

Reuse Program Supports Wyoming Students and Families with Assistive Technology Access

Jax is an 18-year-old student at South High School in Cheyenne who enjoys watching movies, telling a good joke, and hanging out with his family. In order to engage with his family, friends, and community, Jax uses a speech generating device to increase his verbal communication. Because these devices frequently need to be recharged and occasionally require service, the Laramie County School District acquired an additional speech generating device with assistance from the Wyoming Assistive Technology Resources (WATR) device reuse program, providing Jax another critical tool for communicating his wants, needs, and interests.

The WATR device reuse program provides networking opportunities for individuals to exchange, sell, and recycle lightly-used assistive technology devices. All sale profits allow WATR to buy, update, and maintain new devices. The Dynavox speech generating device Jax acquired was added to the WATR reuse program thanks to a donation from the Amyotrophic Lateral Sclerosis (ALS) Association, Rocky Mountain Chapter.

Last March, Katie Rhoads, occupational therapist with the Laramie County School District #1 in Cheyenne, was searching for a device with similar features to his current speech generating device for Jax to trial. The DynaVox was sent to South High School, and after two weeks of use, it was evident to Jax and his teachers that the device would be a critical

back-up to the speech generating systems already in place at South High School.

The Dynavox system allows Jax to use a head-tracking mouse, a small magnetic disc placed on his forehead that can be moved with head motion to control the device. He can navigate through the pages of his communication board that have been programmed with the words and concepts most used in his home, community, and school. With these



Jax, a senior at Cheyenne South High School, navigates the pages of his communication board on his speech generating device.

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Message from the Director

We spent some time re-visioning WATR Waves and I invite you to read through this current issue and let me know your thoughts about our Wyoming assistive technology magazine and how we may be able to improve upon it.



This edition introduces our newest faculty member, Terri Wofford, who recently moved to Wyoming from Georgia. As a speech language pathologist, she will be providing the augmentative and alternative communication training and technical assistance throughout the state.

Terri joins Ryan Rausch (Occupational Therapist and Assistive Technology Professional) and Felicia Arce (Assistive Technology Professional), both of whom have recently passed the Assistive Technology Professional Certification exam. Along with Gisele Knopf (Assistive Technology Associate), this team is well-qualified and eager to help you identify the assistive technology solutions you need.

We encourage contributions from our readers. If you have an assistive technology related success story or best practices information that you would like to share with others in the state, please let us know.

As we welcome a new semester at the University of Wyoming, I hope I can share with you my optimism for the coming year and enthusiasm for what lies ahead. I encourage you to contact me or members of our faculty and staff if we can be of help.

Sandy Root-Elledge
Executive Director,
Wyoming Institute for Disabilities
Director,
Wyoming Assistive Technology Resources

Welcome, Terri Wofford

Wyoming Institute for Disabilities is delighted to welcome our new speech language pathologist, Terri Wofford, MS CCC-SLP, to the WATR team. Terri started in late August, and she brings over 19 years of experience in the field, including an extensive background in the area of Augmentative and Alternative Communication (AAC)/Assistive Technology (AT) and Autism.

Terri received a Bachelor of Science in Communicative Disorders from the University of Central Florida and a Master of Science in Communicative Disorders from East Tennessee State University.

Terri is an avid horse lover and has applied this passion to her professional work. She is a member of the American Hippotherapy Association and has provided equine assisted speech therapy services. She also has hosted a day camp that specializes in incorporating AAC within the camp setting. Terri is a Special Olympics Equestrian Coach, and she loves sharing her horse experiences with others.

Terri loves to see her clients develop functional communication skills, and she is excited to provide opportunities for professional development in AAC for practitioners across the state through the WATR program. A true cowgirl at heart, she is looking forward to exploring the western lifestyle and meeting the people of Wyoming.



Terri and Hank are ready for Wyoming.

Accessibility Features on your Smartphone

Universal design describes the form and structure of an environment or product that can be accessed by the greatest number of users, regardless of ability or age, and without the need for adaptations. With the development of personal devices such as smartphones and tablets, these devices continue to be improved with expanding capacities to meet the accessibility needs of all users.

While most people are likely familiar with making calls, texting, or accessing the internet on their phones, they might not be aware of some of the accessibility features that are built into these devices. Smartphones are available on two different platforms, the iPhone from Apple and the Google-based Android platform. Each platform offers different accessibility tools and opportunities for compatible devices.

