Apps for People with Special Needs

These apps empower those with special needs… and the people who care for them.

by Kevin Sitek

Whether you're ordering food at a restaurant, describing a shoulder pain to your doctor, or telling someone you love them, communication is a daily part of life—and one we definitely take for granted. Now imagine that you couldn't speak. Scary, right? Unfortunately, this is a daily challenge for millions of people. My 3-year-old daughter Lillie has cerebral palsy and for her, communication is a daily challenge. She has no way to communicate her wants or needs unless my wife and I ask Lillie a specific list of questions which she will answer "yes" by laughing/smiling, or "no" by frowning/screaming.

Tools are available to help with the special needs/speech impaired community, but in the past, these were expensive and not very portable. Mobile consumer devices started to change this, particularly devices that let you install apps. The opening of the iPhone and iPod touch to third-party apps accelerated this change, but the smaller displays proved problematic for special needs users. It wasn't until Apple introduced the iPad that we had a near-perfect device to serve the needs of this population.

Whether you are the parent of a special needs child or a caregiver, educator, medical professional, or therapist, the iPad is revolutionizing the special needs community. Here are some of the great communication apps available in the App Store.

Switch apps

In the "special needs" sense, a "switch" is a large electronic button or another piece of assistive technology that is connected to a computer, toy, or another piece of equipment. The combination is used to communicate and reinforce a cause and effect relationship. For example, when my daughter Lillie is listening to music and hears a song she wants to play again, she taps a large button switch. This sends a signal to the computer to replay the song. Switches are a phenomenal way for individuals with special needs to communicate their wants and needs.

TapSpeak Button for iPad

$9.99 (iPad version), app2.me/3216; (iPhone/iPod touch version), app2.me/3217

TapSpeak Button adds a virtual "switch" to your iPad that lets you record and playback messages. For example, if I ask my daughter if she would like more to eat, Lillie can let me know if she does or doesn't by tapping on her desired response using the "yes" or "no" buttons on the screen. You can record an unlimited number of messages for your speech impaired child, partner, etc. The interface is very easy to use—simply select the desired message in the left-hand sidebar and

tap on the large red playback button. It's a very useful app for the visually impaired because of the high contrast between the background and the large buttons and text.

Note that you can only record messages in landscape mode. For younger or more severely impaired individuals, I'd like to have the option of selecting a message and then hiding the message sidebar so that the big red button is by itself on the screen. I'd also like to see some sort of animation included that reinforces the cause-effect relationship when the button is pressed. I think $9.99 is a little expensive for a simple app like this.

Answers: Yes No HD

$1.99 (iPad version), app2.me/3218; $0.99 (iPhone/iPod touch version), app2.me/3219

This is a great, simple switch app that lets impaired individuals respond to simple yes/no questions. The user can tap either the large "yes" or "no" button to indicate their response and have one of 5 prerecorded voices vocalize it. In addition, you can create two additional custom buttons with user-defined text and audio. The buttons are large and on a black background, perfect for someone who is visually impaired or has trouble with muscular coordination. My only gripe (and it's a big one) is that you can only create two custom buttons. If you want to create an

additional set, you have to delete the first two custom buttons. I'd like this app even more if the developer increases the number of custom buttons you can create.

Augmentative and Alternative Communication (AAC) apps

Augmentative and alternative communication is any method that supplements or replaces speech and writing when these are temporarily or permanently impaired and inadequate to meet all or some of a person's communication needs. Use of AAC involves selecting messages or codes from a set of possibilities. The user can use these elements alone or in combinations in order to communicate a variety of messages. AAC may be unaided or aided, involving high and low technology." Developers have done a great job creating AAC apps that are customizable and adaptable for individuals with special needs.

MyTalkTools Mobile

$39.99, app2.me/3220; Free "Lite" version, app2.me/3221; MyTalk Workspace subscription: $9/mo or $75/yr.

