Next Steps for Providing Accessible Educational Materials (AEM) to Students with Disabilities

Considering the need for assistive technology, including accessible education materials (AEM), is a state and federal legal requirement for each student with an IEP.

Wisconsin DPI's I-4 IEP form includes this additional prompt under "Does the student need assistive technology services or devices":

> *Consider any item, piece of equipment, product system, or service to increase, maintain, or improve the student's functional capabilities. In addition to other needs that require assistive technology, **discuss if the student accesses, uses, and derives meaning from age or grade level standard printed text when considering accessible education materials (AEM) and the need for assistive technology.***

Accessible Educational Materials (AEM) do not change the rigorous high expectations of what is being taught or what is expected to be learned by all students of the same age or grade. AEM, like other supplementary aids or services, only changes "how" information is presented to the learner. The need for such materials must be considered for every student with a disability. Providing a student with AEM does not replace a student's need for explicit and intensive specially designed instruction (SDI) in a specific skill such as reading comprehension or to teach a student how to effectively use supplementary aids (including AEMs) during learning activities.

IEP teams should consider whether a combination of both explicit and intensive instruction (SDI), along with supplementary aids and services, will best support the disability-related needs of an individual student. Once identified by the IEP team, specifics about the type, amount, frequency, location, and duration of the needed AEM should be documented in the supplementary aids and services section of the program summary of the students Individualized Education Program (IEP).
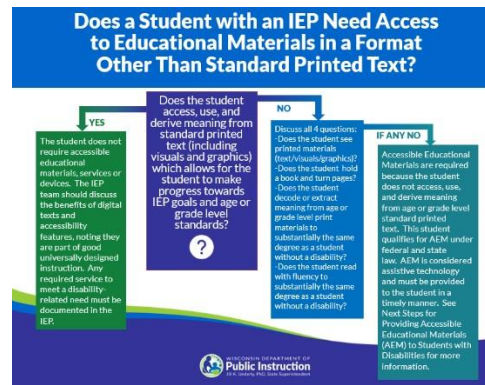
DPI developed an AEM decision tree to help IEP teams determine whether a student with a disability requires AEM. The purpose of this resource is to outline "next steps" IEP teams should follow when the IEP team determines a student requires AEM to address one or more of the student's disability-related needs. These next steps are to identify, acquire, train, and monitor AEM.
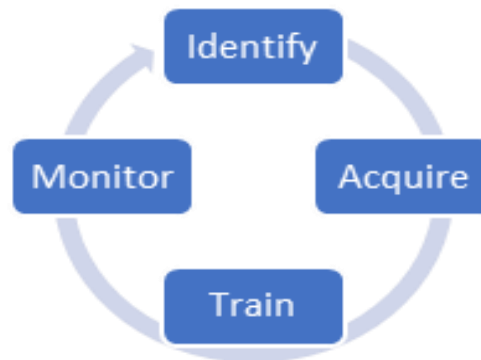
First: Identify the Type of Accessible Educational Material

Identify the type(s) of AEM needed, as well as the conditions under which they are needed, based on the student's unique strengths and needs.

The type (s) of AEM needed will depend on the format of printed text that is disabling to the student and the conditions or context in which they are needed, as well as the individual disability-related needs of the student. A student's need for AEM may vary based on the specific task or learning environment. IEP teams may find the SETT framework, developed by Dr. Joy Zabala, helpful to identify AEM "tools" based first on the needs of the "student", factors in the "environment", and the "tasks" required.

Consider the Individual Effects of the Student's Disability on access, engagement, and progress and any resulting disability-related needs in the following areas:

- Academics: Age or grade level reading or math comprehension, decoding, or fluency
- Communication: Expressive or receptive language leading to difficulties with understanding standard printed text ●
  Cognitive Learning: Memory and organization
- Independence & Self-Determination: Need for adult or peer assistance to access standard printed text
- Physical & Health: Blindness or low vision, physical disabilities limiting the ability to turn pages, use of a mouse or keyboard
- Social and Emotional Learning: Anxiety and mental health impacting engagement with standard printed text *For each area, also consider the student's age, strengths, assets, home language, culture, and past experiences.*

For more information about these areas of potential effect of disability see: Six Areas of Academic and Functional Skill.

