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Technical Assistance Bulletin

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Date: May 2020

Supporting the use of Assistive Technology in a Virtual and/or Distance Learning Environment

Purpose

The purpose of this document is to provide guidance to support the continuity of learning for students who receive Assistive Technology (AT) devices and/or services as a part of their Individualized Education Program (IEP) delivered through specially designed instruction (SDI). This TAB includes:

- Legal Drivers
- General Considerations
- Instructional Best Practices
- Special Considerations: Recovery Planning
- Frequently Asked Questions
- Resources

This document is a supplement to Technical Assistance Bulletin (TAB) #20-01, *Serving Children with Disabilities under IDEA during school closures due to the COVID-19 Pandemic* and TAB #20-03: *Providing Continuity of Learning to Students with Disabilities during COVID-19*. Please refer to these TABs for additional information and guidance on the provision of special education services to students with disabilities during this unprecedented time.

Legal Drivers

In addition to the general FAPE requirements for all students with disabilities, the law provides additional requirements for AT. IDEA defines an **assistive technology device** 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 the functional capabilities of a student with a disability,” not including a medical device that is surgically implanted or the replacement of such a device [34 CFR §300.5 and COMAR 13A.05.01.03B (4)].

An **assistive technology service** means a service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. Assistive technology services include:

- Evaluating the needs of a student with a disability, including a functional evaluation of the student in the student’s customary environment;
- Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices for students with disabilities;
- Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- Training or technical assistance for a student with a disability or, if appropriate, the student’s family; and
- Training or technical assistance for professionals, including individuals providing education or rehabilitation services, employers, or other individuals who provide services, employ, or are otherwise substantially involved in the major life functions of a student with a disability, [34 CFR §300.6 and COMAR 13A.05.01.03B (5)]

IDEA requires that IEP teams consider several “special factors” that impact the development of the student’s individualized program. The need for AT devices and/or services is one of these factors [34 CFR §300.324(a)(2)]. The IEP must consider whether the student requires AT devices and/or services and document that decision in the IEP. If devices and/or services are required, they are documented in the appropriate section(s) of the IEP document. Please note that consistent with the Individuals with Disabilities Education Act (IDEA) and as defined in State regulations, Assistive Technology Services are not considered a Related Service [34 CFR §300.34(c) and COMAR 13A.05.01.03(65)].

General Considerations

Assistive technology (AT) devices and/or services are an essential component of the IEP for many students with disabilities in order to access the curriculum and environment, mitigate the impact of the disability and support the demonstration of skills and knowledge. The access to, and the use of, AT to support continuity of learning for students with disabilities (who have it as a documented part of their existing IEP) will help to provide equitable access in the virtual and/or distance learning environment to meet the individual learning needs of the student. As the school staff reviews current IEPs, they consider, as appropriate, existing AT devices or services required and how they can be implemented, to the greatest extent possible, to support continuity of learning. AT supports may be implemented through:

- Instructional and assessment accommodations
- Supplementary aids and services
- IEP goals and objectives
- Special education and related services and,
- Secondary transition services

Instructional Best Practices

Factors such as accessibility, providing AT in the new learning environment, type and quality of materials, and the duration of distance learning may be considered by school staff as they develop individualized proposals for IEP implementation, including how AT devices and/or services may be delivered during virtual and/or distance learning. The following key strategies can support educators as they implement AT to promote continuity of learning during the extended school closure:

Strategy 1: Co-Develop Thoughtfully and Consider Accessibility

School closures present significant challenges for all students and educators. Local School Systems (LSSs) have been tasked to identify virtual/distance learning platforms and develop accessible content in alignment with the curriculum for all students. The principles of Universal Design for Learning (UDL) are critical to consider during distance learning. Though UDL principles apply to all learners and do not constitute SDI, the understanding of [UDL guidelines](#) supports the effective use of the identified virtual platform and the development of accessible materials. This allows educators to implement the interventions, accommodations, and SDI more easily as documented on their IEP (prior to the pandemic) to accelerate progress and mitigate recovery needs when schools re-open. In addition, knowledge of accessibility guidelines will enable educators to plan lessons with accessibility in mind first.

