer to this question is "yes," and the "yes" box should be checked.

Checking the "yes" box indicates that the IEP team agrees that assistive technology is, or may be, an important factor in a student's plan. When this box is checked, AT will then need to be addressed in the IEP. This action does not indicate that devices will be provided to the student by the school. It could mean that the team sees a need for further evaluation or that assistive technology tools are needed or should continue. The IEP should document the unique student needs in the Educational Concerns sections (Staff and/or Parent) and in the specific subject areas Present Level of Academic Achievement

and Functional Performance. The IEP team will identify tasks or activities where the student requires supports to gain benefit from their special education program. This may include independence in accessing curriculum and activities and/or expressing knowledge. The IEP team will identify areas in which AT is currently supporting the student's independence and participation in the least restrictive environment (LRE) and identify any areas where AT needs to be considered.

Types of assistive technology tools and services should be listed in the Supplemental Aids and Services section of the IEP. It is recommended that IEP teams use general terms for tools that highlight required features, such as "mobile tablet with touch screen," rather than specific products such as "iPad." Assistive technology is a special education services area of need and, therefore, can have stand-alone goals, such as when the student is learning skills to use a device or tool, or can also be included in other IEP service areas, such as reading, written language or communication, with a link to goals and goal achievement. A statement regarding a need for an AT assessment or tools should be listed in the IEP Notes section.

Assessment

5. Must assistive technology be considered for all students with disabilities?

Yes.

CFR 300.346 Development, review, and revision of IEP

6. What kinds of tools qualify as assistive technology?

Any item, piece of equipment, or product system that is used to increase, maintain, or improve the functional capabilities of a student with disabilities and which the IEP team specifies is necessary for the student to receive a free appropriate public education (FAPE) in the least restrictive environment (LRE).

7. Who is qualified to assess a student's need for assistive technology?

Montana does not have licensing or certifications standards for specialists in assistive technology. It is recommended that a team of individuals with the best knowledge of a student's abilities, including at least one person with knowledge of assistive technology, comprise the assessment team. Professionals most likely to have knowledge of assistive technology are occupational therapists, speech language pathologists, physical therapists and/or special education teachers.

8. What is the role of the parent in determining a student's need for an assistive tool or service?

Parents, and the student, if appropriate, should be invited to participate in all aspects of the AT assessment and implementation process. They provide meaningful information and input about their student's learning strengths, interests and needs. It is important to consider parent information regarding fitting, customizing, and adapting the technology to their child.

9. How is the determination made that an assistive technology tool or service is educationally necessary for a student?

The IEP team determines that assistive technology device or service is educationally necessary for a student to benefit from his or her education program.

A problem-solving process will assist teams in making decisions regarding AT tools and services. Regardless of the problem-solving or scientific approach applied, careful examination of data collected when considering the many factors, benefits, and implications in the use of assistive technology tools or services is dynamic and must include careful documentation throughout.

CFR 300.324 Development, review, and revision of IEP

10. When are assistive technology tools or assistive technology services considered a related service?

Assistive technology tools or services are considered to be related services when the IEP team determines that the service(s) is required to assist a student with disabilities to benefit from his or her Special Educational Program.

CFR 300.105 Assistive Technology

11. Can an independent educational evaluation be requested by the parent to address a student's need for assistive technology?

Yes. The school district is required to evaluate a student in all areas of suspected disability including, if appropriate, evaluating the student's need for assistive technology. A parent has the right to an independent educational evaluation if the parent disagrees with an evaluation obtained by the school. Be familiar with your district's policy on independent educational evaluations.

CFR 300.502 Independent educational evaluation

Choosing an Assistive Technology Tool

12. What procedures should be followed when determining a student's need for an assistive technology tool?

Many factors will need to be addressed due to the unique needs of each individual student. Districts are encouraged to develop a process for this determination.

13. Is a school district required to provide “state-of-the-art,” or specific assistive technology tool or service for a student?

The decision by the IEP team as to what type of assistive technology is appropriate should be based on the assistive technology assessment process which includes tool feature analysis and comparison across tools. The school must provide appropriate technology for the student's needs to ensure FAPE. If specific assistive technology is necessary to ensure FAPE for a student and no other assistive technology can meet the student's educational needs, the district must provide the required assistive technology. If a less expensive assistive technology would accomplish the same goals, the school district is under no obligation to choose a more expensive option.

14. May school district administrators instruct personnel not to include assistive technology in the IEP?

No. The IEP team determines a student's need for assistive technology tools and services. A school may not prevent IEP teams from identifying a student's need for assistive technology.

CFR 300.324 Development, review, and revision of IEP

15. What constitutes an unreasonable amount of time to obtain an assistive technology tool?

It is not possible to set a specific time period. However, once an assistive technology tool is determined necessary for the student's instructional program, the district must implement procedures necessary for obtaining the tool without unnecessary delay. When a delay is anticipated (e.g., equipment is on backorder from the company) it is best practice for the school to inform the parent and to implement procedures to ensure that the student has access to the instructional program through other means (e.g., student scribe until speech-to-text device available and trained).

16. Are there any places in Montana that offer the opportunity to try out equipment before a purchase is made?

Yes. See “Resources” on page 30. It may be possible for the district to borrow or lease an appropriate device or tool, as used in the trial period, while waiting for purchase. MonTECH, PLUK, and other state resources have equipment loan programs. At times, manufacturers of assistive technology also have equipment loans available for trial purposes.

