

Supplemental Material S2. Studies excluded during coding.

Study	Reason for Exclusion
Brown, K. M. (2007). <i>Initiations and responses: A comparison of two AAC interventions</i> [Thesis]. University of Kansas.	Did not report and graph session-level data
Bruno, J., & Trembath, D. (2006). Use of aided language stimulation to improve syntactic performance during a weeklong intervention program. <i>Augmentative and Alternative Communication</i> , 22(4), 300–313. https://doi.org/10.1080/07434610600768318	Nonexperimental design
Ferrara, S. M. (2005). <i>Voice output communication aids or picture communication system: The efficient way for individuals with severe disabilities to acquire communication</i> [Thesis]. California State University.	Nonexperimental design
Flores, M., Musgrove, K., Renner, S., Hinton, V., Strozier, S., Franklin, S., & Hil, D. (2012). A comparison of communication using the Apple iPad and a picture-based system. <i>Augmentative and Alternative Communication</i> , 28(2), 74–84. https://doi.org/10.3109/07434618.2011.644579	Participants were proficient in one of the compared conditions prior to the study
Ganz, J. B., Hong, E. R., Gilliland, W., Morin, K., & Svenkerud, N. (2015). Comparison between visual scene displays and exchange-based communication in augmentative and alternative communication for children with ASD. <i>Research in Autism Spectrum Disorders</i> , 11, 27–41. https://doi.org/10.1016/j.rasd.2014.11.005	Participants were proficient in one of the compared conditions prior to the study
McMurray, K. R. (2016). <i>A comparison of two types of augmentative and alternative communication systems (iPad and PECS) for children with autism spectrum disorder: The benefits of integrating assistive technology into the ASD classroom</i> [Thesis]. California State University.	Participants were proficient in one of the compared conditions prior to the study
Shaver, M. A. (2007). <i>Communicative functions, autism, and AAC</i> [Thesis]. University of Kansas.	Did not report and graph session-level data
Stasolla, F., De Pace, C., Damiani, R., Di Leone, A., Albano, V., & Perilli, V. (2014). Comparing PECS and VOCA to promote communication opportunities and to reduce stereotyped behaviors by three girls with Rett syndrome. <i>Research in Autism Spectrum Disorders</i> , 8(10), 1269–1278. https://doi.org/10.1016/j.rasd.2014.06.009	Did not report and graph session-level data

Yong Yvonne HL, Dutt, A. S., Chen, M., & Yeong, A. M. (2021). Evaluating acquisition, preference and discrimination in requesting skills between picture exchange and iPad®-based speech generating device across preschoolers. *Child Language Teaching and Therapy*, 37(2), 123–136. <https://doi.org/10.1177/0265659021989391>

Conditions were not directly compared during the intervention phase of the design