National Down Syndrome Congress Policy Brief

Assistive Technology (AT) Devices and Services

Authored by Ricki Sabia, J.D., NDSC Senior Education Policy Advisor

Executive Summary

An Assistive Technology (AT) device, as defined in education law, is any item, piece of equipment, or product system that is used to increase, maintain, or improve functional capabilities of an infant, toddler or student with a disability.

An AT device does not have to be a high-tech electronic device, it can also be low-tech (modified scissors) or mid-tech (calculator).

An AT Service, as defined in education law, is any service that directly assists an infant, toddler or student with a disability in the selection, acquisition, or use of an AT device.

Several federal laws, including the Individuals with Disabilities Education Act (IDEA), the Elementary and Secondary Education Act (ESEA, also known as ESSA) and the Assistive Technology Act discuss the rights of infants, toddlers and students with disabilities to AT devices and services.

If the Individualized Family Service Plan (IFSP) team or the Individualized Education Program (IEP) team determines that AT devices and services are needed, it is the responsibility of the Local Education Agency (LEA) to find the funding to provide and maintain them.

AT devices purchased by the LEA may be used at home or other locations if their use in these settings is determined to be necessary. Also, an AT device from home may be used in school if the LEA and parents agree.

If families and/or students disagree with a decision that AT devices and services are not needed, they should ask to review the data that supports this decision (e.g. performance with and without AT).

There are Assistive Technology Act Projects (ATAPs) in every State. They provide services to people with disabilities, as well as to their families, and education agencies.

New benefits and concerns are arising as Artificial Intelligence is incorporated into AT.

This brief provides additional AT resources for children, youth and adults with Down syndrome.

Introduction

Many individuals with Down syndrome would benefit from Assistive Technology (AT) devices and services to improve educational outcomes, develop important skills and abilities, and prepare them for post-school success. It is important to understand an infant toddler, or student's rights under federal law to these devices and services, as well as common misconceptions you might face in your advocacy to get them. Although the use of AT for adults is not the focus of this brief, AT also helps adults improve skills and opportunities for postsecondary education, independent living and employment. Some of the resources provided in this brief will help adults, as well as students who are receiving IDEA services.

U.S. Department of Education AT Guidance

In January 2024 the U.S. Office of Special Education Programs (OSEP), in collaboration with the Office of Educational Technology (OET), provided a guidance document called "Myths and Facts Surrounding Assistive Technology Devices and Services (AT guidance). You can click here to see the AT guidance in English, and click here to see it in Spanish.

What is an AT Device and AT Services?

An AT device is defined in federal education policy 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 an infant, toddler or child with a disability." It is important to note that an AT device does not have to be an electronic device. Items like visual schedules and calendars, squishy balls (for sensory issues or attention), or stickers may also be considered AT.

An AT Service is defined as "…any service that directly assists an infant, toddler or child with a disability in the selection, acquisition, or use of an AT device."

It is important to note that an assistive technology device does not have to be an electronic device. Items like visual calendars, squishy balls (for sensory issues or attention), or stickers may also be considered assistive technology.

Examples of AT Devices

AT devices and services must be considered for all types of disabilities, not only sensory disabilities (e.g. visual or hearing disabilities), and must be tailored to the user's individual needs.

An OSEP funded technical assistance center, the IRIS Center, created a chart that categorizes AT devices into low-tech, mid-tech, and high-tech devices.

Low-tech AT devices are described in the chart as devices that are readily available, inexpensive, and typically do not require batteries or electricity.

Examples provided are:

- Specialized rubber pencil grip
- Page holder
- Modified scissors

Mid-tech AT devices are described as devices that are usually digital and may require batteries or another power source.

Examples provided are:

- Calculator
- Audio book
- Digital recorder

High-tech AT devices are described as devices that are typically computer-based, likely to have sophisticated features, and can be tailored to the specific needs of an individual.

Examples provided are:

- Tablet
- Screen reader
- Voice recognition software

AT devices can also benefit infants and toddlers with disabilities. The AT guidance provides the following examples under Myth and Fact 23:

- Augmentative and Alternative Communication (AAC) devices (e.g., pictures of activities or objects, or a handheld tablet) that help infants and toddlers express wants and needs
- Tactile books that can be felt and experienced for infants and toddlers with sensory issues
- Helmets, cushions, adapted seating, and standing aids to support infants and toddlers with reduced mobility

Requirements for AT Under Federal Laws

IDEA 2004

IDEA Part B (ages 3-21+) requires that each time an Individualized Education Program (IEP) team develops, reviews, or revises a child's IEP, the IEP team *must* consider whether the student requires AT devices and services as a special education or related service in order to receive a Free Appropriate Public Education (FAPE).

In addition, IDEA Part B requires an education in the Least Restrictive Environment. The LRE provisions state that students with disabilities must receive their education alongside their peers without disabilities to the maximum extent appropriate and should not be removed from the general education classroom unless a satisfactory education cannot be achieved even with the use of supplementary aids and services. The IEP team should discuss whether certain types of AT devices and services are supplementary aids and services needed to support the student in the LRE.

If the IEP team determines that AT devices and services are needed, the Local Education Agency (LEA), which is the school system/district, has the responsibility to provide the services and provide and maintain the devices. Claims that there is no funding for AT devices and services does not change the LEA's responsibility to fund them.

In Myth and Fact 11, the AT guidance makes it clear that AT devices purchased by the LEA may be used at home or other locations if the IEP team determines their use is necessary. Also, Myth and Fact 18 states that a student's own AT device from home may be used if the LEA and parent agree and describes some issues that need to be resolved in the IEP or a separate agreement.

