

**FACTORS AFFECTING MATHEMATICS ACHIEVEMENT
OF ETHNIC STUDENTS**

**A
THESIS
BY
PITAMBAR SIGDEL**

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

**SUBMITTED
TO
DEPARTMENT OF MATHEMATICS EDUCATION
CENTRAL DEPARTMENT OF EDUCATION
TRIBHUVAN UNIVERSITY
KIRTIPUR, KATHMANDU
2016**

LETTER OF CERTIFICATE

This is to certify that **Mr. Pitambar Sigdel**, a student of academic year 2067/68 with campus Roll No.591, Thesis No. 972, Exam Roll No.281506 and T.U. Regd. No. 9-1-48-854-2001 has completed his thesis under my supervision for the period prescribed by the rule and regulation of Tribhuvan University, Nepal. The thesis entitled, “**Factors Affecting Mathematics Achievement of Ethnic Students**” has been prepared based on the result of investigation he conducted during the period of 2015/2016. I, hereby, recommend that his thesis be submitted for the evaluation as the partial requirements of the degree of Master’s of Education.

.....

(Mr. Lok Nath Bhattarai)

Supervisor

.....

(Ass. Prof. Laxmi Narayan Yadav)

Head

Date:



त्रिभुवन विश्वविद्यालय
शिक्षा शास्त्र संकाय
शिक्षा शास्त्र केन्द्रीय विभाग
TRIBHUVAN UNIVERSITY
FACULTY OF EDUCATION
CENTRAL DEPT. OF EDUCATION

विश्वविद्यालय क्याम्पस
कीर्तिपुर, काठमाडौं, नेपाल
फोन नं.: ४३३१३३७

UNIVERSITY CAMPUS
Kirtipur, Kathmandu, Nepal
Tel. No.: 4331337

पत्र संख्या:-
Ref.

मिति:
Date:

LETTER OF APPROVAL

Thesis Submitted

By

Pitambar Sigdel

Entitled

“Factors Affecting Mathematics Achievement of Ethnic Students” has been approved in partial fulfillment of the requirement 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. Lok Nath Bhattarai
(Member)

.....

Date:

ACKNOWLEDGEMENTS

I want to express my heartfelt gratitude of my respected supervisor Mr. Lok Nath Bhattarai, Department of Mathematics Education, Central Department of Education, Kirtipur, Kathmandu. His valuable and constructive suggestions, instructions and scholarly guidance have become the greatest property in this thesis. Without his constant supervision and intellectual guidance it would never have been appeared in this form. Though, I haven't found any such word to express my deep gratitude to him for his kind help. So I'm heavily indebted towards him.

I would like to extend my gratitude to my respected teacher Ass. Prof. Laxmi Naryan Yadav, Head, Department of Mathematics Education, Central Department of Education, T.U. Kirtipur support to complete this thesis in time. I would like to thank Prof. Dr. Hari Prasad Upadhyay, Chairman of Mathematics and computer science subject committee.

Similarly, I am very grateful to my all respected teacher of the Department of Mathematics Education who directly or indirectly encouraged me to complete my thesis. Finally my hearty honor goes to my parents Mr. Hari Bhakta Sigdel and Mrs. Gopi Maya Sigdel for their invaluable contribution to my career and great patience and encouragement during my study.

May, 2016

.....

Pitambar Sigdel

ABSTRACT

Ethnic students in the remote villages of Kathmandu district have little access to education and have difficulty in learning mathematics. This study employed, questionnaire and interview schedule to 60 Ethnic Students of grade IX, their teachers, 20 low achiever Ethnic Students and their parents. Social cognitive theory was applied as the theoretical framework. The objectives of this study are to find out the factors that determined ethnic students mathematical result and to suggest some remedies to reduce affecting factors. The tools for the research were questionnaire and interview from the analysis of collected data. Prior knowledge, favorite subject, presented regularly in math class, no consultation with friends and teachers to learn missed classes subject matter, environment of school, higher education of the subject teacher, Parent's higher education, inappropriate environment of the family, social belief and tradition, household work load, lack of motivation are the major factors affecting the mathematics achievement of Ethnic Students.

To improve the situation, Ethnic students should be motivated to be regular in class. Providing necessary educational material, interaction between their parents and teachers, motivation by parents and teachers, appropriate environment to learn and tuition and extra classes to improve in mathematics are other important steps that would help improve the situation.

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>
<i>Abbreviations</i>	<i>vii</i>
Chapters	
I. INTRODUCTION	1-4
Background of the Study	1
The Ethnic and Academic Performance in Mathematics	2
Statement of the Problems	2
Objectives of the Study	2
Significance of the Study	3
Hypothesis of the Study	4
Delimitations of the Study	4
Definitions of Terms Used	4
II. REVIEW OF RELATED LITERATURE	5-10
Theoretical Construction	8
Conceptual Framework	10
III. METHODS AND PROCEDURES	11-13
Design of the Study	11
Sources of Data	11
Population of the Study	11
Sample of the Study	11
Tools for Research	11
Questionnaire	12
Interview Schedule	12
Item Analysis	12

	Reliability and Validity of the Data	12
	Scoring Procedure	13
	Data Collection Procedures	13
	Data Analysis and Interpretations	13
IV	ANALYSIS AND INTERPRETATION OF THE DATA	14-32
	Achievement Level of the Students	14
	Major Factors Affecting Mathematics Achievement of Ethnic Students	14
	Influence of Home Related factors in Mathematics Achievement	14
	Analysis of the Response given by the Parents	17
	Influence of Student Related Factors in Mathematics Achievement	20
	Practice of Previously Learned Subject Matters	25
	Analysis of the Influence of School Related Factors in Mathematics Achievement	26
	Analysis of the Response given by the Math Teachers	29
	Analysis of the Response given by the Head Teachers	29
	Facility of Play Ground and Playing Materials	30
V	SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATION	33-36
	Summary	33
	Major Findings of the Study	34
	Conclusion	35
	Recommendations	36

REFERENCES

APPENDICES