



UNIVERSITI TEKNOLOGI MARA

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**THE EFFECTIVENESS OF LEARNING SCIENCE  
USING INQUIRY-DISCOVERY IN IMPROVING  
PUPIL UNDERSTANDING AND ACHIEVEMENT:  
A CASE STUDY AMONG YEAR 5 AT  
SK SUNGAI BULU SENANGEH ASAJAYA  
SARAWAK**

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## **ABSTRACT**

The purpose of this study was to identify the effectiveness using science inquiry-discovery improving pupils understanding among Year 5 in SK Sungai Bulu Senangeh Asajaya Kota Samarahan. Fourteen students were involved in this study. Previous study show the science inquiry-discovery method was able to enhance achievement among students. The result of this study revealed that there is a significant difference between pre-test and post-test result, indicating that the intervention using the implementation of science inquiry-discovery was successful. In addition, the students also gave positive feedback on the implementation of the using science inquiry-discovery method. They agreed that using science inquiry-discovery method was able to enhance achievement. The conclusion of this study revealed that inquiry-discovery is an effective compare traditional method.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

Malaysia's vision is to become a developed nation by 2020. To achieve this, we need more manpower with expertise in various aspects including expertise in science and technology. Standard Curriculum for Primary Schools aim to produce a balanced, creative thinking, critical and innovative based through communication, science and technology, physical and aesthetic development, personal skills, humanity and spirituality, attitude and values.

Standard Curriculum for Primary Schools based on the National Education Philosophy and the National Education Policy. KSSR take into account the challenges of the 21st century, the New Economic Model (NEM) and the latest learning theory. KSSR also adopted four pillars of education UNESCO, namely learning to learn (learning to know), learn to act (learning to do), learning to live together (learning to live together) and learn to form personal (learning to be). KSSR will have the following principles: human balanced in terms of intellectual, spiritual, emotional, physical and social, citizens who are responsible, citizens who can play a role in the global arena (Global Player) employees are knowledgeable.

Teaching and learning methods followed for this as well as various exposure can

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This study focused on the effectiveness of the inquiry-discovery compared with traditional methods. Based on previous studies, the problem of misunderstanding in science subjects among students have been accepted for a long time. Although many changes have occurred in the education system of our country but the problems of students in learning science is still not fully resolved. Thus, school-based study conducted to assess the effectiveness of the approach of the inquiry-discovery methods to improve students' understanding.

##### 2.1.1 Effectiveness teaching and learning

Effectiveness is defined as the process of teaching and learning and the quality of the learning process that can develop human potential in terms of psychomotor, cognitive and effectively to the optimum level. The effectiveness of teaching and learning should be implemented according to the principles outlined some of the approaches, methods and techniques are well diversified actively engage students, support materials based on relevant and evaluation and improvement of teaching and learning as they go.