# Assistive Technology Practitioner's Guide



Created in Collaboration with Iowa AEA Assistive Technology Leads and the

Iowa Department of Education

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# **Purpose**

The purpose of this resource is to provide school teams across the state of Iowa with information and tools to thoughtfully diagnose, design and deliver assistive technology tools and services for students with disabilities as required by IDEA 2004. Thoughtful and thorough consideration of assistive technology is especially critical for students with identified disabilities, as it promotes equitable access and participation with Iowa Core instruction and related assessments that occur in the classroom.

While Iowa Core standards identify the learning goals for each age or grade level, it does not on its own offer the specific instruction, intervention methods or materials necessary to support the wide range of capabilities and learning needs of individual learners. The purpose of this resource is to assist school teams with those assistive technology considerations as part of the provision of specially designed instruction to support the learning needs of each student.

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# **Section 1: Introduction: Making Connections**

# Impact of International, National and State Educational Accessibility Reform

Educational reforms at the international, national, and state levels strengthen the need for school teams to thoughtfully consider accessibility supports and accommodations across the vast continuum of learner needs including those individuals with identified disabilities.

# ISTE: International Society for Technology in Education Standards for Students

(ISTE, 2019) cites the need to "Empower Learners" to leverage technology to meet personal learning goals and to customize their learning environments in an effort to support the learning process. This leveraging of technology may include the consideration and/or use of various assistive technologies which serve to provide critical supports for learner success in the classroom. This leveraging of technology is important for all learners within the Universal Tier of Iowa Core instruction. It becomes especially critical when discussing the needs of learners with identified disabilities.

# **Individuals with Disabilities Education Act**

Nationally, the reauthorization of the Individuals with Disabilities Education Act (IDEA 2004) mandates thoughtful consideration and documentation of assistive technology tools and services for all learners with disabilities to promote equal access and progress in the general education curriculum. IDEA 2004 also includes a federal requirement that assistive technology consideration be included at each annual IEP meeting. The information in this resource offers information and tools to support school teams engaged in these conversations and decisions.

# **Determining Supports for Learning & Performance for All Students**

The Iowa Department of Education provides the following guidance regarding consideration and provision of appropriate learner supports (<u>Determining Supports for Learning & Performance for All Students</u>, 2019) (rebrand.ly/SupportsForLearning)

"To ensure that all learners in Iowa acquire knowledge and skills they will need to become productive and successful citizens, a rigorous set of expectations and standards for academic achievement has been adopted for Iowa public schools and accredited nonpublic schools...A full range of services, programs, and supports and accommodations must be provided for all students who have learning needs." (Iowa Dept of Education, 2019.)

The consideration and identification of appropriate supports and accommodations for individual learners, especially those with identified disabilities who are not making progress in the general education environment, requires a thoughtful and data driven

decision-making process. Resources within this handbook are intended to support school teams engaged in these efforts.

# **Connections with Iowa's Multi-Tiered System of Supports**

Decisions to determine appropriate supports and accommodations required for learner success can be made in a variety of ways. Current implementation and use of Iowa's Multi-tiered System of Supports (MTSS) encourages general education school teams to consider interventions as well as supports and accommodations that promote independence and help learners achieve educational standards and expectations. If a learner is performing below grade level expectations and has an identified disability, accommodations that support access and successful participation with Iowa core instruction in the classroom environment should be carefully documented on the IEP. The identification, trial and provision of these accommodations may include various forms of assistive technology tools and/or services mentioned within this guide.

# **Iowa's Specially Designed Instruction/Special Education Services**

For learners receiving Special Education services, Iowa's 2017 framework for <u>Specially Designed Instruction (SDI)</u> (<u>rebrand.ly/SDIFramework</u>) includes safeguards to encourage the consideration and identification of assistive technology supports and/or accommodations which may be especially critical for learners to acquire, demonstrate and apply their learning.

# **SETT Framework**

Use of the SETT: Student/Learner-Environment-Task-Tools (adapted from Zabala, J. 2005) resource provides a framework for the consideration and potential identification of any assistive technology that may serve to support specially designed instruction and learner success in the classroom. The consideration of assistive technology and use of the SETT Framework will be discussed in greater detail in Section 2 of this resource.

# **Legal Definition of Assistive Technology in IDEA 2004**

In legal terms, under the Individuals with Disabilities Act (IDEA, 2004) and subsequent revisions, an "assistive technology device" is defined as:

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

# The term "assistive technology service" refers to:

- "any services that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device." Such term includes:
  - 1. The evaluation of the needs of such child, including a functional evaluation of the child in the child's customary environment;

- 2. Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by such child;
- 3. Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;
- 4. Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- 5. Training or technical assistance for such child, or where appropriate, the family of such child; and
- 6. Training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of such child.

Assistive Technology supports are available to all learners, regardless of age. These supports can increase learner access and engagement with curricular materials, instruction, and assessment. Assistive technology includes devices and/or services that enable children with disabilities to participate more fully in various aspects of life (home, school, and community) and helps them access their right to a "free, appropriate, public education" (FAPE) in the "least restrictive environment" (LRE). Although assistive technology can be a "tool" or set of "tools" that assist learners to benefit from instruction, it is not solely devices. Assistive technology may also take the form of assistive technology services, adaptations and/or modifications. Because assistive technology takes many different forms, it looks different from learner to learner. In fact, the provision of assistive technology must be individualized for each learner. There are numerous assistive technology tools available, each designed with supports for varied areas of need. While this is ever-changing a list of assistive technology features with examples of currently available assistive technologies for each can be found in Appendix B.

# Section 504 of the Rehabilitation Act of 1973

Section 504 prohibits discrimination on the basis of disability in any program receiving Federal financial assistance, including public school districts. Within Section 504 students with disabilities are eligible even if they do not need any special education services. Therefore, students who do not meet the criteria under IDEA but who still need specialized assistance, including assistive technology, are covered by Section 504. If a student with a disability who is not receiving special education services needs an AT device or service to fully participate in school activities, Section 504 may require that the school provide the device, training, and maintenance of the device at no cost to the parents.

# **Section 2: Consideration**

# AT Consideration on IEP

As stated in the <u>Individuals with Disabilities Act</u> (<u>rebrand.ly/IDEAstatute</u>) the IEP process **must include the consideration of assistive technology for all learners eligible for special education services**. When developing, reviewing, or revising each IEP, the IEP team is responsible for determining if assistive technology devices or services are needed for an individual to receive a Free Appropriate Public Education (FAPE).

This section includes an overview of processes and possible forms that support the assistive technology consideration, identification, planning, and provision of assistive technology as part of specially designed instruction for learners with IEPs in Iowa.

# **Diagnose**

The consideration of AT is critical when "diagnosing" for instructional design and "designing" for instructional delivery which are both essential components in the context of <a href="Iowa's Specially Designed Instruction (SDI)">Iowa's Specially Designed Instruction (SDI)</a> framework (<a href="rebrand.ly/IowaSDI">rebrand.ly/IowaSDI</a>). During the diagnose for the instructional design component of the SDI framework, IEP teams should gather information from the RIOT process (Review, Interview, Observe, and Test) to identify various areas of concern.

