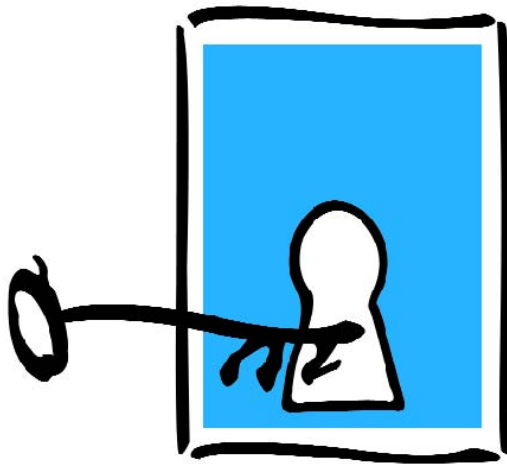


# ATEN

*Assistive Technology Educational Network*

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Assistive Technology  
Unlocking Human Potential



High-Tech / Mid-Tech / Low-Tech

**Never Just One Solution**



*ATEN provides services to students, family members, teachers, and other professionals within the state of Florida. The mission of the Assistive Technology Educational Network (ATEN) Coordinating Unit(CU) is to assist in the enhancement of student outcomes through provision of information, training and technical support in the area of assistive technology. ATEN's staff is comprised of professional educators.*

### ***Technical Assistance***

ATEN provides information and resources related to assistive technology via phone, fax, email, and the world wide web. ([www.aten.scps.k12.fl.us](http://www.aten.scps.k12.fl.us)).

### ***Local Assistive Technology Specialists (LATS)***

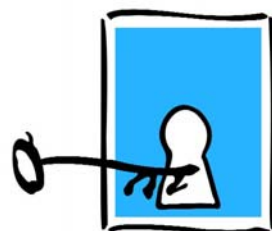
This network of professionals, appointed by their District ESE Director, serves as a front line of support for students with assistive technology needs. LATS also support personnel, family members, and caregivers. The LATS coordinate their districts evaluation and implementation efforts.

### ***Loan Library***

ATEN offers a short-term loan library of assistive technology devices and computer adaptations for use by LATS to assist with their student assessments.

### **Assistive Technology Educational Network**

1207 Mellonville Avenue  
Sanford, FL 32771  
(800) 588-6580  
Fax: (407) 320-2379



**Never  
Just  
One  
Solution**

# ATEN FACTS

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## ***Demonstration Lab***

The Sanford based *Demo* lab houses a comprehensive array of assistive technology for hands-on demonstration purposes. The lab includes voice- and print-output devices, low-tech hearing and vision devices, adapted toys, computer adaptations, and environmental control systems. The lab is open daily for scheduled appointments. For further information or to schedule an appointment, please call the ATEN Lab (800) 558-6580.

## ***Resource Library***

ATEN's library contains books, magazines, journals, conference proceedings, catalogs, videos, and other resources pertaining to assistive technology. All materials are available for review or two-week check-out.

## ***Regional and Satellite Labs***

ATEN CU supports five additional regional centers located in Tallahassee, Palatka, Daytona, Tampa, and Ft. Lauderdale. These facilities offer a sampling of assistive technology options and provide training and support in their regions. See *Resources* page for contact information.



## ***Loan Library***

ATEN offers a short-term loan library of assistive technology devices and computer adaptations for the assistive technology assessment and trial use with students. Equipment borrowed from the ATEN loan library is intended for use by students in all settings: school, home, and community. It is packaged into customized kits including all necessary accessories and instructions. *Only preauthorized public school personnel are allowed to check out this equipment.*

## ***Print Resources***

ATEN's online newsletter, *Keyhole Communiqué*, provides a forum to share information on a variety of topics related to assistive technology.

## ***World Wide Web***

ATEN's web site ([www.aten.scps.k12.fl.us](http://www.aten.scps.k12.fl.us)) features up-to-date information about ATEN and ATEN's databases, device information, links to other AT related websites and conferences.

