Teachers readiness in teaching STEM education

ABSTRACT

Science, Technology, Engineering and Mathematics education (STEM) is a curriculum that aims to educate students in four specific disciplines using an interdisciplinary and applied approach. Instead of teaching the four disciplines as separate subjects; STEM education integrates them into a cohesive learning based on real-world applications. The objective of this study was to examine teacher readiness towards teaching Science, Technology, Engineering and Mathematics education (STEM). This study is carried out through a case study based on open-ended question survey done by ten participants. This study also used content analysis as its data analysis. As a result, three out of ten participants agreed that they are ready to implement STEM education because of few reasons: lack of confidence to teach subjects that are other than their expertise, lack of related teaching materials and poor condition of laboratory facilities to support STEM activities. Implication for science educators based on these results is discussed.

Keyword: Science teacher; STEM education; Teacher readiness