17. If the IEP team cannot come to consensus regarding an assistive technology tool or service, what should occur?

The IEP team should work toward consensus, but the public agency has ultimate responsibility to ensure that the IEP includes the services that the student needs in order to receive FAPE. If the team cannot reach consensus, the public agency must:

- a. Inform the parents of the district's proposals or refusals, or both, regarding the student's educational program. This is done using a prior written notice.
- b. Advise the parents that they have the right to seek resolution of any disagreements through informal processes such as the OPI's Early Assistance Program, or requesting formal mediation or initiating an impartial due process hearing.

Every effort should be made to resolve differences between parents and school staff through voluntary mediation or some other informal step without resort to a due process hearing. However, mediation or other informal procedures may not be used to deny or delay a parent's right to a due process hearing, or to deny any other rights afforded under Part B of IDEA.

CFR 300.506 Mediation

CFR 300.507 Filing a due process complaint

CFR 300.508 Due process complaint

The IEP meeting enables parents and school personnel, as a team, to make joint, informed decisions regarding the:

- c. Student's needs and appropriate goals;
- d. Extent to which the student will be involved in the general curriculum and participate in the regular education environment and state and districtwide assessments; and
- e. Services needed to support that involvement and participation and to achieve agreed-upon goals.

Parents are considered equal partners with school personnel in making these decisions, and the IEP team must consider the parents' concerns and the information they provide regarding their child in developing, reviewing, and revising IEPs.

Purchasing Assistive Technology Tools

18. Who is required to provide assistive technology tools and services?

Once the IEP team has determined the need for assistive technology, the school district is obligated to provide or purchase the assistive technology tool(s) and/or services for educational purposes. Therefore, the tool is the property of the district. However, the student's family may also wish to use family/parent resources for purchasing the tool. The tool would then be the student's property and be able to travel with them through his or her education and beyond.

19. May schools require the parents to pay for an assistive technology tool or service?

No. Special education and related services must be provided "at no cost to the parent."

CFR 300.26 Special education

20. Are there options for districts to consider other than purchasing the assistive technology tool?

Yes. Below are some options that the student's team could consider prior to the school purchasing the assistive technology tool:

- Use of student's Medicaid funds for purchase, with parent approval
- Use of Private insurance for purchase, with parent approval
- Renting or leasing the tool
- Community and service groups may offer financial assistance for the purchase
- Grants and private foundations may offer financial assistance for the purchase

(See Resources on page 30)

21. What resources are available to assist in obtaining appropriate assistive technology tools and services?

There are a number of parent, professional and advocacy organizations/associations that offer assistance regarding assistive technology tools and services. See Resources on page 30.

22. Who owns the assistive technology purchased for an individual student?

If the school purchased the tool(s), it is the property of the school. If the assistive technology was purchased using the student's Medicaid or private insurance funds, the tool belongs to the student. If the tool was donated, ownership would be determined by the conditions of the donorship. If the parents or third party pays for a portion of a device, and the school pays a portion of a device it is advisable that a written agreement be drawn up between the school and the parents regarding ownership.

23. When a student moves from school to school within the same district, does the district-purchased assistive technology tool follow the student?

The same tool may not necessarily follow the student from one school to the next, but a tool that fulfills the assistive technology needs identified in the IEP would need to be provided. If an assistive technology tool is included in a student's IEP, it must be provided in whichever school, or educational setting, the student attends in that district.

24. When a student moves from one school district to a different school district, does the assistive technology tool that was purchased by district A follow the student to district B?

Since District A owns the tool, it may keep the assistive technology tool for use by other students. Or District A may decide to transfer or sell the assistive technology tool to District B.

25. If an assistive technology tool is no longer needed by a student and the tool was paid for by Medicaid or private insurance, can it be donated for use by another student?

Yes. A student's parents could donate the assistive technology to the school for use by other students or to any other program, organization or individual of their choosing.

Training in Using the Assistive Technology Tool or Service

26. In addition to the student, who else should receive training on how to use an assistive technology tool or service?

Anyone with whom the student may use the tool. This includes parents, special education teachers, bus staff, paraprofessionals, lunchroom staff, general education teachers, relevant peers and others. It is the district's responsibility to train appropriate staff members in proper use of the technology. Each teacher and provider involved with the student must be informed of the specific accommodations, modifications, and supports that must be provided for the student in accordance with the IEP and typically is documented in the Supplementary Aids and Services section.

300.342 When IEPs must be in effect

27. What kind of training and technical assistance should be provided to families, peers and professionals?

Depending on the technology and the involvement of the family, peers and professionals with the child, training and technical assistance should include, but not be limited to, providing information and training about:

- f. the tool and how it works;
- g. programming and setting up the tool;
- h. gathering data to identify if the tool is considered successful;
- i. recognizing and fixing minor problems;
- j. generalizing skills and integrating the tool into the student's life across multiple environments, including at home;
- k. integrating the tool into the student's education goals and objectives;
- l. maintenance of the tool(s); and
- m. resources within the local community for repair services.

Using the Assistive Technology Tool or Service

28. When can an assistive technology tool be used in the regular education setting?

The IEP team determines when and how the student will use the assistive technology tool in the regular education setting. Following the development of the IEP this information must be shared with all of the student's classroom teachers and other service providers who have need of such information and is noted in the Supplementary Aids and Services

section of the IEP. The IEP team needs to identify specific task and setting-specific use of assistive technology and features required to assist student with meeting academic goals outlined in the IEP.

300.342 When IEPs must be in effect

29. May a student be required to bring a personal assistive equipment (such as a laptop computer) to school for use as assistive technology?

