

ABSTRACT

The Selection of Problem-Solving Strategies by Standard Five Students in Solving Non-Routine Mathematical Problems

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This study examined the heuristic strategies employed by Standard 5 students at a primary school in Trinidad and Tobago to solve non-routine mathematical problems. It also examined the institutions that have contributed to the students' existing repertoire of heuristic strategies. Data were collected through task-based interviews with a sample of 12 Standard 5 students and three teachers, as well as through a series of non-routine mathematical problems administered to the students. The results of the study indicated that the students demonstrated confidence when using only a narrow range of heuristic strategies. The teachers were not aware of the particular strategies employed by the students. It was also found that the school and the home were the only institutions that influenced learning and the development of heuristic strategies among the students.

Keywords: Primary school students, Mathematics education; Problem-based learning; Learning skills; Case studies; Trinidad and Tobago.