Creativity in mathematics: Malaysian perspective

ABSTRACT

Becoming a world-class education system is one of Malaysia's aspirations that will allow the citizens to achieve their full potential besides contributing to country advancement. One of the goals of national education is to provide human resources for the needs and progress of the country. However, Malaysia is facing a phenomenon where despite its globalization in higher education, the percentage of unemployed graduates remains high. The requirement of creativity in problem-solving is not only highlighted as an essential ability in STEM education, but also one of the important skills in the industrial field. Graduates fail to meet the employer requirement due to lack of creative skills in problem-solving which leads to difficulties in getting a job. This paper attempts to discuss this deficiency from the creative perspective and highlight the reasons why it is important to study more on creativity among our students at all level especially in the field of mathematics. It is acknowledged in Malaysia's higher education blueprint where 'improving the quality of graduates' becomes one of its top five aspirations. Students' performance in tertiary mathematics is reflected by what and how students learn in primary and secondary mathematics prior to the admittance into the university. They should have the creativity to apply, connect and synthesize all the knowledge and information that they attained from primary, secondary and tertiary level to the work field. Lack of creativity in mathematics could be one of the contributing factors for the struggle that the students encounter when faced with these transitions. Without enough resources and relevant articles on mathematical creativity research in Malaysia, this is a problem to tackle for the improvement of the future generation. The need arises for researchers and educators to start to assess and fully realize the level of mathematical creativity among the students in order for the next step on developing creativity for the future and increasing quality citizens for the sake of country's growth and development.

Keyword: Creativity; Mathematics; Mathematical creativity; Problem solving