

Response to Intervention: The Use of a Low-Tech Alternative and Augmentative
Communication (AAC) Device For Language Development
In a Child with a Traumatic Brain Injury (TBI)

Purpose: Children who suffer a traumatic brain injury (TBI) are at risk for deviations from typical cognitive development, specifically the development of language skills and communicative competence. Effective alternative and augmentative communication (AAC) interventions can facilitate improved communication in children with cognitive deficits of acquired origins. This case study sought to demonstrate the use of an AAC intervention in the vocabulary and conceptual language development of a child who experienced a severe TBI in infancy. The AAC intervention was designed to support Vermont's Alternative Assessment Portfolio requirements for the achievement of specific physical science learning goals.

Method: A single participant, age 10-11, who had prior experience with the AAC device (GoTalk9+), was provided with a nine cell display consisting of eight new vocabulary words and concepts specific to a physical science unit on electricity and magnetism. The GoTalk9+ was used during physical science exploration activities in both a one-on-one instructional setting and in an inclusive classroom setting. The adult communication partners used the System of Language model: augmenting verbal production of the target terms by selecting the appropriate word/concept and symbol from the GoTalk9+. Corrective models and verbal or gestural prompts were also employed. Data from ten events was analyzed to measure (a) the accuracy of message selection, (b) oral production following the visual and auditory model, and (3) the level scaffolding required. Additionally, the participant's engagement in the inclusive classroom environment was documented through subjective reports from the classroom teacher and individual aides. Preliminary results indicated a favorable response to intervention as evidenced by a measurable increase in several independent variables.