

Investigating the Effect of the Pedagogical Agent on Visual Attention in Attention Deficit Hyperactivity Disorder Students

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Abstract : The attention to relevance information is the key element for learning. Otherwise, Attention Deficit Hyperactivity Disorder (ADHD) students have a fuzzy visual pattern that prevents them to attention and remember learning subject. The present study aimed to test the hypothesis that the presence of a pedagogical agent can effectively support ADHD learner's attention and learning outcomes in a multimedia learning environment. The learning environment was integrated with a pedagogical agent, named Koosha as a social peer. This study employed a pretest and posttest experimental design with control group. The statistical population was 30 boys students, age 10-11 with ADHD that randomly assigned to learn with/without an agent in well designed environment for mathematic. The results suggested that experimental and control groups show a significant difference in time when they participated and mathematics achievement. According to this research, using the pedagogical agent can enhance learning of ADHD students by gaining and guiding their attention to relevance information part on display, so it can be considered as a social cue that provides theme cognitive supports.

Keywords : attention, computer assisted instruction, multimedia learning environment, pedagogical agent

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