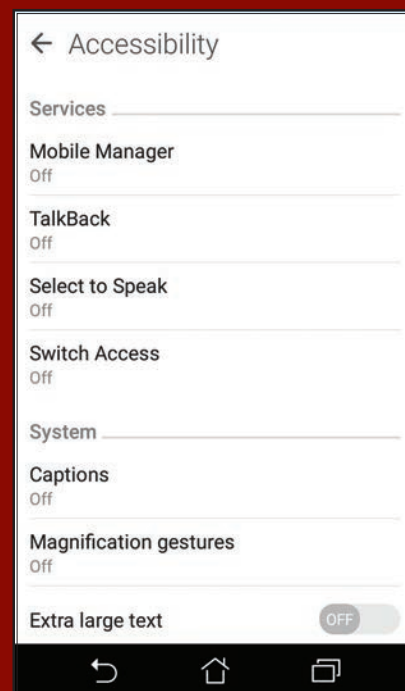
The iPhone has a wide range of accessibility features built into its operating system that may help all users, but ensure access for individuals with disabilities. For people with a visual impairment, VoiceOver provides an audio description of the screen when using the phone and taking pictures. This feature can describe facial expressions, scenes, and objects once a picture has been taken. A related feature is SpeakScreen, which provides audio for books, web pages and other documents. Another useful accessibility tool is the Hey, Siri feature, which allows a user to activate and use an iPhone hands-free and accomplish a wide range of tasks, including setting an alarm, making a call, sending a text, or even getting a restaurant recommendation.

The iPhone is also able to synchronize with other assistive technology devices. The Made for iPhone hearing aids allow users to work with their audiologist to create default settings for the microphone that allow for better sound quality in noisy environments.

Fitness tracking devices, such as the Fitbit or Apple Watch can also be paired with smartphones. While most fitness trackers are designed to track individual steps, the Workout and Activity apps now have a fitness algorithm that allows wheelchair users to track their pushes.

For users with Android phones, there are similar types of accessibility features. TalkBack allows users to hear the description of the phone screen; users can scan the smartphone screen with their finger, and TalkBack will speak the function that was selected, which can then be opened with a double tap of the finger. This can be helpful for users with a visual impairment. Another function of the Android platform is Voice Access which allows the user to control the device with spoken commands. An android phone will also allow users access to BrailleBack, an accessibility service that connects a refreshable braille display to the phone, providing a combined braille and speech experience.

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While there may be variations based on device and operating system, the images show the accessibility menus for iPhone (top) and Android (bottom).

University Community Partnership Offered through the Disability Studies Minor

By Maddie Deutsch, UW Speech-Language Pathology Student

For many UW students in the College of Health Sciences, the opportunity to engage with community providers is a valuable core learning opportunity. The undergraduate minor in disability studies offered through Wyoming Institute for Disabilities (WIND) provides a strong foundation in understanding the nature, meanings, and consequences of disability from multiple perspectives. Before attaining the minor, students are required to spend one semester working in a community environment that supports individuals with disabilities. During my third year as an undergraduate majoring in communication disorders, I was fortunate to work with the individuals and professionals at Ark Regional Services in Laramie.

brain injuries and intellectual/developmental disabilities. Ark supports and services include individual and public policy advocacy, as well as residential and vocational services that allow clients to participate in an integrated community environment. Ark offers a comprehensive array of unique services, including classes in the creative arts, general education, sign language, and therapeutic riding programs.

The Cooper Center program offers residents a great deal of choice and customization in their classes, and it allows for individualized support, care, and flexibility that is unique to a community-based organization. With this structure in place as a practicum student, I noticed a gap between functional communication and opportunities for use of Augmentative and Alternative Communication (AAC). After several conversations with Ark staff, I had the opportunity to contribute to the implementation and use of assistive technology, specifically speech generating devices, for individuals seeking to increase verbal communication in their work, life, and community environments.

Under the direction of faculty in the Division of Communication Disorders and staff at the Ark, I began working with four clients to continue to support their communication goals. The residents had previously been using iPads and were familiar and comfortable with this platform.

During the practicum, we trialed two different communication apps that were provided on client owned iPads for trials. The first app, CoughDrop, works across multiple devices and keeps content in sync from one device to the next. CoughDrop's ability to search and personalize communication boards created by other users was a useful feature. The app allowed me to supervise and modify multiple users' boards under one account. While trying the app, the students and I programmed several boards together. We included content that could be used in multiple environments, such as their schedules and directional terms.