Through this process, they will be able to answer:

- What tasks are difficult for the learner?
- In what environments does the learner need to perform these tasks?
- Why are these tasks difficult for the learner?

# Design

In the designing for delivery, IEP teams need to consider assistive technology to address identified areas of concern; Through this process, they will be able to answer:

• What, if any, assistive technology does the learner need to perform these tasks as independently as possible?

Throughout the consideration process, IEP teams may gather and use any resources available to make an informed decision and to answer the above question regarding the need for AT for a learner on an IEP. Although IEP teams may use whatever resources are available to make an informed decision and to answer the above question, the Iowa SETT framework (adapted from Zabala, J. 2005) provides a systematic way of gathering information to make those decisions. The Iowa SETT Framework is adapted from the SETT Framework by Joy Zabala which is a four-part model intended to promote

collaborative decision-making in all phases of assistive technology service design and delivery from consideration through implementation and evaluation of effectiveness.

# Iowa SETT framework

The SETT framework supports teams in this consideration process as they discuss, organize, and record information regarding the:

- <u>S</u>tudent/Learner
- Environments
- Tasks
- <u>T</u>ools

Prior to considering any tools, IEP teams begin by using the guiding questions (listed below) to provide information about the <u>S</u>tudent/Learner, <u>E</u>nvironments, and <u>T</u>asks pertaining to the area of concern. These first three areas of the SETT are considered simultaneously as it is difficult to separate one area from another. Discussion of possible <u>T</u>ools is next for the team. Leaving the possible tool discussion for last keeps the focus on the learner's needs rather than on how the 'latest tool' can be used without an awareness of the learner's strengths, concerns, environments, and tasks that need to be completed.

# The Student/Learner:

- What does the learner need to do?
- What are the learner's current abilities?
- What are the learner's special needs?
- What strategies does the learner use?

### The **Environment**:

- What materials and equipment are currently available in the environment?
- What is the physical arrangement? Are there special concerns?
- What is the instructional arrangement? Are there likely to be changes?
- What supports are available to the learner?
- What resources are available to the people supporting the learner?

#### The Tasks:

- What naturally occurring activities take place in the environment?
- What is everyone else doing?

- What activities support the learner's curricular goals?
- What are the critical elements of the activities?
- How might the activities be modified to accommodate the learner's special needs?
- How might technology support the learner's active participation in those activities?

From the discussion surrounding the first 3 areas, a list of critical features required to support the learner's needs based on the area of concern can then be generated and matched with possible assistive technology tools.

#### The **Tools**:

- What no tech, low-tech, mid-tech, and high-tech options should be considered when developing a system for a learner with these needs and abilities doing these tasks in these environments?
- What strategies might be used to invite increased learner performance?
- How might these tools be tried out with the learner in the customary environments in which they will be used?
- Does the learner require accessible, alternate format versions of printed textbooks and printed core materials?

# **Conclusion of Consideration Process**

After the discussion has occurred, the team comes to a consensus and conclusion regarding the assistive technology needs for this learner. The conclusion may be any one of the following:

- 1. The student's needs are being met WITHOUT assistive technology- "Considered but not needed." on the IEP.
- 2. The student's needs are being met WITH assistive technology List items and related support services on IEP.
- 3. AT Concerns continue to exist Further assessment necessary.

The goal of the AT consideration process is to reach a conclusion about the needs of the student and what technology might be needed to support his/her learning. With repeated use of the Iowa SETT Framework in this consideration process, IEP teams become more confident in their abilities to research, select, acquire, and provide for the needs of students. As with any process the more you utilize it the more proficient you become which in turn builds capacity.

# Iowa AEA's Systematic Process for Considering Assistive Technology Accommodations and AIM/AEM for Reading

Using components of the SDI Framework, a flowchart has been created to provide additional support to IEP teams using the systematic consideration of assistive technology. It provides teams with a data-based decision-making process for considering AT supports to increase student access and engagement with curricular materials for learners struggling to meet grade-level standards based on universal screening, lowa Statewide Assessments, and/or other literacy assessments (not including learners taking alternate assessments). This guidance aligns with the AEA Special Education Statewide Procedures (rebrand.ly/lowaSpedProcedures) and is not in addition to described procedures.

Flowchart for Reading

**Template Flowchart** 

# Section 3: Trial/Training/Data Collection

Once the IEP team has worked through the AT Consideration process and determined that the learner may benefit from assistive technology, a trial with the technology needs to be completed in authentic environments. A trial may be done during a short visit or over the course of several weeks. Regardless of the length of the trial, it is completed prior to documenting the technology within the IEP. A written plan to implement a quality trial placement is recommended.

# Action Plan

Some questions for the IEP team to consider include:

- From where will the trial device be acquired?
- Who is responsible for acquiring the device/software?
- Who is the primary person responsible for learning how to operate the assistive technology?
- Who needs to be trained to use the device and who will conduct the training?
- Who will be responsible for the maintenance and troubleshooting of the assistive technology?
- How will we know that the tool is beneficial/required for the student?

# **QIAT-Evaluation of Effectiveness**

During the trial period, data is collected to determine the effectiveness of the assistive technology. Questions regarding data collection that might be considered include:

- What kind of change will there be in the way the learner completes the task(s)?
- What about the learner's performance will change?
- What data will best reflect this change?
- How long will it take to observe the change in performance?
- Is there a need for a trial of a different tool?

Following the trial placement(s) the IEP team will analyze the data that was collected. The following questions may be useful when analyzing the data.

- What were the advantages/disadvantages of each of the assistive technologies that were trialed?
- Did the learner have a preference for one of the assistive technologies?
- Was there an increase in the learner's performance when using the assistive

technology?

- If multiple items were trialed, how did the learner's performance with each of the assistive technologies compare?
- What, if any, assistive technology will be recommended?

Once it is determined that a learner may benefit from the use of assistive technology the team will complete a trial placement. Evaluation of effectiveness helps a team know whether the AT used for a student is producing the desired outcomes. The use of AT is not the desired end result. The use of AT results in a student being able to write faster, be more independent in their work, communicate more effectively, complete work at grade level, etc.

# **Section 4: Securing & Maintaining Tools**

IDEA places the responsibility for providing assistive technology devices and services with the school district. Each public agency shall ensure that assistive technology devices or assistive technology services, or both, are made available to a child with a disability if either are required as part of the child's:

- special education
- related services
- supplementary aids and services.

If a learner requires assistive technology services and devices in order to receive FAPE, the school district will make the appropriate devices available at no cost to the family. The technology should be documented in the learner's IEP.

(IDEA, Title 34, CFR, Sec. 300.308)

# **Be Proactive**

It is critical that school districts are proactive in planning for assistive technology expenditures. By investigating potential funding sources before specific needs are identified, funds can be available to meet the assistive technology needs as they occur. When considering long-range planning, it is helpful to identify and consult with individuals in the district who may be instrumental in allocating or identifying funding sources for technology or special education needs.

