Learning Outcomes and Student's Self-Regulation in Mathematics Using Online Interactive Multimedia

Harja Santana Purba[1], Mitra Pramita[2]* , R. Ati Sukmawati[3], Delsika Pramata Sari[4], Rizaldi Aprilian[5]
[1,2,3,4,5] Computer Science Education, Lambung Mangkurat University, Indonesia
harja.sp@ulm.ac.id[1], mitrapramita92@ulm.ac.id[2]* , atisukmawati@ulm.ac.id[3,] delsika@ulm.ac.id[4],
rizaldaprilian@gmail.com[5]

Abstract

The policy of studying at home requires students to organize their learning. The ability of students to manage their own learning is also known as self-regulation learning (SRL) ability. Interactive multimedia in learning is expected to help students manage their learning independently. This study aims to describe student's SRL ability and learning outcomes in mathematics learning with the help of interactive multimedia. It is also to analyze the relationship between SRL and student learning outcomes after learning mathematics with the help of interactive multimedia. This research is descriptive that involved 274 of 7th grader students. Data were collected using tests and questionnaires. The data analysis technique used descriptive statistics and simple linear regression. The results showed that the students' average SRL in the medium category and student learning outcomes were enough. Student self-regulation learning has a positive effect on learning outcomes. Thus, interactive multimedia makes students more independent in learning to increase their self-regulation learning abilities and ultimately improve their learning outcomes. Therefore, to foster students' SRL skills, teachers can use interactive multimedia as an alternative media in learning mathematics.

Keywords: Interactive Multimedia; Mathematics Learning; Self-regulation Learning