# Classification of AT Devices

Throughout the Annual Progress Report (APR) system you are asked to classify the AT devices provided. There are ten categories for classifying devices.

* Vision
* Hearing
* Speech communication
* Learning, cognition, and developmental
* Mobility, seating, and positioning
* Daily living
* Environmental adaptations
* Vehicle modification and transportation
* Computers and related
* Recreation, sports, and leisure

**You must choose one category where a device belongs**. Devices must be reported in one of these categories as there is no “Other” category. Many devices can fit into more than one category depending on how they are used by a consumer. When it is not immediately obvious in which category you should classify a device, you should classify it based on the functional need that is served by the “assistive” aspect of the device. Exception: If the device is designed to assist someone who has a vision or hearing impairment, regardless of the function that is being served, classify the device under vision or hearing. In the case of an individual who is deaf/blind, you should classify the AT device in either vision or hearing. (For large amounts of deaf/blind related AT device reporting associated with the I Can Connect program, you should establish a process for making AT device type determinations so that your data is consistent over fiscal years.)

**You may not count a device more than once and devices that make up a system should be reported as one device.** A component of a larger system should be classified according to the function or primary use of the entire system and reported as one device in that category. For example, a switch and mounting system used to access a communication device would be reported in communication as one device. Many sets of devices in Daily Living and Mobility, Seating and Positioning should be reported as a system rather than individual devices when they are providing an overall access purpose (such as bathroom access).

**Services are classified according to the AT device category associated with the service**.

Each category below includes a definition, decision rules, and examples that will assist you in determining the appropriate classification.

### 1. Vision

*Definition:* Products designed to assist with vision.

***Decision rules:*** Products intended to facilitate access and participation for people who have vision needs (i.e. blind, low-vision) are classified in this category, even if they are used for activities of daily living, computer access, reading/learning, way finding/mobility, recreation, etc. Products in this category characteristically provide output of information through large print/display, speech and/or Braille/tactile alternatives to “regular” print or text.

If the adaptation is for an individual who has vision and other disabilities, categorize according to the primary functionality of the device (e.g. if the device is addressing a daily living need due to a mobility disability in addition to the vision loss, then it would be categorized as daily living). In the case of an individual who is deaf/blind, you should classify the AT device in either vision or hearing. (For large amounts of deaf/blind related AT device reporting associated with the I Can Connect program, you should establish a process for making AT device type determinations so that your data is consistent over fiscal years).

***Examples:***

* Manual magnifiers
* Video magnifiers
* Health related instruments (scales, blood pressure gauge, glucometer etc.) with alternative input navigation control and output
* Household appliances with alternative input navigation control and output
* Daily living devices with alternative input navigation control and output
* Computers and mobile devices with alternate hardware and software options (e.g. text scanning, audio navigation, speech output, screen magnifiers, Braille displays, etc.)
* Navigation and mobility aids with alternative input navigation control and output

### 2. Hearing

***Definition:*** Products designed to assist with hearing.

***Decision rules:*** Products intended to facilitate access and participation for people who are deaf or hard of hearing are classified in this category, even if they are used for activities of daily living or could have another application for people with other disabilities or for other functions. Products in this category characteristically provide amplified auditory output and/or output in another format (e.g. text or sign language).

If the adaptation is for an individual who has hearing and other disabilities, categorize according to the primary functionality of the device (e.g. if the device is addressing a daily living need due to a mobility disability in addition to the hearing loss, then it would be categorized as daily living). In the case of an individual who is deaf/blind, you should classify the AT device in either vision or hearing. (For large amounts of deaf/blind related AT device reporting associated with the I Can Connect program, you should establish a process for making AT device type determinations so that your data is consistent over fiscal years).

***Examples:***

* Personal amplification systems including medical device hearing aids, over-the-counter (OTC) hearing aids, and personal sound amplification products (PSAP)
* Assistive Listening Systems designed to improve signal to noise ratio (FM, loop, infrared, sound-field)
* Daily living aids with enhanced auditory, visual and/or tactile output (e.g. vibrating alarm clock; smoke alarm with strobe light; etc.)
* Amplified or text telecommunication devices (including captioned telephones and associated signaling devices)
* Captioning systems and apps (including speech to text) for computers or mobile devices
* Video systems and apps that support visual communication (sign language, speech reading, etc.) for computers or mobile devices

### 3. Speech Communication

***Definition:*** Products designed to assist with communication for individuals with speech limitations.

***Decision rules:*** Products intended to facilitate face-to-face and virtual communication for people with speech disabilities are classified in this category, even if they are also used for other functions (e.g. a speech generating device that can also serve as an alternate keyboard for computer input). These products may produce speech and/or text output, or may be those that rely on interpretation by the communication partner (e.g. “low tech” symbol and/or alphabet-based communication boards). Products that amplify voice are classified here if used by an individual with a communication disability, in order for his/her speech to be audible to others. Peripherals designed to facilitate access to or otherwise support the use of a device for speech communication (e.g. mounting systems; carrying cases; switch or mouth stick used for access) are counted in this category. Software that provides symbol sets used in creating “low tech” systems or overlays for speech generating systems are counted in this category.