# **Consider Funding Principles**

There are four significant principles that surround assistive technology and must be a part of any decision-making process regarding its funding:

- 1. The focus during the selection of assistive technology must be on the desired outcome for the learner rather than on equipment and costs.
- 2. Cost may be considered but may not be a controlling factor in selecting appropriate assistive technology.
- 3. If more than one option will provide for the provision of FAPE, then cost may be a legitimate factor in determining whether a particular service or device is appropriate.
- 4. The determination of appropriate assistive technology services and devices for learners must be done on an individual basis and must adhere to the components of IDEA

# **Conduct Trial Periods**

Trial periods are necessary to determine if a particular assistive technology device is

appropriate for a learner and to avoid purchasing equipment that does not meet the learner's needs. The length of a trial period will vary with each individual, depending on the type of assistive technology. It may be necessary for the learner to try different types of technology before the appropriate one can be selected. Refer to Section 3 of this resource for more detailed information regarding the trial period.

# **Acquiring Trial Equipment**

Many Districts and AEAs have equipment in lending libraries that may be explored at no cost. The types of equipment vary from AEA to AEA and district to district, but these local resources should always be considered first.

Most companies offer a free trial period for their products. It is best practice to review the policy of companies from which assistive technology devices or products are acquired.

# **Purchase Appropriate Equipment**

Utilizing the consideration process in Section 2 and the trial/training/data collection discussed in Section 3 of this guide increases the likelihood of identifying appropriate assistive technology.

# **Explore Additional Funding Resources**

While a school district is ultimately responsible for ensuring that assistive technology services and devices are made available to a learner in need of them, teams may explore a variety of funding resources for purchasing services and devices to meet the assistive technology needs. Potential sources for outside funding include:

- 1. **Private insurance** Some health insurance plans will purchase assistive technology equipment considered medically necessary (a doctor's prescription is required). Parents may choose to use private insurance to pay for assistive technology devices and services.
- 2. **Medicaid** As a joint federal and state program, Medicaid may cover the cost of some assistive technology equipment if it is considered medically necessary. Parents may choose to use Medicaid funds, but parents are not obligated to use this source of funding. A parent's private insurance must be accessed (with parent permission) before Medicaid can be used to purchase assistive technology devices or services.
- 3. **Local/regional resources** Service and civic organizations, churches, private industry, foundations, or individuals may be approached to assist in funding. The confidentiality and integrity of the child and family must always be considered when exploring funding resources.
- 4. **Other programs** Schools can explore state or federal alternatives which may provide funding for the purchase of assistive technology devices and services. The AEA or district Assistive Technology Team may also be able to

provide additional resources for consideration.

# 5. Some examples of nonprofit disability associations:

- Easterseals Iowa
- United Way
- March of Dimes
- United Cerebral Palsy Association
- Muscular Dystrophy Association
- Braille Institute

# **Maintaining Assistive Technology**

The tools that are utilized as assistive technology may need to be updated. Staff will want to work with their technology department to develop processes for upgrading software and hardware.

Any repair or replacement costs for a device are the school district's responsibility if the device is provided as a part of the learner's IEP. If a learner's IEP provides for home use of the device, the district is responsible for repair even if the damage occurs during home use.

It is critical that assistive technology written into the IEP be available. In order to appropriately address the IEP of a learner with assistive technology needs, it is vital to keep the delays in the repair of a device at a minimum. It is imperative to have a backup system for student use while the device is being repaired.

It is also beneficial to address certain questions regarding repair and maintenance before the assistive technology is purchased. Some of these questions may include:

# 1) What is the warranty?

Check the length of the warranty and find out exactly what is covered. Extended warranties and service contracts may be available.

# 2) Is technical support provided by the vendor?

Many vendors have technical support related to the device and its application. Identify what type of support is available, when it is available, and how to access it. If the assistive technology needs to be sent to the vendor for repair, ask if the vendor provides replacement equipment while the repair is being completed.

# 3) Is the user's manual for the device user-friendly?

Look at the user's manual for the device that the team is considering purchasing. Determine if it is easy to understand and if there is a "frequently asked questions" or "troubleshooting" section. Supplemental documentation to staff and/or

families may need to be provided.

# 4) What happens if the device needs repairs?

Ask if the company will provide a loaner device if the AT cannot be repaired in a short time. Some companies indicate a quick turnaround time for repairs, but it is important to identify a low-tech back-up or determine what is available for loaner if repair will take more than a few days. Make sure that the vendor's repair policy meets the needs of the learner using the device.

Please see Section 9 for Frequently Asked Questions regarding funding.

# Section 5: Assistive Technology and the Individual Education Plan

Once the IEP team has worked through the AT Consideration process and assistive technology has been determined to be needed by the learner, the AT needs must then be documented in the IEP. Assistive Technology may be documented in several places within the IEP including as a device, support and/or service. The devices, supports, and services are chosen to allow the learner to:

- Be involved and progress in the Iowa Core Curriculum and assessment
- Progress toward his or her annual goals
- Pursue the course of study and postsecondary expectations by at least age 14 (therefore included in IEPs written at age 13 and older)
- Participate in extracurricular and other nonacademic activities with other learners with disabilities and nondisabled learners, and
- Be educated with other learners with disabilities and nondisabled learners

# **Assistive Technology Device**

Assistive Technology Device is 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 learner with a disability except a medical device that is surgically implanted. A few examples of devices could include:

- Text readers
- Word prediction software
- Augmentative and Alternative Communication (AAC) Systems
- Calculators
- Switch-adapted items

# **Assistive Technology Supports**

Assistive Technology Supports are events or tasks that the learner needs to complete in order to take advantage of or respond to educational programs and opportunities. Assistive technology supports are provided for the learner to have access to the general education curriculum and assessment. Professional development related to the learner's assistive technology provided for school personnel is also a form of assistive technology support. AT supports are less regular and systematic than AT services. Unlike AT services, AT supports do not need to be linked to a goal, nor require a designated number of minutes. A few examples of support activities may include:

- Providing aided language stimulation to learners who use augmentative/alternative communication
- Troubleshooting technology and remediating problems
- Training opportunities for staff and families

# **Assistive Technology Services**

Assistive Technology Services are actions designed to meet the unique needs of a learner or are required to assist the learner to take advantage of or respond to educational programs and opportunities. Services imply a regular, purposeful, ongoing set of actions delivered to or on behalf of a learner over time. The systematic nature of a described service is reflected in the IEP's designation of the number of minutes of service, the frequency of service, the setting where services are provided and the persons responsible.

# **Accessible Educational Materials (AEM)**

Accessible educational materials, or AEM, are print- and technology-based educational materials, including printed and electronic textbooks and related core materials that are designed or enhanced in a way that makes them usable across the widest range of learner variability, regardless of format (e.g. print, digital, graphic, audio, video).

# **Section 6: Implementation**

# **Deliver**

The final component of Iowa's SDI Framework is Deliver. Effective implementation of the AT in the IEP should result in the student's functional performance being increased, improved, or maintained. A great deal of planning takes place after the decision has been made to utilize AT to meet specific student needs. The team must decide how, when and where the student will use assistive technology. A sequence of instruction must be developed so that everyone knows just how the student will learn to use the AT and how it will help overcome the educational barriers.

