

Assessing secondary school students' understanding of the relevance of energy in their daily lives

Abstract

The purpose of this study was to investigate the levels of energy literacy among 276 Form 2 (Grade 8) Malaysian students as no similar study has been previously conducted in the country, as well as the contribution of students' energy-related knowledge and attitudes on their energy-related behaviors. This was a non-experimental quantitative research using the sample survey method to collect data by using the 'Energy Literacy Questionnaire' (ELQ). Independent samples t-test, Pearson product-moment correlation, and multiple linear re-gressions were used to analyse the data. The study found that levels of energy literacy were relatively low suggesting that the implemented curriculum had failed to meet the specifications of the intended curriculum that emphasises the relevance of energy-related issues to students' everyday life experiences. The authors suggest that there is a need to emphasise the importance of a context-based curriculum specifying criteria that embrace broad energy literacy with benchmarks related not just to science-related energy content but also recognizing the importance of practical energy-related knowledge, decision making skills, value judgments, ethical and moral dimensions, and issues of personal responsibility related to energy resource development and consumption in Malaysia.