

Tools for Life: Exploring Your Assistive Technology Program, Strategies, and Solutions in Georgia

Tools for Life Center for Inclusive Design and Innovation College of Design Georgia Institute of Technology

GVRA Managers and Supervisor Training February 2019

CREATING THE NEXT®

Agenda



- ✓ Introduction to CIDI (formerly AMAC) and Tools for Life
- ✓ Guiding Principles
- ✓ Assistive Technology Strategies
- ✓ Funding Solutions and Resources
- ✓ What's New in AT Solutions and Trends
- ✓ Exploring Disability Awareness and Culture
- ✓ People First Language
- ✓ Communication and Etiquette
- ✓ Ask It Basket/Q&A

Ask it Basket



What are your questions?

Here is your opportunity!

IDEAS and **GATE**



IDEAS – June 4-7, 2019!

Conference Hosts:

- Georgia Department of Education
- Tools for Life (Georgia Tech)
- Georgia Council on Exceptional Children
- Georgia Vocational Rehabilitation Agency

Join us for Georgia's largest Assistive Technology and Education focused conference of the year!

- Over 950 attendees!
- Over 40 nationwide exhibitors!
- Over 120 educational sessions!
- On-site Assistive Technology Lab!
- Free CEUs and CRCs!
- Awards nomination!









Accessibility Made Smart



- Accessibility Consulting focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and website accessibility solutions.
- Braille Services produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.
- Captioning and Described Audio Services makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing and providing audio descriptions of videos and other visual media for those who are blind or have low-vision.
- Professional E-Text Producers provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- Certified Assistive Technology team provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.

Tools for Life (TFL)



Tools for Life (TFL), Georgia's Assistive Technology Act Program, provides Georgians of all ages and disabilities the opportunity to gain access to and acquisition of assistive technology devices and services so they can live, learn, work, and play independently in the communities of their choice.



Tools for Life Core Services



As the Assistive Technology Program in Georgia, we are charged with 7 core activities:

- 1. Information & Assistance
- 2. AT Assessments
- 3. AT Demonstrations
- 4. AT Equipment Lending
- 5. Training (Individuals & Groups)
- 6. Funding Education & Solutions
- 7. AT Reuse

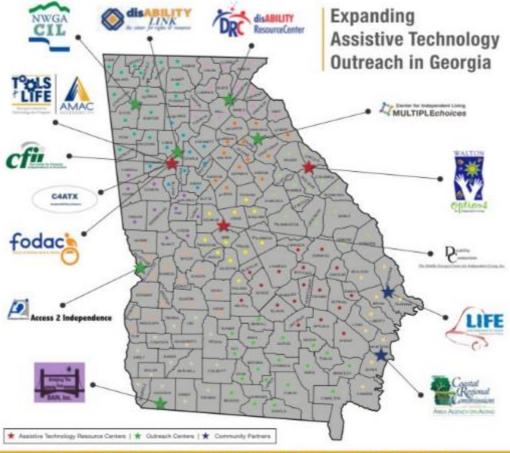
Tools for Life Website





Tools for Life Network

Assistive Technology Resource Centers, Outreach Centers, Community Partners and Affiliates



GEORGIA'S AGING & DISABILITY RESOURCE CENTERS

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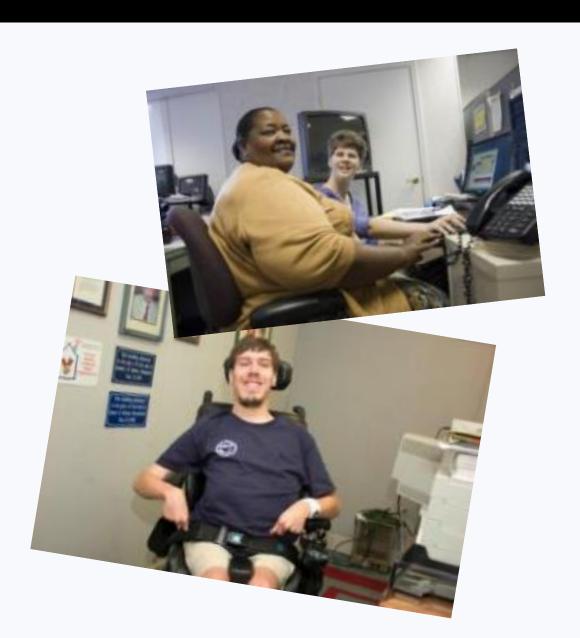
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Who Are We Serving? Every 1 in 5