Identification of the individual effects of the student's disability on access, engagement, and progress and any resulting disability-related needs is identified in Step 2 of the College and Career Ready IEP (CCR IEP) Five Step Process. IEP teams are required to identify each student's unique disability-related needs whether or not they are linked to the disability category of the student.

For more information on identifying root causes and disability-related needs see: Step 2 of the CCR IEP Process.

Consider the Environments and Tasks the Student Must Access Across Subject Areas and Educational Activities

- word processing documents, PDFs, or other types of documents
- printing texts, worksheets, maps, diagrams, charts, and other handouts used in class
- printed materials throughout the building
- slides, online forms, email
- website platforms, learning management systems, or online curriculum

For each of the above, consider complexity of the task, length of time it takes to access the content, and options for student responses.

The student can share preferences for how they learn best and what they think has worked in the past to remove barriers to learning.

Additional guidance at the [Center for Accessible Educational Materials FAQ: Considering the Full Learning Context](#).

Identify the Type of Accessible Educational Material (AEM) Needed

Although the IEP team will need to identify the specific AEM required, broad types of AEM include but are not limited to:

- Braille
- Large print books
- Text-to-Speech
- Audio files

The specific type of AEM tool a student requires will be on a continuum from low-tech tools to mid- and high-tech tools including but not limited to guided reading strip for tracking lines, highlighting tools, tactile graphics, switches, screen readers, apps that level text, e-dictionaries, outlining and visual mapping tools, audio books, web-based reading tools, or electronic textbooks.

Second: Acquire the Accessible Educational Material (AEM)

Acquire the needed AEM that best matches the student's disability-related needs in the environments that standard printed text must be accessed and for the tasks the student must perform.

Before seeking additional assistance, educators are encouraged to visit the following websites for help with acquiring AEM. If you need additional assistance, contact the Wisconsin AEM Center. If the student is blind or visually impaired, contact the Wisconsin Center for the Blind and Visually Impaired.

- Bookshare is a copyright-exempt publisher and provides a Training Resources Library with resources for a wide variety of media including textbooks, bestsellers, children's books, newspapers, magazines, career resources, driver manuals, guides, collections, and titles in over 34 languages. Bookshare allows students to listen to books with high quality audio, see text and follow along with word-level highlighting, adjust reading speed, font, and color, enlarge font size, read in braille, and add bookmarks and notes. Membership is free to students and school districts.

- Learning Ally is a copyright-exempt publisher and provides district and individual memberships at a cost. Resources include a collection of 80,000 human-narrated audio textbooks and literature titles available for use on PCs, MACs, Apple and Android tablets, Smartphones and Chromebooks. Features include the ability to navigate through audiobooks by chapter or page, create and edit bookmarks with personal notations to mark important passages, adjust the speed of audio playback, and automatically pick up playback where students last left off.

- Louis Database (braille, large print, sound recordings, and electronic files) is a copyright-exempt publisher *and* contains information on AEM produced by over 100 organizations throughout the United States and Canada. These materials include educational materials in braille, large print, audio, and electronic file format.

In addition to the above resources, many publishers of curriculum, computer and tablet applications, and web platforms now have free or low cost **"built in" accessibility features included in the learning tools already used in a student's classroom.**

Universal Text-to-Speech Resources:

- Read & Write for Google Chrome ● Speechify ● Android Accessibility
- Don Johnston Snap & Read ● Additional Chrome Extensions ● Chromebooks
- Kami ● Apple Accessibility ● Windows Narrator
- Read Aloud for Google Chrome ● Samsung Accessibility

There are also many low and mid-tech AEM such as guided reading strips for tracking lines, highlighting tools, tactile graphics, switches, and many more ways to support accessibility to text outside of high-tech devices or applications.