No. However, the family may wish for the student to use his or her own equipment in school, since he or she may be most familiar or comfortable with that equipment.

30. May students take assistive technology tools owned by the school to their home?

This decision must be made on a case-by-case basis. The use of school-purchased assistive technology tools 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 tools in order to receive a free appropriate public education.

31. May an assistive technology tool be used by more than one student?

If the tool is the property of the school, it can be used by more than one student so long as each student who requires use of the tool has access to it as identified in his or her IEP. If the tool is owned by an individual student, parent approval must be obtained before other students may use the equipment.

32. May students become too dependent on assistive technology?

Proper assessment, assistive technology choice, implementation, and periodic reviews of assistive technology usage and the need for the assistive technology can prevent inappropriate dependency. Assistive technology is appropriate when it compensates for disabilities so that the individual can function as independently as possible. The IEP team should determine the student's need for assistive technology based on the results of assessment and annual reviews.

33. Why do some students refuse to use an assistive technology tool?

When this occurs, it is important to discuss the reasons with the student, teachers, parents and others. Following are some reasons why a student may not use an assistive technology tool:

- The student was not involved in decision-making.
- The tool was not appropriate for the intended purpose.
- The tool is inconvenient or impractical to use.
- The tool inhibited some other important function.
- The tool can't be modified or upgraded to meet changing needs.
- The tool is cumbersome or unattractive.
- The functional needs of the student changed.
- Medical intervention (surgery, medications) made it unusable.
- Use of the technology increased medical or safety risk.
- Training on the tool and its use was not provided.
- Technical support was not readily available.
- Student was self-conscious about using it.
- Student was not given the opportunity to use the tool independently for a meaningful activity.
- For communication devices, the student may continue to use previous communication methods (gestures, eye gaze) rather than the new tool or system, if she or he is able to get what they want by using the previous method rather than by using the new method.

Repair and Maintenance

34. What are the responsibilities of the student, educators and parents in the maintenance and repair of assistive technology tools and reporting broken tools?

It is the joint responsibility of the parent, student and school personnel to take reasonable care of assistive technology tools. The IEP team should identify methods for reporting problems and completing repairs prior to using the assistive technology tool.

35. If an assistive technology tool is lost or damaged beyond repair, who replaces the tool?

The school district is responsible to arrange for the repair or replacement of district - owned assistive technology tools. The district should ensure that proper safeguards are taken to protect the tool if the student has a history of losing or damaging assistive technology tools.

36. Is the school liable for family owned assistive technology tools used at school to implement the student's IEP?

The IDEA doesn't specify the responsibility of the school. The school district should take proper precautions to protect the equipment while it is in school buildings or being transported between home and school.

37. What provisions could be made for the student while an assistive technology tool is being repaired?

During the development of the IEP, the IEP team should identify the steps to be taken if the tool needs repairs; how a substitute tool will be provided; and which other temporary options would offer an acceptable substitute to the student's tool. It may not be possible to provide the same tool in the interim. Parents, Let's Unite for Kids (PLUK), MonTech or other parents/districts may be contacted about a loaner tool.

38. What is important to know about a warranty?

The manufacturer's warranty should be reviewed prior to purchasing an assistive technology tool and before making any repairs or modifications to the tool. In some cases, warranties may be voided if persons other than the manufacturer or authorized service representatives attempt to repair a tool.

39. Should assistive technology tools be insured?

It is the school district's decision to carry insurance. School district insurance policies may cover an assistive technology tool purchased by the district for student use or may offer additional coverage that includes assistive technology tools. Assistive technology tools purchased by funding sources other than the school may or may not be covered while the student is on school premises or involved in school activities. It is important for school staff to investigate the district's insurance to determine what the policy currently covers and whether or not the policy insures against loss or damage of assistive technology tools.