If a team believes additional structure will support this process with fidelity, an implementation plan can be written and addressed in more detail. That plan might include specific responsibilities of staff in the implementation of this plan. A description of how and when the AT will be used may be included as well.

# Sample Implementation Plan

Sometimes planning for the implementation of an assistive technology program can be complicated. This is particularly true when the AT device is itself complicated or the student will need to use the device in a variety of environments. When the team needs help in planning for a student's use of assistive technology, they may want to call upon someone who has experience in teaching a student to use that particular device.

# Follow Up

IEP teams are required to review the student's plan at least annually to make sure that the student is able to meet the educational goals and short-term objectives that were set during the IEP meeting. When teams meet to review a child's progress toward meeting goals, they should review the student's progress in learning to use assistive technology.

The evaluation of effectiveness of AT is the opportunity to explore whether a device or system is working as intended, or if changes need to be made. It is an opportunity to look at a range of data, both quantitative and qualitative. The data is collected in an organized manner, synthesized, analyzed, and used to make a determination of the effectiveness of the AT device. It is important to have determined what systems will be used to collect data, in what settings data will be collected, who will collect the data, and who will analyze the data prior to beginning the intervention. There should also be predetermined timelines when data are being collected during an AT evaluation to review the data and make decisions about next steps.

# **Home Use**

According to IDEA Section 300.105 Assistive Technology (rebrand.ly/IDEAAT)

(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.

# **Section 7: Transition**

Throughout life, people move from one set of circumstances to another. The period of adjustment to these changes is known as transition. There are two specific times when procedures and practices are mandated by IDEA '04 and the Iowa Administrative Rules of Special Education. The first time is when children turn three years of age and transition from Part C services to Part B or other community services. The second time is when an individual turns 14 years of age, or younger if determined appropriate by the IEP team, and post-secondary planning procedures take effect. When implementing the post-secondary planning procedures for learners in Iowa who are 14 years of age, expectations for living, learning, and working and a course of study to help meet these expectations must be included. This plan is part of an ongoing process that continues to be reviewed and revised at least annually at the IEP meeting. For more information about the transition see the <a href="Iowa Department of Education - Secondary Transition">Iowa Website (rebrand.ly/IowaTransition)</a>

Although there are only two specific times that transition procedures and practices are mandated for learners with disabilities, there are many times that learners face transitions throughout their schooling. Therefore, the definition of transition in this document includes changes that occur in an individual's life as the individual grows, matures, and moves from setting to setting. **Assistive Technology should be considered for a learner with a disability for any transition as the use of AT devices, supports, or services may be critical for a successful transition.** The following is a list of just some of the transitions a learner may encounter:

- Part C Services to Part B Services
- Home-to-school
- Preschool-to-Kindergarten
- Grade-to-grade
- Room-to-room
- Elementary-to-Middle school
- Middle school-to-High school
- High School to-postsecondary
- High School-to-employment
- Program-to-program
- Building-to-building
- School-to-home
- School-to-community

As AT is considered during periods of transition, revisiting the Iowa SETT framework and providing additional information that might be needed for the new environment and tasks will again continue to support the decision-making process regarding AT devices and services. The AT needed may not change for the new environment, however, the supports for the staff may be different. The Iowa SETT framework will again help IEP teams determine what supports might be needed in order for the learner to be successful in the new environment to minimize the adjustment period for both the learner and the staff.

For learners considering transitioning to post-secondary education, they must be able to explain their disability, advocate for their assistive technology needs and have the documentation supporting the use of their assistive technology. IEP teams must make sure that learners and families understand that the devices, supports and services a learner has received while in high school do not automatically transition to college. Postsecondary institutions follow the Americans with Disabilities (ADA) Act. Also, devices, supports and services at each post-secondary institution can vary so it is critical that learners connect with the appropriate departments and discuss the accommodations that a particular university/college is able to provide.

Learners who qualify for Vocational Rehabilitation services may want to connect with their counselor to discuss post-high school assistive technology needs.

# Section 8: Accessible Educational Materials (AEM)

Accessible educational materials, or AEM, are print- and technology-based educational materials, including printed and electronic textbooks and related core materials that are designed or enhanced in a way that make them usable across the widest range of learner variability, regardless of format (e.g. print, digital, graphic, audio, video).

# What are the Accessible Formats?

Accessible formats include Braille, large print, audio, and digital text. Accessible materials afford the flexibility to meet the needs of a broad range of learners, even those without disabilities. Fully accessible format means that: All text is digital and can be read with text-to-speech, modified with regard to font size, and navigated by unit, chapter, section, and page number (or other appropriate segments). Images include alternative text and long descriptions when appropriate (alternative text is a replacement for an image that serves the same purpose as the image itself. It is read by a screen reader in place of the image). Along with the accessible formats, technologies are needed that allow individuals to interact with the specialized format. These may be as simple as a computer, tablet, or smartphone with an app to read the accessible format or may be a system designed specifically for an accessible format. Closed captioning may be used on audio and video content to make them accessible. School districts should note that just because a document is digital or online, it is not inherently accessible.

# Who Needs AEM?

Accessible educational materials and technologies are essential for learning by learners with a range of disabilities.

- Learners with identified disabilities, print can be a barrier for general education learners, such as those whose decoding abilities are considerably below grade level.
- Learners with visual impairments may not be able to see the material.
- Learners with physical disabilities may not be able to hold a book or turn its pages.
- Learners with learning disabilities, as well as general education learners with limited decoding abilities, may have difficulty making meaning from printed text.
- Learners with hearing disabilities may have difficulty hearing videos or other audio content.

These and other barriers presented by printed materials may be addressed by providing the identical information in one or more specialized formats. Digital materials and technologies may present barriers to learners with a wide range of disabilities.

# Who is Responsible for AEM in the Schools?

School districts have the ultimate responsibility to provide learning materials that are accessible to all learners with print disabilities. Web Content Accessibility Guidelines are available for making digital content Perceivable Operable, Understandable and Robust.

National Center on Accessible Educational Materials (2020)

(rebrand.ly/AccessibilityWithPOUR).

# Why Provide AEM?

The use of accessible educational materials and accessible technologies strengthens opportunities for learners to experience independence, participation, and academic progress. Specialized formats of printed materials may mean the difference between learning barriers and learning opportunities.

Technology is an integral part of our lives in the 21st Century. For learners with disabilities, AT can have impacts that are far-reaching and have the potential to yield enormous benefits. AT allows learners to hear, to see, and to access and participate in the environments they learn in. It can create independence that allows learners to expand their worlds, unleashes and enhances their abilities. Both low-tech and high-tech applications have been successfully used to ensure learners' success in the general education curriculum.