*This publication was developed by the Assistive Technology Educational Network (ATEN), a Florida Diagnostic and Learning Resources System (FDLRS) Specialized Center, located in Seminole County and funded by the State of Florida, Department of Education, Bureau of Instructional Support and Disabilities Education Act (IDEA), Part B and state general revenue funds.*



### ***Magic Arm System***

A mounting system featuring one dial to adjust all three movable joints and the ability to clamp onto a variety of surfaces



### ***Grooved Platform Communicator***

A 3-message, voice output communication device with a platform for objects and pictures to aid users in transition to pictures



### ***Headpointers***

A low-tech device which gives physically impaired users access to switches and keyboards

# LOW-TECH SOLUTIONS

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*Easy to use, low cost (ranging from \$.39 to \$200) and typically do not require a power source*

## ***Daily Living***

Adapted utensils  
Ultrastick adhesive  
Velcro  
Universal cuffs

## ***Recreation and Leisure***

Large dominoes  
Low vision playing cards  
Card holder  
Toy holders

## ***Alternative Augmentative Communication***

Eye-gaze board  
I-4 message devices  
Manual communication board  
Object representation

## ***Mobility/Positioning***

Canes  
Wedges  
Cushions  
Braces

## ***Vision***

Large print books  
Magnifiers  
High contrast color acetate  
Talking calculators

## ***Reading***

Picture symbols  
Adapted books  
Cover overlays  
Line guide

## ***Hearing***

Sign language  
Pens and paper  
Signaling devices  
Phone amplifier

## ***Writing***

Adapted pencil grips  
Raised line paper  
Ease  
keyguards

*Equipment and devices listed are a token representation of available solutions to technology questions. For a more comprehensive look and to view other low-tech devices, check ATEN's website ([www.aten.scps.k12.fl.us](http://www.aten.scps.k12.fl.us))*



### *Tech Speak*

Digitized speech communication device giving users the ability to communicate via six levels of pre-programmed choices with 32 targeted selection sites

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### *All Turn It Spinner*

Spinner to be used by individuals for random selection of the inner and outer overlay (It has the ability to be accessed directly or with a single switch.)



### *Quicktionary Pen*

Word scanning device with the capacity of reading and defining 200,000 words (It is useful for individuals with learning disabilities.)

# MID-TECH SOLUTIONS

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*Easy to operate, typically require a power source, and are moderately priced ranging from \$200 - \$1000)*

## ***Daily Living***

- Electrical devices
- Environmental controls
- Switch adapted household items

## ***Alternative Augmentative Communication***

- Voice output devices with levels
- Text to speech
- Visual and auditory scanning

## ***Vision***

- Magnification software
- Books on tape/CD
- Braille translation software
- Auditory scanning options

## ***Hearing***

- Text telephone
- Voice amplification systems

## ***Recreation and Leisure***

- Switch adapted games and toys
- Adapted tv/vcr/dvd remote
- Adapted CD player

## ***Mobility/Positioning***

- Manual wheelchairs
- Adapted chairs and tables
- Gait trainer
- Scooter

## ***Reading***

- Audible word scanning devices
- Computer software

## ***Writing***

- Portable word processor
- Adapted switch computer interfaces
- Adapted keyboards
- Software

*Equipment and devices listed are a token representation of available solutions to technology questions. For a more comprehensive look and to view other low-tech devices, check ATEN's website ([www.aten.scps.k12.fl.us](http://www.aten.scps.k12.fl.us))*

### *DV4 and MT4*

A sophisticated portable voice output communication device using dynamic screen displays with letters, words and pictures; voice output either synthetic or digitized; and direct touch screen or scanning access



### *MiniMerc*

PC based device with a touch screen, mouse, and scanning that enables the user to have communication and computer capabilities

### *Pathfinder*

Voice output device which offers both a static touch panel and a dynamic touch screen and has vocabulary generated by combining icons in various combinations with synthesized and digitized speech



# HIGH-TECH SOLUTIONS

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*Devices and systems that are complex and programmable  
and are priced over \$1000*

## ***Daily Living***

Computer-based  
Environmental control system

## ***Alternative Augmentative Communication***

Voice output devices with  
dynamic displays  
integrated computer-based systems  
voice output with icon sequencing

## ***Vision***

Adapted keyboards  
Screen reading software  
Closed captioning text readers

## ***Hearing***

iCommunicator/software  
personal captioning systems  
speech amplification systems  
infra-red systems

## ***Recreation and Leisure***

Adapted electronic games  
Computer with adaptations for games  
Internet browsers

