EXPLORING THE PARTICIPATION OF STUDENTS IN MATHEMATICS LEARNING

 \mathbf{A}

THESIS

 \mathbf{BY}

DINESH CHAPAGAIN

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

SUBMITTED

TO

DEPARTMENT OF MATHEMATICS EDUCATION

CENTRAL DEPARTMENT OF EDUCATION

UNIVERSITY CAMPUS, KIRTIPUR

TRIBHUVAN UNIVERSITY

KATHMANDU

NEPAL

2016

LETTER OF CERTIFICATE

This is to certify that **Mr. Dinesh Chapagain**, a student of academic year 2069/071 with campus Roll No. 96 (2069-2070), Exam Roll No. 281017 (2070) and T. U. Registration Number: 5-2-282-567-2005 has completed his thesis under my supervision during the period prescribed by the rules and regulations of Tribhuvan University, Nepal. The thesis entitled **"Exploring The Participation of Students in Mathematics Learning"** has been prepared based on the results of his investigation conducted during the period of April, 2016 to September, 2016 under the Department of Mathematics Education, University Campus, Tribhuvan University, Kartipur Kathmandu. I recommend and forward for evaluation as the partial requirments to award the degree of Master of Education.

(Assot. Prof. Dr. Baua Lal Sah)	(Assot. Prof. Laxmi Narayan Yadav)
Supervisor	Head
	Department of Mathematics Education
Date:	

LETTER OF APPROVAL

A **Thesis** by

Dinesh Chapagain

Entitled

"Exploring The Participation of Students in Mathematics Learning"

has been approved in partial fulfillment for the requirements for the degree of

Master of Education

Committee for the Viva-Voce	Signature
1. Assot. Prof . Laxmi Narayan Yadav	••••••
(Chairman)	
2. Prof. Dr. Hari Prasad Upadhyay	••••••
(Member)	
3. Assot. Prof. Dr. Baua Lal Sah	
(Member)	
Date:	

ACKNOWLEDGEMENT

I am heavily indebted to my respected gurus from the department of mathematics education, Central Department of Education, University campus, Kirtipur, Kathmandu. With their grate approaches I have been able to present this dissertation in this form.

First of all, I would like to express my sincere gratitude to my thesis supervisor, Dr. Baua Lal Sah, Reader in the Department of Mathematics Education, Central Departation of Education, Tribhuvan University, Kirtipur for his continuous guidance, enlightening ideas and invaluable suggestion. Without his constant supervision and intellectual guidance this thesis would never been appeared in this form. At the same time I am grateful to the head of the department, Mr. Laxmi Narayan Yadav for his continuous support and encouragement to the study.

I would also like to express my sincere gratitude to Prof. Dr. Hari prasad Upadhyaya, Prof. Dr. Min Bahadur Shrestha, Prof. Dr. Lekha Nath Sharma, Dr. Eka Ratna Acharya, Mr. Bed Raj Acharya from the Department of Mathematics Education, Central Department of Education for their leading support in Research in Mathematics Education and the whole Teaching Staff team without their proper guidance and contribution I would not be able to writing this acknowledgement for this study.

I owe a real debt of gratitude to the staff from Central Department of Education,
Tribhuvan University and My colleagues in the University Campus, Kirtipur, Kathmandu.

I have received very useful inputs from different sources while writing this thesis. I would like to record with gratitude the contributions made by them in the process of bringing this thesis out in the present form.

My special thanks goes to the family of Shree Mangala Devi Secondary School, Khandbari, Sankhuwasabha and the School Community for their kind cooperation and providing opportunities for the collection of data.

Finally, I wish to acknowledge my parents, brother, sister and my family for the invaluable contribution of my career and great patience and encouragement during my study.

•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

October, 2016

Dinesh Chapagain

ABSTRACT

This thesis entitled "Exploring the Participation of Student in Mathematics Learning" is an attempt to study how students are take parting or engaging in mathematics learning. It focuses on the way of engagement of the students in mathematics learning at school and out of the school.

According with time Nepal's also changing in its political, social and cultural aspect. Rapid urbanization and interest of people to live in urban culture is increasing. Now a day the people are becoming aware about their education, health, employment, development etc. that's why people are developing their society according as their will. Among them education is a major sector to fulfill the whole desire of the developing society. But the development of the education sector in its own pace. Without proper education people cannot address the challenges of the present day world. Thus for the effective and productive education system research can plays the vital role to manipulate the education in path of development of nation.

The study aims to examine the learners in mathematics learning regarding on their participation like engaging fashion, way of involvement, exposure, learning style in and outside the school and the affect of mathematics education in their learning activities in mainstream education system of Nepal. Mainly the study focuses on the how the students are acting or take parting in mathematics education as being the focal point of the education system. The study is conducted in a qualitative paradigm in a government funded school. The study field is chosen as a motto of the study for suburban area.

The main finding of the study is that the existing level of participation of students in terms of regularity, their economic increment, positive attitude towards education, investment in

the child education by their parents are appreciative. Particularly in case of mathematics learning students are not taking commonly and they are performing uncomfortably. There have been shown some of the hurdles in mathematics learning. This research suggests for concerned bodies which can be removed by clever compilation of the components of mathematics learning.

TABLE OF CONTENTS	PAGE
Letter of Certificate	i
Letter of Approval	ii
Acknowledgement	iii
Abstract	v
Table of contents	vii
List of figure	x
List of Abbreviations	xi
Chapters	
I. INTRODUCTION	1-11
Background of the study	1
Statement of the Problem	6
Objectives of the Study	7
Research Question	7
Significance of the Study	7
Delimitation of the study	9
Operational Definition of the Term	10

II. REVIEW OF RELATED LITERATURE AND CONCEPTUAL

FRAMEWORK	12-21
Empirical Literature	12
Theoretical Framework	15
Conceptual Framework	19
III. METHODS AND PROCEDURES	22-26
Research Design of the Study	22
Selection of the Site	23
Sample of the Study	23
Tools and Techniques for Data Collection	24
Data Collection Procedure	25
Data Analysis and Interpretation Procedure	26
IV. ANALYSIS AND INTERPRETATION OF RESULT	27-43
Involvement of the Students in Learning Mathematic at Home	28
Engaging in Learning Mathematics at School	30
School Community	30
Position of the Students in School Culture	31
Physical Facilities and Environment of the School	33
Teaching learning Environment at the School	34

Engagement of the Students at Mathematics Classroom	36
Learning Outcomes of the Students in Mathematics	39
Performance of the Students in Mathematics Learning	41
V. SUMMARY, CONCLUSION AND RECOMMENDATION	44-47
Summary of Findings	44
Conclusion	46
Recommendation for Further Study	46
Referecces	48
Appendices	50

LIST OF FIGURE

Flowchart: 2.1 A Framework for Exploring the Participation of Students in Mathematics

Learning

LIST OF ABBREVIATIONS

BS - 'Bikaram Sambat'

CDC -Curriculum Development Centre

DEO -District Education Office

DLE -District Level Examination

EFA -Education for All

NCF -National Curriculum Framework

SLC -School Leaving Certificate

SSRP -School Sector Reform Plan