# **Section 9: FAQ**

# **General Questions**

<u>Iowa Department of Education Assistive Technology FAQ (rebrand.ly/IowaATFAQ)</u>

1. Who is eligible for assistive technology?

All students with disabilities, both students who receive services under IDEA and those who are protected under Section 504 of the Rehabilitation Act, are eligible to receive assistive technology if it is needed for the child to meet educational goals. Need is determined if the student cannot receive a free and appropriate public education (FAPE) in the least restrictive environment (LRE) without the use of assistive technology. Infants and toddlers younger than three years of age who are enrolled in Early ACCESS (Part C) Services are also eligible to receive assistive technology devices and services if they are needed for the child to meet developmental goals.

2. What is an assistive technology assessment?

The consideration process, outlined in Section 2 of this document, is the way in which teams assess a learner's need for assistive technology.

3. Who is qualified to complete an assistive technology assessment?

Assistive technology assessments should involve all members of the child's educational team. IDEA states that evaluation of the child's assistive technology needs should include a functional evaluation in the child's typical environment. When an assistive technology assessment is conducted, at least one member of the child's team must have knowledge about the assistive technology devices and services which the child could use to complete the tasks identified in the assessment. In some cases, the IEP team may have enough information to complete the assessment without help. When the team requires additional information about assistive technology, the services of an assistive technology specialist or other knowledgeable person may be needed.

4. When an outside expert recommends assistive technology, must the education agency provide it?

The IEP team is required to consider all available information when planning a child's specially designed instruction. If an outside expert recommends a particular assistive technology device for a child, it is important that the team consider this recommendation along with all other information about the child. IDEA states that an assistive technology evaluation includes a functional evaluation in the child's typical environment. If the student has not used the assistive technology recommended by an outside expert in the typical environment, it is advisable for the team to plan for this trial before determining the child's need for the recommended device.

5. What documentation is required when a team considers assistive technology and determines that it is needed in a child's educational program?

IDEA requires that every IEP team consider a child's need for assistive technology, but the law does not mandate specific documentation regarding that team's consideration. If the team decides that the child needs assistive technology, that technology should be documented in the IEP. While it is not required, teams may also want to document the basis for their decisions when assistive technology is considered but is not needed by the child.

6. Should specific assistive technology devices be named in the IEP/IFSP?

In most cases, the features of an assistive technology device rather than the specific device name should be described in the IEP/IFSP. This allows for more flexibility if the student moves to another district or if the IEP team determines that a device similar to the one initially considered better meets the student's needs. In rare cases, the team may name a specific assistive technology device in the child's plan. This is generally necessary when the child is required to learn unique ways to operate the device that cannot be generalized to other similar devices.

7. When assistive technology is listed on the IEP, must that technology be available in all classes?

Students generally use assistive technology to accomplish specific tasks. The IEP team should describe the conditions under which the child needs assistive technology. The assistive technology should then be made available to the student as described in the IEP.

8. Can students use their assistive technology while completing district performance assessments?

Assistive technology may be utilized on district assessments so long as use of the technology does not destroy the construct of the test.

9. Can students use their assistive technology while participating in state assessments?

This depends upon each assessment. Please refer to the accessibility manual for each assessment in question.

ISASP Accessibility & Accommodations Manual (rebrand.ly/ISASPAccessibility)

10. What if a student abuses or mistreats equipment?

The severity of a child's behavior is not a valid reason for a school district to elect not to provide the device if the child requires it to receive an appropriate education. The behaviors do, however, need to be addressed when the team is considering features of

the possible devices and or services that will meet the student's needs (Chambers, A.C., p. 13).

# **Funding Questions**

1. Must the school district assume financial responsibility for the purchase of assistive technology devices and services if they are listed in the IEP?

The school district must assume financial responsibility for the provision of assistive technology devices and services that are identified by the IEP team. School districts may seek other sources of funding. However, the provision of assistive technology devices and services as determined necessary by the IEP team must not be delayed by efforts to obtain outside funding and/or donations. In short, there must be no cost to the parents. Therefore, the district should ensure that the district's insurance policy will cover the device during transporting to and while at school.

2. What is the responsibility of a school district when parents elect to purchase a needed device on their own and the family-owned device is written into the IEP?

Federal law is silent on this issue. However, it is reasonable to expect a school district to assume liability for an assistive technology device that is family-owned but used to implement a learner's IEP in school. Discuss this with the district's insurance carrier. In the absence of the family assuming financial responsibility to provide the device, a school district would be required to provide and maintain a needed assistive device that was written into the IEP. In circumstances where the family has provided the original device, it is recommended that the school district clarify in its agreements with the family whether the family retains ownership of the device in the case of a necessary replacement. If the district provides the replacement device, the replacement device would be owned by the district rather than the family.

3. Is the school liable for family owned assistive technology devices used at school to implement the learner's IEP?

While IDEA does not specify the responsibility of the school in such cases, state law could potentially impose liability on the school depending on the facts of the situation. The school district should take proper precautions to protect the equipment while it is in school buildings or being transported between home and school. Discuss potential liability with the district's insurance carrier.

4. Are school districts responsible for customization, maintenance, repair, and replacement of assistive technology devices?

Assistive technology services such as customization, maintenance, repair, and replacement are included considerations in the acquisition of equipment or devices purchased/provided by the school district. It is the responsibility of the school district to ensure that learners who require assistive technology devices also receive the necessary assistive technology services that will make the technology meaningful to the learner.

This requirement reflects the "individualization" of a specific type of device. If family owned assistive technology is used by the school district, is listed in the IEP, and is necessary for providing a Free Appropriate Public Education (FAPE), the school district is also responsible for maintenance, repair, and replacement. Responsibilities for these services should be identified in the IEP. The school district will have ownership in the device to the extent of any costs the school district assumes for maintenance, repair, or replacement.

# 5. Should assistive technology devices be insured?

It is the school district's decision to carry insurance. School district insurance policies may cover an assistive technology device purchased by the district for learner use or may offer additional coverage that includes assistive technology devices. Assistive technology devices purchased from funding sources other than the school district may or may not be covered while the learner 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 the policy insures against loss or damage of assistive technology devices.

# 6. What is important to know about a warranty?

The school should check the length of the warranty and find out exactly what is covered and, equally important, what is not covered. One-year warranties are common. Extended warranties and service contracts may be available. For some devices, the manufacturer suggests annual maintenance. School districts should weigh the cost of additional or extended warranties with the cost of the device. The manufacturer's warranty should be reviewed prior to purchasing an assistive technology device and before making any repairs or modifications to the device. In some cases, warranties may be voided if persons other than the manufacturer or authorized service representatives attempt to repair a device.

# 7. What provisions could be made for the learner when an assistive technology device needs repaired?

During the development of the IEP, the IEP Team should identify the steps to be taken if the device needs repair; how a substitute device will be provided; and other temporary options that would offer an acceptable substitute to the learner's device.

# 8. What if an assistive technology device is sent home and damaged?

Parents cannot be charged for use and normal wear and tear of assistive technology devices. In Iowa, school districts may make policies regarding the parent's responsibility for equipment damaged due to misuse or neglect. When developing such a policy, it is recommended that education agencies refer to their policies for loaning student's other equipment such as scientific calculators and football uniforms.

9. What are the responsibilities of the learner, educators, and parents in the maintenance and repair of assistive technology devices and reporting broken devices?