- People with disabilities are the largest minority group in America
- This group cuts across racial, ethnic, religious, gender and age boundaries
- Anyone can become a member of this minority group at any time

Guiding Principle and Public Law



Disability is a natural part of the human experience and in no way diminishes the right of individuals to:

- A. live independently;
- B. enjoy self-determination and make choices;
- C. benefit from an education;
- D. pursue meaningful careers; and
- E. enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of society in the United States.

Statistics to Digest



• 14% of People with disabilities are fully employed.

16% of People with disabilities are underemployed.

70% are unemployed or out of the work force entirely.

 Adults with disabilities work fewer hours, command lower wages, and earn less annually.

Why Assistive Technology?

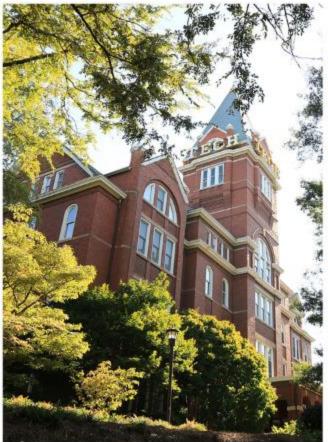


 For a person without a disability, assistive technology makes life easier.

 For a person with a disability, assistive technology makes life possible.











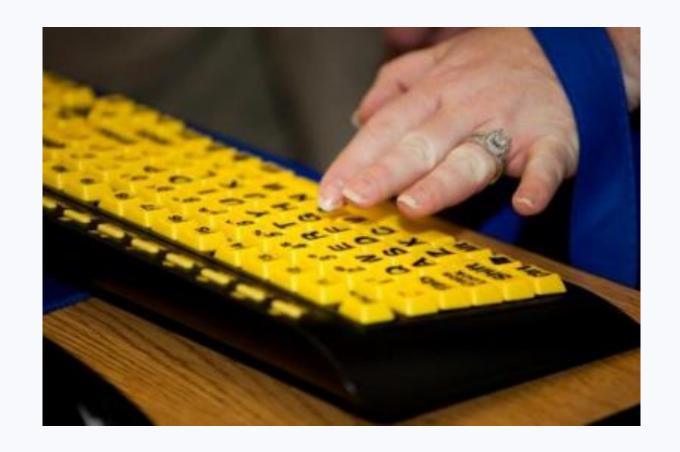
Assistive Technology Services and Strategies



What is Assistive Technology?



Assistive Technology (AT) is any item or piece of equipment that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities in all aspects of life, including at school, at work, at home, and in the community



Assistive Technology Continuum



Observations and "Hanging out with Intent"

Assistive Technology is a *continuum of* tools, strategies, and services that match a person's needs, abilities, and tasks.

Low/No-tech

- pencil grip
- adapted books
- slant board
- highlighters, tape
- magnifiers
- color coding
- read to out loud
- picture schedule
- strategies for memory
- colored transparencies
- proof readers
- note taker
- dry erase board

Mid-Tech

- word prediction
- text to speech
- speech to text
- spell checkers
- talking calculators
- digital recorders
- organizers
- e-books
- adapted keyboard
- adapted mouse
- adapted toys
- CCTV
- apps under \$100

High-Tech

- computer/laptops
- tablets/phablets
- smartphones
- smart pens
- OCR scanner/software
- magnification software
- speech output devices
- switch, joystick access
- scanning access
- voice recognition
- environmental control devices
- apps over \$100

Team Approach



- Person with the disability
- Circle of support/Family of choice
- Teachers
- Case Managers
- Technologist
- Occupational Therapist
- Speech-Language Pathologist
- Physical Therapist
- Engineer
- Neighbors
- Bus drivers



