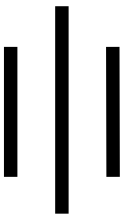
A STUDY OF APPROPRIATENESS OF INTRODUCING PRECALCULUS IN GRADE IX OF NEPAL

(A STUDY IN KASKI DISTRICT)



A THESIS SUBMITTED

BY

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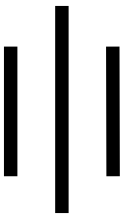

IN THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

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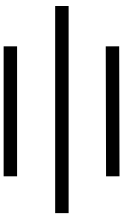

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Thesis Submitted

By

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Entitled

A STUDY OF APPROPRIATENESS OF INTRODUCING PRECALCULUS IN GRADE IX OF NEPAL has been approved in partial fulfillment of the requirements for the Degree of Master in Education.

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CERTIFICATE

This is to certify that Mr. Sandip Baral, student of academic year 063/065 with campus Roll No. 206/063 Exam Roll No. 480288 and TU Registration No. 9-2-240-534-97 has completed his thesis under my supervision, during the period prescribed by the rules and regulations of Tribhuwan University, Nepal. The thesis entitled **"A Study of Appropriateness of Introducing Precalculus in Grade IX of Nepal"** embodies the results of his investigation conducted during the period of 2010/2011 under the Department of Mathematics, Prithvi Narayan Campus, Tribhuwan University. I recommend and forward that his thesis be submitted for the evaluation for awarding the Degree of Master of Education.

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ABSTRACT

Mathematics has been given a significant place in school curriculum of Nepal. There is a wide acceptance of importance of mathematics; still there is a lack of consensus regarding the different issues related to school mathematics curriculum, such as, contents, curriculum materials, teaching methods etc.

For the development of science and technology of a country mathematics at school level plays a very significant role. Therefore great changes are taking place in the school mathematics curriculum throughout the world. To keep pace with this recent trend, many research studies are still continuing in Nepal for the development of a better school mathematics curriculum. In this context, the purpose of this study was an attempt to introduce the fundamental concept of precalculus from the secondary level. Therefore the main objective of this study was:

To explore the possibility of introducing precalculus in Grade nine of school level.

For this purpose, "An introductory course in Precalculus" was developed and taught in grade IX for 8 days. The course was taught to 15 grade nine students of Shantideep English School and Harvard Boarding School each selected randomly. This was done to conduct teaching in small groups.

An achievement test consisting of two class tests and one post test was administered. Students' achievement in the test was compared with their achievement in the whole course of

mathematics by using t-test. The findings of the study were: both Group ‘A’ and ‘B’ students’ achievement in precalculus significantly higher than in their achievement in mathematics.

The relation between students’ achievement score in precalculus and their achievement score in mathematics was highly positive. On the basis of the above finding it was concluded that an introductory topic of precalculus could be introduced from grade IX.

TABLE OF CONTENTS

TOPICS		Page No:
Viva-voce		i
Certificate		ii
Acknowledgement		iii
Abstract		iv-v
Table of Contents		vi-viii
List of Tables		ix
Abbreviation		x
CHAPTER I:		
INTRODUCTION		(1-12)
1.1	Background of the Study	1
1.2	Statement of the Problem	8
1.3	Significance of the Study	8
1.4	Objectives of Study	10
1.5	Statement of Research Hypothesis	10
1.6	Limitations of the Study	11
1.7	Meaning of Terms	11
CHAPTER II:		
REVIEW OF RELATED LITERATURE		(13-18)
CHAPTER III:		
METHODOLOGY		(19-23)
3.1	Design of the Study.	19
3.2	Sample.	19
3.3	Development of Instructions.	20

3.3.1 Development and Validation of Introductory Course in Precalculus. 20
3.3.2 Construction, Validation and Reliability of Test Items. 21
3.3.3 Conduction of Purposed Course. 23
3.4 Data Collection Procedure. 23
3.5 Data Analysis Procedure. 23

CHAPTER IV:
ANALYSIS AND INTERPRETATION OF DATA (24-29)
4.1 Comparison Achievement in Precalculus vs. Achievement in Whole course of Mathematics. 26
4.2 Relation between Group 'A' and Group 'B' Students' Achievement Scores on Precalculus with their Scores on Mathematics. 27

CHAPTER V:
SUMMARY CONCLUSION AND RECOMMENDATION (30-32)
5.1 Summary 30
5.2 Major Findings 31
5.3 Conclusion 32
5.4 Recommendation 32

BIBLIOGRAPHY (33-37)
Appendix 1: Proposed unit curriculum for Grade IX. 38
Appendix 2: Content Specification Grid. 41
Appendix 3(i): ClassTest I 46
Appendix 3(ii): Class Test II 47
Appendix 3(iii):PostTest 48

Appendix 4(i): Achievement Score of Group A Students in Mathematics and Precalculus Unit. 50
Appendix 4(ii) Achievement Score of Group B Students in Mathematics and Precalculus Unit. 51
Appendix 5(i): Correlation Coefficient between Group A Students' Achievement Score in Precalculus and Total Score in Mathematics. 52
Appendix 5(ii): Correlation Coefficient between Group B Students' Achievement Score in Precalculus and Total Score in Mathematics. 56
Appendix 6: List of Formulae. 56

LIST OF TABLES

Page No:

Table No. 1: Test Retest Reliability of Post Test. 22

Table No. 2: Comparison of Group 'A' Students' Achievement in Precalculus with their Achievements in Mathematics. 26

Table No. 3: Comparison of Group 'B' Students' Achievement in Precalculus with their Achievements in Mathematics 27

Table No. 4: Correlation between Score on Precalculus and Mathematics. 28

ABBREVIATIONS

CDC – Curriculum Development Centre

DOE – Department of Education

Exp. – Experiment

Fig. – Figure

MOE – Ministry of Education

NEC – National Education Commission

NESP – National Education System Plan

No. – Number

S.D. – Standard Deviation

S.N. – Serial Number

SMSG – School Mathematics Study Group

Vs – Verses