



Assistive Technology for Infants and Toddlers

FAPE-12

Research shows that assistive technology (AT) can help young children with disabilities learn valuable skills.⁽¹⁾ For example, by using computers and special software, young children may improve in the following areas:

- social skills including sharing and taking turns
- communication skills
- attention span
- fine and gross motor skills
- self confidence and independence

In addition, by using the right type of assistive technology, some negative behaviors may decrease as a child's ability to communicate increases. Some common examples of assistive technology include, wheel chairs, computers and computer software, and communication devices.

Q: What types of assistive technology devices can infants and toddlers use?

A: There are two types of AT devices most commonly used by infants and toddlers—switches and augmentative communication devices.

- There are many types of switches that can be used in many different ways. Switches can be used with battery-operated toys to give infants opportunities to play with them. For example, a switch could be attached directly to a stuffed pig so that every time an infant touches the toy, it wiggles and snorts. Switches can also be used to turn many things off and on. Toddlers can learn to press a switch to turn on a computer or to use cause and effect (interactive) software. Children who have severe disabilities can also use switches. For example, a switch could be placed next to an infant's head so that every time she moved her head to the left a musical mobile hanging overhead would play.

- Augmentative communication devices allow children who cannot speak or who cannot yet speak to communicate with the world around them. These devices can be as simple as pointing to a photo on a picture board or they can be more complicated—for instance, pressing message buttons on a device that activate pre-recorded messages such as, "I'm hungry."

Q: Why is assistive technology important?

A: Many of the skills learned in life begin in infancy: AT can help infants and toddlers with disabilities learn many of these crucial skills. In fact, with assistive technology, they can usually learn the same things that nondisabled children learn at the same age, only in a different way. Communication skills at this age are especially important because most of what an infant or toddler learns is through interacting with other people, especially family members and other primary caregivers.

Sometimes parents are reluctant to begin using an AT device because they believe it will discourage their child from learning important skills. However, the opposite may be true. Research has shown that using AT devices, especially augmentative communication devices may actually encourage a child to increase communication efforts and skills. It is important to remember that the earlier a child is taught to use an AT device, the more easily a child will accept and use it.

Assistive technology is also important because expectations for a child increase as those around them learn to say, "This is what the baby can do, with supports," instead of, "This is what the baby can't do." With assistive technology, parents learn that the dreams they had for their child don't necessarily end when he or she



is diagnosed with a disability. The dreams may have to be changed a little, but they can still come true.

Q: How can a family obtain AT devices for their infant or toddler?

A: There are two ways. First, infants and toddlers who have a disability are eligible for early intervention services under Part C of the federal law called the Individuals with Disabilities Education Act (IDEA). If the child meets the state eligibility criteria for early intervention services under IDEA, he or she will receive assistive technology devices and services if their Individual Family Services Program (IFSP) team decides that these services are needed to meet the child's unique needs and includes them in the IFSP.

Secondly, some infants and toddlers have delays that are not significant enough or are not yet significant enough to be eligible for IDEA early intervention services under the state's eligibility criteria. Many of these infants and toddlers may still benefit from using an AT device. In some cases, private insurance or medical assistance will pay for a device or you may choose to purchase a device directly for your child.

Many schools and communities have special lending libraries where parents can borrow toys with switches, computer software, and other devices. These libraries, such as the Tech Tots libraries sponsored by United Cerebral Palsy chapters around the country, give parents an opportunity to try various AT devices to see if they will help their child before purchasing them.

Q: If my child is not eligible for early intervention services under IDEA, how will I know if she could still benefit from using an AT device?

A: Asking certain questions may help you make that decision. For example: Compared to other children her age, can my child play with toys independently? How does my child communicate—can she communicate effectively? How does my child move from place to place—can she sit, stand, or walk independently? And, can my child feed herself? If you answer “No” to these questions, then assistive technology may help. In some

cases, children with behavior problems actually have a communication impairment and are frustrated that they cannot tell someone how they feel.

Q: What is assistive technology for children who are eligible for early intervention under IDEA?

A: IDEA defines an AT device as any item, piece of equipment, or product system, whether purchased directly off the shelf, changed or adjusted, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities.

Under IDEA, assistive technology services are any services that directly help a child with a disability to choose, obtain, or use assistive technology. AT services include:

- finding and paying for the device (including purchasing, leasing or otherwise acquiring);
- selecting, designing, fitting, adapting, applying, maintaining, or customizing a device for a particular child;
- repairing or replacing a device;
- coordinating and using other therapies, interventions, or services with AT devices;
- evaluating the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
- training or technical assistance for a child with disabilities or, if appropriate, that child's family; and
- training or technical assistance for professionals, including those providing early intervention services, or others who provide services to or are substantially involved in the major life functions of individuals with disabilities.