IDEA Part C (ages birth - 3) includes both AT devices and AT services within the definition of "early intervention service." An Individualized Family Service Plan (IFSP) team must determine whether an AT device or service is needed to meet the "developmental needs of an infant or toddler with a disability and the needs of the family to assist appropriately in the infant's or toddler's development." If this determination is made then the AT device or service must be provided to the infant, toddler or family members at no cost. As an early intervention service, the IFSP team must document the AT device and service in the infant or toddler's IFSP. Also, the AT device and service must be included in the periodic review and annual evaluation of the IFSP.

Elementary and Secondary Education Act
Amended as the Every Student Succeeds Act (ESSA) in 2015

ESSA is a law for ALL students in elementary and secondary education. However, it also has a focus on the achievement of certain underserved subgroups of students, including students with disabilities.

Under ESSA, States must provide appropriate accommodations for students with disabilities, which may include the use of AT devices, as part of State assessments. ESSA requires these assessments in grades 3-8 and once in high school. It is important that students with disabilities have practice in the classroom using or applying their State assessment accommodations, including assistive technology.

21st Century Assistive Technology Act (AT Act)

This law was first enacted in 1988 and over the years has increased access to, availability of, and funding for AT for all individuals with disabilities, including very young children. This law is not limited to educational settings. Under the law, each U.S. State and territory receives a grant to fund an AT Act Project (ATAP). Click here to find the ATAP in your State.

Evolving Issues: Pros and Cons of Artificial Intelligence (AI) and AT

Pros:

- **Enhanced Independence:** AI-powered tools like smart wheelchairs, voice assistants, and predictive text systems help users perform tasks without constant human support.
- **Improved Communication:** AI-powered Augmentative and Alternative Communication (AAC) devices can recognize non-standard speech patterns and facilitate clearer communication. Predictive text and natural language processing can enhance communication devices and streamline written communication.
- **Personalized Support:** AI can adapt to individual instructional needs.
- **Real-Time Accessibility:** AI enables features like automatic captioning, sign language avatars, and image descriptions, making digital content more inclusive.
- **Smarter Navigation:** AI-driven mobility aids can detect obstacles, map accessible routes, and even assist with indoor navigation for visually impaired users.

Cons:

- **Bias in Algorithms:** If AI systems are trained on non-diverse data, they may misinterpret or exclude people with disabilities.
- **Privacy Concerns:** Many AI tools rely on sensitive personal data, raising issues around consent and data protection.
- **High Cost & Limited Access:** Advanced AI-based devices can be expensive and may not be available in all regions.
- **Over-Reliance on Technology:** Users may become dependent on AI tools, potentially reducing their own skill development or resilience.
- **Incomplete Functionality:** Some AI systems still struggle with nuanced tasks — for example, speech recognition may not work well for some users.
- **Lack of Inclusive Design:** Many AI tools are developed without input from people with disabilities, leading to features that don't fully meet their needs.

Advocacy for Assistive Technology

For Your Family Member:

- Be familiar with the language about AT requirements in federal statutes, as discussed above.
- Be prepared to discuss the student's AT needs in various categories e.g. communication, organization, reading, writing, problem-solving, note-taking, testing, homework, study skills, participating in class presentations or performances. For infants and toddlers, the categories might be more about communication and physical and fine motor supports.
- See if the AT checklists from the Center for Parent Information and Resources (CPIR) are helpful in your situation. They are designed to assist IEP teams in considering AT needs. Click here for the checklist in English. Click here for the checklist in Spanish.
- Also, look at the SETT Framework for evaluating AT needs: Click here
- If you are told that AT devices and services aren't needed, ask to review the data that supports this decision (e.g. performance with and without AT)
- If you are told there is no funding to provide AT devices and services, remember that IDEA requires the LEA to provide them if the IEP or IFSP team determines that they are needed. There are multiple sources of local, State and federal funding for AT devices and services.
- Make sure any decisions about the type of AT devices and services are written into the IEP or IFSP.
- Reach out to the ATAP in your State. They provide services to people with disabilities, as well as to their families, and education agencies.

For State Policy and Funding:

- **Advocate for Funding:** Advocate for increased State funding for AT programs and services.
- **Support Legislation:** Advocate for and support State-level legislation that promotes access to AT for individuals with disabilities.
- **Raise Awareness:** Educate policymakers and the public about the importance of AT for individuals with disabilities.
- **Connect with Organizations:** Partner with disability advocacy organizations, parent support groups, and AT experts in your State to strengthen your advocacy efforts.
- **Share Your Story:** Share your experiences with AT, and those of others in the disability community, to raise awareness and inspire others to advocate for change.

Additional Resources for All Ages

Center on Inclusive Technology and Education Systems: Graphics about AT Myths and Facts Guidance

Center for Parent Information and Resources AT: Act information

PACER Center

Families and Advocates Partnership for Education: resource on AT for Infants, Toddlers and young children with disabilities

Center on Technology and Disability: resource for exploring AT with a teen or young adult

Auxiliary Aids and Services for Postsecondary Students with Disabilities

The intersection of Technology, Disability Rights and Worker's Rights

How to Incorporate Privacy into Inclusive Design for Assistive Technology

National Technical Assistance Centers addressing AT:

- AT3 Center
- Center on Inclusive Technology & Education Systems (CITES)
- National Technical Assistance Center on Transition (NTACT:C)
- Center on Technology and Disability (CTD)