

## **High-tech, Lo-tech or No-tech?**

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The world of Augmentative and Alternative Communication systems is in a constant state of flux. The most recent additions to this ever expanding set of tools are the iPod/iPhone apps. Some apps focus on building sentences to be shown to a listener, others function as speech generating devices (SGDs). The question for parents then becomes "What is the best option for my child?" And some of you may be asking "In a world of high and low tech gadgets, where does PECS, now categorised as a 'no-tech' system, fit in?"

The development of PECS began in 1985. In the 25 years since this time, numerous research papers have concluded that PECS and the protocols used to teach it are effective. PECS truly is an evidence-based system, with proven outcomes. Using PECS has improved communication skills, increased independence and decreased inappropriate behaviours in students of all ages across the world. Many students who use PECS eventually transition to using speech as their primary mode of communication. When this is the case, investment in a high-tech device may not be warranted until other options have been explored.

Those considering use of high and low tech devices must consider, weight, size, transportability, battery life, button size, voice output options, vocabulary size, communicative functions, cost and more. The beauty of the iPod/iPhone system is that it provides a light weight, transportable, low-cost option. With the development of applications like Grace App, it is clear that personalising the system is possible with some technical know-how. However, as with any communication system, there are a range of other issues to consider.

One of the clear advantages of PECS is that with no batteries or microchips, charging and breakdowns are not a consideration. It is often recommended that PECS is the starting point for students who will eventually transition to using an SGD. Beginning with PECS allows students to learn about communication more quickly, as the pre-requisite skills are far fewer. When this is the case, students will have the ability to develop a functional communication more quickly. For students who have learned PECS prior to SGD use, they also have ready access to a communication system if their high-tech device breaks down or runs out of charge.

Setting up a no-tech communication system like PECS is often far easier than setting up a high-tech device. One of the most important considerations when providing a communication system is how quickly the student will be able to use it. If the lead-in includes having to program or modify a device, the student may have an extended period without a functional communication system. In addition, a pre-requisite to using this type of picture point system is that the student can discriminate pictures. This again increases the time until the student is able to functionally communicate.

When considering a communication system, always think back to the definition of communication. Communication involves approaching a communication partner and delivering a message. While it is possible to teach both of these skills using high-tech devices (most effectively done through the use of techniques from the PECS protocol), it is often easier to teach these skills using a no-tech system like PECS. With no voice output, the PECS user must approach their communication partner to deliver their message, thus ensuring the skill of social approach is required.

On the whole, whether choosing a no-tech, low-tech or high-tech communication system, it is essential that communication systems are customised to best suit the individual student. When doing so, always consider what is being taught and how it will be taught. The Pyramid Approach to Education and PECS protocol provide a strong base for teaching any communication system. A focus on no-tech systems can provide a functional communication system with very little lead in. Consider starting with a no-tech system and transitioning to a high-tech system if the individual does not develop speech. This will also allow time for the newest editions to high-tech communication systems to be further developed and made more user friendly.