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

# 10. Can schools require learners to bring a family-owned assistive technology device to school?

No. There is no barrier to a learner bringing his or her assistive technology device from home to school, but school districts have no authority to mandate that this occur. If the family agrees to allow the device to travel from home to school, then a discussion regarding liability while the device is transported to or is at school needs to be held and recorded in the IEP. The district should ensure that its insurance policy will cover the device while being transported to or at school when it is required by the IEP. The family can and may insist that schools provide any necessary device as part of the learner's IEP even if the learner has an identical device at home.

# 11. Who owns the assistive technology purchased for an individual learner?

If the school district purchased the device, it is the property of the school district. If the assistive technology was purchased using the learner's Medicaid or private insurance funds, the device belongs to the learner. If the device were donated to the district, ownership would be the districts. If the device were donated to the learner or his/her family, ownership would be the learner's or his/her family.

# 12. Is the school district obligated to provide "state-of-the-art" technology for learners with disabilities?

The school district is obligated to provide the learner with features of technology that match those that have been identified in the consideration process. The school district is not responsible for providing "state-of-the-art" technology if the learner's needs do not require it; however, if a learner needs the features of a "state-of-the-art" device or service to receive FAPE, then the district must provide it.

# **Section 10: References**

AEA Assistive Technology Operating Guidelines for School Districts and IEP Teams, 2010. Adapted from Bowser, G., 2003. Assistive Technology Model Operating Guidelines for School Districts and the IEP Teams.

Assessing Student's Needs for Assistive Technology, 4th Edition, Wisconsin Assistive Technology Initiative, Milton, WI, 2004.

Assistive Technology Creating a Pathway, Field Ed., Iowa Department of Education, Des Moines, IA, US, 1998.

AT in Special Education Policy & Practice. 1998. Reston, VA; Technology and Media Division of the Council for Exceptional Children.

Bowser, G. 2003. Assistive Technology Model Operating Guidelines for School Districts and IEP Teams. Roseburg, OR; Oregon Technology Access Program.

Bowser, G. et. al. Quality Indicators for Assistive Technology: A Comprehensive Guide to Assistive Technology Services. Wakefield, MA: CAST Professional Publishing, 2015.

Bowser, G. & Reed, P., 2004. A School Administrators' Desktop Guide to Assistive Technology. Reston, VA; Technology and Media Division of the Council of Exceptional Children.

Bowser, G. & Reed, P. 2012. Education Tech Points: A Framework for Assistive Technology. Winchester, OR: Coalition for Assistive Technology in Oregon.

Bugaj, C. The New Assistive Tech: Make Learning Awesome for All. Portland, OR; International Society for Technology in Education, 2018.

Castellani, J., Reed, P., Zabala, J., Dwyer J., McPerson, S., & Rein J. 2005. Assistive Technology Within the Individualized Education Program. Reston, VA; Technology and Media Division of the Council for Exceptional Children.

DeCoste, D., Reed, P., & Kaplan, M. 2005. Assistive Technology Teams: Many Ways to Do it Well. National Assistive Technology in Education Network.

Determining Supports for Learning and Performance for All Students, Revised., Iowa Department of Education, Des Moines, IA, US, 2019.

Friedlander, B. Assistive Technology: What Every Educator Needs to Know. National Professional Resources, Inc, 2016.

Has Technology Been Considered? A Guide for IEP Teams. 1997. Reston, VA; Technology and Media Division of the Council for Exceptional Children.

Kelker, K. & Holt, R. Family Guide to Assistive Technology. Northhampton, MA; Brookline Books/Lumen Editions, 1999.

QIAT Leadership Team. Resources: Plan for Evaluation of Effectiveness of Assistive Technology Use, <a href="https://www.qiat.org">www.qiat.org</a>, 2012. Web. 8 May, 2020.

Reed, P. 2007. A Resource Guide for Teachers and Administrators About Assistive Technology. Wisconsin Assistive Technology Initiative & Wisconsin Department of Public Instruction.

Reed, P. & Bowser, G. 2013. Assistive Technology Pointers for Parents, Wyoming Institute for Disabilities.

Technology and Media for Access Curriculum, 2005. Reston, VA; Technology and Media Division of the Council of Exceptional Children.

Zabala, Joy. SETT Scaffold for Considerations of AT Needs, <u>www.joyzabala.com</u>, 2005. Web. 1 May, 2020.

# **Appendix A: Terms/Glossary**

# Accessible Educational Materials (AEM)

Accessible educational materials, or AEM, are print- and technology-based educational materials, including printed and electronic textbooks and related core materials that are designed or enhanced in a way that makes them usable across the widest range of learner variability, regardless of format (e.g. print, digital, graphic, audio, video).

# Accommodations

Adaptations made by classroom teachers and other school staff to enable the students with disabilities to benefit from an appropriate education. Adjustments in academic requirements and expectations may be necessary to accommodate the needs of an individual student with a disability to enable him/her to participate in the general education program.

# Americans with Disabilities Act of 1990 (ADA)

The Americans with Disabilities Act (ADA) is federal legislation passed in 1990 that prohibits discrimination against people with disabilities. The law made it illegal to discriminate against a disabled person in terms of employment opportunities, access to transportation, public accommodations, communications, and government activities. The law prohibits private employers, state and local governments, employment agencies, and labor unions from discriminating against the disabled.

# Assistive Technology (AT)/Assistive Technology Device

Any item, piece of equipment, or product system, whether acquired commercially or off the shelf, modified or customized, that increases, maintains, or improves functional capabilities of individuals with disabilities.

# Assistive Technology Evaluation

This functional evaluation of a child in his/her customary environment focuses specifically on the child's need for assistive technology. While it is conducted by a team of professional evaluators, input from family members and other knowledgeable personnel is sought in order to identify the child's strengths and challenges. Some people use the terms "assessment" and "evaluation" interchangeably, while others use "assessment" to refer to the process that takes place before a child receives an AT device, and "evaluation" to refer to the process (and resulting document) that studies how well the device has worked for the child.

# 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.

# Augmentative and Alternative Communication (AAC)

Augmentative and alternative communication (AAC) describes multiple ways to communicate that can supplement or compensate (either temporarily or permanently) for the impairment and disability patterns of individuals with complex communication needs.

# Braille

This raised dot printed language is used by many people with visual impairments. Each raised dot arrangement represents a letter or word combination.

# Captions

Closed captions are a text version of the spoken part of a television, movie, or computer presentation. Closed captioning was developed to aid persons who are deaf or hard of hearing, but it's useful for a variety of situations. For example, captions can be read when audio can't be heard, either because of a noisy environment, such as an airport, or because of an environment that must be kept quiet, such as a hospital.

# Disability

A physical or mental impairment that substantially limits one or more major life activities; a record of such an impairment; or being regarded as having such an impairment.

