

UNIVERSITI TEKNOLOGI MARA

**CONSTRUCTING TIMETABLE MODEL FOR
GOVERNMENT PRIMARY SCHOOL IN
MALAYSIA**

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Abstract

This thesis is concerned with the problem of constructing timetable for government primary schools in Malaysia. These problems are interesting topic to study because neither modeling nor solving them is straightforward. Besides, it is difficult to make a clear-cut distinction between optimized and not optimized timetable. Because of the large diversity in acceptance criteria, realistic timetable construction problems are multidimensional. Each dimension may introduce its own characteristic aspects that add to the complexity of the problem. Therefore, a good understanding of timetable construction is needed to ensure that these problems can be solved and an optimized timetable can be created. To solve these problems, a heuristics method namely sequence technique has been chosen as a practical way to construct a timetable for government primary school in Malaysia. As a result, a model of constructing timetable was established after a deep study during this thesis.

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TABLE OF CONTENTS

CONTENTS	PAGE
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDICES	ix

CHAPTER 1	INTRODUCTION	PAGE
1.1	Introduction	1
1.2	Problem Statement	3
1.3	Research Objectives	4
1.4	Research Scope	4
1.5	Research Significances	5

CHAPTER 2	LITERATURE REVIEW	PAGE
2.1	Timetabling problems	6
2.2	Soft constraints and hard constraints	8

Chapter 1

Introduction

1.1 Introduction

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Timetabling concerns all activities with regarding to make timetable. According to Collins Concise Dictionary, 4th Edition (Marian Makins, 1995) a timetable is a table of events arranged according to the time when they take place. The events are usually meetings between people at a particular location and at a certain time. Consequently, a timetable specifies which people meet at which location and at what time. A timetable must meet a number of requirements and should satisfy the desires of all people involved simultaneously as well as possible. The timing of event must be such that nobody has more than one event at the same time. In fact, it is not an easy job to fulfil and satisfy these requirements since the solution may be unsatisfactory in some respect.