***Examples:***

* “Dedicated” or purpose-built speech generating devices
* “Talking” switches (if used for communication)
* Communication boards/books
* Software and apps that support speech communication on a computer or mobile device
* Artificial larynx
  + - Voice clarifiers
    - Voice amplifiers
    - Stuttering aids

### 4. Learning, Cognition, and Developmental

***Definition:*** Products that assist with learning, development and cognitive processes for people with disabilities of all ages.

***Common subcategories:***

Cognitive aids

Early intervention aids

Instructional materials

Reading and writing

Memory aids

General personal organization tools

***Decision rules:*** Products intended to augment, mitigate or compensate for learning or cognitive process limitations such as memory, organization, reading, writing, etc. regardless of the environment used should be classified here. This includes products that provide access to educational materials and instruction in school or other learning environments. Products designed to assist people with vision disabilities with reading, organization, learning, computer access, or other functions are classified under vision. Toys are reported under Recreation, Sports and Leisure even if used to teach cause and effect.

***Examples:***

* Calculators
* Clocks/timers/alarms
* Calendar/reminder systems including apps
* Memory aids including apps
* Educational/instructional software including apps
* Audio recorders
* Text-to-speech systems
* Speech-to-text systems
* Devices for enhancing signal to noise ratio or blocking extraneous noise

### 5. Mobility, Seating, and Positioning

***Definition:*** Products whose main focus is addressing the functional limitations of a mobility disability and/or improving seating and positioning for health, safety and control.

***Decision rules:*** Wheelchair components associated with seating and positioning (shoulder or safety belts) are classified in this category. Wheelchair restraints (e.g. tie downs and docking or lock systems) which allow a power chair user to drive and/or be transported safely in a car or van are classified under Vehicle Modification and Transportation. Devices that position other equipment (e.g. communication device mounts) are classified in the category of the device they are supporting.

***Examples:***

* Ambulatory aids such as canes (not canes used by people with vision disabilities for wayfinding), walkers or crutches
* Orthotics and prosthetics
* Non-motorized wheeled mobility products including strollers, transport chairs and manual wheelchairs
* Power mobility products including scooters and power wheelchairs
* Seating and positioning aids including foam wedges, cushions and specially designed seating systems

### 6. Daily Living

***Definition:*** Devices that enhance the capacity of people with disabilities to live independently, especially AT that assists with Instrumental and other Activities of Daily Living, (ADLs, IADLs) such as dressing, personal hygiene, bathing, home maintenance, cooking, eating, sleeping, breathing, shopping and managing money.

***Common Subcategories:***

Personal care and hygiene

Medical equipment for life and safety

Smart home hub

Clothing and dressing aids

Housekeeping, cleaning, maintenance

Meal preparation and eating

Handling, reaching, manipulating

Alerting and signaling

Household management, bill paying (not cognitive, vision, or hearing AT)

Telephony equipment

***Decision rules:*** Durable medical equipment for life and safety that do not involve home modifications are categorized here, e.g. respiratory equipment. Smart home hubs are classified according to their primary use. Those that control small appliances may be classified here; if they control semi-permanent or permanently installed home devices they are categorized as Environmental Adaptations; if they are primarily used for entertainment they should be categorized as Recreation, Sports and Leisure. Devices intended to accommodate hearing or vision, including telephony, are assigned to those categories. Devices that assist with personal organization are classified as Learning, Cognition and Developmental AT. Devices that assist persons with motor impairments not categorized elsewhere are included here. Switches controlling daily living aids or unknown devices are reported here, otherwise switches are reported with the category of devices controlled.

***Examples:***

* Writing guides, adapted writing implements
* Modified or large-handled tools and utensils
* Eating/feeding equipment, including dentures; spiked cutting board, jar opener
* Zipper pulls, button hooks, needle threader
* Personal pager, multi-sensing/multi-sensory alerting devices
* Wheelchair desks/trays
* Reacher
* Wheelchair/walker bag
* Switch-adapted food processor
* Large-button telephone (not for vision or cognitive accommodation)

### 7. Environmental Adaptations

***Definition:*** Environmental and structural adaptations to the built environment that remove or reduce barriers and promote access to and within the built home, employment and community facilities for individuals with disabilities. Environmental adaptations usually involve building construction, engineering, and/or architecture, but also include environmental controls and switches that can control a large portion of or an entire living environment. Environmental adaptations are typically permanent or semi-permanent structures, modifications, or additions.

