Case Study

OxfordLanguages

AssistiveWare and Oxford Languages

Pioneering language solutions for people who cannot speak

The Product

AssistiveWare is at the forefront of augmentative and alternative communication (AAC) and a leader in the assistive technology software market. AAC consists of methods or tools that offer communication alternatives for people who temporarily, intermittently, or permanently cannot speak. AAC covers a range of methods including gestures, facial expressions, body movements, writing or drawing on boards, and can also come in the form of high-tech options such as communication devices and applications.

AssistiveWare's Proloquo product is a next-generation symbol-based app for iOS that acts as a daily communication tool for non-speaking children, as well as working to develop key language skills.

AssistiveWare combined clinical expertise, user feedback and anonymous language data from their existing products to build Proloquo. The app presents a grid of buttons with symbols for commonly used words, enabling their users to communicate with ease.

AssistiveWare's technology sits at the core of their commitment to helping people with communication difficulties and making AAC an effective and accepted means of communication.

Find out more about Proloquo here, powered by Oxford Languages data.
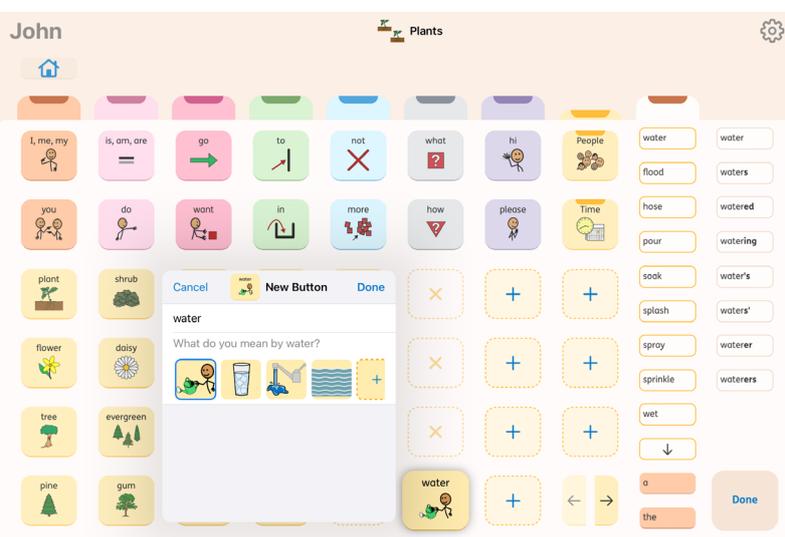
Creating a new button and selecting the right meaning with its set of semantically-linked words.
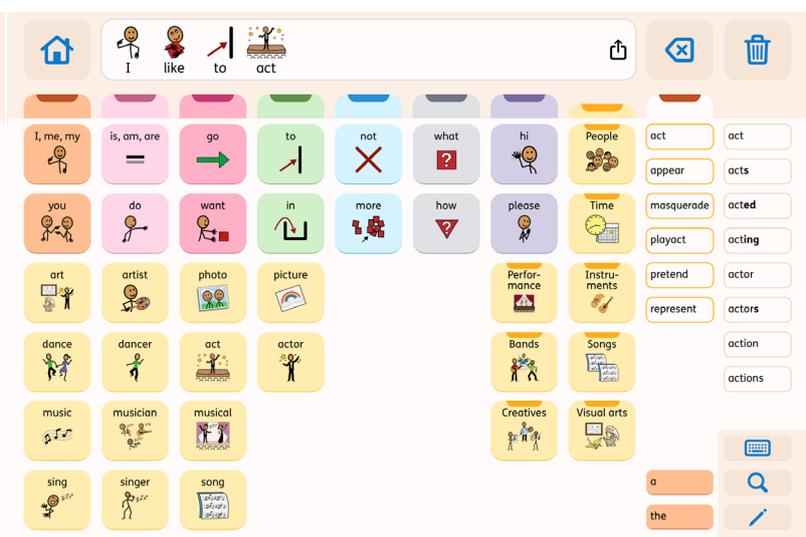
The semantically-linked words for 'act' are shown as the user builds a sentence.

The Problem

Speaking people naturally develop language skills through immersion in a language at a young age by observing, listening, and experimenting. This is known as natural language acquisition.

Non-speaking children lack the development opportunities that immersion provides, and so to support their development, they require something that replicates the experience of natural language acquisition. This can be achieved through modelling, where augmented methods of communication are shown in use.

There is a variety of AAC systems that support adults to model language. The biggest limitation of these systems is that they offer a small vocabulary. Speaking children get models of a much richer and nuanced vocabulary. Adults speak new words all the time, thereby implicitly modelling to speaking children. Exposure to new vocabulary is essential for vocabulary development.

AssistiveWare needed language data to enable their modelling process to mimic the natural language acquisition process as closely as possible.

"Oxford Languages thesaurus data was extremely valuable. It helped us identify the best semantically-linked terms to associate together.

This data combined with Proloquo's innovative design, our users can quickly and easily express nuanced thoughts. Plus, nonspeaking children can be included in exploring new words just like their speaking peers."

Erin Sheldon
Vocabulary Specialist, AssistiveWare

The Solution

As developing speech and communication goes hand in hand with language development, AssistiveWare utilizes Oxford Languages Thesaurus data in Proloquo to improve their users' experience with communication.

Non-speaking children are at a developmental disadvantage which results in a small expressive vocabulary. The broad coverage of our Thesaurus data helps AssistiveWare to bridge this lexical gap between speaking children and those who rely on AAC. It provides these children with expressive language to enrich their vocabulary and enhance their ability to communicate.

Our data enables AssistiveWare to provide nuance and specificity to the most commonly used words that appear on the symbols board, by offering a list of semantically linked word suggestions, rather than a standard list of synonyms. By offering more specific word suggestions, users are able to get their point across in a meaningful way and participate more fully in society.

Our Thesaurus data is used in the back end of the app for AssistiveWare to select the right semantically linked suggestions for each word. This is possible due to the richness and breadth of our example sentences, which provide the context needed for AssistiveWare to select the appropriate suggestions. Oxford Languages data helped their experts to identify which sense of a word with multiple meanings they would like to assign a symbol to. By dividing word groups into those that are most used and require symbols, and those that are used less often but are equally essential for depth of communication, Oxford Languages data plays a key role in developing a tool that enables stronger language, vocabulary, and literacy development.

Find AssistiveWare online:

assistiveware.com

Find Oxford Languages online:

languages.oup.com

AssistiveWare

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To find out more about how Oxford Languages data could power your products, get in touch at: **Oxford.Languages@oup.com**

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