AN EVALUATION OF TEACHING PERFORMANCE BY USING FUZZY ANALYTIC HIERARCHY PROCESS (AHP)

ZAMZABIDAH BINTI ZAINOL

Thesis Submitted in Fulfillment of the Requirement for Bachelor of Science (Hons.) Computational Mathematics in the Faculty of Computer and Mathematical Sciences Universiti Teknologi Mara

July 2017

DECLARATION BY CANDIDATE

I hereby declare that the thesis is based on my original work except for quotations and citations which have been acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Teknologi MARA or other institutions.

Zamzabidah Binti Zainol Date: 23 July 2017

TABLE OF CONTENTS

ACKNOWLEDGEMENT	i
DECLARATION BY THE SUPERVISOR	ii
DECLARATION BY CANDIDATE	iii
TABLE OF CONTENT	iv
LIST OF FIGURE	vi
LIST OF TABLES	vii
ABSTRACT	ix
CHAPTER 1: INTRODUCTION OF RESEARCH	1
1.1 Introduction	1
1.2 Background of study	1
1.3 Problem statement	2
1.4 Objectives	3
1.5 Significant of study	4
1.6 Scope of project	4
1.7 Definition of terms and concepts	6
1.8 Literature review	7
CHAPTER 2: METHODOLOGY	11
2.1 Introduction	11
2.2 Fundamental of research	11
2.3 Conclusion	23

CHAPTER 3: IMPLEMENTATION	24
3.1. Introduction	24
3.2 Research data	24
3.3 Conclusion	37
CHAPTER 4: RESULT AND DISCUSSION	38
4.1 Introduction	38
4.2 Result and discussion	38
4.3 Discussion of project	42
4.4 Conclusion	44
CHAPTER 5: CONCLUSION AND RECOMMENDATION	45
5.1 Introduction	45
5.2 Conclusion	45
5.3 Recommendation	46
REFERENCES	47
APPENDICES	50
Appendix A: The sample questionnaire	50
Appendix B: Calculation the weight using Microsoft Excel (main criteria)	54
Appendix C: Calculation the weight using Microsoft Excel (sub criteria)	57

ABSTRACT

Teaching performance is important in the development of an institute of learning and especially among of students. Therefore, the improvement of teaching performance depends on the selection of criteria such as planning and preparation, communication and interaction, teaching for learning, managing the learning environment, student evaluation, and professionalism. Fuzzy AHP is one of the methods for decisions making and is developed to optimize complex problems. This method is used for selection the best criteria of teaching performance. In this project, eight decision makers are chosen from the lecturer in UITM Kuala Terengganu Campus who have more experience in teaching. Then, the decision maker needs to complete the FAHP questionnaire. The results show that the weight of "communication and interaction" is largest. This criterion plays the best essential part in teaching performance, followed by "teaching for learning". However, the lowest of weight was followed by "student evaluation" criterion. As a conclusion, this method can be seen as a way that can help the lecturer to improve their teaching performance.