Third: Train Staff, Students, Families, and Caregivers

Ensure all staff are trained so that a) the student can be provided with any required specially designed instruction needed to learn how to use AEM independently, and b) ensure all general and special education staff know when and how to make AEM available to the student. All adults that support the student should have knowledge of what AEMs are, in what contexts the student should have access to AEM, and how to support the student's self-advocacy and independent use of AEM. Some staff and caregivers may also require coaching to consistently provide AEM to ensure the student has access to instruction and curriculum across all settings when they are needed.

The use of AEM may be a lifelong support for the student beyond high school. The IEP team should consider how the student will self-advocate to utilize AEM independently across post-secondary environments to inform the skills and types of support needed currently.

Parents, families, and other caregivers should also receive training so that students can utilize AEM in the home and community to generalize and further support their learning as well as support greater autonomy, independence, and self-determination. IEP teams should engage families to understand the unique culture, interest, and capacity to support the student in using AEM.

Any training for school staff that is needed can be documented in the Program Summary of the student's IEP under "Program modifications and support for school staff" or "related services" and may include but is not limited to consultation, professional development, or other training. In addition, the effectiveness of AEM written into a student's IEP should be periodically reviewed and must be reviewed at least annually. During IEP review meetings, the IEP team should determine if any substantive changes are needed for AEM or other assistive technologies the student requires.

Consider the following to ensure all adults have the knowledge and skills to support the student's use of AEM:

- To identify "who" needs training, go back to the discussion of the student's disability-related needs, the environments where standard printed text must be accessed as well as the tasks the student is expected to perform using print materials.

- What existing accessibility features are included in the school or district's curriculum, online learning platform, computer or tablet applications and programs, and web platforms that educators should already be using for students in their classroom?

- What advocacy skills can be taught to the student in selecting and requesting AEM to assist the student in meeting learning goals.

- How will substitute or interim teachers be trained on AEM and ensure the student receives required AEM during staff transitions?

- How will staff be trained on the use of AEM to benefit all learners with and without disabilities and when will such training be needed (frequency or conditions)?

- What are the families' and caregivers' interests, availability, and resources to support the use of AEM in the home and community and what resources and training can be provided?

Fourth: Monitor the Student's Progress Using Accessible Educational Materials (AEM)

The effectiveness of AEM used by a student should be monitored regularly throughout the school year across all educational environments. Consider the following guiding questions when monitoring the effectiveness of AEM to determine a) if the student is better able to access and engage in curriculum and instruction that otherwise uses age or grade level printed text and b) if the student is making sufficient progress in the learning goals of age and grade level curriculum.

- What formative assessments have been used to show improvement when using AEM?

- Are there IEP goals that include monitoring progress of the student's independent use of AEM?

- How might interviews of the student, family, caregiver, or educators help identify the effectiveness of AEM?

- What observations of the student can be completed that demonstrate increased independence, interest, and progress in academic activities?

- What additional training, instruction, and support do students, family members, and school staff need to improve the student's independence in utilizing AEM?

Additional Resources for Further Learning about Accessible Educational Materials (AEM)

AT Forward CoP Introduction to AEM (video)

AT Forward CoP Bookshare and Learning Ally (video)

Bulletin 20.02: AEM, Wisconsin DPI (document)

Bulletin 22.02: Assistive Technology, Wisconsin DPI (document)

Bulletin 10.07: Describing Special Education, Related Services, Supplementary Aids and Services, and Program Modifications and Supports (document)

Center for Exceptional Children The SETT Framework and Evaluating Assistive Technology Remotely (website)

CCR IEP Five Step Process , Wisconsin DPI (website)

FAQ: Considering the Full Learning Context, National Center on Accessible Educational Materials (website)

