

The Effect of Argumentation-Based Learning Environment on Promoting 6th Grade Students' Argumentation Abilities

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This study aimed to design an argumentation-based learning environment to promote the argumentation abilities of 6th grade students. Three intact classes with a total of 103 students participated in the study. The treatments lasted for eight weeks to compare the argumentation performance in three different groups: the online argumentative-based learning group (OG), the in-class argumentative-based learning group (IG), and the control group (CG). This study, which adopted a quasi-experimental design, used the Critical Thinking Test I (Yeh, 2003) for pre-test and an Argumentation Ability Test for post-test. The results showed that: a) The argumentation abilities of the students in the IG group were superior to those in the OG group and the effect size was medium. The implication revealed that the design of IG could be applied to teaching practice. b) Students' argumentation focused mainly on describing a phenomenon instead of explaining it, c) Students defended their own claims while they were in the debate, and d) Students rebut by identifying their opponents' weaknesses in arguments.

Keywords: *argumentation abilities, argumentation-based learning environment, networked learning environment,*

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