MyTalkTools Mobile enables people with communication difficulties to express their needs and desires to those around them. It consists of two parts: the app for the iPad/iPhone/iPod touch and the MyTalk Workspace, a Web-based message-building tool. You use the MyTalk Workspace on your computer to build "message boards" (which the developer calls "cells") that can be synced with the MyTalk Mobile app. You can use the app in "user" mode as a communication tool, but you can also switch to "author" mode and create messages on the fly.

The messages you create can include images, symbols, text, and audio. You can create new content on your iOS device or from the MyTalk Workspace on your desktop computer, but it's definitely much easier and faster to build message boards with Workspace and then sync them to your device. Workspace backs up all of your message boards on their servers so you never have to worry about losing them.

Both the full and free versions of the app include a 30-day free trial of the MyTalk Mobile Workspace. Continued use of Workspace after that period requires a subscription fee of $9/ month or $75/year in order to continue to create and sync your customized cells.

Proloquo2Go

$189.99, app2.me/172

Proluquo2Go is definitely the most talked about of all the AAC apps as well as the most expensive, but in my opinion it's worth every penny. It is relatively simple to use, extremely robust, and completely customizable. The amount of control over the settings is most impressive. Even the size of the buttons can be adjusted, so you can make them smaller for the speech-impaired with normal eyesight and larger for the visually impaired or individuals with motor coordination problems.

The app features text-to-speech capability with five voices built in (additional ones can be downloaded). In addition, it includes an up-to-date set of symbols frequently used by special needs individuals, automatic conjugations, and a default vocabulary database of over 7000 items that can be expanded upon. The thing that I love the most is that the developer has a supportive online community forum where you can communicate with other users (proloquo2go.com/support). In addition, the website has multiple video tutorials and even a way to contact a local assessment and resource center in your area. I could do a five-page article on this app alone—it's definitely my favorite AAC app in the App Store.

TapToTalk

Free, app2.me/3222; $99/year subscription for TapToTalk Designer tool

TapToTalk is a robust AAC app that lets you tap on an image to "speak" the word or phrase associated with it. The app itself is free but you have to subscribe for $99 a year to use the TapToTalk Designer, an online tool that lets you create your own picture and sound albums and then download them to your iPad or iPhone.
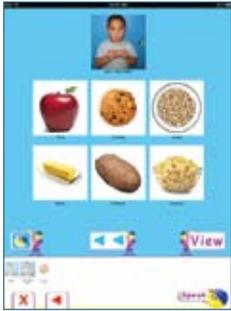
After you install the free app, the developer will send you a confirmation along with instructions on how to download three free starter albums for your device. The free albums consist of sound/picture choices for Go, Play, Hungry, Drink, Emotion, and Bathroom. Each album has 6 individual sound/picture choices. For instance, the "Go" album consists of a sound/picture for home, school, playground, shopping, movie, restaurant, and beach. A user taps one of the pictures and the corresponding sound plays. I didn't subscribe to the TapToTalk Designer online component, but from the video demos I watched, it is quite versatile and robust.

AAC SpeechBuddy

$44.99, app2.me/3223

AAC Speech Buddy app allows the user to quickly and easily create custom "PECS Speech Sets" (sets of images with associated sounds). In addition, you can select from up to six different voices to play back the audio. Once you purchase and install the

app, you can create a free "Profile ID" on the developer's website (aacspeech. com). Although the app includes basic speech sets, you can create custom sets on the website and sync them with the app or with their free desktop application.

My favorite part of the app is the website's flexibility in creating custom speech sets. You can create sentences using various pictures with captions, sync them with your device, and then have the user "speak" the complete sentences—great for speech impaired individuals.

