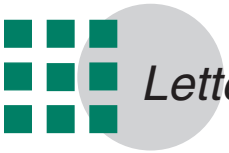

Letters to the Editor

RE: Mizuko, M. (1993). Personal computers as augmentative and alternative communication aids. *American Journal of Speech-Language Pathology 2*(3), 8–10.

Mizuko accurately points out in his article that advancements in computer technology allow laptop computers to be more easily adapted as AAC devices. Their smaller size makes them much more portable than earlier systems. They can now be fitted with a number of speech options and they also provide access to other software packages and environmental controls.

However, the process of selecting a communication device is much more than choosing a device that allows its operator to generate spoken words. The goal of providing an AAC device is to maximize the individual's ability to communicate and the device should be chosen on that basis. This choice is affected by several factors, some that relate directly to the specific hardware platform and some that do not.

The person who relies on AAC must be able to use and depend on the communication aid in various situations that are encountered in daily life. This includes the portability, durability, and accessibility of the device. The batteries should allow the operator to be independent for an entire day. The hardware should be designed to withstand the physical stress of being mounted on a wheelchair or transported on a school bus. Access to the device should be designed to take the greatest advantage of the physical capabilities of the operator. The manufacturer or provider of the device should be able to provide fast, responsive service when a technical or operational problem appears. In many cases, since dedicated devices were designed specifically to address the needs of people who rely on AAC, instead of being modifications of products designed for other purposes, these issues are addressed more directly and completely.

A properly selected communication device will provide for the language needs of the individual. Interactive communication requires both the efficient retrieval of vocabulary and the flexibility to say exactly what the individual is thinking. The language interface of a communication device needs to address both needs. The system should incorporate a proven, systematic approach for efficiently accessing a sizable vocabulary and also provide for easy customization to meet specific needs.

The best of devices, however, is of little value unless the person who uses it is well trained, both in the operation of the device and in the functional aspects of communication. The manufacturer can make assistance available through seminars, conferences, workshops, videos, and printed materials to teach the individual to operate the device. Clinical training also needs to be provided to teach the individual how to use the device as a functional communication tool in various situations.

Rather than being the focus of the issue, the hardware platform should be part of the overall solution to the needs of the individual. The communication device should become a prosthesis, a transparent tool, allowing the individual to convert thoughts into speech. People should be free to concentrate on communication rather than on the mechanics of making a device speak. This requires dependable and accessible hardware, good training, practice, and a language system such as Minspeak™, which encourages automaticity of speech generation.

Device selection decisions perhaps should be made less on the basis of an academic discussion of technology and more on the observation of the actual communication performance of other people who depend on AAC, since this is the bottom line. Fortunately, this is possible today since there are tens of thousands of people who rely on speech output AAC systems. My experience in the past 10 years of intense involvement in augmentative communication has been that those most capable of conversation are not using laptop computers but rather dedicated systems that support the Minspeak™ paradigm. It is my belief that communication potential should not be traded off for computing potential.

Dave Hershsberger
Prentke Romich Company
Wooster, OH

Response to Hershberger

In general I agree with many of the issues that Hershberger has made regarding my article. However, many of his statements regarding factors affecting the ultimate selection of a communication device are applicable to the computer-based communication aid.

I do not agree with Hershberger's discussion about interactive communication. It takes more than a communication device and a language

interface to facilitate interactive communication. Other factors, such as nonverbal communication, pragmatic skills, and cognitive skills, may contribute to this process.

One of the reasons that laptop computers have not been used widely as communication aids is that they have not been available as long as dedicated communication aids. The second reason is that many users may not be aware of the computer capabilities as communication aids, which relates to my reason for writing the original article. It is important that consumers are aware of what aids are available and their capabilities. After all, they are the ones who will be using these aids. I totally agree that the users who are capable of conversation are using dedicated systems that support the Minspeak paradigm. But what about the individuals who do not have those skills? No device will serve all of their needs. Some devices will serve others better.

It is my belief that communication potential will not be traded off for computer potential when someone uses a computer-based communication aid. I believe that you increase the communication potential as you open up other channels of communication. I do not feel that computer-based communication aids should replace dedicated communication aids; I feel that there is a place for dedicated communication aids. Ultimately, the consumer should make the choice.

Mark Mizuko
University of Minnesota, Duluth

Correction: In Mizuko's original article, the phone number for the Trace Research and Development Center should have been (608) 262-6966.