

**EFFECT OF INSTRUCTIONAL FACTORS IN MATHEMATICS
ACHIEVEMENT**

A THESIS

BY

DEEPAK NEPAL

**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

TRIBHUVAN UNIVERSITY

KIRTIPUR, KATHMANDU

2016

Letter of Certificate

This is to certify that Mr. Deepak Nepal, a student of academic year 2067/68 with campus Roll No. 3185/067, Thesis No. 1036, Exam Roll No. 281339) and T.U. Regd. No. 9-1-21-55-2004 has completed his thesis under my supervision for the period prescribed by the rule and regulation of Tribhuvan University, Nepal. The thesis entitled "**Effect of Instructional Factors in Mathematics Achievement** " has been prepared based on the result of his investigation conducted during the period of 2015. I hereby recommend and forward that his thesis be submitted for the evaluation as the partial requirement to award the degree of Master's of Education.

.....
(Mr. Arjun Neupane)
Supervisor

.....
(Mr. Laxmi Narayan Yadav)
Chairman

Letter of Approval

Thesis submitted by

DEEPAK NEPAL

Effect of Instructional Factors in Mathematics Achievement has been approved in partial fulfillment of requirements for the Degree of Master of Education

Committee for the Viva-Voce

Signature

- | | |
|---|-------|
| 1. Ass. Prof. Laxmi Narayan Yadav
(Chairman) | |
| 2. Prof. Dr. Hari Prasad Upadhyay
(Member) | |
| 3. Mr. Arjun Neupane
(Member) | |

Date:

ACKNOWLEDGEMENTS

As the researcher I would like express profound gratitude and appreciation to my respected supervisor Mr. Arjun Neupane, Department of Mathematics Education, T.U., for his inspirational guidance, generous advice, continuous support and valuable suggestions.

The researcher expresses his gratitude to Ass. Prof. Laxmi Narayan Yadav, Head Department of Mathematics Education, T.U., for his creative suggestions and constant inspiration while accomplishing this research work. My gratitude is also extended to Prof. Dr. Hari Prasad Upadhyay, Prof. Dr. Min Bahadur Shrestha, Mr. Bed Prasad Dhakal, Mr. Abatar Subedi and Mr. Krishna Prasad. Adhikary, for their valuable comments and suggestions to bring the work into present form.

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

I would like to thank to, Mr. Ramhari Basnet, Mr. Prabin Acharya, Rajesh Basnet who provided needed atmosphere and necessary encouragement.

February, 2016

.....

Deepak Nepal

ABSTRACT

Mathematics takes important place and usages in different ways in human life. So, it is necessary to learn and teach in systematic way at mathematics. Among various teaching methods here, the present study concentrated on "Effect of Instructional Factors in Mathematics Achievement of Students". This study was based on the following objectives: find out the instructional factors affecting in mathematics achievement and analyze the effect of instructional factors (curriculum, instructional method, teachers competency, school context and facilities) in mathematics achievement of student.

For the data collection, three campus and all secondary level teachers of mathematics were selected purposively and non-equivalent group design was used to conduct this study. 200 students were selected from three campus and 50 teachers and some parents were selected from Dolakha District as a survey for collecting data researcher used to questionnaire and interview.

Questionnaire and interview were the main tools for the study and mean, standard deviation; variance and ANOVA (at 0.05 level of significant) were used as statistical tools for the study. After analyzed the obtained data, it was concluded that result of the study. The most affective instructional factors are curriculum, methods, teacher competency and school context and facilities.

TABLE OF CONTENTS

	Page No.
<i>Letter of Certificate</i>	<i>i</i>
<i>Letter of Approval</i>	<i>ii</i>
<i>Acknowledgements</i>	<i>iii</i>
<i>Abstract</i>	<i>iv</i>
<i>Table of Contents</i>	<i>v</i>
Chapter	
I: Introduction	1-7
Background of the Study	1
Educational Status of Dolakha District	2
Statement of the Problem	3
Significance of the Study	3
Objectives of the Study	5
Hypothesis of the Study	5
Research Hypothesis	5
Delimitation of the Study	6
Definition of the terms	7
II: Review of the Related Literature	8-19
Empirical Literatures	8
Theoretical Review	15
Conceptual Framework	18
III: Methods and Procedures	20-23
Design of the Study	20
Population of the Study	20

Sample of the Study	21
Tools/Instrument	21
Interview	21
Questionnaire	21
Reliability and Validity of the Data	22
Data Collection Procedure	22
Data Analysis and Interpretation	23
IV: Analysis and Interpretation of Data	24-35
Curriculum	24
Method	27
Teacher's Competency	29
School Context and Facilities	32
V: Summary, Findings, Conclusion and Recommendation	36-40
Summary	36
Findings	37
Conclusion	38
Recommendation	39

REFERENCE

APPENDICES