

REFLECTION OF PROBLEM SOLVING SKILL IN LIFE AND MATHEMATICS EDUCATION THROUGH MODELING AND APPLYING

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Date Received: 06/07/2018

Date Revised: 16/09/2018

Date Accepted: 22/10/2018

ABSTRACT

Problems are part of our lives. It causes stress, tension, emotional instability, and physical strain to us. It is very essential to deal with our problems before they deal with our happiness. Problem solving skill is an irreplaceable life skill and it is cognitive or thinking activity essential to our day-to-day lives. In order to lead a satisfied life, the skill of problem solving is essential. The problem solving skill requires some abstract thinking to arrive at a clear solution. This skill is not only a math skill, but also a skill used in every subject and in all aspects of life. Problem-solving skill is very crucial one whether in the field of teaching mathematics or in the daily life of any individual. This competency reflects two main categories of activities, namely modelling and applying, the transition from reality to mathematics, and the transition back from mathematics to reality. This study aims at investigating how problem solving skill in mathematics can be applied to real life and problem solving skill in reality can be modelled in mathematics. Thus, the significance of the current study lies in that, it attempts to reveal how problem solving ability helps individuals or group to meet their challenges in mathematics learning environment and their real life situations. This paper explores how mathematics education is able to solve problem in real life. Also there is a need for teachers to establish a proper teaching plan involving problem solving ability suitable for students' learning process. Thus it addresses problems in mathematics education and real life and helps to foster problem-solving skills in the context of mathematics learning and real-life.

Keywords: Problem Solving Skill, Mathematics Education, Modelling, Applying.

INTRODUCTION

Humans are extraordinarily adaptable creatures. To lead a meaningful life, everyone needs life skills. Life skills are psychological and social competencies that facilitate transformation in cognitive, affective, and psychomotor domains of individuals into healthy and productive behaviours for leading a successful life. Life presents many challenges with an individual or group. The unresolved problems in life can cause mental stress and give rise to physical strain. So in order to overcome the hurdles or problems of life, problem solving skill is needed. The skill of problem solving is one of the most paramount skills in a fast moving life. Problem solving helps us to handle problems in our lives effectively (University of Kent, 2017).

The problem-solving strategies taught in educational institutions whether schools and universities, needs only finding and applying the correct formulae or strategy to answer well-structured, algorithmic problems. So most of the students struggle when they face complex and unstructured problems in their real life. Solving complex real-life problems require deep, organized conceptual understanding, relevant procedural knowledge, and meta-cognitive strategies that allow one to formulate potential solution strategies, implement a course of action, and reflect on the viability of their solution from multiple perspectives.

Mathematical problem solving is the most important aspect of teaching mathematics. According to Bereiter