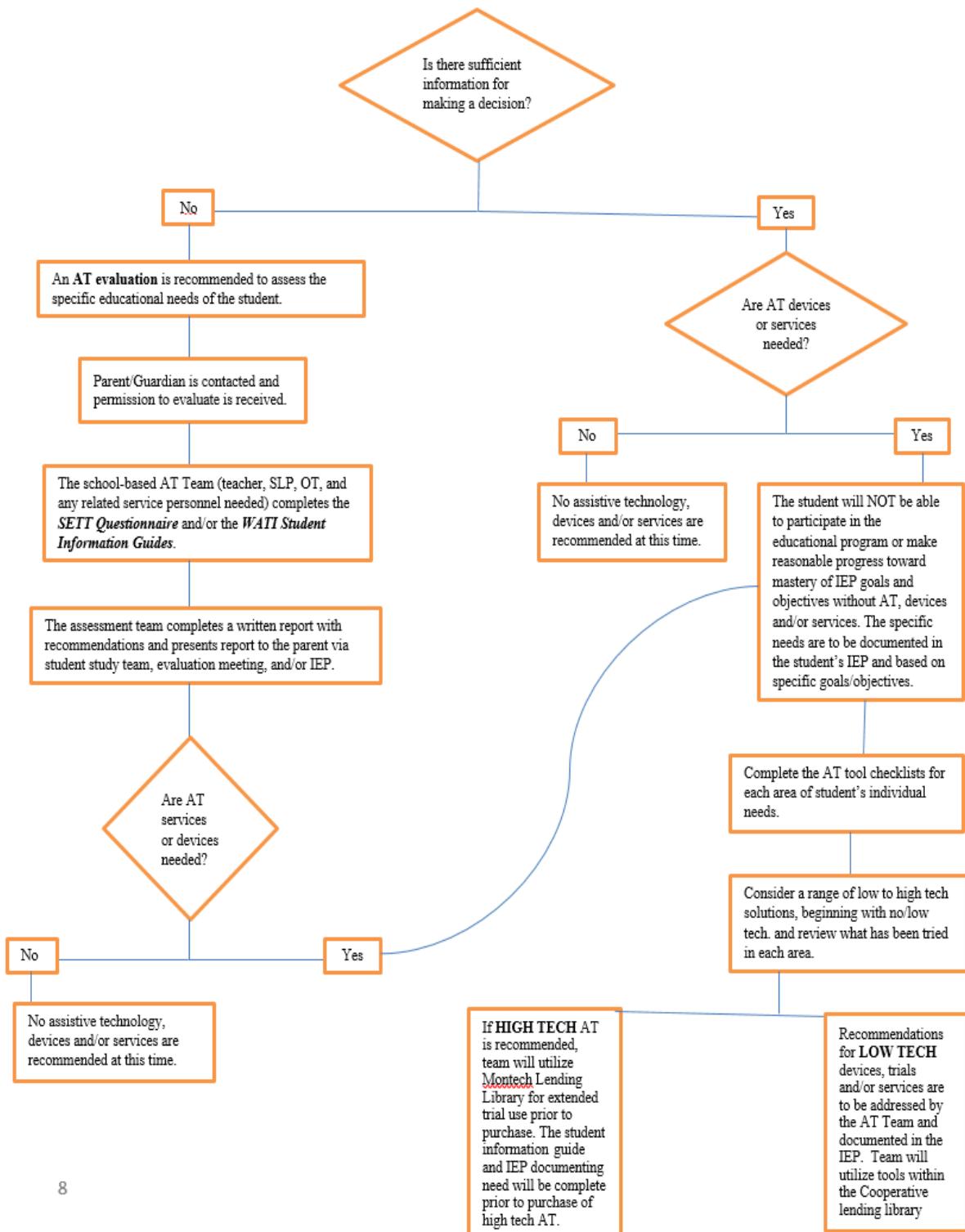
Legal Responsibilities

In accordance with the IDEA, the school district must ensure that assistive technology tools or assistive technology services are made available to a child with a disability if required as a part of the child's special education or related services in order to receive a free appropriate public education (FAPE) in the least restrictive environment (LRE). The determination as to what is an appropriate program for each student must be identified in the IEP. There must be a relationship between the educational needs of the student and the assistive technology tool and/or service. Assistive technology services and tools must be provided for the student, in accord with the IEP, at no cost to the parent.

The school district is responsible for ensuring that the assistive technology tool(s) identified in the student's IEP is in working order and, if it is lost or stolen, the tool is replaced. If the tool is broken, the district must provide repair or replacement, as appropriate.

In consideration of the need for assistive technology, assessment results, the use of AT tools, as well the provision of AT services, school teams are encouraged to maintain student's right to confidentiality. Access to shared servers, applications and storage systems (e.g., Cloud) should closely follow district policy and ensure student's right to privacy. Personal devices used to generate AT tools, (e.g., taking pictures or videos of student, etc.) is discouraged as the personal device would be considered part of the student's educational record if subpoenaed. 20 U.S.C. 1232g(a)(4) FERPA

Assistive Technology as Part of the Special Education Process



A. Pre-referral/School-Based Support Team

The pre-referral/school-based support team should consider assistive technology instructional technology or accessible instructional materials as a tool(s) to address educational access problems in the general education program prior to special education referral.

B. Child Find/Referral to Special Education

If the school-based support team determines that the student is not able to perform expected tasks within the general education curriculum even with the intervention(s) tried, the team should refer the student for a comprehensive special education evaluation.

Notice and Consent (Permission for Evaluation)

Permission to evaluate is needed before evaluation occurs.

C. Comprehensive Evaluation

As part of the comprehensive evaluation, the evaluation team may determine that an assistive technology assessment is needed.

D. Evaluation Report Meeting

The evaluation team determines whether the student has a disability that adversely affects the student's educational performances, and because of that disability needs special education. Students who do not meet the eligibility criteria for an IEP may meet the eligibility requirements of Section 504.

E. Individualized Education Program (IEP)

If an assistive technology evaluation was conducted as part of the comprehensive evaluation, the IEP team members must consider the results and recommendations of the evaluation when developing the IEP.

F. Review

The IDEA requires that each student's IEP be reviewed at least annually. This should include a review of the effectiveness of the assistive technology and strategies, and consider if further assessments and/or revisions are needed.

Assistive technology and strategies should also be reviewed when:

- the assistive technology is thought to be ineffective;
- the student is ready to use a new assistive technology tool or service; and
- the student is transitioning to a new educational environment. The new setting should be analyzed to ensure the assistive technology is compatible to that setting.

Assistive Technology Consideration Process

1. Identify possible need for assistive technology tools or services.
2. Collect and analyze information about the student and her/his environments (playground, classroom, lunchroom, etc.), what assistive materials are required, and how any possible assistive technology tools could be used.
3. Collect and analyze information about the activity/tasks the student is expected to complete in each environment (be specific).
4. List all previous assistive technology strategies and tools used and/or tried, including no-tech, low-tech, and instructional strategies.
5. If needed, include persons with expertise in specific areas, e.g., behavior, technology, communication, etc.
6. Identify and select strategies and assistive technology tools to be used in each environment.
7. Develop a plan for trials of tools and strategies being considered.
8. Create a plan for obtaining tools that are successful.
9. Create a plan for training the student, staff, parents and others in the use of the assistive technology strategies and tool(s).
10. Develop a maintenance and repair plan.
11. Routinely evaluate the effectiveness of the assistive technologies and strategies.
12. Repeat any of the above steps and make changes as necessary to ensure success.

