Exploring Youths' Attitudes Towards STEM Integration in High School Education in Southeast Asia

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Abstract

The integration of science, technology, engineering and mathematics (STEM) into high school education has become increasingly important and has been adopted by many schools as a critical approach to pedagogy in today's fast-paced, technology-driven world. However, there is a lack of research on how youths perceive the integration of STEM in their education and how it affects their learning outcomes in these subjects. This paper explores youths' attitudes towards STEM integration in high school education and its impact on their learning outcomes. A mixed-method study that includes a survey and focus group interviews with students from high schools in Southeast Asia is conducted. The survey examines students' attitudes towards STEM integration and their perceived learning outcomes while the focus group interviews explore in greater depth their experiences of STEM integration in their education. The paper also studies the importance of integrating STEM in a more connected manner in the context of real-world issues so as to make the subjects more relevant and engaging. Drawing on existing research, I will discuss the advantages of an integrated STEM approach that touch on student interest, motivation and achievement, while acknowledging the challenges and barriers that come with the implementation of the approach.

Keywords: high school education, integration of STEM, learning outcomes, Southeast Asia, youths’ attitudes