The National Center on Accessible Educational Materials (AEM) reviewed current accessibility guidelines and developed a free resource to help educators think through accessibility before planning lessons. Educators and family members can confirm that lessons meet accessibility guidelines and are Perceivable, Operable, Understandable, and Robust, by reviewing the [POUR Principles](#) provided by AEM when planning for virtual instruction.

It is important for educators to know that popular programs (e.g., Microsoft Word, PPT, Apple Products, etc.) have embedded accessibility features to support the development of educational materials. District AT personnel can provide support to educators and families through training and answering questions concerning accessibility. Regarding technology, educators consider connectivity issues that may arise; some students may not have access to the internet, phone lines, TV, or radio. It is important to provide a variety of methods for distance learning that offer accessibility features for a wide range of needs, and/or hard copy alternatives for assignments.

Strategy 2: Co-Implement Effectively

The individualized IEP implementation plan clearly articulates how SDI, including AT devices and/or services, will be delivered during this period of school closure. To promote continuity of learning and minimize regression, educators aim to maintain the specially designed instructional program to the greatest extent possible.

Reviewing and answering the following guiding questions while incorporating AT into the individualized IEP implementation plan will help educators continue current programming:

- What AT is currently documented in the student's IEP?
- Has the IEP team reviewed the SETT framework since distance learning began?

- Has the IEP team clearly explained the purpose of the AT device and/or service to the family to support authentic use in the home setting?
- Does the student have this AT solution available in the home setting, if not, can the family obtain the device, or can the IEP team offer an alternative that meets the need of the student?
- Is the AT device or tool operational?
- Does the family know when and how to use the device during daily routines, and when their child is engaged in virtual instruction, to increase opportunities for generalization and engagement?
- Does the AT device interact with any technology platforms to allow for student participation and, when necessary, collaboration with peers?
- What level of prompting does the student need to use the AT device or tool as independently as possible, and is a fade plan in place?
- How will AT services, coaching support, and or training be provided to the family to ensure appropriate and consistent use of the AT device or tool during distance learning?
- Can the student navigate through graphics, images, and tables with a keyboard only?
- Do families know who to contact if there is a question about the use of an AT device or the implementation of a particular AT service?
- Which IEP team member is the primary point of contact for parents or the student when the family has questions regarding AT?

Strategy 3: Co-Evaluate AT Regularly

As implementation continues in the distance learning environment, educators collaborate to regularly co-evaluate student progress, involving the family when feasible. For students with disabilities using AT as part of their SDI during school closure, educators evaluate how the student is progressing towards the IEP goals identified as part of the individual IEP implementation plan. This includes understanding how the AT device is being used, and/or how the AT services are being received, and if AT is having a positive impact on student progress.

Guiding questions when developing a plan to evaluate the impact of an AT service may also be considered:

- Does the AT service follow a consistent routine and schedule?
- Are activities and services documented through a service log?
- Is data available regarding the student’s behavior and responses during virtual AT service?
- Has the service provider focused efforts on building the family’s capacity to use the AT by providing coaching and modeling strategies for effective AT use to the parent and student?

During school closure, the instructional team analyzes student response to instruction and progress to determine if a student requires additional or different services. This is also true when considering if a student would benefit from AT devices and/or services if not identified on their IEP prior to the COVID-19 pandemic. Educators can work with families to trial devices, and amend an IEP, with parent agreement. When considering if a student would benefit from an AT device and/or service during school closures, the IEP team and family may consider the following guiding questions:

- Is the student experiencing any barriers to participating in virtual instruction?
- What types of supports help the student increase their engagement during virtual instruction, and do they fall into the category of AT?
- Is the student exhibiting any behaviors that negatively impact their participation during family routines?
- Could an AT solution increase positive engagement during the regular family routines?
- Has the IEP team and family determined the most effective way to trial a new AT device in the distance learning environment and come to an agreement on what success looks like for the student?
- Has the IEP team reached out to the Maryland Technology Assistance Program (MDTAP) if there is difficulty obtaining an AT device? MDTAP offers a lending library and remote demonstrations to support families (See Resources at the end of the TAB for contact information)

Progress monitoring will provide the team with opportunities to continually assess the effectiveness of AT and adjust as needed, in order to minimize regression and promote accelerated progress. Consistent communication between the IEP team, student, and family regarding student progress provides opportunities to celebrate success and continually improve the student's learning experience and outcomes.