Questions To Ask When Considering Assistive Technology Tools and Services

The following are questions to answer when considering a student's need for assistive technology. Each person* involved with the student should have the opportunity to review these questions before making choices about the student's assistive technology needs.

*(Student, paraeducators, special education teachers, parents, regular education teachers, principals, peers, maintenance staff, office staff, lunchroom staff, home service providers, transportation staff, etc.)

Assessment

What are the student's current abilities?

What are the student's functional limitations?

What task is the student unable to perform without assistive technology?

What is the purpose of the tool?

(handwriting, computer access, communication, hearing, writing, reading, studying, math, seating and positioning, mobility, vision, etc.)

What tools/strategies have been used in the past with this student to address this need?

For each tool/strategy, what has been the success?

If tool/strategies failed, why did they fail?

What tool/strategy is the student currently using to meet his or her needs?

What will happen if the student does not have access to assistive technology?

What will the tool do that the student currently cannot do or has trouble doing? What current IEP goals are related to the student's needs for assistive technology?

What may limit the student's use of the device? (mobility, availability, physical limitations, etc.)

How often will the student use the tool/strategy?

Choosing an Assistive Technology Tool and/or Strategy

What features does the tool or strategy need to offer to the student?

What features help with what needs?

What tool is needed?

How often will the student use the tool/strategy?

Is the considered tool/strategy the least restrictive technology?

Where will the student use the tool?

(Home/sped classroom/ regular education classroom (which classes)/ on the bus/ physical education / lunchroom / recess, etc.)

Who will the student use the tool with? Peers? Teachers?

Will the assistive technology tool be “test-driven” prior to purchase?
Are there other people in the school/district/community who have used similar tools?
How easy is the tool to set up, learn to use, operate, maintain and repair for the student, teachers and parents?
Is the tool portable and flexible enough that the student can/will use the tool?
Is the tool portable and flexible enough for moving around the school? Is the tool portable and flexible enough to use on transportation?
Is the student concerned about the appearance of the technology or using it around peers?
Have plans been made for use of the assistive technology in other environments and during transition times?
Is the considered tool/strategy the most cost-effective approach to meeting the student’s need?

Purchasing an Assistive Technology Tool

Who will purchase the tool?
What is the effectiveness, reliability, durability, safety, comfort, and long-term use of the assistive technology tool?
When will the assistive technology need to be replaced or updated?
How easy is the tool to store and transport? Will there be a need for any additional equipment such as carrying cases, mounting systems, etc.?
If software is to be used, do you know the memory, operating system and speed of the computers on which the software is to be used?
What is the compatibility and expandability of the tool(s)?
Have assistive technology manufacturers or other organizations (MonTECH, PLUK) been contacted about loan programs?

Training in Using Assistive Technology Tool or Service

What training will the student receive to use the assistive technology tool? Who will deliver the training(s)?
Who else will be trained to use the tool or trained about the tool?
(Paraeducators, special education teachers, parents, regular education teachers, peers, principals, maintenance staff, office staff, lunchroom staff, home service providers, transportation staff, etc.)
How will substitute staff be trained in the use of the tool?
How will future needs for training be identified?

Using the Assistive Technology Tool or Service

Who will determine if the assistive technology is being used successfully?
What IEP goals will be developed for the use of the assistive technology?
How will the IEP include assistive technology services?
When will the success or failure of the tool be reviewed? By whom?

How will the student provide feedback on the use of the assistive technology tool?

Repair and Maintenance

Who will pay for repairs?

Are local resources available to provide technical support or repair of the tool(s)?

When the tool breaks, who will repair it?

Who will be responsible to contact the repair provider? To get the tool to the repair location? To make sure that the repairs occur?

How will the need for the assistive technology be addressed while repairs are occurring?

Student-Centered Assessment

The school district must evaluate a student in all areas of suspected disability, including whether the student needs assistive technology devices or services. When the **E** or IEP team determines that a student needs an assistive technology assessment, the school must provide for the assessment. A school may use its own personnel or, if it participates in a special education cooperative, use cooperative staff to conduct or assist with the evaluation or contract with an individual or organization to assist with conducting the evaluation.

The assistive technology assessment must be conducted within the student's customary environments, since the assessment is being conducted for the purpose of determining the appropriateness of an assistive device(s) for the student's educational program. "Customary environments" means the environments in which the **student** receives his or her education instruction.

Professional Development

The implementation and use of assistive technology services and devices includes training or technical assistance for the student or, if appropriate, the student's family, as well as training or technical assistance for persons providing education or rehabilitation services, employers, or other individuals who provide services to or are substantially involved in the life of the student.

CFR 300.6 Assistive technology service

Schools may address training needs by:

- Using school personnel to provide the necessary training, since these people are a valuable resource for creating a "train the trainer" model. Outside resources can be used to consult and provide training where needed.
- Reviews of training needs should be regularly scheduled and occur whenever there is a change in the student's educational program.
- Retraining may be necessary when the IEP is revised, new staff are employed,

or the student's placement is changed.