The "FAST" Track



Frustration

Anxiety

Stress

Tension

AT Assessments



Comprehensive AT assessment

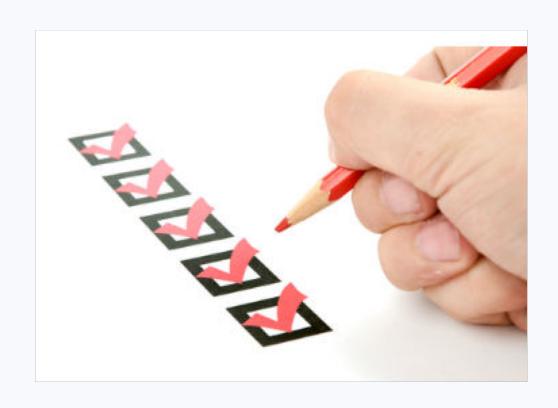
Certified AT team

\$450

• Written report and recommendations

Area of focus:

- Workplace
- Ergonomics
- Hardware/Software
- Strategies

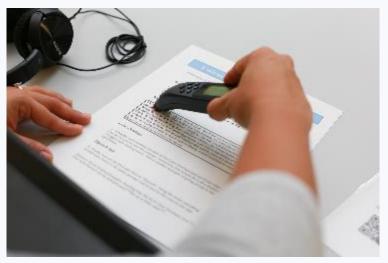


AT Demonstrations



- Free of charge!
- Learn about devices
- What will work best?
 - Assist in making informed choices
 - Consumer's choice in devices





AT Lending Library



- Try before you buy!
- Loans are usually for 3 to 4 weeks
- Training on items before borrowed, if needed



TFL AT Solution and Access Labs



- Tablets
- Vision and Hearing items
- Durable Medical Equipment (DME)
- Communication devices
- Gaming solutions
- Software
- Switches and Keyboards
- Aids for daily living
- Environmental Control/Internet of Things
- 3D printed technology





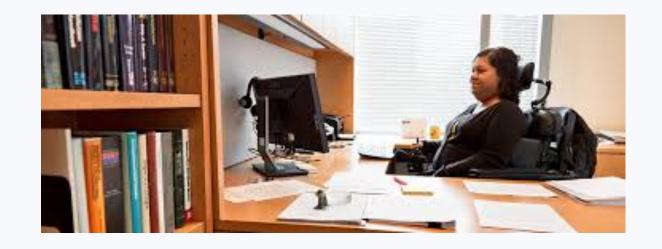


Workstations



Many options available

- Stature considerations
- Task considerations
- Needs based on injury or disability











Funding Solutions and Resources



Credit-Able

- Georgia's alternative financing program for assistive technology
- Thanks to a partnership between Center for Financial Independence and Innovation and Tools for Life







AT Loan Details

• Range: \$250-\$10,000

Length: 6 months-8 years

• **Interest**: 3%-8%





First \$TEP Program





- For Georgians with disabilities
- Small low interest loans to establish/repair credit
- Can be used for anything
- 4% interest
- \$1,000 max
- 18 months max term



