Abstract

Mathematics learning is a lesson taught in elementary schools (SD). However, currently there are still many students who still feel bored with learning Mathematics. The causal factor is that teachers do not use interesting media and use the same methods. This research aims to build a pedagogical agent, which is an animated agent with interactive capabilities that is used as a learning assistant in a virtual environment. The pedagogical agent in this research aims to help students in learning Mathematics, so as to reduce the level of student learning boredom. The system was built with the concept of rational unified process (RUP) design and pedagogical agent design using the scaffolding method. To measure the extent of the influence of implementing pedagogical agents on Mathematics learning in Elementary Schools (SD), an experiment was used using Nonrandomized Control Group Pretest-Posttest Designs with the addition of a questionnaire to measure student learning boredom. The results show that the scaffolding method using pedagogical agents has a good influence on reducing boredom in student learning.

Keywords : animated pedagogical agent, rational unified process, scaffolding, mathematics learning, Nonrandomized Control Group Pretest-Posttest Designs.