

Tawasol AAC Symbols and Inclusive Education

Mada Center

The use of an Augmentative and Alternative Communication (AAC) symbol-set is vital in fostering successful inclusion of students with learning and communication disabilities within an education environment. The integration of AAC into daily school activities can lead to improve student participation and performance in the education curriculum. Strategic and effective implementation of AAC resources in education can often have relevant students acquire new knowledge and skills to meet their diverse individual needs. The Tawasol AAC symbol set serves as a critical AAC resource to offer an inclusive education environment for students in Qatar and the Arabic language speaking region by supporting the provision of inclusive Arabic and English language-based curricula.

AAC can often serve as a universal design learning tool. It has been noted that the use of a symbol-based communication system can help improve the academic growth of all students. Conveying education ideas and concepts using symbols can offer a more visual perception of the content being discussed. The use of AAC symbols can facilitates such discussion amongst all students. Effective outcomes of AAC symbols usage occurs when communication partners (students and teachers in class) are well trained to initiate communication and responses using the AAC system. This allows complete integration of the student with disability within the classroom as he/she is able to inclusively communicate with peers and offer equal level of participation in classroom activities.

Mada has and continues to collaborate with strategic partners within the Education sector to build capacity for supporting relevant students with learning and communication disabilities. This is achieved by building capacity in relevant institutions by providing AAC solutions utilizing the Tawasol Symbol set and training educationalists on strategic implementation of the solution to gain effective outcomes. The enhancement of Tawasol Symbols set is a continues endeavor by focusing on the expansion of the vocabulary set and improving its availability in various platforms (e.g. Clicker 7 Arabic, Tawasol AAC App, etc.). Recently, a series of symbols have been created to educate children using AAC symbols about the COVID-19 pandemic and steps to safeguard from it. This is part of Mada's continues effort to keep the Tawasol Symbols relevant and up to date for providing the latest inclusive educational content.

Key progression of Tawasol Symbols:

<p>Key Milestone 1</p>	<p>Tawasol Symbols Development Kick-Off</p>	<p>In 2013 MADA had embarked on a project to develop an Augmentative and Alternative Communication (AAC) symbol-set called Tawasol that focused towards the Qatari Arabic language. The project was launched in collaboration with University of South Hampton and under support funding from Qatar National Research Fund (QNRF). The project aimed at the creation of a suitable set of symbols that is culturally and contextually appropriate towards the local society.</p>
<p>Key Milestone 2</p>	<p>Online Platform</p>	<p>A dedicated online platform was been developed in 2017 to make the Tawasol symbols available for teachers, therapists, parents, and developers. The platform allows users and relevant professionals to download the symbol set for use within their environment (e.g. home, school, etc.) along with the associated training resources to utilize it.</p>
<p>Key Milestone 3</p>	<p>Application Programming Interface (API)</p>	<p>The Tawasol Symbols online platform is further extended to offer an Application Programming Interface (API) in 2018 for developers to be able to integrate the symbol set into any applications being developed. The API can be used to develop new AAC Apps using Tawasol symbols for android and iOS.</p>
<p>Key Milestone 4</p>	<p>Tawasol AAC App</p>	<p>To maximize the impact on Arabic AAC users in Qatar and the region, Mada has introduced the first fully functional Arabic AAC app using the Tawasol Symbols. The Tawasol AAC App is one of the innovative solutions supported by Mada through the Mada Innovation Program. It has been developed in 2018 by following the international guidelines governing AAC methods, as well as transforming speech models into alternative and enhanced communication by following the principles of verbal behavior and the analysis of applied behavior.</p>
<p>Key Milestone 5</p>	<p>COVID-19 Illustrations</p>	<p>In 2020, considering the COVID-19 pandemic outbreak, a set of about 30 symbols have been designed to represent a COVID-19 guide interpreting the basic hygiene and safety measures to be followed – including depiction of the typical COVID-19 symptoms, proper hand washing procedures, respiratory hygiene, and calling for medical help were the main focus of the illustrations.</p>