National Center on Accessible Educational Materials (website)

Possibilities abound with Bookshare (video)

What is Specially Designed Instruction and Who can Provide It? Wisconsin DPI (document)

Start a Conversation: Accessible Learning Across the Lifespan (video)

WCASS Guide: How to Provide Students with IEPs Access to their Grade Level Curriculum through Text to Speech (document)

WCASS Guide for IEP Teams: Supporting Students with Print Disability (document)

Worksheet to Identify the Types of Accessible Educational Materials (AEM)

Student	Environment	Tasks
List the student's age, strengths, assets, preferences, disability-related needs, and past experiences	*People, places, flexibility of the use of resources in different environments, independent use, small group, classroom.*	*What classroom or homework materials are not accessible, what subjects and activities require access to standard printed text, how complex is it for the student to access, how long does it take to access, what options does the student have to respond?*

Acronyms and Definitions

Accessible: "Accessible" means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use." [United States Department of Education, Office of Civil Rights](#).

Accessible Educational Materials (AEM): "Accessible educational materials (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)." [National Center on Accessible Educational Materials.](#)

Accessible Formats: "Accessible formats provide the same information in another form to address the barriers text-based materials can present for some learners. Examples of accessible formats include audio, braille, large print, tactile graphics, and digital text conforming with accessibility standards." [National Center on Accessible Educational Materials](#).

Accessible Technologies: Accessible technologies are the hardware devices and software that provide learners with access to the content in accessible digital materials. These technologies are designed to be flexible and provide supports that benefit everyone - they are universally designed. [National Center on Accessible Educational Materials](#).

Assistive Technology: An assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a student with a disability. An assistive technology service means any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. [Bulletin 22.02: Assistive Technology](#), Wisconsin DPI.

Individualized Education Program (IEP): "The plan developed by the child's IEP team which indicates the child's annual goals and specifies the special education and related services which the child will receive." [Special Education in Plain Language](#).

Program Modifications and Supports for School Staff: "Program modifications or supports for school personnel are services or activities needed by school personnel to meet the needs of the student. [34 C.F.R § 300.320(a)(4) and Wis. Stat. § 115.787(2)(c)]." [Bulletin 10.07: Describing Special Education, Related Services, Supplementary Aids and Services, and Program Modifications and Supports](#).

Related Services: "Related services are transportation and such developmental, corrective, and other supportive services required to assist a student with a disability to benefit from special education. [34 C.F.R § 300.34 and Wis. Stat. § 115.76 (14)]." [Bulletin 10.07: Describing Special Education, Related Services, Supplementary Aids and Services, and Program Modifications and Supports](#).

SETT: SETT is an acronym that means Student, Environment, Tasks, and Tools. SETT is a framework that can be used to gather information to match the unique disability-related needs of individual students to the different types of assistive technology available.

Supplementary Aids and Services: "Supplementary aids and services are aids, services, and other supports provided in general education classes or other education-related settings to enable a student with a disability to be educated with students without disabilities to the maximum extent appropriate. [34 C.F.R § 300.34 and Wis. Stat. § 115.76 (16)]." [Bulletin 10.07: Describing Special Education, Related Services, Supplementary Aids and Services, and Program Modifications and Supports](#).

Specially Designed Instruction: "SDI is instruction in which the content, methodology, or delivery of the instruction is individually adapted to address the student's disability-related needs so the student can access, engage, and make progress in the general education curriculum and meet the standards and expectations that apply to all students of the same age or grade. This is true irrespective of where the instruction is provided." [What is Specially Designed Instruction and Who can Provide It?](#)

Text-to-Speech: Text-to-Speech technology reads digital text aloud providing instant access to all sorts of instructional materials including textbooks, articles, websites, newspapers, and even instructional materials prepared by the classroom teacher. Adapted from [WCASS Guide: How to Provide Students with IEPs Access to their Grade Level Curriculum through Text to Speech](#).

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