

North Dakota

ASSISTIVE

ASSISTIVE **T**ECHNOLOGY

There Is No Impossible

TRISH FLOYD – ASSISTIVE TECHNOLOGY CONSULTANT, ATP

Learning Objectives

1. Gain knowledge about the assistive technology devices and services available to ND and MN residents
2. Understand the different areas of assistive technology
3. Know how to identify when assistive technology is beneficial

Who Are We?

North Dakota Assistive connects people of all ages and abilities to assistive technology (AT) devices and services to help them learn in school, get back to work, access the community, and live safely and more independently in the home of their choice.

Since 1993, ND Assistive has been one of the 56 AT Act programs in the United States, providing a range of AT related services to increase awareness of and access to assistive technology for people in North Dakota and Northwest Minnesota. In addition, ND Assistive administers several other state and federal contracts and delivers AT services on a fee-for-service basis.

What Do We Do?



ND Assistive's AT Consultants are available to assess individual needs and recommend assistive technology solutions. We offer short-term equipment loans, so people can try before they buy. We also provide assistance with finding funding to help get the AT devices in the hands of the people who need them. We have two Home First Demonstration Centers in Mandan and Fargo (simulated homes filled with assistive technology in every room), where people can learn how AT can help them stay in their homes longer as they age versus having to move to a more restrictive environment such as a nursing home.

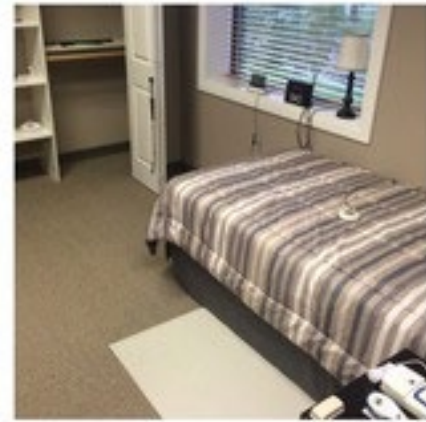


AT Equipment Demonstration Centers

- AT Education is the primary purpose of the Demonstration Centers
- Meet with an expert in AT to figure out solutions in person or via video conferencing
- No cost, no referral – appointment needed!
- Two locations:
 - Fargo
 - Mandan



Home First Demonstration Centers







AT Short-Term Equipment Trial Program

- TRY before you BUY
- Trial fees range from \$15 - \$45 dollars, plus any shipping costs
- 6 week trial period
- Provides a time to ask questions, try new things, and see what works
- For ND and MN residents
- Browse our equipment inventory: www.nd.at4all.com

Equipment Reuse Program

- Free database to buy, sell, or give away used equipment
- Long-term Equipment Loan Program
- www.nd.at4all.com

The screenshot displays the website's search interface. At the top, navigation links include HOME, MY ACCOUNT, ITEMS (highlighted), CONTACT US, and ADMIN/HELP. Below these is a search bar with the text "START HERE: Enter Keyword or Phrase" and a "Search" button. A "MENU" sidebar on the left lists: View New Items, Item Add, Place Want Ad, and Logoff. The main content area shows "30 newly listed items found" and includes filters for Category, Classification, Type, and Program. It also features a "Custom Item Report" link, a "State" dropdown set to "North Dakota (2070)", a "Sorting" dropdown set to "Listing Date: New-Old", and an "Include Expired Items" checkbox. The item listings are as follows:

Item Information	Bookmark
Pool walker - 170606 Available for Loan North Dakota Life Skills & Transition Center Grafton, ND (about 113 miles) Health care grade MJM pool walker with PVC pipe and floatation devices.	
My Critter Catcher - 170512 Available for Loan ASSISTIVE Mandan Mandan, ND (about 192 miles) Personal bug, spider and insect trap Safely catch and remove: Spiders, Roaches, Scorpions, Flies, Crickets, Stink Bugs, Millipedes, Centipedes, Wasps, Yellow Jackets, Bees, Moths and more Patented design keeps you and the insect safe – no direct contact with the bug and no mess 100% eco-friendly and chemical-free Easy to use for children, parents, and grandparents alike	
Mini Keyboard - 170485 Available for Loan ASSISTIVE Fargo Fargo, ND A mini keyboard easily connects to your PC. A mini keyboard good for users with small hands, one handed typists, or little desk space. Dimensions are 12" x 5.5"	
Mini Keyboard - 170484 Available for Loan ASSISTIVE Fargo Fargo, ND A mini keyboard easily connects to your PC. A mini keyboard good for users with small hands, one handed typists, or little desk space. Dimensions are 12" x 5.5"	

