

The Capability of Integrated Problem-Based Learning in Determining Students' Level of Creative-Critical Thinking.

ABSTRACT

The purpose of this paper was to report and provide evidence of positive development on physics students' thinking style focally on their critical thinking at early implementation of an integrated problem-based learning (PBL) approach. This study was performed on a cohort of 28 Physics with Electronics students from School of Science and Technology at University Malaysia Sabah. The sample was trained by the integrated PBL method for 1 semester (i.e., 14 weeks) in a Physics course (i.e., Thermodynamics). The YanPiaw Creative-Critical Thinking (YCreative-Critical Thinking) Test developed by Chua (2004) was used to identify students' level of thinking style (i.e., balanced thinking, critical thinking etc.) before and after the early implementation. The results show increasing development in students' thinking style before to after the implementation. Additionally the relations of these thinking styles with student's age were also analysed.