

2015

– DIPA TIMALSENA

LEARNING STYLES OF SUPERIOR STUDENTS IN MATHEMATICS

**A
THESIS
BY
DIPA TIMALSENA**

LEARNING STYLES OF SUPERIOR STUDENTS IN MATHEMATICS

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE
OF MASTERS IN MATHEMATICS EDUCATION**

**SUBMITTED
TO
DEPARTMENT OF MATHEMATICS EDUCATION
CENTRAL DEPARTMENT OF EDUCATION
UNIVERSITY CAMPUS
TRIBHUVAN UNIVERSITY
KIRITPUR, KATHMANDU
2015**

LETTER OF CERTIFICATE

This is to certify that Mrs. Dipa Timalsena a student of academic year 065/066 with Campus Roll No. 1381/065, thesis no. 1003, Exam Roll No. 281095 (2066), T.U., Regd. No. 9-2-240-292-2004 has completed his thesis under my supervision during the period prescribed by the rules and regulations of Tribhuvan University, Nepal. The thesis entitled, **Learning Style of Superior Students in Mathematics** embodies the results of her investigation conducted during the period of 2014 to May 2015 under the Department of Mathematics Education, Central Department of Education, University Campus, Kirtipur, Kathmandu. I recommend and forward that her thesis be submitted for the evaluation for awarding the Degree of Master of Mathematics Education.

.....

(Mr. Dipak Mainali)

Supervisor

.....

(Asso.Prof. Laxmi Narayan Yadav)

Head

LETTER OF APPROVAL

A
Thesis
By

Dipa Timalsena

Entitled

Learning Style of Superior Students in Mathematics has been approved in partial fulfillments of the requirements for the Degree of Master of Mathematics Education.

Committee for the Viva-Voce

Signature

Asso. Prof. Laxmi Narayan Yadav

.....

(Chairman)

Prof. Dr. Hari Prasad Upadhyay

.....

(Member)

Mr. Dipak Mainali

.....

(Member)

ACKNOWLEDGEMENTS

I, as a researcher of this study, would like to acknowledge the generous help given by my respective teachers and colleagues who were directly and indirectly involved to carry out this study. Firstly, I would like to extend my sincere gratitude to my respected guru and guide Mr. Dipak Mainali, Department of Mathematics Education, T.U. Kirtipur, from whom I have got invaluable suggestions, encouragement, insightful comments and appreciable guidance with constitute the foundation for this study.

I would like to offer my deep gratitude to my respected Asso. Prof. Laxmi Narayan Yadav, Head Department of Mathematics Education and Prof. Dr. Lekhnath Sharma, Department of Mathematics Education, T.U. Kirtipur for their inspiration and suggestions to complete this work. I would like to acknowledge to all teachers of Department of Mathematics Education.

I wish to acknowledge and express my profound gratitude to the head teacher and mathematics teacher of selected schools for their valuable suggestions, facilitating reference mathematics, advices and encouragement during my research work.

At last, I offer thanks to Durka Computer Center, Kiritpur, Kathmandu who helps me typing and printing out this paper and I cannot stay without giving special thanks to my family for providing me economic support as well as invaluable support.

.....

June 2015

Dipa Timalseña

ABSTRACT

This study focuses on the learning styles of superior students in mathematics. The main objective of this study was to explore the learning styles of superior students and to investigate the factors which contribute to be a super student in mathematics. To fulfill the intended objectives of the study, the researcher had developed the conceptual understanding of the study which was the theoretical framework for this study. Autonomous and self directed learning, relevancy oriented learning, goal oriented learning, bring life experience and knowledge learning, intra personal learning and inter personal learning styles were covered in the theoretical framework of this study.

This was case study research having qualitative and descriptive nature. Among all schools from Kathmandu district, only one school was chosen purposively. Finally, from the superior students (2 boys and 2 girls) were selected for the case study on the basis of mathematics score obtained by the students in the test taken by school. Tools for the data collection were interview schedule and observational note. Face to face interview with students, parents, Mathematics teacher & Head teacher were carried out and classroom observation was done. The collected information was analyzed descriptively according to the adult learning theory and VAK learning theory.

This study showed different learning styles of superior students. The findings were: superior students are autonomous and self directed, some superior students may be motivated by their set goal and life experience, superior students do not limit them in their course books, most superior students get involved in extracurricular activities and do better and most superior students are comfortable with the group learning and interacting with teacher, parents and friends.

TABLE OF CONTENT

<u>Chapters</u>	<u>Page No.</u>
Letter of Approval	i
Letter of Certificate	ii
Acknowledgements	iii
Abstract	iv
<u>Contents</u>	v
I. <u>INTRODUCTION</u>	1-10
Background of the Study	1
Statement of Problem	6
Objective of the Study	8
Significance of the Study	8
Delimitation of the Study	9
Definition of Key Terms	9
II. <u>REVIEW OF RELATED LITERATURE</u>	11-27
Review of Empirical Literature	11
Review of Theoretical Literature	22
Conceptual Understanding of the Study	26
III. <u>METHODS AND PROCEDURES</u>	28-32
Design of the Study	28
Selection of Study Area	28
Case of the Study	29
Selection of Case Respondent	30
Tools for Data Collection	30
In-depth Interview	30

Non-participant Observation	31
Data Collection Procedure	31
Data Analysis and Interpretation	32
IV. <u>ANALYSIS & INTERPRETATION</u>	33-55
Introduction to Case School	33
Introduction of Case Respondents	34
Learning Styles of Case Respondents	37
Autonomous and Self Directed Learning	38
Relevancy Oriented Learning	41
Goal Oriented Learning	43
Bring Life Experience & Knowledge Oriented Learning	45
Intra Personal Learning	46
Inter Personal Learning	48
Motivation Factor	53
V. <u>FINDING, DISCUSSION AND RECOMMENDATIONS</u>	56-58
Summary	56
Finding & Discussion	57
Conclusion	57
Recommendations	58
<u>REFERENCES</u>	