***Decision rules:***  Adaptations or modifications to vehicles are classified under Vehicle Modification and Transportation. Adaptations to furniture such as chairs, couches, beds, etc., would generally be classified under Mobility, Seating, and Positioning. Items or structures that are portable or temporary, rather than permanent or semi-permanent, are generally classified in another related category to address a functional limitation. For example, shower chairs, commodes, raised toilet seats, temporary/portable ramps and similar portable items should be classified in the Daily Living category where as a roll in shower, wall or floor mounted grab bars, installed ramps, etc. would be classified here because they become part of the building structure.

***Examples:***

* Accessible HVAC controls, accessible plumbing fixtures and controls
* Alarm and security systems
* Cabinetry and storage equipment
* Door/gate openers including farm and ranch gates/latches
* Environmental controls and switches that control them permanently or semi-permanently installed or non-mobile items (i.e., electronic systems that enable people to control various appliances, lights, window coverings, security systems, etc.)
* Flooring and surface materials/detectable warning surfaces
* General environmental access products
* Lifts
* Ramps
* Signage/signaling products
* Adapted farm equipment that is not reported as Vehicle Modification and Transportation such as sprayers, seeding systems, augers, etc.

### 8. Vehicle Modification and Transportation

***Definition:***  Products that give people with disabilities independence and enhance safety in transportation through adaptation of vehicles.

***Decision rules:*** Vehicle ramps are classified in this category. Versatile/portableramps (temporary adaptation) and wheelchair lifts (permanently installed in buildings) are classified under Environmental Adaptations. Multi-purpose portable ramps would be classified under Daily Living.

***Examples:***

* Adaptive shoulder and seat safety belts
* Tie downs and lock downs that secure the wheelchair to the vehicle floor
* Hand controls
* Extended directional mirrors.
* Vehicles and vans modified with lifts, ramps, raised roofs, etc.
* Adapted farm vehicles such as tractors and other self-propelled vehicles modified with hand controls, GPS, lifts and ramp systems.

### 9. Computers and Related

***Definition:*** Hardware and software products that enable people with disabilities to access, interact with, and use computers at home, work, or school. Includes modified or alternate keyboards, switches activated by pressure, touch screens, proprietary software, and/or operating system accessibility options.

***Decision rules:*** Classify standard computers and computer-related devices (those that will be used without any adaptations) in this category, along with input adaptations used to mitigate, compensate or address motor limitations. Do not include computer adaptations used to address vision or learning/cognitive limitations as those will be reported in Vision or Learning/Cognition and Developmental.

***Examples:***

* Standard software
* Standard hardware
* Computer accessories
* Alternative keyboards and pointing devices
* Switches and scanning software used for computer access
* Touchscreens
* Voice recognition systems

### 10. Recreation, Sports, and Leisure Equipment

***Definition:*** Products not already classified in other categories that help persons with disabilities to participate in sport, health, physical education, recreation, leisure, and dance events.

***Common subcategories:***

* Toys and games
* Sports equipment
* Fitness equipment
* Specialized wheelchairs and recreational mobility equipment
* Musical instruments and related devices
* Arts, crafts and photography equipment
* Gardening and horticultural equipment
* Hunting, fishing, shooting equipment
* Camping, hiking and other outdoor recreational equipment
* Audio and video entertainment equipment

***Decision rules:***Devices intended to accommodate specific disabilities, such as hearing or vision, are assigned to those categories. Specialized products designed specifically for recreational, leisure or athletic pursuits are categorized here. Devices that may have other uses, but are selected as AT for a recreational setting, should be categorized here. Devices for environmental control that also serve as entertainment system controls (e.g. television remote) are classified according to their primary use.

***Examples:***

* Toys, adapted toys and games (includes toys used for developmental purposes such as teaching cause and effect)
* Tennis wheelchairs; beach wheelchairs
* Skiing equipment; sled/sledge hockey equipment
* Gardening tools and equipment
* Playing card shuffler
* Adapted camera and other photography equipment
* Adaptive exercise equipment (not used in a rehabilitation setting)
* Adaptive equipment for wildlife viewing, fishing, hunting, and camping
* Adaptive musical instruments and accessories (not used in a school setting)
* Entertainment system remote control not used for lights, heat or other environmental control