## ***Mobility/Positioning***

Customized wheelchairs  
Van adaptations  
Hoists/lifts

## ***Reading***

Talking word processors with text  
Software options  
Electronic page turners

## ***Writing***

Software options  
Adapted keyboard/mouse alternatives  
Switch adaptations

*(Note: Low-tech backup systems are  
suggested)*

*Equipment and devices listed are a token representation of available solutions to technology questions. For a more comprehensive look and to view other low-tech devices, check ATEN's website ([www.aten.scps.k12.fl.us](http://www.aten.scps.k12.fl.us))*

***Assistive Technology  
Educational Network  
Coordinating Unit***

**Mark Cerasale,  
Program Administrator  
ATEN**

1207 Mellonville Avenue  
Sanford, FL 32771  
407-320-2380  
Lab: 800-588-6580  
Fax: 407-320-2379

Anne Banton, Lab Manager; 407-320-2381  
Diane Penn, Tech Specialist; 407-320-2384  
Dee Enright, Executive Secretary; 407-320-2382  
Melanie Johnson, Loan Library; 407-320-2383



# Regional Technology Labs

**Region 1 Panhandle**

Rena Carney, Regional Manager  
3955 West Pensacola Street  
Tallahassee, FL 32304  
800-257-5044  
Fax: 850-921-4097

**Region 2 North East**

Frank Crosby, Regional Manager  
3841 Reid Street  
Palatka, FL 32177  
800-227-6036  
Fax: 386-329-3835

**Region 3 East Central**

Janet Good, Regional Manager  
1825 Dunn Avenue, Trailer 730  
Daytona Beach, FL 32114  
800-358-8525  
Fax: 386-274-0309

**Region 4 West Central**

Lenore Remley, Regional  
Manager  
4210 West Bay Villa Avenue  
Tampa, FL 33611  
800-282-9193  
813-837-7876  
Fax: 813-837-7801

**Region 5 South**

Beth Saunders, Regional Manager  
600 SE 3rd Avenue 9th Floor  
Ft. Lauderdale, FL 33301  
754-321-2214  
Fax: 754-321-2715

# RESOURCES

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## ***Center for Independent Living (CIL)***

720 N. Denning Drive  
Winter Park, FL 32789  
407-623-1185  
TDD: 407-623-1185  
Fax: 407-623-1390  
info@cilorlando.org  
[www.cilorlando.org](http://www.cilorlando.org)

## ***Lighthouse of Central Florida***

215 East New Hampshire Street  
Orlando, FL 32804  
Phone: 407.898.2483 (Orlando)  
352-365-1544 (Lake and Sumter)  
Fax: 407-895-5255 (Orlando)  
Fax: 352-365-6970 (Lake and Sumter)  
lvaneepoel@lcf-fl.org  
[www.lighthousecentralflorida.org](http://www.lighthousecentralflorida.org)

## ***Family Network on Disabilities (FND)***

2735 Whitney Road  
Clearwater, FL 33760  
727-523-1130  
800-825-5736  
Fax: 727-523-8687  
fnd@fndfl.org  
[www.fndfl.org](http://www.fndfl.org)

## ***Vocational Rehabilitation***

400 West Robinson Street  
Suite N-608  
Orlando, FL 32801  
(407) 245-0895  
[www.rehabworks.org](http://www.rehabworks.org)

## ***Florida Alliance for Assistive Services & Technology, Inc. (FAAST)***

325 John Knox Road Bldg. 400 Suite 402  
Tallahassee, Florida 32303  
(850) 487-3278 – (888) 788-8216  
[www.faast.org](http://www.faast.org)

## ***Florida DOE Bureau of Exceptional Education and Student Services***

Clearinghouse Information Center  
628 Turlington Building  
Tallahassee, Florida 32399-0400  
(850) 245-0477 - FAX: (850) 245-0987  
[www.firn.edu/doe/bin00014/clerhome.htm](http://www.firn.edu/doe/bin00014/clerhome.htm)

## ***Florida Instructional Materials Center for the Visually Impaired***

4210 West Bay Villa Avenue  
Tampa, FL 33611  
813-837-7827  
800-282-9193  
Fax: 813-837-7979  
[www.fimcvi.org/index\\_aboutus.htm](http://www.fimcvi.org/index_aboutus.htm)

## ***Resource Materials & Technology Center: Deaf & Hard of Hearing***

207 N. San Marco Avenue  
904-827-2666  
800-356-6731  
Fax: 904-827-2338  
[www.fsdb.k12.fl.us/rmc/](http://www.fsdb.k12.fl.us/rmc/)

