

Effectiveness of PBL-STEM module in physics on students' interest A preliminary finding of implementation amongst students in rural area of Sabah, Malaysia

ABSTRACT

Due to declining number of students enrolled in Science, Technology, Engineering and Mathematics education (STEM) subjects, the Ministry of Education has introduced STEM packages option for Form 4 students starting January 2020. Nevertheless, it is important to cultivate the learning interest towards STEM subjects starting from the lower form. In this study, an integrated problem-based learning Biology module called BOTANIstNJA was implemented to Form 1 and 2 of a secondary school in a rural area to gauge their interest in learning STEM subject. Total of 79 students participated in this case study related to plants, simple plant specimen activity and early career exposure as a Botanist. Three perspectives: teaching, learning, and communications skills were evaluated through questionnaires and analysed by means of frequency distribution. All students expressed "strongly agree" at 78.5%, 57.0%, and 51.9%, respectively. This result suggests the effectiveness of the integrated problem-based learning module to stimulate students' interest and shall be continued to encourage them in taking the STEM package.