Eligibility Criteria

Be a resident of Georgia

A person with a disability

or

AND

A family member/guardian of a person with a disability

or

An <u>employer</u> of a person with a disability

Able to pay back the loan

AND

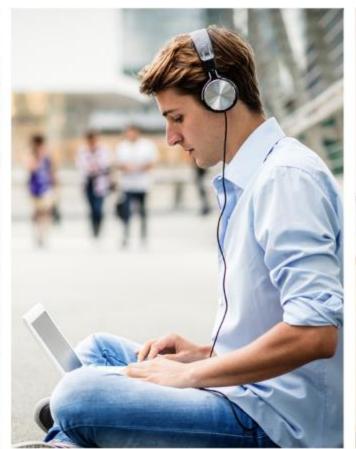
Using the loan for AT











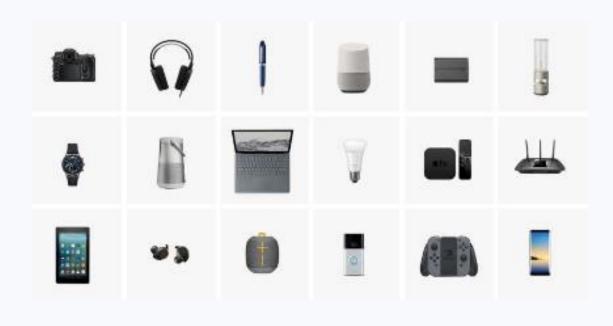


What's New in AT Solutions and Trends in the Workplace



Accommodations Specialist and Special Projects

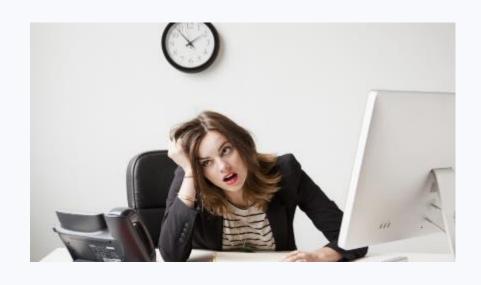




- Emerging and Cutting Edge Technologies
- Consumer Tech
 - Affordable
 - Easily acquired
 - Effective
- How can this tech be used by people with disabilities?

Bring Your Best Self to Work





Stress

- FAST Track
- Lack of Sleep
- Insufficient self care
- Lack of independence
- Lack of social outlet
- Lack of recreational outlet

Smart Home Technologies





Smart Speakers

- Google Home
- Amazon Echo
- Apple HomePod

IoT Devices (Internet of Things)

- Lights
- Security
- TV
- Other

Gaming Accessibility





- Social and Recreational outlet
- Achievements
- Benefits
 - Cognitive
 - Motor Control
 - Decision Making
 - Sense of belonging

3D Printed Technologies





- Inexpensive
 - Free to download
 - Printing Services
- Complex mechanisms
- Quick Prototyping
- www.thingiverse.com









Exploring Disability Awareness and Culture



The Importance of Disability Awareness



• There are more than one billion people with disabilities in the world who must overcome challenges every day – including stigmatization. As a society, we are all different and must recognize the importance of acceptance.

 Disability awareness is important when it comes to breaking stereotypes and overcoming preconceptions regarding disabilities.

• Learning about disabilities, the ADA, and taking part in awareness actives and events is a step towards breaking these barriers and promoting change.



disability
is often a
consequence of the
environment

What is Disability Culture?



"People with disabilities have forged a group identity. We share a common history of oppression and a common bond of resilience.

We generate art, music, literature, and other expressions of our lives and our culture, infused from our experience of disability. Most importantly, we are proud of ourselves as people with disabilities. We claim our disabilities with pride as part of our identity. We are who we are: we are people with disabilities."

Steven E. Brown, Ph.D., Co-Founder, Institute on disability Culture, Published in a 1996 issue of MAINSTREAM Magazine

Medical Model



 Under the medical model, impairments or differences should be 'fixed' or changed by medical and other treatments, even when the impairment or difference does not cause pain or illness.

 People with disabilities are to be adapted to fit into the world as it is.

• The emphasis is on dependence.

- Focus is on the impairment, rather than the needs of the person.
- Often, institution is the norm where basic needs can be met.

• Environmental and design barriers make it difficult to have a successful future whether it is in work, school, leisure and entertainment facilities, transport, training, higher education, housing or in personal, family and social life.

Social Model



- Disability is caused by the way society is organized, rather than by a person's impairment or difference.
- Views that the position of disabled people and the discrimination against us are socially created and has little to do with our impairments.
- Explores ways of removing barriers that restrict life choices for disabled people.
- When barriers are removed, disabled people can be independent and equal in society, with choice and control over their own lives.

- Traditional medical model did not explain their personal experience of disability or help to develop more inclusive ways of living.
- Encourages people with disabilities to redefine what "disability" means to them.
- Perpetuates confidence and self-esteem.

