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## The effectiveness of computer-assisted instruction in vocabulary learning

(Conference Paper)

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### Abstract

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The present study aimed to examine the effectiveness of computer-assisted instruction (CAI) on vocabulary learning for children with Autism Spectrum Disorder (ASD) who are non-native English speakers. A lack of educational strategies may hinder the children from benefitting the most from their education. Previous literature has demonstrated that CAI can be effective in enhancing language development. However, research on the applicability of CAI in the Malaysian context whom majority are non-native English speakers is limited. 29 children with ASD aged four to seven were recruited through purposive sampling from two branches of an autism centre. The present study employed an experimental mixed-design in which the children were assigned to two groups which are CAI and a control group (non-CAI) based on the centre they attended. The CAI group used computer with software program of First Word II while the control group received the conventional teaching instruction. Results of a 2 x 2 mixed ANOVA indicate that there were significant main effects of time (i.e., pre and post intervention) on both participants' receptive and expressive vocabulary learning. Potential explanations of these findings were discussed in this study. Implications, strengths, limitations, and recommendations for future research were also discussed. © 2018 IEEE.

### Author keywords

Autism spectrum disorder Children with autism Computer-assisted instruction Computer-based intervention Language Technology Vocabulary learning

### Indexed keywords

Engineering controlled terms: Computer aided instruction Diseases

Engineering uncontrolled terms: Autism spectrum disorders Children with autisms Computer Assisted Instruction Language Vocabulary learning

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