A STUDY OF CLASSROOM ASSESSMENT STRATEGIES IN MATHEMATICS

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The Ministry of Education (MOE), Singapore, has been pushing rigorously for individual Holistic Assessments for students in Singapore's primary and secondary schools since 2008 to further improve students' learning and accomplishments. While Ratnam-Lim and Tan (2015) pointed out that the success in large-scale implementations of formative assessments practices largely depends on the implementation of such assessment methods in practice as well as the teachers' perceptions of such assessment methods, the students' assessment preferences are also a determinative factor that would shape their learning of mathematics. This study seeks to (i) fill a gap in research on students' preferred assessment strategies in the primary and secondary mathematics classrooms, and (ii) identify assessments strategies in mathematics. The study was conducted in two primary and two secondary mathematics classrooms in Singapore. A case study approach was used to identify the assessment strategies used by four mathematics teachers. Four one-hour mathematics lessons for each mathematics teacher were observed over three weeks. The teachers were interviewed immediately after the classroom observation for the researchers to gain an in-depth understanding of the teachers' perceptions of the assessment strategies identified. Both the classroom observations and interviews were audio-recorded. Interview questions included: What are the assessment strategies used in the mathematics lesson? A questionnaire, designed by the researchers, was implemented with 73 students to investigate the students' preferred assessment strategies. Results of the study show that the teacher-participants in this study used a range of assessment strategies in their mathematics instruction. Peer-assessment and self-assessment were chosen by the most number of student-participants in the primary school. Teacher-questioning and the use of performance assessment (hands-on tasks such as the use of manipulatives) were chosen by the most number of student-participants in the secondary school.

Reference