Understanding Attitudinal Barriers



 People with disabilities face many barriers every day—from physical obstacles in buildings to systemic barriers in employment and civic programs.

 Often, the most difficult barriers to overcome are attitudes other people carry regarding people with disabilities.

 Whether born from ignorance, fear, misunderstanding or hate, these attitudes keep people from appreciating—and experiencing—the full potential a person with a disability can achieve.

Types of Attitudinal Barriers



Inferiority - Because a person may be impaired in one of life's major functions, some people believe that individual is a "second-class citizen."

Pity - People feel sorry for the person with a disability, which tends to lead to patronizing attitudes.

Hero worship - People consider someone with a disability who lives independently or pursues a profession to be brave or "special" for overcoming a disability.

More Types of Attitudinal Barriers



Ignorance - People with disabilities are often dismissed as incapable of accomplishing a task without the opportunity to display their skills.

The Spread Effect - People assume that an individual's disability negatively affects other senses, abilities or personality traits, or that the total person is impaired.

Stereotypes - The other side of the spread effect is the positive and negative generalizations people form about disabilities. Aside from diminishing the individual and his or her abilities, such prejudice can set too high or too low a standard for individuals who are merely human.

Even More Types of Attitudinal Barriers



Backlash - Many people believe individuals with disabilities are given unfair advantages, such as easier work requirements. The Americans with Disabilities Act (ADA) does not require special privileges for people with disabilities, just equal opportunities.

Denial - Many disabilities are "hidden," such as learning disabilities, psychiatric disabilities, epilepsy, cancer, arthritis and heart conditions.

Fear - Many people are afraid that they will "do or say the wrong thing" around someone with a disability so they avert their own discomfort by avoiding the individual with a disability.













The Power of Language

Value Laden People First Language Helpful Tips



The Power of Language



 Language is continually evolving, and that includes language related to people with disabilities.

 Staying current is important, not to show that you are "politically correct" but to communicate effectively and with respect.



"The difference between the right word and the almost right word is the difference between lightning and the lightning bug."

Mark Twain

What is Value-Laden Language?



 What you say and write may enhance the dignity of people with disabilities or inadvertently reflect stereotypes and negative attitudes.

 Some words and phrases don't recognize the broad range of capabilities of people with disabilities.

Value-Laden Language



Promotes

Distance

Stereotypes

Pigeon-holes

Reduces sense of

Self-worth

Power

Self-direction

Value-Laden Language: Creates Categories



We vs. They

Good vs. Bad

Strong vs. Weak

High vs. Low (expectation)

Sick vs. Well

Superior vs. Inferior

Value-Laden Language: Promotes Distance



- × Abnormal
- × Afflicted
- × Burdened
- × Defect
- × Deformity
- Mute (Deaf and Mute)
- × Palsied
- × Spastic
- × Stricken with
- × Sufferer
- × Victim
- × Invalid



Accessible HANDICAPPED PARKING



Disability-Negative

- The disabled, the blind, the deaf
- Crippled, suffers from, afflicted with, stricken with, victim of, invalid
- Impaired, impairment
- Normal person, healthy, while, wheelchair bound

- People with disabilities, the disability community ("disabled" is an adjective, so much be accompanied by a noun), the blind community, the Deaf community
- Has a disability, is a person with a disability, happens to be physically disabled, walks with a cane, uses leg braces
- Has a disability
- Non-disabled, person without disabilities, uses a wheelchair



Disability-Negative

- The disabled, the handicapped
- Disabled parking
- Handicapped entrance
- Confined to a wheelchair, wheelchair bound

- People with disabilities
- Accessible parking
- Accessible entrance
- Person who uses a wheelchair, wheelchair user



Disability-Negative

- Hearing impaired, hearing impairment
- Visually impaired, visual impairment
- Dumb, mute
- Stutterer, tongue-tied
- CP victim, spastic
- Epileptic
- Fit, attack

- Deaf, hard of hearing, deaf-blind
- Low vision, blind
- Person who has a speech or communication disability
- Person with cerebral palsy
- Person with epilepsy, person with a seizure disorder
- Seizure, epileptic episode



