

Innovative AAC options for phones, digital media and gaming platforms

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Short Abstract

Technology is essential to nearly all aspects of life, including employment, education, leisure, and personal connectivity. However, mainstream technology platforms are often not designed with accessibility in mind for individuals with physical conditions. While these individuals may have prior experience with technology, their continued engagement relies on accessible platforms.

This presentation explores innovative features offered by the apps from the Tobii Dynavox (TD) TD Access Suite, D-Bur Join-In Accessible apps and Microsoft and Pretorian gaming accessories that allow the individual to go beyond face-to-face communication with their Alternative and Augmentative Communication (AAC) device and provide access to phones, digital media and gaming platforms.

Participants will come away with tools to identify technology needs and a deeper understanding of AAC devices' potential to enhance communication and participation in the digital world.

Long Abstract

Technology is essential to nearly all aspects of life, including employment, education, leisure, and personal connectivity. However, many mainstream technology platforms are not designed with alternative access users in mind for individuals with conditions such as cerebral palsy, spinal cord injury, or motor neuron disease. While these individuals often have prior experience with technology, their continued engagement depends on accessible platforms. Unfortunately, existing platforms for alternative access often involve cumbersome interfaces, requiring users to relearn tasks they once performed with ease on mainstream systems (Botelho, 2021).

There have been significant changes in what communication looks like and now includes exchanging information for school, work and friendships through texts, phone calls and emails; research, training and social connection in social media; engaging interests through video and photos media and gaming chat rooms (Light & McNaughton, 2012; Shane et al, 2012).

This presentation will explore some of the new innovative possibilities from the Tobii Dynavox (TD) range that someone's Alternative and Augmentative Communication (AAC) device can offer beyond face-to-face communication.

It is important to first identify the individual's technology needs through feature matching assessment with the individual and their team (SPA, 2020; Hill, 2010). This can be achieved

using questionnaires and exploring preferences. The following tools will be highlighted as useful options to help explore technology features and needs of the AAC device:

- The Identifying Client Technology Needs Rating Scale (Tobii Dynavox, 2020)
- Control Feature Checklist (Link Assistive, 2022)

This will be followed by a demonstration of the software options and case study examples of:

- The TD Access Suite, accessed with eyegaze on TD I Series devices
- The D-Bur Join In Accessible apps available for TD Communicator 5 and Smartbox Grid 3 with eye gaze, switch scanning, alternative mouse and touch access
- some Microsoft and Pretorian gaming accessories for a range of AAC device hardware and access options

The TD Access Suite is a collection of software applications designed to streamline eye gaze access to various functions. Some individuals don't want all the bells and whistles included in their AAC software. Others may struggle with the cognitive load or overwhelming nature of access to multiple technology tools and features. Singular applications take away the complexities of some of the software options and brings back the focus to one function, just for "text and phone" or just for "browsing". These tools provide simpler, more intuitive access, enhancing participation and engagement for eye gaze users. The suite includes TD Browse, an eye gaze-specific web browser, TD Phone for intuitive phone control, and TD Control, which allows comprehensive mouse control in a Windows environment.

The Join In apps from D-Bur are available on both Communicator 5 and Grid 3 software platforms and allow people with communication support needs and/or physical impairment to access the digital world. Many people are familiar with alternative ways to use social media platforms such as Facebook and streaming You Tube on their AAC devices or tablets, but D-Bur also includes options for:

- Social Network and Messengers: Instagram, WhatsApp
- Streaming Networks: Twitch, Tik Tok, Disney

A selection of these options will be shown as part of the presentation.

Computer games can also play a big part in our daily lives for access to leisure options and provide further social connections both face-to-face and in the online world. However, operating the controllers can be a barrier or make it difficult to play game (Garber, 2013)

The TD Access Suite also introduces new features for gaming. Along with gaming accessories for alternative access, individuals can now use game mainstream platforms and communicate in gaming chatrooms, highlighting the broad potential for AAC devices to enhance leisure and entertainment.

Participants in this session will come away with some useful tools for identifying technology needs and a greater awareness and understanding of app options for participation and communication in the digital world we live in.

Full reference list available on request.