

## **Evaluation of the implementation of a science project through the application of integrated stem education as an approach**

### **ABSTRACT**

Despite the growing number of resources, references, and support groups in integrated STEM education, there is a need to evaluate the implementation of these programs in school to identify the strength and problems for further improvement by the teachers and school administrators. This case study describes the evaluation of the implementation of a KSSM forms two science projects through the application of integrated STEM education as an approach. The individual science project organises and connects related concepts and skills of the STEM disciplines through engineering design practice (EDP) to solve a contextual problem based on a theme from the Sustainable Development Goals (SDG). The objectives of this study were to compare the actual and intended learning process and, to identify the strengths and weaknesses during the implementation process. Data were collected mainly from classroom observation and interviews. This study revealed that the actual process did not fully match the intended process as most of the students seem to be a lack of motivation to engage and persist through the design task. Besides, the lack of resources, tools and material, number of students, classroom setting, and the time frame may also contribute to the motivation of the students. The findings lead to suggestions to improve the implementation of similar science projects in the future.