Disability-Negative

- Crazy, lunatic, insane, nuts, deranged, psycho
- Retard, mentally defective, moron, idiot, imbecile, Down's person, mongoloid
- Slow learner, retarded
- Dwarf, midget

- People with mental health issues, mental illness, mental disability, psychiatric disability
- Has a developmental disability, person with Down syndrome
- Has a learning disability, person with a specific learning disability
- Person of small stature, short stature, little person



Disability-Negative

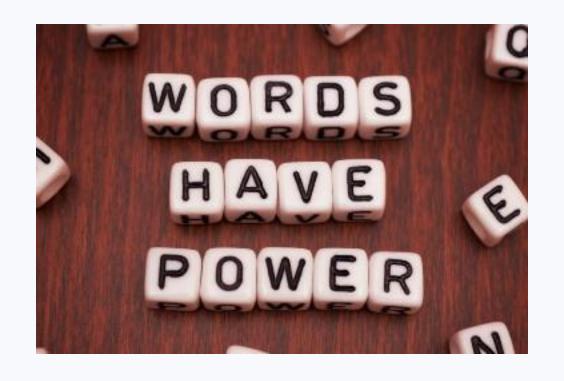
- Paraplegic, quadriplegic
- Birth defect
- Post-polio, suffered from polio
- Homebound, shut-in

- Person with paraplegia, person who is paralyzed, person with a spinal cord injury
- Congenital disability, person with a disability from birth
- Person who had polio
- Stay-at-home, hard for the person to get out

Using People First Language is Crucial



People First Language puts the person before the disability, and it describes who a person is not what a person has.



Person and Identity First Language



- Designed to stress personhood
- "person with _____" or "person who _____"
- Disability is part of a person's identity.



- Modeled after how we talk about other traits of people.
- Frequently preferred by people actively involved in disability culture, pride and advocacy.

Individual Pledge



I pledge to respect all people. I will do this by using respectful language and refrain from disrespectful, mean, discriminatory, or unjust language or actions. I will try to form meaningful, respectful relationships with people who are different from me. I will make an effort to speak out against language, actions, and situations that I see which may discriminate against or unjustly exclude certain people. I will do my best to be a force for positive change, respect, and inclusion in my community.





"The greatest discovery of my generation is that human beings can alter their lives by altering their attitudes of mind."

William James





Communication Tips

Physical Disabilities
Deaf and Hard of Hearing
Cognitive
Blind and Low Vision
Communication / AAC

General Communication Tips



- Don't be afraid to make a mistake.
- Always be respectful.
- Don't make assumptions about what a person can or cannot do. Ask before giving assistance. If you offer help and the person says "no," don't insist. If the answer is "yes," ask how you can best help, and follow directions.
- If someone with a disability is accompanied by another individual, address the person with a disability directly rather than speaking through the other person.
- Treat adults as adults.
- Expect diversity of preferences and opinions.

Communication Tips: Physical Disabilities



- Respect the individual's personal space.
 - Personal space includes a person's wheelchair, crutches, or other mobility aid. Never move someone's crutches, walker, cane, or other mobility aid without permission.
- Do not push a person's wheelchair or grab the arm of someone walking with difficulty without first asking if you can help.
- When speaking for more than a few minutes to a person using a wheelchair to find a seat for yourself so that the two of you are at eye level.
- Shake hands or hand over business cards.
 - If a person cannot share your hand or grasp your card, they will tell you.

Communication Tips: Deaf/Hard of Hearing



- Ask the person how he or she prefers to communicate.
- Before you start to speak, make sure you have the person's attention. A wave, a light touch on the shoulder, or other visual or tactile signals are appropriate ways to get their attention.
- Speak in a clear, expressive manner. Do not over enunciate or exaggerate words.
- Unless asked, do not raise your voice. Speak in a normal tone.
- Talk directly to the person who is Deaf or hard of hearing, not to the interpreter.
- If you are speaking through an interpreter, remember that the interpreter may lag
 a few words behind. Pause occasionally.

