

**The effectiveness of PBL online on students' creativity: a case study at the
Universiti Malaysia Sabah, Malaysia**

Abstract

This paper aims at finding out the effectiveness of PBL Online on students' creativity. A cohort of 61 Physics with Electronic science undergraduate physics students from the School of Science and Technology (SST) comprised the sample. The sample was separated into experimental and control groups, with the experimental group using PBL online learning activities, and the control group more traditional learning activities. Both groups were supported via an online learning environment, which acted as the main medium for learning. Participants' creativity was evaluated using a previously validated instrument, the Torrance Test of Creativity Thinking (TTCT) administered before (pretest) and after (post-test) the intervention. Examination of these data, points to statistically significant differences between the traditional and PBL groups in creative thinking. Therefore the research findings suggest that students' creative thinking can be improved by PBL online