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How to Organize a Well-Structured STEM Enrichment Program

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Abstract

Today's educational system is becoming increasingly competitive for both students and institutions especially in STEM area. As the years go by, various initiatives taken by countries all over the world to increase students' interests in choosing STEM as a career in order to meet demands of increasingly challenging curriculum in schools and universities. One of the many ways to impart students' interest in the area is through STEM Enrichment Programs. Therefore, Pusat GENIUS@pintar Negara took the initiative to organize The PERMATA-UKM Science Institute; a STEM Enrichment program where 21 secondary school students, 6 pre-university students, 6 young scientists from 4 research universities and 4 secondary school teachers (participants), hereafter are selected through a selection process by the Nobel Mindset Workshop committee to participate in this program, which is held in London. This program aims to help the participants build network with students and researchers from schools or research centers in London. This program aims to promote STEM interests among students and train the participants in the mindset to become a Nobel Laureate. The students are given the opportunity to work with the young scientists in a field of their interest. This study analyzed the students' reflection entries and interview them in order to study the impact of PERMATAUKM Science Institute in promoting students' interest in STEM career and to investigate how activities conducted in the program were effective in stimulate students' interests in STEM. This study will provide insight on the importance of a well-structured STEM enrichment program and its benefits to the students. This finding can be beneficial to the ministry of education and other stakeholders.

Keywords: STEM, enrichment programs, well-structured, organized