More Communication Tips: Deaf/Hard of Hearing



 To facilitate speech reading: face into the light, and keep your hands and other objects away from your mouth. Face the person directly and maintain eye contact. Don't turn your back or walk around while talking. If you look away, the person might assume the conversation is over.

 While you are writing a message for someone who is Deaf or hard of hearing, don't talk, since the person cannot read your note and your lips at the same time.

• If you don't understand something, ask the person to repeat it or write it down. The goal is communication; don't pretend to understand if you did not.

Communication Tips: Cognitive Tips



- Treat adults with cognitive disabilities as adults.
- When speaking to someone who has a cognitive disability, try to be alert to his
 or her responses so that you can adjust your method of communication if
 necessary.
 - For example, some people may benefit from simple, direct sentences or from supplementary visual forms of communication, such gestures, diagrams, or demonstrations.
- Use language that is concrete rather than abstract.
- People with brain injuries may have short-term memory deficits and may repeat themselves or require information to be repeated.

More Communication Tips: Cognitive Disabilities



- People with auditory perceptual problems may need to have direction repeated and may take notes to help them remember direction or the sequence of tasks. They may benefit from watching a task demonstrated.
- People with perceptual or "sensory overload" problems may become disoriented or confused if there is too much to absorb at once. Provide information gradually and clearly. Reduce background noise if possible.
- Don't pretend to understand if you do not. Ask the person to repeat what was said.
- In conversation, people with cognitive disabilities may respond slowly, so give them time.

Communication Tips: Blind/Low Vision



- It is appropriate to touch the person's arm lightly when you speak so that he or she knows you are speaking to him or her.
- Identify yourself when you approach a person who is blind. If a new person approaches, introduce him or her. Not everyone recognizes voices or remembers them.
- Don't shout. Most people who happen to be blind have normal hearing. Speak clearly and strongly if you know that an older blind person also has a hearing problem.
- Identify yourself when entering a room and let the blind person know when you are leaving. Don't leave a blind person talking to an empty room, or standing alone in empty space.

More Communication Tips: Blind/Low Vision



- Face the person and speak directly to him or her. Use a normal tone of voice.
- Don't assume that help is needed. Always ask before providing assistance.
- Never push, pull, or grab a blind person. This can be frightening and it's often embarrassing
- If you are offering direction, be as specific as possible, and point out obstacles in the path of travel.
- Alert people who are blind or visually impaired to posted information.
- Never pet, talk to or otherwise distract a service dog unless the owner has given you permission.
- Don't hesitate to use words like "see" and "look."
- Don't use hand signals or gestures.

Communication Tips: Communication Disabilities



- If you are having trouble understanding what is being said, ask the
 person to repeat rather than pretend you understand. The former is
 respectful and leads to accurate communication; the latter is
 belittling and leads to embarrassment.
- In conversation, people may respond slowly, so give them time.
- Don't try to finish sentences or guess what the person is saying.

Communication Tips: AAC Specific



- Acknowledge values and multiple modes of communication.
- Attend to person and not to the Alternative and Augmented Communication (AAC) system of another task.
- Ask/determine the individual's preferences in communication interactions.
 - For example: Some people may prefer that you read along as they type or read the completed message. Depending on the device it can be more convenient, especially in crowds and noisy settings.

Communication Rights



- ✓ Be spoken to with respect and courtesy.
- ✓ Be spoken to directly and not be spoken for or talked about in the third person while present.
- ✓ Have clear, meaningful and culturally and linguistically appropriate communications.

AT Helps!



Assistive Technology (AT) strategies and solutions can help support individuals with a variety of disabilities in the workplace. AT helps to bridge the gap and provide solutions to problems with:

- ✓ Speaking
- ✓ Hearing
- ✓ Seeing
- ✓ Moving around
- ✓ Getting places
- ✓ Memory
- ✓ Cognition (thought processes and understanding)
- ✓ Daily living activities, such as dressing and preparing meals
- ✓ Socializing

Ask it Basket



Here's your opportunity!

What are your questions?



Hope begins in the dark, the stubborn hope that if you just show up and try to do the right thing, the dawn will come.

Anne Lamott

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