

A Framework for Diagnosing Dyscalculia

ABSTRACT

This paper outlines the development of mathematical items which evolves from making sense of mathematics through perception, operation, and reason. There are three main constructs in this framework, and it involves seven tests namely simple reaction time, short term memory, number sense, matching Items, dot enumeration, number comparison and arithmetic. This study is concerned with how a group of students struggle with basic numerical skills which may be caused by dyscalculia. One of the most important contributions of this study, in addition to its wider theoretical and practical applications, is that it has come out with a set of standardized instruments which is called the Malaysian Dyscalculia Instrument (MDI) for primary school students. This tool could be further used widely in the fields of psychology and education, especially special education and particularly research studies related to education.