Maddie and Rich work on programming information into his iPad.

After my placement ended, I accepted an offer of full-time employment at the Ark with the Cooper Center.

Ark Regional Services in Laramie is a community-based organization that caters to adults with acquired



The second app used for client trials was the Tobii Dynavox's Compass app. While this app did not allow use on multiple devices, it did offer a wide range of customization options, including the user's age and level of functioning. The app was equipped with pre-loaded messages, symbols, core word strategies, and supports. Although the clients found programming the boards to be more challenging, they discovered that the layout was more user friendly. In a relatively short time period, two clients were independently using the app as a means for communication repair.

One client in particular adopted the communication app with outstanding results. He regularly used the app to repair communication breakdown with staff and other clients regarding upcoming events and appointments. During the Wyoming Special

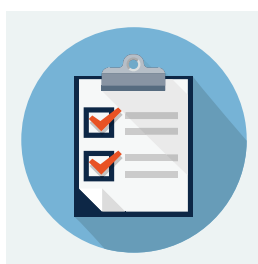
Olympics, we worked together to program the events and times for his competition. We spent time together customizing his boards to match his interests and practiced conversational repair strategies for common topics like upcoming events. In late May, a training session was held for his family and other Ark staff so that the app would be familiar to all the people in his life.

The Disability Studies minor practicum requirement provided me with the significant opportunity to be a part of the program at Ark Regional Services. It was a privilege to have the opportunity to assist with AAC devices, and as I transition from the work at Ark to the Speech-Language Pathology program at UW, I am excited to discover further how professionals can use AAC in the classroom to support and engage adult students in higher level thinking and increase the desire to expand their communication.

For more information about the Disability Studies minor program offered through the Wyoming Institute for Disabilities, please visit www.uwyo.edu/wind/disabilitystudies.

ABOUT THE DISABILITY STUDIES MINOR

Disability studies focuses on the social context of disability, stressing the importance of supporting the integration and maximum participation of individuals with disabilities in their communities. The Disability Studies practicum allows students to contribute to such strength-based pre-professional practice through the educational programs such as Ark/Cooper Center. Students are able to experience the connections between disability studies education and practice.



Your feedback on WATR services is important to us, as we work to improve service to Wyoming residents. Please take our short on-line survey and enter to win a \$25 Amazon gift card. Thank you!

<http://www.surveygizmo.com/s3/3860345/WATR-All-Activities-Survey>



ASSISTIVE TECHNOLOGY SERVICES FLOW CHART

How do you acquire information about assistive technology devices for yourself, family members, or clients to enhance life, work, and play?

Public Awareness

Information & Assistance

Contact Wyoming Assistive Technology Resources for more information on AT devices and usage.



Device Demonstration

AT professionals will demonstrate different devices according to your particular needs.



Device Loan

You can borrow devices to try at home, school, work, or play.



Device Acquisition

You can acquire the desired device or consider additional options.



Reutilization & Financing

Some devices may be acquired at little or no cost. For others, financing through Wyoming Technology Assistance Program (WyTAP) is available. Contact WATR to learn about all your device options.

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Smartphone Accessibility

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Android smartphones can also be easily synced to a smartwatch or fitness tracker. This will give users the ability to monitor their heart rate, track steps, and set vibrating alarms. These features can support an individual who may need an alternative to a sound alarm. Android watches can also be a cost-effective alternative to an Apple Watch.

The WATR staff is available for additional information on accessibility features on smartphones, tablets, and computers. Call the WATR Lab at (888) 989-9463 for information or to schedule an appointment. You can also attend Open Lab for device demonstrations and information on Wednesdays and Thursdays from 2:00 to 4:00 p.m. either in person on the UW campus or statewide by using videoconferencing technology.

Libraries Enhancing Access for Rural Neighbors (LEARN)

The Wyoming State Libraries and the Wyoming Assistive Technology Resources (WATR) are excited to launch a new statewide collaboration to enhance awareness of assistive technology (AT) and assistive technology services available to residents of Wyoming. This collaboration highlights the assistive technology devices, assistance, and demonstrations that are available through WATR and how these devices can benefit library users.

AT displays developed by WATR and Wyoming State Library staff will be on display at branches across the state to highlight various low-tech AT devices such as pencil grips, magnifying bookmarks, raised lined paper, and large print keyboard stickers. In addition, the displays will also have information available regarding various apps that can be downloaded and used on an iPad or tablet; these apps can assist patrons wanting an alternative method to access and use library materials.