General Professional Development

Professional development is important because a lack of meaningful training in assistive technology can lead to product abandonment. It is to the benefit of the school district that school personnel have some awareness training regarding assistive technology devices, services and resources. This training is important so that district personnel are knowledgeable of the obligations of the district under IDEA, the resources available within the district to address students' assistive technology needs, and the basic process to follow if a parent or school personnel think a student may need assistive technology devices or services. When providing awareness training, it is important to think about including the following groups:

- All educators involved in the educational process of the student (special educators, paraprofessionals and general educators)
- Parents
- Students
- Others who interact with the student:
 - Bus drivers
 - Lunchroom or playground assistant
 - Peers

School districts should provide inservice opportunities in the following areas:

- Legal requirements related to assistive technology devices and services.
- Factors that may lead to consideration of a student's need for assistive technology.
- Student-centered assessment process to determine a student's need for an assistive technology tool and/or service.
- Documentation of assistive technology tools and assistive technology services on the IEP.
- Development of IEP goals and objectives for assistive technology services and tools.
- Implementation of assistive technology across settings.
- Common assistive technology tools (low tech/high tech).
- Resources for information and support.

Student-Specific Training

School personnel who work with a student should have training on the use and maintenance of the assistive technology, as appropriate, and should know who to contact for assistance, equipment repair or maintenance. Training should include, but not be limited to, the following:

- Review of the student's educational and assistive technology needs.

- How the student will use the assistive technology in his or her educational program.
- Methods to evaluate the effectiveness of the assistive technology.

Peer Group Awareness Training

Students who require assistive technology tools and strategies may feel more comfortable using the assistive technology with peers if assistive technology information is shared with the student's peer group.

Such training can help:

- create an understanding of the student's assistive technology and the need for the assistive technology.
- foster acceptance in the social environment.
- reduce fears or discomfort about socializing with the student who uses the technology.

The student and parent are important parts of any training activities. Parents should be aware of and be invited to participate in all peer training activities.

Parent Training

Parents should be invited to participate in:

- Training on the use of the assistive technology
- Training on the implementation of the assistive technology
- Development of the maintenance plan
- Ongoing training opportunities
- Peer group awareness training

Funding for Assistive Technology

If a student who is eligible under IDEA requires assistive technology in order to receive a free appropriate public education, the school must provide the appropriate assistive technology devices and services at no cost to the parents.

School districts should be proactive in coordinating efforts to secure supplemental funding. Districts may use any of the following funds to purchase assistive technology devices and services.

- State education funds;
- State or local funds;
- Federal funds provided for special education and related services under IDEA for eligible students with disabilities; and
- Other available sources such as donations, private insurance and Medicaid.

When equipment is purchased with state or local district funds, state special education or IDEA funds, the equipment becomes the property of the school and the school is responsible for maintenance, repair and insurance.

If equipment is purchased with a family's insurance or student's Medicaid funds, the equipment becomes the property of the family and the family is generally responsible for maintenance, repair and insurance. If the parents or third party pays for a portion of a device, and the school pays a portion of a device, it is advisable that a written agreement be drawn up between the school and the parents regarding ownership and repairs.

Possible sources of funding are:

Public Programs

- Medicaid and Medicaid Waiver Programs
- Vocational Rehabilitation Services

Private Programs

- Loans
- Grants from private foundations
- Private Insurance
- Non-Profit Disability Associations
 - These include, but are not limited to:
 - Braille Institute
 - March of Dimes
 - Muscular Dystrophy Association
 - National Easter Seal Society United Way
 - United Cerebral Palsy Association
- Foundations

- Service Organizations
 - These groups include, but are not limited to:
 - Elks Club
 - Kiwanis
 - Knights of Columbus
 - Lions Club
 - Masons
 - Rotary Club
 - Soroptimist
 - Veterans of Foreign Wars (VFW)
- Scholarships
- Fundraising Activities
- Manufacturer-sponsored scholarship

Resources

The following is a list of resources that may be used to learn more about assistive technology funding options, services and assistive technologies.

Montana Resources

Montana Relay/Telecommunications Access Program (MTAP)

111 North Last Chance Gulch Helena, MT 59604

800-833-8503

<http://dphhs.mt.gov/dtd/mtap>

MTAP helps individuals across the state to access telecommunication services and equipment.

MonTECH Program

52 Corbin Hall

Missoula, MT 59812

406-243-5751

877-243-5511

montech.ruralinstitute.umt.edu

MonTECH is Montana's Technology-Related Assistance Program for People with Disabilities that provides information and assistance which lets inquirers know what type of equipment is available, where to find it, approximate cost and information on funding sources.

Parents, Let's Unite for Kids (PLUK)

516 North 32nd Street Billings, MT 59101-0298

800-222-7585

www.pluk.org

PLUK serves the entire state. This parent-advocacy service can provide information on assistive technology.

(Information presented on this page was current as of the time of publication. If you are unable to locate any of these resources, please contact the Division of Special Education at 444-5661.)

National Resources

Assistive Technology Industry Association

www.atia.org

The ATIA is an organization for manufacturers, sellers and providers of assistive technology (AT)—products, equipment and systems that enhance learning, working and daily living for persons with disabilities.

Association of Assistive Technology Act Program (ATAP)

www.ataporg.org

The Association of Assistive Technology Act Programs (ATAP) is a national, member-based non-profit organization, comprised of state Assistive Technology Act Programs funded under the Assistive Technology Act (AT Act). ATAP facilitates the coordination of state AT Programs nationally and provides technical assistance and support to its members. Established in 1997, the organization strives to enhance the effectiveness of AT Programs on the national, state, and local levels. The ATAP promotes the national network of AT Programs, represents the needs and interests of the programs, and serves as the national representative of state AT programs.