## ***FDLRS/Tech Instructional Technology Training Resource Unit***

753 West Blvd  
Chipley, FL 32428  
850-638-6131 ext 2242  
Fax: 850-638-6142  
david@fdlrstech.com  
[www.paec.org/fdlrstech/index.htm](http://www.paec.org/fdlrstech/index.htm)

# GLOSSARY

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**Assistive Technology** – any aid, including computers, switches, calculators, spelling devices, communication devices and voice synthesizers, which are used to help an individual perform some task of daily living

**Alternative Keyboard** – may include enlarged, reduced, varied key placement, one-handed, Braille, chordic, or any other device for entering text on a computer

**Augmentative Communication** - aided or unaided communication modes used as a supplement to or as an alternative to oral language, including gestures, sign language, picture symbols, the alphabet, and computers with synthetic speech

**Environmental Control** – any device that an individual may use to control the environment (lights, appliances, TV, telephone, etc) and may include anything from simple reachers or sticks to computers and voice-activated electronic systems

**FM System** – a local wireless broadcast system that consists of a microphone and transmitter for the speaker and receivers with headphones for listeners with hearing impairments or attention disorders

**High Tech** - assistive technology devices that contain micro-computer components and allow for the storage and retrieval of information

**Icon** – an image that represents an object, concept, or message and can be used on a communication device instead of words or on a computer to indicate an application or file

**Keyboard** – a device to input text and commands to a computer

**Keyguard** – a Plexiglas or other cover for a keyboard with holes for the individual keys, allowing more precise selection of keys for an individual with fine motor skills.

**Keypad** - a small keyboard with a 10 key setup for numeric input used as a control for a screen reader program

**Low Tech** – indicates use of low-cost, nonelectric solutions

**Output** – information transferred from a computer or AAC system that may be printed output from a printer, visual information from the screen, or sounds from speakers



**Scanning** – a method for accessing a computer or communication device using one or more switchers (It is another method for accessing a computer or communication device using one or more switches. Scanning involves presenting a group of choices, cycling among them, and making choices by activating a switch)

**Speech Synthesizer** – hardware or software for producing electronic speech on a computer or augmentative communication device

**Sticky Keys** - a software or mechanical utility allowing typing of other multiple keystrokes with one finger (using the shift or other modifier keys)

**Switch** – a device similar to a single button of a keyboard or mouse used by an individual with severe motor difficulties by any muscle in the body (head, hand, toe, eye, breath, etc) to operate computer augmentative communication or environmental control device

**Switch Interface** – a device that connects to a computer or communication device to allow switch access

**TDD** – a telephone used for communicating typed text over a phone line and having a keyboard and text display or small printer ( BOTH parties who are communicating over a phone line must have TDDs)

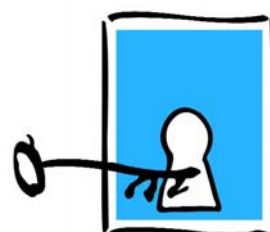
**Touch Window** – a computer input device that uses a touch-sensitive, transparent window placed on the computer screen and performs mouse functions with a finger or stylus directly on the screen

**Trackball** - a ball set within the surface of a keyboard or free-standing box that operates as a substitute for a mouse to control cursor movement

**Voice Recognition** – computer software and microphone that allows input and control with voice commands

**Word Prediction** – productivity software that increases typing speed for one-finger typists and others by predicting and choosing complete words

**Word Processor** – software for inputting and formatting text



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BUREAU OF EXCEPTIONAL EDUCATION  
AND STUDENT SERVICES

*Bambi J. Lockman, Bureau Chief*



*Commissioner John Winn, Florida Department of Education  
2006*

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This publication has been prepared by the Florida Diagnostic and Learning Resources System Assistive Technology Educational Network (FDLRS/ATEN) Coordinating Unit, Sanford, Florida through funding by the Bureau of Exceptional Education and Student Services, K-12 Public Schools, Florida Department of Education. This is one of many publications available through the Bureau of Exceptional Education and Student Services designed to assist school districts and state agencies that support educational programs and parents in the provision of special programs. For additional information on this publication or for a list of available publications, contact the Clearinghouse Information Center, Bureau of Exceptional Education and Student Services, K-12 Schools, Florida Department of Education, Room 628 Turlington Bldg., Tallahassee, Florida 32399-0400.

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