Finally, patrons will have additional information regarding WATR services and contact information in order to find out more information about device demonstrations, loans, acquisition, financing and reuse. Visit your local library and/or contact WATR staff with all your assistive technology questions.



Using Voice Controlled Smart Speakers in the Home

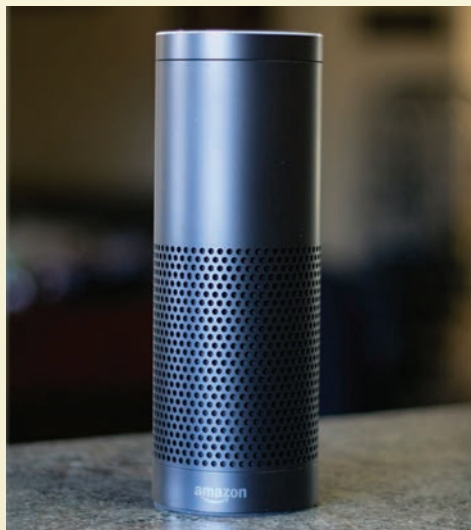
Voice controlled smart speakers have many features that can be beneficial for all individuals. From setting alarms, turning on lights, controlling the thermostat, to locking the front door, the smart speaker allows a person to perform numerous tasks with the use of voice commands. Amazon and Google are currently the only two companies making smart speakers for the mass market, although other companies are expected to enter this market soon.

Amazon has four voice controlled smart speakers in its line-up. The Echo, Echo Dot, Echo Show, and Tap come in various sizes and run off Amazon's Alexa voice recognition technology. The Echo can hear a question from any direction in a room. Using just voice commands, users can play music from various subscription services. Echo controls lights and more with compatible connected devices from WeMo, Philips Hue, Sony, Samsung SmartThings, Nest, and others.

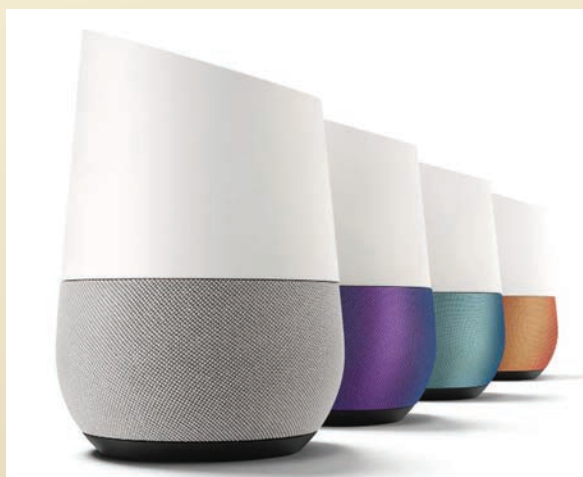
Google Home is Google's voice controlled smart speaker. Like Amazon Echo, Google Home can respond to questions or commands, including requests for information on weather, sports, local news, and more. Google Home can also play music, podcasts, or radio from various subscription services. In addition, Google Home has the capability to integrate with smart home technology using voice commands. One unique feature with Google Home is its ability to distinguish voices, providing users a more personalized experience.

In choosing a voice controlled smart speaker, there are many considerations, including compatibility with other services, portability, and appearance. Google Home integrates with Google devices such as Google's Chromecast (for television), while Amazon's Echo integrates with Amazon Audible (for audio books). Location of use is another important consideration. The Amazon Tap is a portable voice controlled smart speaker with a battery pack, allowing it to be used in multiple locations, while Google Home and Amazon Echo require an electrical outlet. Google Home has various colors while Amazon's Echo comes in black or white.

Wyoming Assistive Technology Resources is available to assist with any questions about this innovative and exciting technology.



The Amazon ECHO



Google Home is available in several color choices.

WATR Reuse Program

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technological supports, he is able to interact with his classmates and teaching staff and initiate impromptu conversations.

As Jax prepares to transition from high school to community-based opportunities, he will bring with him tools that assist him with communication, allowing him to fully participate in the activities of life, including work, family, and fun.



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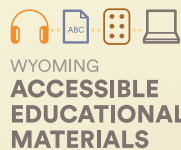
Consider making a tax deductible gift to Wyoming Institute for Disabilities Assistive Technology program. Your support will provide access to technology, devices, and training for Wyoming residents. Please visit www.uwyo.edu/giveonline.

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Located at 9th and Clark Street
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 Building, Room 151.

Parking passes available.

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