Fee for Services

- AT Assessments and Consultations
- Staff available to train groups or individuals on a diverse array of AT topics



Assistive Technology Financial Loan Program

- Loan to eligible ND residents with disabilities or their family members to purchase AT devices or services
- 2% interest rates
- Flexible terms available
- Financial loans \$1,000 - \$50,000

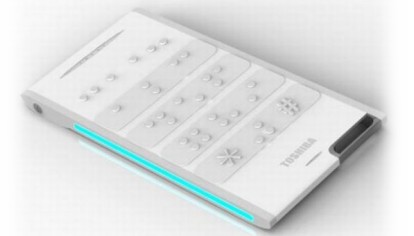
Possibilities Grant

- We raise dollars every year to help people obtain the AT devices and services they need
- If you're found ineligible for other public or private funding programs, you may be eligible for a grant
- For ND and Moorhead, MN residents



Contracted Programs

ND Assistive has several contracted services. Due to our organizational structure and staff expertise, state and private entities contract with us to deliver AT related services.



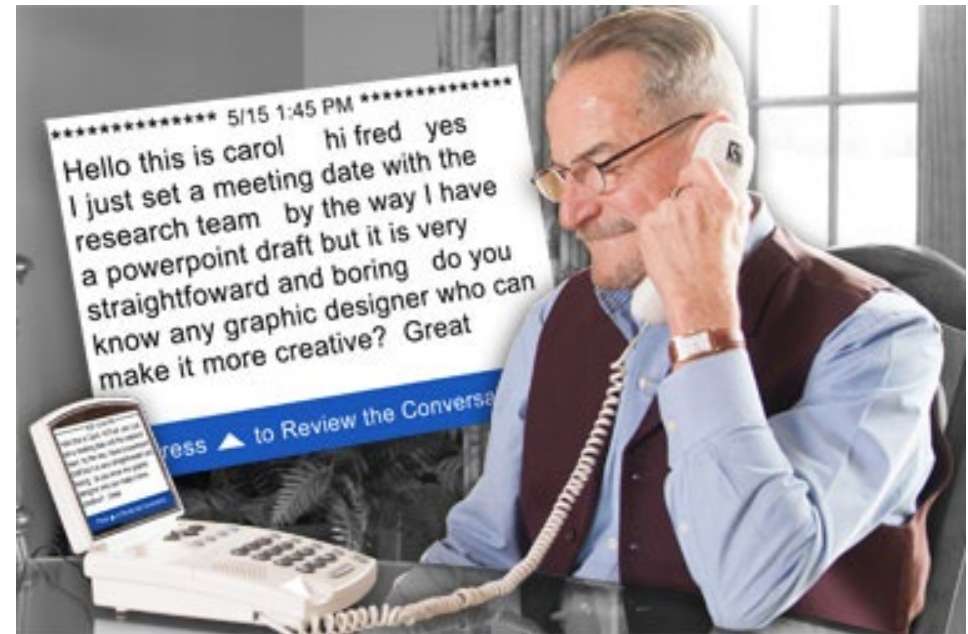
Senior Safety Program

- Provides AT that will help make daily life easier, and living at home safer
- Eligibility:
 - ND resident
 - 60 or older
 - Exhibit an economic or social need
 - At risk of having to leave your home



Specialized Telephone Program

- Provides telecommunications equipment or adaptations for those with vision, hearing, or physical disabilities that would otherwise not be able to use a phone independently.
- Eligibility:
 - ND resident
 - At least 5 years old
 - You have, or have applied for phone service in your home
 - You meet the income guidelines
 - Application required



iCanConnect

- Ensures people of low income who have combined vision and hearing loss can access the telecommunications technology necessary to connect with family, friends, and the community. www.icanconnect.org
- Eligibility:
 - Have a visual acuity of 20/200 or less in the best corrected eye, or a field loss of 20 degrees or less, or a progressive loss with a prognosis leading to one or both of these conditions;
 - Hearing – an impairment so severe that most speech cannot be understood without optimum amplification , or a progressive loss with a prognosis leading to that condition;
 - Cognition – the functional abilities that would allow for the use of telecommunications technology; and,
 - Income – has an income that does not exceed 400 percent of the Federal Poverty Guidelines.
 - Application required



Assistive Technology Reminders

1. Assistive technology is not a magic wand.
2. More assistive technology is not always better.
3. When looking for assistive technology for someone or yourself, remember that the device is not the goal – independence, learning, and safety is the ultimate goal.
4. Match the needs to the equipment, not the equipment to the need.
5. We always recommend first and foremost an assistive technology assessment by a qualified professional.
 - One who can evaluate the person as a whole, in all areas of need, so the AT recommended works together and transitions from environment to environment with the individual so that all parts of his/her life work are integrated.

