New AAC Technologies to Enhance Communication and Participation

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THE NEED

• More than 4 million Americans and 97 million people worldwide have complex communication needs. This includes individuals with:
  - developmental disabilities (e.g., autism spectrum disorder [ASD], cerebral palsy, Down syndrome)
  - acquired conditions (e.g., aphasia, TBI, spinal cord injury)
  - degenerative conditions (e.g., ALS, dementia)

• These individuals cannot rely on natural speech to communicate and are severely restricted in participation in education, employment, healthcare, and community living.

• Development of augmentative and alternative communication (AAC) technologies offers significant potential to:
  - enhance communication
  - increase participation
  - improve quality of life

• Traditionally, AAC technologies have utilized isolated picture symbols organized in grid displays. These are difficult to learn and use for:
  - young children with developmental disabilities
  - older beginning communicators with severe disabilities
  - adults with acquired language limitations

• Video Visual Scene Displays (Video VSDs) support communication about personally relevant events.
  - capture meaningful events, including people and activities
  - add relevant vocabulary as hotspots or as adjacent text
  - select hotspot and retrieve speech or text output to communicate messages

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References and additional information available at RERC-AAC.PSU.EDU/NIDILRR-40th/