

**THE EFFECTIVENESS OF THE INTENSIVE
LEARNING KIT FOR MAT 037
ON WEAK LEARNER'S PERFORMANCE
IN MATHEMATICS**



الجامعة
UNIVERSITI
TEKNOLOGI
MARA

**INSTITUTE OF RESEARCH, DEVELOPMENT
AND COMMERCIALIZATION
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM,
SELANGOR**

**Prepared by :
WAN NORLIZA WAN BAKAR
NAZHATUL SAHIMA MOHAMAD YUSOFF
SITI HASRINAFASYA CHE HASSAN
WAN SALFARINA WAN HUSSAIN**

DECEMBER 2013

ACKNOWLEDGEMENT

I am truly grateful to God for providing me the strength, spiritual and emotional support when there was none in sight assisting the completion of this research. Allow me to express gratitude to many parties for their involvement in any ways in the completion of the research project.

Assoc Prof Dr. Shukri Omar
(Director of UiTM Kelantan)

Assoc Prod Dr. Nik Kamarulzaman Abdul Latif
(URDC Coordinator of UiTM Kelantan)

Coordinators, Head of Programs,
Lecturers and Students of UiTM
Kelantan For their time and
Guidelines

ABSTRACT

Weak learners can be identified in mathematics classrooms. They are the students who have problems in adapting to the learning process, slow to understand concepts, unable to retain information for long and have difficulties in applying their knowledge to various situations. Weak learners should be helped because they are the asset of the country and reducing their numbers, means a better chance for the country to achieve the mission as a developed country. The aim of this research is to study the effectiveness of the implementation of Intensive Learning Kit for MAT 037 on weak learners. 50 weak learners of Mengubah Destini Anak Bangsa Group Semester December 2012 to April 2013 in UiTM Kelantan involved in this study. The experimental study method was used in this study. Results of this research will provide an insight to syllabus designer's instruction to create new innovation of teaching and learning process.

CHAPTER 1

INTRODUCTION

1.0 Introduction

Malaysia is a country which has its own target to be a developed country in 2020. To achieve this mission a big transformation is needed to improve the quality of the work force in this nation. The prime minister has released new economic model (NEM) alongside the Economic Transformation Programme to realize this vision. One of the important elements in this programme is education sector which need to be strengthened in order to achieve the mission. An emphasis on Mathematics Education will ensure that our nation has an adequate workforce to meet the demand and drive towards vision 2020. Therefore, weak students in mathematics need special attention and not to be excluded. These weak learners if not being guided thoroughly will affect the process of producing quality graduates and this give negative impact on the ETP Programme and at once disturbing the development towards vision 2020.

According to Wan Norliza Wan Bakar (2012) weak learners are students who have problems in adapting to the learning process. They are slow to understand concepts, unable to retain information for long and have difficulties in applying their knowledge to various situations. The number of weak learners is increasing tremendously as years grow. According to NCES (2003) 71% of the students scored below the proficiency level in mathematics. This gap increases as years go by as students with mathematical disabilities continue to fall further behind their peers (Cowley, Parmer, Yan and Miller, 1998). According to study of mathematics achievement conducted by Mullis, Martin and Foy (2008) in the year 1999 to 2007 show the average score of mathematics achievement continues to fall from 519 to 474. If this trend continues the effect will be the delay

on attaining merit for the higher education system. Weak learners have few

problems in mathematics classrooms. They can be categorized as visualization, auditory and kinesthetic problems. The main problem forced by weak learners is they are unable to understand concept and principle taught in an abstract and symbolic way. They are said to have weak concept imagery (Lindamoodbelle, 2012). Secondly, they cannot follow the lectures carried in auditory sequential under because they are system thinkers who need to see the whole picture with the relationship between the concepts. Sometimes, they do not really understand the concept itself (Orton, 2002) and this will affect the understanding of the whole lectures given. Lastly, they are also reluctant in doing mathematical exercises because the task is above their ability. Due to the abovementioned problem a solution which synthesized three areas of learning styles should be introduced. So we decided to propose the Intensive Learning Kit For MAT 037 a complete set of study to enhance the process of teaching and learning. Intensive Learning Kit For MAT 037 is a mathematical learning kit which consists of 3 particular things that are video and manual of Je Vous Teaching and Learning Strategies, Visual Animation of four critical topics such as equation, inequality, algebra and polynomials, exponents and logarithm and a module of Intensive Mathematics (MAT 037). Je Vous Teaching and Learning Strategies are a video and manual on how the proposed teaching strategies are carried on. This teaching strategy consists of six phases. The phases are gathering the student's SPM mathematics result, giving the diagnostic test, delivering direct teaching, peer mentoring and coaching session, doctor patient session and lastly the evaluation of particular topics. Je Vous Teaching and Learning Strategies which is packed in video are designed to help the understanding of basic concepts. The concept is repeatedly explained by the lecturer in a coaching session and the excellent students in a peer mentoring sessions. This will automatically help the students to understand better.