Strategy 4: Leverage Low-Tech Solutions

Educators and families work collaboratively to review AT solutions that are realistic during virtual instruction. Identify a low-tech "plan B" to meet the student's needs if a higher-tech device is unavailable or breaks. Remember, those students who have AT devices and services as a part of their IEP rely on them to help support learning and skill development; their use, especially during this unprecedented time, may help to minimize regression.

When developing a "plan B," the educators, family, and student consider the intent behind the original AT device or tool. For example, if a student uses a high-tech AAC device for expressive communication with 50-word choices, a viable "plan B" may be to have the same 50 words and pictures available as a communication book. Opportunities to practice using "plan B" should be built into the student's educational program, so that the student understands the "plan B" in the event of an unexpected issue. Remember, the purpose of AT is to minimize barriers to the environment and promote independence. The most important factor is the skill that the student is learning through the use of the AT device, not the AT device itself. If the device is no longer available, due to an accident or unforeseen event, the student should still be able to access an alternative tool that allows for the use of the skill as much as possible.

Additionally, the use of low-tech solutions may become more prevalent during virtual instruction to support potential fatigue. The increased use of technology and changes in the instructional environment introduces additional factors for the IEP team to consider. Low-tech solutions may be used as a "plan B," as described above, or in conjunction with high-tech solutions. Consider how the student is responding to virtual instruction across academic content and discuss if low-tech AT solutions may benefit their access to grade-level instruction. Easy, low-tech solutions available in homes that support access to the curriculum across content include, but are not limited to:

- Graphic organizers
- Highlighters
- Overlays
- Word Banks
- Outlines
- Digital recorders
- Slant boards
- Timers
- Dictionaries
- Spell check and Thesaurus features
- Calculator

Special Considerations: Recovery Planning

When planning to implement current, amended, or revised IEPs during the transition from distance learning to either blended or in-person instruction, teams consider the ways to thoughtfully integrate Assistive Technology (AT) devices and/or services. As LSSs plan to reopen schools, a continuum of educational models will be identified and may include blended, distance, and in-person options. General considerations for the successful incorporation of AT into these various models are listed below.

1. Determine how AT fits into the three recovery options as LSSs plan for school reopening:

- **Distance Learning:** Distance learning occurs when teachers and students are physically separated, and all instruction takes place online using technology. Incorporating AT devices and/or services requires constant communication between educators, parents, and students to ensure that AT is being implemented as intended. Coaching and modeling between the educator, service provider, and family members are critical to ensure that AT is being implemented as intended, progress is monitored, and updates to specially designed instruction are made if necessary.
- **Blended Learning:** Blended learning combines online and in-person instruction, and may include options such as Rotations, (Individual, Lab, and/or Station), Flipped Classrooms, Flex, A La Carte, and Enriched Virtual models. Blended learning models provide opportunities for flexibility with schedules, allowing students to move through learning opportunities at their own pace and time for planned support from educators and service providers. If one of these blended learning options is utilized, the implementation team reviews the documented AT devices and/or services and determine how the AT will be incorporated.
- **In-Person (A/B Day and/or Rotating Schedules):** Some LSSs may elect to facilitate in-person, rotating schedules. The implementation team carefully reviews the current, amended, or revised IEP to intentionally plan for the AT device use and service provision.

Questions to Consider for both Blended and In-Person options:

- What instruction will take place in-person, and is the documented AT device/tool available for use?
- How well does the AT device/tool(s) integrate with the district's LMS?

- What personnel and/or family members are available, if needed, to provide support to the student in either environment?
 - How will AT implementation be monitored in both settings, is a clear process for capturing and analyzing data in place?
2. **Discuss the role of family members:** Family participation in the special education plan and implementation of AT is critical for positive student outcomes. Have a clear, open dialogue with family members to ensure that the plan for integrating AT into activities at home is realistic and feasible for the family.
 3. **Identify natural routines to incorporate AT throughout the day:** During this time of transition, educators and families can work together to identify naturally occurring routines to embed AT instruction, use, or opportunities for practice. The more AT can be infused into naturally occurring routines, the more practice the student will have to master and generalize the skill(s).

