IMPACT OF TEACHING AND LEARNING STYLES ON STUDENTS' MATHEMATICS PERFORMANCE

BY

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ABSTRACT

The purposes of this study are to identify the lecturers' preferred teaching styles and students' preferred learning styles as well as to classify the students' preferred learning styles based on faculty and gender. This study also aims at determining the level of congruency between the teaching style and learning style across lecturers' classes. Furthermore, this study also examines the impact of students' learning styles and lecturers' teaching styles on the Mathematics performance of students. The Canfield Learning Styles Inventory (CLSI) and Canfield Instructional Styles Inventory (CISI) were adapted and administered to the students and their respective lecturers from the fundamental Mathematics courses of UiTM Sarawak.

The data reveals that the most preferred teaching styles of Mathematics lecturers were Organization, Numeric, Direct Experience, and A Influence scales whilst the least preferred styles are Instructor, Qualitative, Lecturing and D- Influence scales. As for the students' learning styles, there is a strong preferences for Instructor, Numeric, Iconic, and B Expectation scales and the least preferred include Competition, Qualitative, Reading, and D Expectation scales. As regards faculty, there is a significant difference in scale preferences of the learning styles of Mathematics students comprise Detail, Authority, Numeric, Qualitative, Inanimate, People, Reading, and Direct Experience. In respect of gender, male students show strong preference for Instructor, Inanimate, and Direct Experience whereas female students show strong preferences for Detail, Independent, Qualitative, and People.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Mathematics is a compulsory subject for all learners in the national curriculum. Studies done by Miller et al. (1998) and Rivera et al. (1998) reported that Mathematics is an important curricular area affecting all aspects of an individual's life and daily routine. According to the Ministry of Education Review Committee Report (1991) on 'Improving Primary School Education' "... all children should have a firm foundation in Mathematics which is the key to mastering technological skills" (preliminary page). The report emphasizes that "our children must never be put in a position where, because of a lack of competence in Mathematics, they are unable to acquire the skills needed to cope with modern technology which will be part of their daily lives" (preliminary page).

Today, Mathematics is used throughout the world in many fields, including natural science, engineering, medicine, and the social sciences such as economics. Therefore, mastering basic skills in Mathematics is crucial. It is a concern that majority of the UiTM Sarawak students at have continuously attained a relatively low achievement when compared to their performance in other courses. A study done by lecturers in UiTM Sarawak found that the passing rate for course codes MAT133 and