

INTRODUCTION

During my doctoral program, I was fortunate enough to work with David Yoder on the publication of "Communication Interaction Strategies for the Severely Communicatively Impaired" (*Topics in Language Disorders* 2, 1982), the first journal issue dedicated to presenting the state-of-the-art in augmentative and alternative communication (AAC). That publication was instrumental in highlighting many important topics of the time, including the role of nonverbal communication and social interaction in AAC, the influence of technology on AAC communication, vocabulary use and needs of AAC communicators, current communication assessment and intervention techniques, and the recognition of the integrity of AAC users and their communications.

During the dozen years separating the publication of the *TLD* issue and this issue of *Technology and Disability* these topics have continued to drive much AAC-related research and clinical innovation. The area of social interaction research has shed much light on the unique characteristics of the AAC communication process, communication competence, and the important role of the communication context. Vocabulary research has also been instrumental for the improvement of AAC technologies as well as for the development of clinical and educational programming in AAC. Both of these areas have provided a foundation for other important developments in AAC, including the recent work in literacy.

What wasn't clearly anticipated in the early 80s was the scope and pace with which technology impacted the AAC field. Through the availability of modern microcomputer technology, individuals who otherwise could not make themselves "heard" now have the ability to speak using a variety of artificial voices and written communication technologies. These individuals now can access thousands of words in prestored vocabularies without necessarily being able to read. With technological advancements, consumers can now access a given piece of AAC technology in a variety of ways, which is optimized for efficiency and energy expenditure. With AAC software and hardware add-ons, many individuals also can use standard microcomputers for work and leisure time activities.

However, the present level of technological advancement also presents many barriers for the AAC user. At this time, most AAC technologies are relatively large, heavy, and visibly intrusive. In order to communicate with an AAC device one must consciously type into the machine to produce a message. The less-than-natural speech afforded by speech synthesis and the slow rates of communication imposed by the technology can be problematic to social intimacy and impede communication success. Finally, new technologies also can be the source of discrimination toward individuals with physical and/or communication challenges. Human goals and values (e.g., independence, intellectual competence) can now be cast in terms of technological competencies (e.g., independent device operation). Thus, when individuals can't operate the technology provided them, they are often thought to be the source of the problem (e.g., intellectually impaired) rather than the technology (e.g., it isn't adaptable enough, technology isn't the solution). As a result of the technologically based oversight, the integrity of such individuals may be overlooked and they may be put at risk for receiving needed therapeutic services. Thus the difficult challenge for the AAC researcher, engineer, and clinician is to continue finding ways in which AAC technologies can be further developed to serve human communication needs and to remove the communication and social barriers imposed by current technological solutions. This issue of *Technology and Disability*, "The Human Face of AAC," recasts the social interaction agenda offered by Yoder and his colleagues over a decade ago by focusing on the complicated problem of how AAC technologies should be developed to meet the needs of human beings with communication challenges.

This issue of *Technology and Disability* is dedicated to our friend and colleague Gary Pooch, who will always remind us about the need to emphasize the human side of communication and interaction as we continue to construct the technological "face" for AAC communicators.

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