

Hetzroni, O. E. (1995). *The effect of active versus passive computer-assisted instruction on the acquisition, retention, and generalization of Blissymbols while using elements for teaching compounds*. Unpublished doctoral dissertation, Purdue University, West Lafayette. Lyle Lloyd (Advisor): 223 pages of text, 197 references, 16 appendices, 10 tables, and 15 figures.

This study investigated the effectiveness of four teaching strategies on the acquisition, retention, and generalization of Blissymbols in two phases. All treatments were conducted in a storytelling context-based paradigm. A microcomputer was used for conducting all tests, the story, and all intervention sets. In phase one, 72 nondisabled subjects were assigned to one of six groups which consisted of two control groups: (A) no treatment control group; and (B) no treatment control group with story; and four experimental groups: (I) active learning of Blissymbols implemented with teaching elements before teaching compounds; (II) passive learning of Blissymbols implemented with teaching elements before teaching compounds; (III) passive learning of Blissymbols implemented with teaching elements while teaching compounds; (IV) active learning of Blissymbols implemented with teaching elements while teaching compounds.

A repeated measures analysis of variance (ANOVA) used to analyze the data of the nondisabled preschoolers revealed that a greater number of Blissymbols were learned, retained, and generalized when active learning was present regardless of the element teaching strategy. A multivariate analysis (MANOVA) confirmed these results across element, compound, and novel compound Blissymbols. Although condition IV (i.e., active learning and teaching elements during compound instruction) was not significantly higher than the other active learning condition (condition I), it resulted consistently in higher average number of correct responses by nondisabled preschoolers.

In phase two, a modified version of the teaching strategy used in condition IV was implemented to investigate its effectiveness with three preschoolers with communication disorders using a single subject multiple baseline design across three Blissymbol sets. Results indicated that intervention was effective across the three sets. The children reached mastery and retained it during maintenance probes. Novel compounds were generalized only after learning all three Blissymbol sets. The significance of these findings and directions for future research are discussed.