Before We Begin...

This is not an exhaustive list of assistive technology solutions. It is a starting place to brainstorm solutions and learn about what has worked for others.

With each category of assistive technology, I will provide a problem and the solution(s) that solved them. All of these examples are based off of real people and their experience with assistive technology. (Not all of the names and pictures used belong to those people.)

Hearing

PROBLEM: Britney is a 9 year old girl with a severe hearing loss. It is difficult for her to understand those she is speaking with on the phone, regardless of how loud it is. She is also unaware when people knock at her door, when the phone is ringing, and when her alarm clock goes off. Britney's parents would like her to wake up for school independently. Finding an alarm clock that will wake her up is an important goal.



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SOLUTIONS:



Serene CentralAlert
\$199.95



CapTel 840
No cost through the Specialized Phone program

Hearing

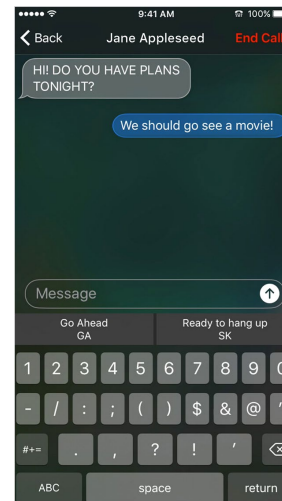
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BONUS SOLUTIONS:



Hamilton CapTel app – No Cost



iPhone's built in TTY



Serene Innovations Cell Phone Signaler with a Bed Shaker
No cost through the Specialized Phone program

Vision

PROBLEM: Lola is a 17 year old senior in high school who has Usher's syndrome. She has a mild hearing loss and some loss of her peripheral vision. Lola has plans to go to college for computer programming. She wants to go prepared with assistive technology that can aid her when her eyes get fatigued but she still wants to continue working – specifically when reading or taking notes/studying. She has already scheduled a meeting with her future university's disabilities services department to learn more about the services and accommodations available to her.



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SOLUTIONS:



iPhone Plus



iPad Pro 12.9"



No cost through the iCanConnect program No cost through the iCanConnect program

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SOLUTIONS:



Claro ScanPen app
\$3.99



Notability app
\$9.99



Seeing AI app
No Cost

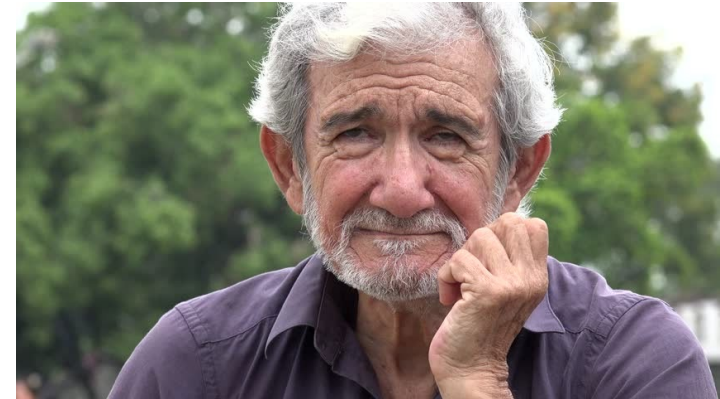


Visor app
\$1.99



Communication

PROBLEM: Ron, a 70 year old man, has Parkinson's disease. He can no longer speak louder than a whisper. His friends and family struggle to hear and understand him when they visit. This is very frustrating and disappointing for everyone – but especially for Ron.



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SOLUTION:



ChatterVox
\$285.00



Communication

PROBLEM: Seth is a 6 year old boy in Kindergarten with childhood apraxia of speech. Although his speech is constantly improving he often gets frustrated talking to adults and peers because they don't always understand him. Moreover, as school becomes more challenging, it is becoming more difficult to assess whether or not Seth is understanding the curriculum. His parents are afraid he may fall behind his peers.



