Aplikasi kemahiran proses sains dalam pembelajaran berasaskan masalah untuk mata pelajaran biologi

ABSTRACT

The study was conducted to investigate the effect of the application of science process skills in the Problem-Based Learning approach (PBL) towards achievement in Biology as compared with the Conventional Teaching (CT). Sixty (60) four of science stream students from a school in the district of Sepang, Selangor were the subjects in this study. The data from the pre-test and post-test from the PBL and CT group were compared. The findings showed that student achievement scores from the PBL approach group (M = 2.496, SD = 0.388) were higher when compared with the overall performance of students from the CT approach group (M = 2,462, SD = 0379). The t-test analysis indicated that that the mean score of students from the PBL approach is significantly higher than students using the CT approach (t(58) = 2,522, p= .014 <.05). The PBL approach can increase student achievement in biology and can be considered to be an effective teaching strategy. The implication of this study is that the PBL approach can be looked upon as an alternative for teachers to enhance their classroom teaching strategies.

Keyword: *Problem based learning; Science process skills; Conventional learning; Teaching and learning biology; Achievement score*