Although this is a useful app, AAC SpeechBuddy could use an overall of the user interface. As is, it's a little confusing and hard to navigate, especially the online portion. Although the app itself is more expensive than MyTalk, there is no subscription fee associated with the online speech set builder. It's a reasonable choice if you need to keep your costs down.

iPrompts
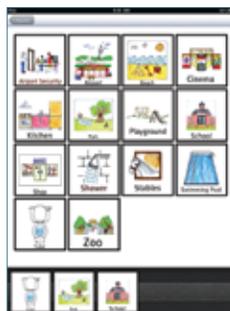
$49.99 (iPhone/iPod touch only), app2.me/3224

iPrompts allows caregivers to create schedules, countdown timers, and choice prompts accessed via pictures. It's a great way to transition individuals through their daily lives and empowers them to make choices with the task at hand. The interface is extremely easy to use and completely customizable. iPrompts comes with a pretty extensive image library that contains hundreds of illustrations and stock photos to choose from. You can also add your own images, either through the iPhone's camera or photo library, and then name them accordingly. You can create and save numerous schedules, depending on the individual's needs, and use the "First/Then" method of scheduling. My favorite feature is the "choice" option where an individual using the app can make a decision between two different choices. The app mimics laminated images affixed to modern switches that you would find in a classroom setting. Overall, iPrompts is a great app.

Grace–Picture Exchange for Non-Verbal People

$37.99, app2.me/3225

Developer's description: "A simple picture exchange system developed by and for non-verbal people allowing the user to communicate their needs by building sentences from relevant images. It can be customized by the individual using their picture and photo vocabulary with the user taking and saving pictures independently to the app."

Grace is a great app for non-verbal individuals to get their needs across by building sentences based on relevant images. The interface is very simple to navigate around. Everything is organized into 8 default categories. You can create and customize new categories by incorporating your own images through your photo library. Four things that this app needs is the ability to label any categories and images that you add, the ability to add recordings to images, the ability to add images to the default categories, and the ability to increase the size of the images for those who are visually impaired. Other than that, it's a good app for non-verbal individuals.

Text-to-speech apps

Text-to-speech apps are great for speech impaired individuals with the ability to use the keypad on the iPad or iPhone. Users type in a sentence and tap a button to have their words read out loud.

SpeakIt! Text to Speech

$1.99, app2.me/3226

This great, low cost text-to-speech app lets you type in text and have it read out loud. Simply type in a word or phrase, select a voice, and tap the Speak It! button. You can save the text-to-speech audio files for quick playback and even e-mail them to others. You can purchase additional male and female voices from a host of different countries for $.99 each from within the app.

The app could be improved if the developer added the ability to rename and better organize your audio files. As it is now, you need to use a search feature if you have more than 14 files. Still, this is a fine app, especially for the price.

Check out YouTube demos before purchasing

Since a number of these apps are expensive, I suggest searching YouTube for app demos before purchasing anything. Most of these apps have a number of video demos, reviews, and real life examples of individuals using the apps. These can help you determine if the app is right for you. If you don't see what you're looking for in this article, check out the App Store. There are many other apps that can be of help to special needs users and their caregivers. You can also check out Apple's list of Special Education apps. Open iTunes to the App Store's main page, go to "App Store Quick Links" in the right column, and select "Special Education" from the list of options.

Finally, remember that an app doesn't have to be specifically developed for special needs individuals to be of use. For example, my daughter Lillie loves the **Kids Song Machine HD** app (iPad only: $1.99, app2.me/3230). It's not your normal nursery rhyme app—definitely on the eclectic and wacky side—but it's beautifully designed and encourages Lillie to interact with the app. It's very entertaining for her. In a future issue, I will review

my favorite regular apps for the special needs community.

I want to thank the developers of the apps I mentioned in this article for answering my questions and providing me with copies of their apps. For those of you reading this, I'd love to find out how you use your iPad, iPhone or iPod touch to enrich your life or the life of a loved one with special needs. You can e-mail me your stories, questions, or suggestions at contact@lilliespad. com. You can also visit my blog (lilliespad.com) for everything related to special needs for the iPad or iPhone.

In his spare time Kevin creates apps for his own company Site K Studios, Inc. His latest app, Soccer Card SKS (soccercardsks.com), is a virtual soccer card that stores and shares players' stats and schedules. More of his app marketing articles are available on Kevin's website (kevinsitek.com/kevins-articles). kevin@sitekstudios.com.