Frequently Asked Questions

Q: Will distance learning platforms include access for students with disabilities?

A: Many commercial tools, such as apps, online learning activities, conferencing platforms, and learning management systems, have built-in accessibility features that can be enabled as needed for individual students. Educators should reach out to LLS/PA IT supports to ensure they are using distance learning tools effectively. If a tool is not accessible for an individual student, alternative solutions (such as printed assignments or assistance from an adult to access the content) should be identified.

Q: How can the need for assistive technology devices and services be addressed during virtual and/or distance learning?

A: Assistive technology needed to access educational services and activities during distance learning should be discussed during the conversation to amend the IEP for the student. In some cases, the tools and devices the student uses at school may be picked up by or delivered to the family for home use. Some students may be able to use an alternative tool (such as a downloadable screen-reading or speech-to-text software). In this case, remember to plan for instruction and support in the use of the tool. If neither of these solutions is appropriate, consider additional ways for the student to access the content and engage in the learning activities, such as listening to an audiobook or having the material read aloud over the phone.

Q. What funds are available to support AT devices and services during the extended school closure due to the COVID-19 pandemic?

A. Flexibility has been granted to LSSs/PAs as they implement their continuity of learning plans for all students, including students with disabilities. Federal IDEA pass-through and discretionary funds can be used to support AT needs. For SFY 2019 and SFY 2020, the DEI/SES has increased the cap on supplies and materials that can be purchased through Local Implementation for Results (LIR) grant funds. LSSs/PAs should discuss their proposed amendment with their assigned programmatic and fiscal liaison to support system programmatic alignment. Federal guidelines for the use of IDEA funds remain in place and have not changed for the purchasing equipment.

Resources

Accessibility for Web Conferencing

- Accessibility Features in Zoom Meetings. Accessibility features include closed captioning, keyboard accessibility, automatic transcripts, and screen reader support.- <https://zoom.us/accessibility>
- Protect Your Zoom Meeting-Security & Safety-https://blog.zoom.us/wordpress/2020/03/27/best-practices-for-securing-your-virtual-classroom/?fbclid=IwAR3KVFa_bPdtmSu242X-PriODyfn0Jx1w5-mTKjMVNK-02IfFU2XSLUy_L4
- Accessibility in Google Meet. Accessibility features include live captions, screen readers and magnifiers, keyboard shortcuts and spoken feedback:
<https://support.google.com/meet/answer/7313544?hl=en>

Translation Accessibility Tools

- Microsoft Translator-Translate real-time conversations across all devices and platforms-
<https://www.microsoft.com/en-us/translator/>
- Microsoft Translator Parent Conference Template-A parent-teacher conference letter template to communicate with parents in their native language so they can download the app before your scheduled meeting:
<https://www.microsoft.com/en-us/translator/education/parent-teacher-conference-letters/>

Closed Captioning

- Streamer Solutions -Provide captioning and/or language translation for remote classrooms:
<https://streamer.solutions/covid-academic/>
- Captions for Google Slides- automatic captions to display the speaker's words in real-time:
<https://support.google.com/docs/answer/9109474?hl=en>
- YouDescribe: Create Audio Descriptions for YouTube Videos:
<https://youdescribe.org/support/tutorial>
- CLIPS App for Creating Videos with Captions:
<https://support.apple.com/en-us/HT207849>

Educational Resources

- Touch Typing - Keyboarding
<http://www.typingclub.com/>
- HW Buddy – Step-by-step directions for HumanWare products (Android and iOS)
<https://apps.apple.com/us/app/hw-buddy/id1503313942?ls=1>

- Helpful gestures to use with VoiceOver on iOS devices
<https://drive.google.com/open?id=0BwWD6cZN8iWUeXlwazJQN05scjA>
- Accessible games for students - *Free of charge through the end of the 2019-2020 school year. Requires school district or administrative approval.*
<https://www.objectiveed.com/distance>

For more information, call 410-767-0249
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