Problem Solving Strategies of Malaysian Secondary School Teachers

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Abstract
Higher order thinking skills are needed for problem-solving which is the highest level of cognitive knowledge. However, studies seem to indicate that Malaysian students lack problem solving and higher order thinking skills. Teachers do not seem to inculcate higher order thinking skills for problem solving. The purpose of this study is to investigate the problem solving strategies teachers use during instruction. A total of 131 science secondary school teachers in a selected state in Malaysia were surveyed to determine the strategies used. The results indicate that teachers prefer teaching facts, and asking students to listen to the teachers’ explanation. The dominant problem solving strategy teachers use is making analogies to similar problems. Further research is required to develop instructional models with strategies for problem solving in the Malaysian context. This will enable teachers to use the model to develop higher order thinking among students.

Keyword: problem solving, problem solving strategies, instructional models, analogy, higher order thinking

INTRODUCTION

Problem solving is not an easy task as it requires higher order thinking skills. In Bloom’s taxonomy, problem solving is categorised at the highest level of cognitive knowledge (Dick, Carey & Carey, 2014). Problem solving is an important skill as it enables students to
modeling so that there can make hypothesis, and conduct experiments to test their hypothesis. This may be useful for developing a thinking nation who are able to solve problems in their studies and at the workplace.

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REFERENCES


