

The aim of the current study was to enhance communication for a middle schooler with CVI who also presented with developmental disabilities, complicating medical factors, and had limited verbal speech. Prior to the current study, the participant had received no literacy instruction. She had, in contrast, received AAC services, but was not successfully provided with an appropriate device. When the current study began, the middle schooler had access to “yes” and “no” switches that she activated by nodding or shaking her head while a facilitator held the switches on her chin and cheek, respectively. The long-term goal of the current study was for the middle schooler to learn adapted braille that she could use expressively as an orthographic, generative communicator (Light & McNaughton, 2013). The short-term goal of the study was to put communication supports into place so she could communicate more fully until she developed the necessary literacy skills to communicate orthographically.

A case study approach with a single-subject, across behaviors design was utilized (Kazdin, 2011). The goal of the literacy intervention sessions was to teach letter-sound correspondence for 9 letter-sounds. Letter tiles with large bump dots were utilized as adapted braille. The letter tiles were also linked to voice output of the sound to foster the development of orthography as an expressive means of communication. Procedures were similar to those followed by Caron and Light (2015). The adapted literacy instruction utilized by Caron and Light (2015) was further adapted to accommodate the limited vision of the current participant. The investigators worked closely with the family and vision specialist to ensure instruction was appropriate and meaningful to the participant. Words that were reported as familiar to the participant by her mother were used to represent each of the target letter-sounds based on their initial letter-sound. Related sound effects or sound clips for each of the words were also used to support motivation – a factor important to literacy learning (Adams, 1990). Each session allowed for at least twenty associations between the target letter and the target sound, as repeated exposure to this association builds mastery of letter-sound correspondence – an important precursor to decoding (Adams, 1990). Results from the study were graphed and visually inspected (Kazdin, 2011). Percent Non-overlapping Data (PND) between baseline and intervention were calculated to determine the effect of the intervention on letter-sound correspondence for the participant (Scruggs, Mastropieri, & Casto, 1987).

Results from the current study provide preliminary evidence of the efficacy of an adapted letter-sound correspondence literacy instruction for teaching letter-sound correspondence to individuals who use AAC and have CVI. Results also indicate the importance of providing interim communication supports while literacy skills continue to be provided.

Literacy should be taught to every individual who uses AAC regardless of intrinsic factors such as vision. Literacy allows for generative communication for individuals who use AAC (Light & McNaughton, 2013), and therefore is too important of a skill not to be targeted no matter how long it takes. However, supporting literacy development can be a long process for individuals with complex communication needs, including the participant in the current study. For this reason, it is critical to ensure individuals who are still developing literacy skills have access to accessible means of communication that allow for the four functions of communication

(Light, 1988). A curriculum of adapted instruction for teaching reading to individuals who use AAC and have CVI should also be developed.

Declaration of Interest: The authors disclose they have no financial or other interest in objects or entities mentioned in this paper.

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