# Free and Appropriate Public Education (FAPE)

Section 504 mandates that school districts must provide a "free appropriate public education" (FAPE) to each qualified person with a disability who is in the school district's jurisdiction, regardless of the nature or severity of the person's disability. Section 504 is a component of the Rehabilitation Act of 1973 that protects the rights of individuals with disabilities in programs that receive federal assistance (e.g. federal funds). Section 504 states "No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

# Individual Education Program (IEP)

A written statement for each child with a disability that describes the student's special educational program. Each IEP is a legal document that spells out, among other things, the special education services, activities and supports each student will receive.

# Individualized Family Services Plan (IFSP)

Like an IEP, an IFSP is a written statement of an infant's or toddler's (birth to age three) developmental status, information about his family's needs and abilities to support his learning and development, and a list of outcomes for the child and the family to achieve. The IFSP describes the services the child will receive, how these will be delivered and how the child will transition to his next environment. The document should identify a service coordinator to work with the family to monitor and achieve the goals established.

# Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA) is a law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities. Federal law that authorizes special education and related services including assistive technology.

# Iowa Statewide Assessment of Student Progress (ISASP)

The Iowa Statewide Assessment of Student Progress includes individual assessments in English Language Arts (ELA), Mathematics, and Science intended for use within the last 12 weeks of the academic year. These summative assessments measure student achievement, growth and college and career readiness based on the Iowa Core Standards. The ELA assessments of ISASP address Iowa Core Standards in Reading, Language, and Writing.

# International Society for Technology in Education (ISTE)

The ISTE Standards are a framework for innovation in education. These standards help educators and education leaders worldwide prepare learners to thrive in work and life.

# Least Restrictive Environment (LRE)

The term used in the Individuals with Disabilities Education Act (IDEA) stating the requirement that, to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with non-disabled children; and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

# Multi-tiered System of Supports (MTSS)

MTSS is an instructional framework that includes universal screening of all students, multiple tiers of instruction and support services, and an integrated data collection and assessment system to inform decisions at each tier of instruction

# Quality Indicators for Assistive Technology (QIAT)

QIAT is a set of quality indicators, intent statements, and common errors for eight areas important to the development and delivery of assistive technology services.

# Rehabilitation Act

Federal law entitling individuals with disabilities to vocational rehabilitation and independent living services. This law also prohibits discrimination on the basis of disability by various entities including the federal government, recipients of federal financial assistance and federal contractors.

### Related Services

Related services are those services that a learner with a disability needs in order to benefit from special education. Related services include speech therapy, occupational therapy, physical therapy, rehabilitation counseling and transportation.

# RIOT (Review, Interview, Observation, and Test) Process

The RIOT process helps schools work efficiently and quickly to decide what relevant information to collect on academic performance and behavior. The process helps organize information to identify probable reasons why the student groups are not experiencing academic or behavioral success. The four potential sources of student information are Review, Interview, Observe and Test.

# Specially Designed Instruction Framework (SDI)

lowa's SDI Framework is intended to engage educators and families in diagnosing, designing and delivering special education services to best meet the needs of learners 3-21 with disabilities and a range of educational needs. "Special Education" means Specially Designed Instruction.

# SETT (Student, Environment, Tasks, Tools) Framework

The SETT is a framework for the consideration and potential identification of any assistive technology that may serve to support specially designed instruction and learner success in the classroom.

# Universal Design for Learning (UDL)

Universal design for learning is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.

# Vocational Rehabilitation Service

A range of vocational services including training, counseling, job placement and assistive technology provided by the Department of Rehabilitation for the purpose of maximizing the employability of individuals with disabilities.

# **Appendix B: AT Examples**

# Writing

**Handwriting**– raised lined papers, pencil grips, slant boards, expanded keyboard templates of letters and/or words, etc.

**Written expression**– graphic organizers, word prediction softwares, electronic dictionaries, speech to text tools, etc.

**Spelling**– templates for three choice or "letter missing" spelling lists, word banks, spelling and/or grammar checkers, portable tablets or laptops with extensions or apps to support spelling, etc.

# Reading

Reading guides, color overlays, highlighting tools, screen masking tools, text readers, screen readers, scanning pens, augmented reality apps, etc.

# Math

Calculators with large numbers, print out or talking capabilities, number lines, touch point numbers, manipulatives, enlarged copy of problems, graph paper, etc.

# Communication

Pictures, picture symbols, objects, voice output communication devices including dedicated high-tech devices, tablets with various augmentative and/or alternative apps, single-message systems, and/or multi-sequence speech generating communication devices, etc.

# **Behavior**

First-then schedules, token systems, robots, vibrating watch reminders, visual timers, augmented and virtual realities, etc.

# **Physical**

**Fine Motor** - switches, adapted utensils

**Mobility** - walkers, wheelchairs, splints, ramps, visual cues such as taped lines on floor, automatic door openers, etc.

**Seating/positioning**– armchairs, bean bag chairs, wrist supports, desk easels, footrests, etc.

# Hearing

Auditory trainers, TTYs (Teleprinters or teletypewriters), closed captioning, hearing aids, FM (frequency modulation) systems, etc.

# **Vision**

Large screen monitors, preferential seating, high contrast materials, modified print, audio digital formats of materials, magnifiers, etc.

# **Adaptive Behavior**

Picture/print schedules, assignment books, organization and reminder apps, study guides, watches, voice recorders, button/zipper fasteners, coat hooks or lockers the student can reach, handrails, etc.

# **Employability**

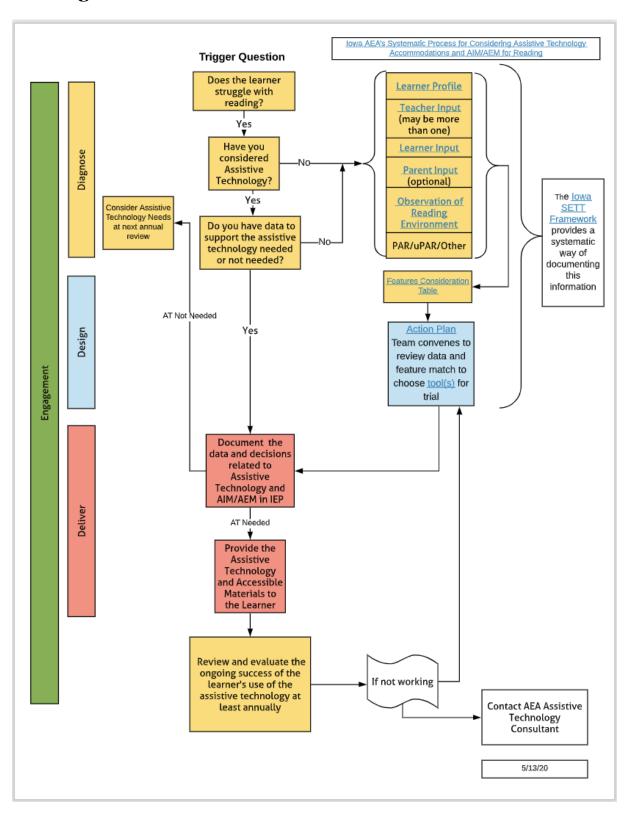
Any AT/accommodation required to ensure access and/or increased independence in job-related tasks.