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“When discussing AAC, one of the first concerns voiced by parents and caregivers is that use of AAC might prevent the child from talking, or further delay development of natural speech. In response, I refer to the excellent Cumley (2001) article included on the Apraxia-KIDSSM web site. His research demonstrated that AAC does not deter a child from using speech to communicate, if and when it is effective for him/her. Moreover, as speech increasingly becomes the primary mode of communication (with development of functional natural speech), AAC tools and strategies will be gradually phased out of the child’s communicative strategies. In fact, the child will phase out use of AAC on his/her own, when speech becomes more effective and efficient.”

- Dyann F. Rupp, M.S., CCC-SLP

Augmentative And Alternative Communication (AAC) for Children with Apraxia

<https://www.apraxia-kids.org/library/augmentative-and-alternative-communication-aac-for-children-with-apraxia/>



Computer Access

PROBLEM: Greg, a man in his 50s, has multiple sclerosis and only the use of his head. Although he has a multitude of family, friends, and the great people who take care of him throughout the day, there is still a lot of day left that is unoccupied time.

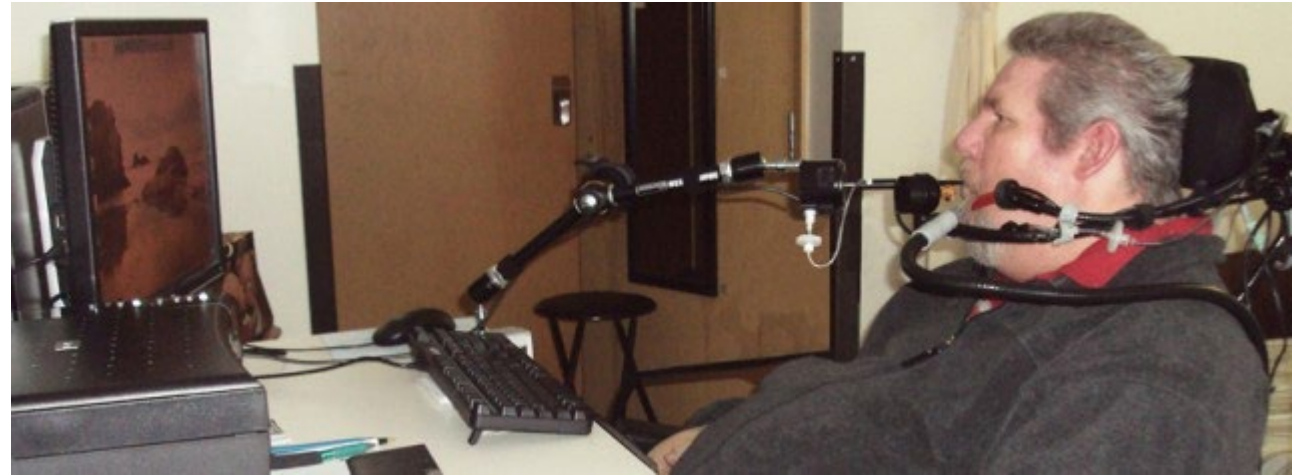


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SOLUTIONS:

1. Computer – Prices vary
 2. Jouse3 - \$1,495
 3. Onscreen Keyboard – No cost
- NOTE: Funded through the Telecommunications Equipment Distribution Program*
4. SIP/PUFF switch control
 5. RCx-1000 switch controlled phone



Computer Access

“I want people who are in my situation to know that even if one is limited to only the physical use of their mouth, you can still be FREE!!! and VERY VERY INDEPENDENT! What a GREAT FEELING!!! With this new technology, I’m on cloud nine. I never dreamed I could be so Independent while being dependent. It’s so FREEING; I LOVE IT!!!”

- Greg Rose

Computer Access

PROBLEM: Reigh is a 8 year old girl in the 2nd grade. Due to an ATV accident, her left arm was amputated below the elbow. Her class has starting learning touch typing. Reigh is learning a one-handed typing style, but complains her arm gets tired and refuses to participate.



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SOLUTION:



Mini-Keyboards
\$12 - \$20



Ergo Armrest
\$50



**Reigh's parents decided to purchase the devices so she could use them at home and year-round.*

Tablet/Smartphone Access

PROBLEM: Geraldine has ALS, little control of her hands and arms, but strong control of her head and neck. She wishes to be more independent and use a smartphone and tablet.



