

Alternative Access Methods for iOS in AAC

Stephen Williams¹

Morgan Threlfall¹

¹ Liberator

Short Abstract

This presentation explores alternative access methods for iOS in Augmentative and Alternative Communication (AAC), focusing on Eye Gaze, Head Tracking, and switch access. We will introduce a new range of innovative products such as the Versa Eye for eye-gaze/head-tracking and the Via for switch access which are iOS solutions.

The growing market for iOS-based AAC devices will be discussed, highlighting the flexibility and familiarity of the iPad platform. We will discuss the considerations for each access method in iOS, providing insights into their implementation and effectiveness.

A key focus will be on developing operational skills for alternative access. We will showcase educational tools and demonstrate how these can be utilised to build proficiency in using various access methods.

The presentation will include guidance on configuring basic settings for each access method, covering aspects such as customisation, activation, and initial setup. Videos will be used to illustrate the practical application of these technologies.

By concentrating exclusively on iOS devices, this presentation aims to provide a focused and in-depth look at the latest advancements in alternative access for AAC. Attendees will gain valuable insights into understanding different access methods within iOS, ultimately enhancing interaction capabilities and quality of life.

Long Abstract

In the rapidly evolving field of Augmentative and Alternative Communication (AAC), the integration of alternative access methods with mainstream technology has opened new avenues for including individuals with communication support needs. This presentation focuses on innovations in alternative access methods specifically designed for iOS, exploring Eye Gaze, Head Tracking, and switch access. By focusing exclusively on iOS solutions, this presentation aims to provide a detailed look at the latest advancements in alternative access for AAC (Nilsson & Durkin, 2014). Attendees will gain valuable insights into understanding different access methods for individuals with communication support needs, ultimately enhancing communication capabilities and quality of life.

In addition to discussing the emergence of iOS-native communication solutions more broadly, we will focus our attention on two specific iOS products: the Versa Eye for eye-gaze/head-tracking and the Via for switch access.

The Versa Eye represents a significant advancement in bringing eye gaze/head-tracking to iOS devices. Key features and considerations include:

- Calibration process and accuracy
- Integration with various AAC apps
- Customisation options for different AAC communicator needs
- Available eye-gaze and head tracking solutions for iOS

The Via system for iOS devices offers advanced switch access capabilities. Key features and considerations include:

- Single vs. multiple switch configurations
- Scanning patterns and customisation

Developing proficiency in using alternative access methods is crucial for effective communication (Borgestig et.al, 2016). We will explore strategies and tools for building these skills. To illustrate the practical application of each access method, we will provide video demonstrations.

Further, we will analyse the increasing preference for iOS-based AAC solutions amongst AAC communicators, their communication partners and their support teams, and highlight the advantages of using familiar, versatile, and widely available technology. The adoption of iOS devices in AAC has seen a significant increase in recent years. This shift has brought about significant advantages in terms of accessibility, familiarity, and social acceptance (McNaughton & Light, 2013). This presentation will address alternative access methods specifically designed for iOS in AAC contexts. We will delve into the unique considerations for implementing each access method via iOS, providing valuable insights for AAC communicators, practitioners, educators, and caregivers.

Strategies for developing operational skills necessary for the effective use of alternative access methods will be discussed (Burkhart, 2018). We will showcase educational tools to encourage motivation and demonstrate how they can be used to build proficiency and confidence across different access methods (Stokes & Roden, 2017).

In addition, we will provide guidance on configuring basic settings for each access method, covering aspects such as customisation, activation, and initial setup. The presentation will include videos to illustrate the practical application of these technologies, offering attendees an understanding of their implementation and potential impact.

Ultimately, it will be highlighted that the integration of alternative access methods with iOS devices represents a significant step forward in making AAC more accessible, effective, and inclusive.

References

Borgestig, M., Sandqvist, J., Parsons, R., Falkmer, T., Hemmingsson, H. (2016). Eye-Gaze performance for children with severe physical impairments using gaze-based tech – a longitudinal study. *Assistive Technology* Vol 28(2), 93-102.

Burkhart, Linda. (2018). Stepping Stones to Switch Access. Perspectives of the ASHA Special Interest Groups. 3. 33. 10.1044/persp3.SIG12.33.

McNaughton, D., & Light, J. (2013). The iPad and mobile technology revolution: Benefits and challenges for individuals who require augmentative and alternative communication. *Augmentative and Alternative Communication*, 29(2), 107-116.

Nilsson L, Durkin J. (2014). Assessment of learning powered mobility use—Applying grounded theory to occupational performance. *J Rehabil Res Dev*. 2014;51(6):963–74.

Stokes, S. & Roden, P. Establishing the key components of an eye gaze assessment for a child with a severe neurodisability using nominal group technique. *Edorium J Disability Rehabilitation* 2017(3):62-68.