

**PROBLEMS FACED BY STUDENTS IN LEARNING MATHEMATICS: AN
INTERPRETIVE INQUIRY**

A

THESIS

BY

BINDU SHRESTHA

**FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF MATHEMATICS EDUCATION**

SUBMITTED TO

DEPARTMENT OF MATHEMATICS EDUCATION

CENTRAL DEPARTMENT OF EDUCATION

UNIVERSITY CAMPUS

KIRTIPUR, KATHMANDU

NEPAL

2017

RECOMMENDATION FOR ACCEPTANCE

This is to certify that Mrs. Bindu Shrestha has completed his M.Ed. thesis entitled "**Problems Faced By Students in Learning Mathematics: An Interpretive Inquiry**" Under my supervision during the period prescribed the rules and regulation of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I mentioned and forward his thesis to the Department of Mathematics Education to evaluate in final viva-voce.

.....

(Assoc. Prof. Dr. Bed Raj Acharya)

Date:

LETTER OF APPROVAL**A****Thesis****By**

BinduShrestha

Entitled

“Problems Faced ByStudents In Learning Mathematics: An Interpretive Inquiry” has been approved in partial fulfilment of requirements for the Degree of Master of Education.

Committee of the Viva –Voce Committee**Signature**

- | | |
|--|-------|
| 1. Associate Prof. Laxmi Narayan Yadav
(Chairman) | |
| 2. Prof Dr. Indira KumariBajrachary
(External) | |
| 3. Dr. Bed Raj Acharya
(Member) | |

Date :.....

LETTER OF CERTIFICATE

This is to certify that Mrs. BinduShrestha, student of academic year2071-2072B. S.with Campus roll. No 353, Exam Roll No 280387.T.U.Regd No 9-2-288-106-2006, thesis no1314 has completed her thesis under supervision of Dr. Bed Raj Acharya, during the period prescribed by the rules and regulation of Tribhuvan University, Nepal. The thesis entitled “**Problems Faced by Students in Learning Mathematics: An Interpretive Inquiry**” has been prepared based on the result of her investigation. I hereby recommend and forward that her thesis be submitted for the evaluation as partial requirements to award the Degree of Master of Education.

.....
(Assoc. Prof. Laxmi Narayan Yadav)

Head

Date:

© 2017

BinduShrestha

This document is copyright material. Under law, no parts of this document may be reproduced without the expressed permission of the researcher.

Defense date:

All right reserved

DECLARATION

This dissertation contains no materials, which has been accepted for the award of other degree in any institutions. To the best of Acknowledgement and belief this dissertation contains no materials previously published by any others except due acknowledgement has been make.

DEDICATION TO

This work is affectionately dedicated to my brother and

Whole my family.

Who even in a very difficult situation gave me a great span of their

life for what I am now.

ACKNOWLEDGEMENT

I would first and foremost like to gratitude to my supervisor Dr. Bed Raj Acharya for his advisory and mentoring roles throughout the research journey. It would not be possible for me to bring the study in this form without his quality, time, positive encouragement and support.

It is my great pleasure to express my heartfelt gratitude to Prof. Dr. Hari Prasad Upadhyay, Chairman of Mathematics and Computer Science Education Subject Committee. Associate Professor Laxmi Narayan Yadav, Head of Mathematics Education Department, for managing such a cooperative environment where I felt carefree during the overall journey of my research. I would like to thank the whole school family who help for my data collection process.

Finally, I would like to express my gratitude to all members of my family for their support and enthusiasm to bring me in this stage of higher education and to complete the thesis.

.....

Bindu Shrestha

ABSTRACT

The main objectives of this study were to explore the problems faced by students in learning mathematics and to suggest ways to overcome the problems that are faced by students in learning mathematics.

The design of this study was qualitative with a case study approach. Learning Zone Academic school of Gangabu, Kathmandu was the study site of my study. I used purposive sampling technique to select the participants. There were 6 students of grade 10, two mathematics teachers and 1 head teacher participant in my study. Observation and interview guidelines were the main tools for this study. The collected data were analyzed by using theories. It was found that lack of teacher-student meaningful interaction, discrimination of teacher, *low socio-economic condition of students*, less motivational, feeling mathematics anxiety, lack of proper knowledge to address the students' diversity were the main problems faced by students in learning mathematics.

Similarly, ensuring a child-friendly environment in the classroom, teaching, applying equality and equity pedagogy in the classroom, linking teaching pedagogy with students' daily life, parental involvement, providing guidance and motivation, involving group discussion were the ways to overcome the problems.

TABLE OF CONTENTS

CHAPTERS:

I:	INTRODUCTION	1-5
	Background of the Study	1
	Statement of Problem	3
	Objectives of the Study	4
	Significance of the study	4
	Delimitation of the Study	5
	Operational Definition of the Related Terms	5
II:	REVIEW OF RELATED LITERATURE	6-18
	Empirical Review	6
	Theoretical Review	12
	Cultural Difference and Discontinuity Theory	12
	Constructivism	13
	Bernstein's Language Code Theory	15
	Theory of Fear	16
	Conclusion	17
	Conceptual Framework	17
III:	METHODS AND PROCEDURES	19-23
	Research Design	19
	Study site	19

Sample of the Study	19
Sampling of the Study	20
Research Tools	20
Class Observation Form	20
Interview Guideline	21
Data Analysis Procedure	21
Quality Standards	22
IV: ANALYSIS AND INTERPRETATION	24-43
Section-I: Problems Faced by Students' in Learning Mathematics	24
Lack of Teacher-Students Meaningful Interaction	24
Discrimination of Teacher	27
Low Socio-economic Condition of Students	29
Less Motivational	30
Mathematics Anxiety	31
Lack of Proper Knowledge to Address the Students Diversity	35
Section-II: Overcomes the Problems	37
Ensuring Child Friendly Environment in the Classroom Teaching	38
Applying Equality and Equity pedagogy in the Classroom Teaching	39
Linking Teaching Pedagogy with Students Daily Life	39
Parental Involvement	40
Providing Guidance and Motivation	41

Involving Group Discussion	42
V: FINDINGS, CONCLUSIONS AND IMPLICATIONS	44-46
Finding Related to Problems Faced by Students in Learning Mathematic	44
Conclusions	45
Implications	45
REFERENCES	47-48
APPENDIX	49-53