Center for Applied Special Technology

www.cast.org

Founded in 1984, CAST is a nonprofit education research and development organization that works to expand learning opportunities for all individuals through Universal Design for Learning.

Closing the Gap

www.closingthegap.com

Computer technology in special education and rehabilitation.

Information Technology Industry Council and government GSA –Government Services Administration”

<http://www.itic.org/policy/accessibility>

The ITI is the leading technology industry voice for accessibility policies and standards. The ITI created “VPAT,” or Voluntary Product Accessibility Template®. This template is available to the public and can be found through the link above.

Microsoft Computers

<https://www.microsoft.com/en-us/accessibility>

Provides a list of assistive technology and links to step-by-step tutorials that will help customize computers to accommodate an individual with a specific disability.

National Federation of the Blind

<https://nfb.org/>

This website includes adapted materials.

Quality Indicators for Assistive Technology Services

<http://www.qiat.org/>

The QIAT Consortium is a nationwide grassroots group that includes hundreds of individuals who provide input into the ongoing process of identifying, disseminating, and implementing a set of widely applicable Quality Indicators for Assistive Technology Services in School Settings.

Rehabilitation Engineering and Assistive Technology Society of North America

<http://www.resna.org/>

phone at (703) 524-6686

The RESNA's strengths include an excellent reputation as experts on AT and RE, a passionate and committed volunteer leadership, and a diverse membership that represents the breadth of the field.

SETT Framework

<http://www.joyzabala.com/>

The SETT framework is an excellent AT evaluation system. This website provides that framework and is a resource for learning about assistive technology devices and services in educational settings. This website provides links to informational sites, as well as sites that provide opportunities to participate in collegial discussions and research on assistive technology.

Wisconsin Assistive Technology Initiative

<http://www.wati.org/>

The Wisconsin Assistive Technology Initiative is a statewide project funded by the Wisconsin Department of Public Instruction to help all school districts develop or improve their assistive technology services.

(Information presented on this page was current as of the time of printing. If you are unable to locate any of these resources, please contact the Division of Special Education at 444-5661.)

Accommodations/Modifications Examples

These lists include modifications to materials and methods, as well as assistive technology examples. Other modifications may be available. Please keep in mind that not all modifications are appropriate for each student.

Skill Area	Method	Material	Technology
Communication	Picture schedules Repeat directions Seat student near teacher Additional time to initiate and/or respond Pre-planned opportunity to answer questions, provide information	Carry pen and paper for writing	Electronic device with voice output Letter/word/icon communication board Picture schedules Pocket-size communication book Word prediction software

Skill Area	Method	Material	Technology
Handwriting	Additional time on written assignments Chalkboard practice Examples on desk Fill-in-the-blank tests rather than essay Multiple choice tests Not grading handwriting Paper position Peer support Photocopy notes Tape paper to desk True or false tests Write on whiteboard	Arm stabilizer/arm guide Clipboards Correction tape/fluid Different colors of paper Different kinds of paper (linen, graph, etc.) Different line colors Different line spacing Different size pencils/pens Highlighters Labels/stickers with name Marker instead of pencil Paper stabilizers Pencil grip adapter Rubber name stamps Slantboard/wedge Stencils/templates Tracing paper Whiteboard	Custom keyboards Keyboard guard Slant board Speech recognition System Use computer or word processor for writing Use handwriting font Wrist supports for typing

Skill Area	Method	Material	Technology
Math	<ul style="list-style-type: none"> Avoid mixing “signs” on page for young students Don’t require copying problems Extra time for completion Reduce number of problems Study carrel for solo work Study guides Use of a calculator 	<ul style="list-style-type: none"> Enlarge worksheets Math fact tables Provide worksheets with partial answers Reduce number of problems on page Use whiteboard Work on graph paper 	<ul style="list-style-type: none"> Calculator Large key calculator On-screen calculator Talking calculator

Skill Area	Method	Material	Technology
Organization	<ul style="list-style-type: none"> Color coding strategies for filing/homework Daily/weekly assignment schedule Have student repeat or write down directions Have student summarize directions Priority list Simplify directions Written directions 	<ul style="list-style-type: none"> Appointment book Assignment notebook Bulletin board reminders Extra books at home Homework journal Locker organizer system Pocket organizer/schedule Process or schedule reminder on desk Schedule in notebook Storage cubicles Study guides 	<ul style="list-style-type: none"> Calendar software Personal digital assistant (PDA) Pocket schedule Timers Voice recorders for reminders Wristwatch with alarm

Skill Area	Method	Material	Technology
Reading	Extra time for completion Provide chapter outlines Reduce reading level on assignments Shorten assignments Study carrel for solo work Study guides	Color overlays Enlarged print on assignments Highlight key words and concepts Large print books	Books on tape Close Circuit TV to enlarge books Electronic dictionary Screen enlarger for computer text Screen readers Use markers/ruler to guide reading

Skill Area	Method	Material	Technology
Spelling, Grammar, and Punctuation	Additional time on written assignments Peer support Recognition spelling test (identify correctly spelled words in multiple choice) Reduce assignments "Word wall" of common words and punctuation posted in classroom	List of problem words Pocket dictionary Reduce length of reading assignments	Computer spell check Electronic dictionary Personal electronic spellchecker Word prediction software