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SOLUTIONS:

NOTE: Funded through the Telecommunications Equipment Distribution Program and Possibilities Grant

1. iPhone 7 Plus – Accessibility – Switch Access
2. Modular Hose Mount
3. Hook+ Switch Adapter
4. X2 Specs Switches
5. iPad – Switch Accessibility and Continuity



Electronic Aids for Daily Living

The list keeps growing and growing! All of these devices can be controlled by voice or using a smartphone/tablet!



Learning, Memory, & Cognition

PROBLEM: Howard would like to start volunteering at his local community center. He plans to help out with the Meals On Wheels program by coordinating routes. Due to his memory, he is afraid he might forget information he was told over the phone.



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SOLUTIONS:



Livescribe Echo Smartpen
\$163.44



Fanstel Amplified
Speakerphone
\$110.94



Safety

PROBLEM: Austin is graduating high school in May. He has Downs syndrome and will be moving from his parents home into a house with several roommates. Austin and his parents want to make sure he has what he needs to be as safe and independent in his new home as possible. Their main concerns are emergency situations such as a fire, medication management, and the ability to check-in with Austin without being intrusive.



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SOLUTION:



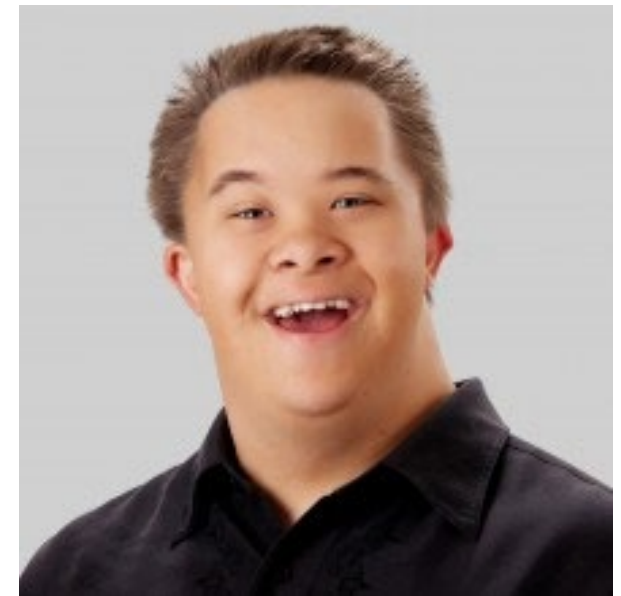
SingalOne Vocal Smoke Alarm
\$45



WatchMinder
\$79



Ring Video Doorbell
\$99



Mobility

PROBLEM: Stephanie, an avid runner and woman in her 40s, just had knee surgery. While healing she has difficulties getting in and out of her chair. She is working with a PT to maintain and build strength but getting out of chairs, especially her chair at work, is difficult. She is afraid she is going to fall and injure herself trying to get up.



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SOLUTION:



Upeasy Power Seat
\$115.25



Daily Living

So many items... so little time...

- MedReady \$149.00
- Freedom Alert \$299.00
- GizmoWatch \$179.99 2-Year Contract

Home First on YouTube: <https://www.youtube.com/channel/UC3OFIE3BsCZOUYaMAtHxWMg>

Browse our Equipment Online: <https://nd.at4all.com/>

ND Assistive on Facebook: <https://www.facebook.com/NDAssistive/>

Our Blog: <https://ndassistive.org/blog/>

AT Brainstorming Resources

ND Assistive Blog

<https://ndassistive.org/blog/>

Assistive Technology Blog

<http://assistivetechblog.com/>

WATI Assistive Technology Assessment Guides

<http://www.wati.org/>

National Assistive Technology Act Technical Assistance and Training (AT3) Center

<https://www.at3center.net/>

Assistive Technology Industry Association

<https://www.atia.org/>

FUN AT Resources

Santa's Little Hackers

<https://www.facebook.com/santashackers/>

AbleGamers

<https://ablegamers.org/>

Assistive Technology in minutes and in a cost effective way.

<https://www.youtube.com/user/ATinNH>

Ablenet

<https://www.ablenetinc.com/>

RJ Cooper

<https://store.rjcooper.com/>

Enabling Devices

<https://enablingdevices.com/>

Your Opportunity to Ask Questions!

**I HAVE NO SPECIAL
TALENTS. I AM ONLY
PASSIONATELY
CURIOUS.**

-ALBERT EINSTEIN

Contact Us!

For Applications, Appointments,
and AT information, please contact us at:

Phone: 1-800-895-4728

Email: info@ndassistive.org

Website: www.ndassistive.org

Facebook: ND Assistive