

**Critical Review:**  
**Literacy Skill Development in Augmentative and Alternative Communication Users**

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This evaluation reviewed published works to assess the



adulthood. Their main population of interest

in order to enhance their learning and provide more opportunities to grow. Some of these recommendations included the use of graphic symbols that help comprehend words and make connections between the symbol and the meaning of the word, similarly to when students are learning how to print words. Learning to print words is one of the fundamentals first focused on before literacy development occurs, and so if there is a shift of focus to graphemic symbols, this can compensate for those limited learning experiences and allow children to develop a greater vocabulary, enhancing their writing experiences, and overall enhance literacy skills.

In order to implement these tasks, it is imperative to understand the computer systems the child is using, and programming the system to learn and recognize orthographic symbols as opposed to pictures that are pre-programmed. Changing these settings allows the learner to develop that connection between symbols and words, and one specific way the author describes this is through the use of picture books, so that the child is able to manipulate the words being presented, learning their meaning, and manipulating them into their own personally-formed sentences. One way to further develop skills is through the use of a fading program, which occurs once the basic skills are developed, by learning specific logos that represent a written word, and slowly the logos disappear, requiring the child to match the word with the corresponding symbol left over and make the connections in processing the word.

Although this paper does not discuss any concrete findings that these interventions may benefit AAC users, the information is still suggestive in the evidence since it focuses on a specific task of programming AAC devices that can be used for a specific literacy skill. Understanding the variety of AAC devices a user may have and how to use specific programs for tasks being focused on in their classroom setting is imperative to understand in order to provide the best learning experiences.

**Balkom and Verhoeven (2010)** critically reviewed papers that focus on a neurocognitive perspective to literacy development in AAC users. The perspective emphasizes the lexical processing of words through orthographic representation and output and retrieval of spoken words from the phonological output lexicon. This process thus facilitates reading through experiential learning, making meaningful relationships between words, and understanding the underlying syntactic knowledge in how letters are strung together to form words.

The authors decided to look at learning strategies of reading and writing from a cross-linguistic perspective, mainly from articles published in English, Dutch, Swedish and German.

The first paper written by Van der Schuit, Segers, van Balkom, Stoep, and Verhoeven emphasize the importance of early literacy intervention in home and school settings. Their intervention analyzed early



effective communication among all class members, understanding the best AAC systems for the specific classroom topics, engaging relationships of educational topics to personal experiences, management strategies to support communication, any constraints that may come from an AAC system on participation, and specific instructional methods for literacy development. Outlining the main areas of weakness in education of literacy is helpful to understand what the limitations of

26(3), 149-157.  
DOI:10.3109/07434618.2010.505610

Hetzroni, O. (2004) AAC and literacy. *Disability and Rehabilitation*, 26(21-22), 1305-1312, DOI: 10.1080/09638280412331280334

Light, J. & McNaughton, D. (2015). Designing AAC Research and Intervention to Improve Outcomes for Individuals with Complex Communication Needs. *Augmentative and Alternative Communication*, 31(2), 85-96, DOI: 10.3109/07434618.2015.1036458

Light, J., McNaughton, D., Weyer, M. & Karg, L. (2008). Evidence-based literacy instruction for individuals who require augmentative and alternative communication: a case study of a student with multiple disabilities. *Semin Speech Lang*. 29(2):120-32. doi: 10.1055/s-2008-1079126.

Sturm, J., Erickson, K. & Yoder, D. (2010). Enhancing Literacy Development Through AAC Technologies.