# Other

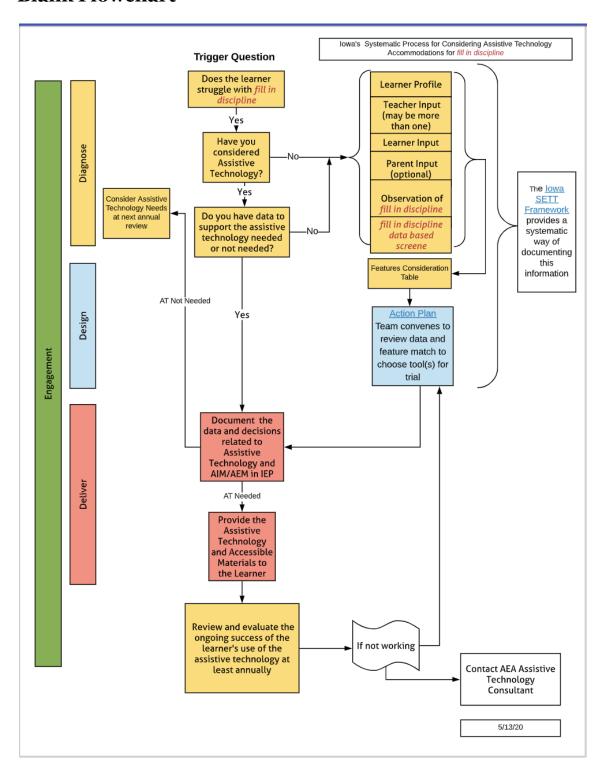
**Recreational AT** - adapted bowling items, switch-accessible tablets, switch-adapted toys, switch-activated cameras, adapted fishing poles, virtual realities, etc.

# **Appendix C: Documents**

# **Reading Flowchart**



# **Blank Flowchart**



# **Iowa SETT Framework**

# Assistive Technology Consideration: <u>S</u>tudent, <u>E</u>nvironment, <u>T</u>asks and <u>T</u>ools (SET

Adapted from the work of Joy S. Zabala. (2005) Assistive Technology Consideration Guide. Based on Denham, A. P., & Zabala, J. S., (1999). Assistive Technology Consideration Guide for IEP Teams and Penny Reed (2004). WATI Assessment Forms www.wati.org

District: Initial Meeting Date: School Building: E-Mail: Grade: Birthdate: Team Participants: (Names/Titles) Contact/Case Manager:

N Behavior N Employability > > AT Consideration: Select the instructional area/s in which the student is experiencing difficulty completing tasks and/or goals.

Y N Writing Y N Communication

Y N Wath Y N Communication

Y N Hearing Y N Vision Y N Adaptive Behavior Other-Specify: N Writing N Physical N Other-Spe

Identify any related IEP goal(s):

Ö	Discuss the Student, Environment, and Tasks,	decidin	g what the student needs to do in different	Tasks, deciding what the student needs to do in different environments. Lastly look at the most appropriate tools to accomplish those tasks.	priate tools to accomplish those tasks.
	STUDENT		ENVIRONMENTS	TASKS	TOOLS
	What are the student's needs?	Ö	Classes/situations where help is needed.	Tasks student needs to be able to accomplish.	What AT tools or services will address these
	(Instructional areas?)				tasks? (Current, New or Additional)
•	What does the Student need to do?	•	What materials and equipment are	Vonat naturally occurring activities     take place in the environment?	Vynat no tech, low tech, mid-tech, and high tech options should be
•	What are the Student' strengths?	)			considered when developing a
				<ul> <li>What is everyone else doing?</li> </ul>	system for a student with these needs
		•	What is the physical arrangement? Are		and abilities doing these tasks in
•	What are the Student's special needs?	=	there special concerns?	<ul> <li>What activities support the student's</li> </ul>	these environments?
				curricular goals?	
		•	What is the instructional arrangement?		<ul> <li>What strategies might be used to</li> </ul>
•	What are the Student's current abilities?	⋖	Are there likely to be changes?	<ul> <li>What are the critical elements of the</li> </ul>	invite increased student
				activities?	performance?
•	What strategies does the student use?	•	What supports are available to the		
		S	student?	<ul> <li>How might the activities be modified</li> </ul>	<ul> <li>How might these tools be tried out</li> </ul>
				to accommodate the student's special	with the student in the customary
		•	What resources are available to the	needs?	environments in which they will be
		<u>a</u>	people supporting the student?		nsed?
				<ul> <li>How might technology support the</li> </ul>	
				student's active participation in those	<ul> <li>Does the student require accessible,</li> </ul>
				activities?	alternate format versions of printed
					textbooks and printed core materials?

	AT concerns continue to exist –	Further assessment necessary	
Conclusion: Select one of the three boxes	Student's needs are being met WITH assistive technology –	List items and related and support services on IEP	
	Student's needs are being met WITHOUT assistive	technology – "considered but not needed" on IEP	

April 2020

# **Action Plan**

Grade: Date:			_	Person Responsible Timeline					
Birthdate:	<u>als</u>		_	Description of Assistive Technology P					vided
Learner Name:  Features of AT to consider: Features Consideration Table	Planning for AEM Resources:    Identification of Current Learning Materials     Accessibility Tools	Possible AT Tools to trial		Technology & Trial Features:	Name of Tool:	Platform (tablets, pc, etc):	Persons to be trained:	Training required:	How training will be provided  Watch a video  Adult modeling  Peer modeling  Hands-on practice

# QIAT Evaluation of Effectiveness of AT Use



# Plan for Evaluation of Effectiveness of AT Use

Student's name:		Date:							
chool/agency: Team members present:									
The intent of this document is to guide planning about how the use of assistive technology will be evaluated. Completion of this document will help the team to create a shared vision of the process for data collection.  IEP Goal:									
Step 1: What is the present level of performance (baseline Describe:									
data) on this goal?	,								
Step 2: What changes are expected as implementation? (e.g. Student v		Describe:							
Step 3: What aspects will change? quality quantity/productivity frequency participation	independence spontaneity duration	Describe:							
Step 4: What obstacles may inhibit suc physical access opportunity instruction/practice student preference	cess? skill attitude medical	Describe:							
Step 5: How will the occurrence of obstate the data?	tacles be reflected in	Describe:							
Step 6: What format will be used to col report (self, other) work samples observation	lect the data? audio/video recording	Describe:							
Step 7: What is the data collection plane Environment(s): Activity: Frequency: Person(s) responsible: Data Collection Data Analysis Changes in Response to Analysis Review date(s):	1?								

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# **Sample Implementation Plan**

# Assistive Technology Implementation Plan

Learner Name:
Implementation Plan developed on:
Implementation Plan developed by:
The purpose of the following assistive technology is:
We will know if the AT tool is working if:
We will know the AT tool is not working if:

# AT Tool Information:

	Additional notes (e.g. training for new staff or staff due to transition):			
	Person responsible for implementation:			
	Where is the tool located?			
	When, specifically, should the student use this tool?  Where is the tool located? implementation:			
or rinter infaction.	Specific task Features and AT Tool			
	Specific task			