Skill Area	Method	Material	Technology
Vision	Frequent breaks from tasks Longer time to complete tasks Peer readers Seating arrangement Shorter or no homework assignments Shorter tasks Typing instead of handwriting	Bold line paper Books on tape Braille textbooks Braille printer Change font Color overlays Different color paper Double-space text Enlarge font size Enlarge reading materials Enlarge worksheets Hand-held (or other) magnifiers Lighting (changes in) Raised line paper Write with wide marker instead of pencil	Anti-glare shield Audio recorder/player Braille labels on keyboard Close Circuit TV to enlarge books Enlarge zoom on computer Large-key calculator Large-key computer keyboard Magnifying glass Page magnifier Provide more or less lighting Rulers - large print Screen enlarger for computer Screen readers Speech recognition systems Talking calculator Video magnifiers Videotape lectures

Skill Area	Method	Material	Technology
Written Expression	Accept outlines or notes to reduce written work Create sentences aloud Do not grade for spelling Extra time for completion Process reminders on chalkboard or desk Provide writing sample Shorten assignments Study carrel for solo work	Pocket dictionary Pocket thesaurus Process reminders on chalkboard or desk	Electronic dictionary Electronic thesaurus Spell check Use computer or word process for writing Use tape recorder to do assignments verbally Word prediction software

Tricks and Tips for Implementing Assistive Technology

Here are suggestions from a handful of professionals in Montana. Oftentimes, mainstream technology can be used in place of, or in preparation for, more robust learning tools and technology.

1. Take pictures of worksheets and then convert to a PDF document to make the documents accessible for students to read and write on. This can be used instead of the “apps” called SnapType, SmartForms or Snapverter.
2. Use voice comments, with tools such as Kaidenza or Read Write for Google, as a bridge to learning how to use speech to text. Students can use voice comments rather than a human scribe on tests and papers for increased independence.
3. Utilize device settings, such as slowing mouse speed and filter keys, to make device more accessible. These features are typically “built-in” to most computers (both PC and Mac).
4. A Keyguard can be placed over the standard keyboard to increase accuracy for users with limited fine motor control.
5. Teach nonverbal students to take pictures with their devices to assist in their communication.
6. A label maker can be placed at student’s desk to type answers to add to worksheet.
7. Students can create digital avatars with student-selected digital voices for text-to-speech when reading back his or her own work. This may increase student engagement.
8. Access “Ok Google” or “Siri” for help with spelling.
9. Teachers can use speech recognition apps or built-in speech-to-text to provide real-time transcript of lectures.
10. Use reminders on student device to augment schedule.
11. Students who need assistance with spelling or writing can use Keedogo Plus adaptive keyboard plus word prediction on an iPad.
12. Use couplings for inexpensive weighted pencil.
13. Offer students graph paper for math.

14. Velcro on desk for sensory needs.

For additional ideas, visit:

<http://www.edutopia.org/article/assistive-technology-resources>

Other Tools Available for Students with Disabilities

- Quick Reference

Reading

- **SpeakIt!** converts text into speech; find it on Google
- **Google Dictionary:** View definitions easily as you browse the web. goo.gl/PSiu2
- **NewsELA:** current nonfiction articles differentiated by Lexile reading level <https://newsela.com/>
- **Readability:** eliminates clutter in a comfortable reading view. goo.gl/J4cHfo
- **Beeline Reader:** Apply a gradient to text to make following the lines easier. Also allows you to enable OpenDyslexic Font. Find it on Google
- **ESL-Bits.net:** Listening, Reading, Audiobooks, Short Stories, Songs. <http://esl-bits.net/>
- **Free Books:** Google Play offers free books in the public domain. goo.gl/QOU76
- **Newsstand:** Google Play offers many free and thousands of affordable online magazines. goo.gl/dMJb2m
- **www.bookshare.org:** online accessible digital library
- **Read2Go:** Accessible eBook Reader for use with Bookshare books.
- **KNFB Reader:** text-to-speech app for IOS and Android devices.

Writing

- **VoiceNote:** (speech to text) Find it on Google
- **Speech Pad:** (speech to text) <https://speechpad.pw/>
- **Dragon Dictate:** speech to text app for iPhone/iPad
- **Virtual Keyboard:** Provides an onscreen keyboard for students who struggle tactiley to use a keyboard. goo.gl/3SYyso
- **Writing Navigator:** includes four products that guide students through the writing process. goo.gl/3TqM8i
- **Grammarly:** check for grammar and spelling errors. Find it on Google.
- **Google Docs:** now converts speech into text by clicking on Tools > Voice Typing
- **Read&Write for Google:** offers a range of powerful support tools; find it on Google

Visual

- **High Contrast:** lets you browse the web with your choice of several high-contrast color filters designed to make it easier to read text. Find it on Google
- **Change font size:** in Chrome Browser: Go to Settings > Show advanced settings > Web Content
- **Zoom:** in Chrome Browser: Press CTRL + or –
- **Screenreader:** most PC and Mac computers (and some mobile devices) have built-in screenreaders. Check the “Accessibility” section of the device.
- **Magnification:** most mobile devices and computers have magnification built into the operating system. Check the “Accessibility” section of the device.

Audio

- **Speech to Text:** Use VoiceNote or Google Docs speech-to-text tool to record teacher's voice and convert it to text in real time.
- **Livescribe SmartPens:** audiorecorders with additional note-taking features.
- **Closed Caption:** Youtube videos can be closed captioned

Note Taking

- **Mic Note:** Audio Recorder & Notepad; Find it on Google
- **Speech Notes:** App available for Android
- **AudioNotes:** App available for iPad & iPhone
- **Tab Scissors & Tab Glue:** Create side-by-side windows so students can look at content on one side and type on the other. Find it on Google