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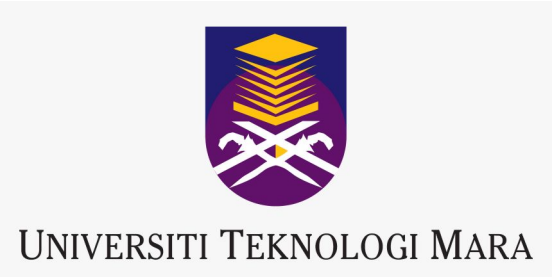

SCIENCE PROCESS SKILLS IN RELATION TO STUDENTS' ACHIEVEMENT: A CASE STUDY IN SK SAMARAHAN ESTATE, SERIAN

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ABSTRACT

Science Process Skills are the basis to learn Science and to practice inquiry-based learning. Additionally, Science Process Skills are interlinked with each other and if not fully mastered, it is difficult to tell apart between each of those skills. This research is aimed to identify types of Science Process Skills structure questions in Section B that students have difficulty in. Both quantitative and qualitative research methodologies were utilized in this research. The qualitative data for the research comes from a questionnaire. Meanwhile, the quantitative data were obtained from mid-year and end of the year exam paper. The findings revealed that students are generally weak and average in their SPS mastery in answering the structure questions in Section B. Students were good in interpreting data. However, they were very weak in the making inferences. The results of this research have provided some implications for the teaching of the Science in Malaysia. This action research concludes with a discussion of the findings and recommendations for future research.

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CHAPTER 1: INTRODUCTION

1.0 Introduction

As articulated in the National Education Policy, education in Malaysia is an on-going effort towards developing the potential of individuals in a holistic and integrated manner to produce individuals who are intellectually, spiritually, emotionally, and physically balanced and harmonious (Curriculum Development Centre, 2006, p. 1). And thus, the primary and secondary school science curriculum is developed with the aim of producing such individuals, as stated in the Curriculum Development Centre (2006, p. 1). It is the hope of our nation that at the end of their school year, they will become balanced individuals comprising of intellectual, spiritual, emotional, and physical elements.

Apart from that, the Science curriculum in Malaysia has been designed to provide opportunities for students to acquire scientific knowledge and skills, develop thinking skills and thinking strategies, and to apply the knowledge and skills learnt in everyday life. For example, one of the skills in the Science Process Skills (SPS) is 'Classifying'. Students have the chance to recognize characteristics, similarities, and differences. In their everyday life, they can sort and group fruits and plants according to similarities and differences.

Science process skills (SPS) and manipulative skills are the two main components in these scientific skills. In the Malaysian context, the SPS are categorized into seven basic science process skills (BSPS) and five integrated science process skills (ISPS). The seven BSPS are observing, classifying, measuring and using numbers, inferring, predicting, communicating, and using space/time relationship (see Appendix A).