

## **The Development and Validation of an All- Encompassing Malaysian-Based Science Process Skills Test for Secondary Schools**

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*The Malaysian Ministry of Education strongly emphasises the development of science process skills, as evidenced by the stipulation of seven basic and five integrated science process skills into the science curriculum across grade levels and scientific disciplines. As such, there is a pressing need to assess the acquisition of these science process skills amongst secondary school students on a large scale at any one time in an all-encompassing manner. This article reports on a study that aims to develop a valid and reliable Malaysian-based science process skills test for secondary schools. The generation of test items according to a set of a priori criteria or indicators, field testing involving 111 Form 2 students, and item analyses are described. The final set of items for the all-encompassing Malaysian-based science process skills test, earmarked for the main study, consists of 60 questions. It has a KR-20 reliability of 0.88, difficulty indices that range between 0.25-0.75 and discrimination indices above 0.40. These three test characteristics are within the acceptable limits for a reliable test.*

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