Q: How does a parent request an AT evaluation under IDEA?

A: Generally, an AT evaluation should be included as part of the early intervention evaluation if there is reason to believe the child may need an AT device or service. However, parents may request an evaluation at any time. Parents and significant others - such as siblings or grandparents if appropriate - should be involved in the

entire process because they have valuable insights and information about the child. When parents are actively involved it is more likely that the child will get the right device and that it will be used properly.

Q: What is the most effective way to evaluate an infant or toddler for AT devices or services?

A: Ideally, a multi-disciplinary team will do an AT evaluation. Generally, this team will include an assistive technology specialist who understands computer hardware and software, augmentative communication devices and other types of equipment. A member of the team should also understand how technology could be used in all areas of a child's life to support the child's early intervention outcomes. (This person should also have knowledge of infant and toddler development.) Some early intervention programs have assistive technology specialists on staff; others use a physical, occupational, or speech therapist that has received additional training. If an early intervention program does not have a technology expert, they can contract with a provider, a school district, or with a community agency. Parents and early intervention providers are always vital members of the team.

Before they do the evaluation, team members should gather background information about the child's interests, abilities, and family routines. This will help to determine what type of AT devices, if any, should be used during the evaluation. Generally, the evaluation is done wherever the child is most comfortable or wherever he spends most of his time. For infants and toddlers, this could be the family home or a childcare or preschool setting. When the evaluation is done, the team should then write specific recommendations about the type of devices and services that would help the child reach the expected outcomes. Any AT devices recommended should be easy for the family and other primary caregivers, such as childcare providers, to use.

The most important thing about the evaluation is that it focuses on the child's strengths and abilities. For example, if an infant with Cerebral Palsy can only wiggle her left foot, then this is considered one of her

strengths. Any AT devices used should build on this strength. In this case, a switch could be positioned so that every time the infant wiggled her foot a music box would play. Creativity is a must when thinking about AT for children who have significant impairments! Again, parents and other primary caretakers are great resources to tap.

Q: Under IDEA, where can assistive technology devices and services be provided?

A: To the maximum extent appropriate to the child's needs, early intervention services must be provided in natural environments such as the child's home, a childcare setting, or other community settings where children without disabilities are found.

It is the responsibility of the IFSP team to determine—based on evaluations and assessments—what services are needed to meet the unique needs of the child. These services, including AT devices and services, should be included in the child's IFSP. As a part of this process, the team would discuss the environments in which AT devices and services would best meet the child's needs, including home, childcare, and other community settings.

As children move from one service to another, it is critical that everyone involved with the child know what AT devices the child is using and how to obtain and use them. For example, if a two-and-a-half year old child is in early intervention and will move to pre-school at age three, the need for AT should be discussed at the transition planning conference. This will help to ensure that the child's AT access is continuous.

Q: Under IDEA, who pays for assistive technology devices and services?

A: All early intervention services, including AT devices and services, must be provided at no cost to the family unless the state has established a system of payment for early intervention services.

Q: What type of training can be provided under IDEA?

A: In general, parents, service providers, childcare providers and others who work with infants and toddlers and their families should be trained to use the AT device. Training could include:

- basic information about the device, how to set it up, and how it works
- how the device can be used in all part of the child's life
- how to know when something is wrong and how to fix minor problems
- what to do or where to take the device if there is a major problem
- how to change or adapt the device for a child as he grows or as her activities become more complex

If parents and service providers are trained and comfortable with the device, then they are more likely to find creative ways to use it in all parts of the child's life. The need for training and who will provide it should be included in the child's IFSP.

Q: Where can parents get more information about assistive technology or IDEA?

A: Parents may call the Parent Training and Information Center that serves their area. Or, they may call PACER center, toll-free, at 1-888-248-0822. The portion of IDEA that deals with assistive technology for infants and

toddlers can be found in 34 Code of Federal Regulations (CFR), part 303. Other resources are available:

ATA—Alliance for Technology Access

ATA is composed of networks of community-based residence centers, developers and vendors, affiliates, and associations.

Tel: (415) 455-4575

E-mail: ATAinfo@ATAccess.org

Closing the Gap

Tel: (507) 248-3294

Web site: www.closingthegap.com

Family Center on Technology and Disability, United Cerebral Palsy

Tel: Toll free (800) 872-5827

FAPE—Family and Advocates Partnership for Education

The FAPE Project is sponsored under a grant from the Office of Special Education Programs, U.S. Department of Education.

Tel: Toll free (888) 248-0822

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