EFFECTIVENESS OF EXPERIMENTAL VERIFICATION IN TEACHING GEOMETRY AT LOWER SECONDARY LEVEL

A Thesis

By

Jaya Prakash Ghile

For the partial fulfillment of the requirements for the Degree of Master of Education

Submitted To

Department of Mathematics Education

Prithvi Narayan Campus

Bagar - 1, Pokhara

March 2018

DEPARTMENT OF MATHEMATICS

FACULTY OF EDUCATION

PRITHVI NARAYAN CAMPUS

POKHARA, NEPAL

TRIBHUVAN UNIVERSITY

LETTER OF RECOMMENDATION

This to certify that Mr. Jaya Prakash Ghile, a student of academic year 2067/068 with Campus Roll No. 206, Exam Roll No. 480232 (2072) and T.U. Registration No. 9-2-48-3865-2006, has completed his thesis under my supervision for the period prescribed by the rules and regulations of Tribhuvan University Nepal. The thesis entitle "*Effectiveness of Experimental Verification in Teaching Geometry at Lower Secondary Level"* has been prepared on the basis result of his investigation conducted during the period of Dec. 2017 to April 2018. I hereby, recommend and forward that his thesis will be submitted for the final evaluation as the partial requirements to award the degree of Master of Education.

……..	……..
Dr. Mr. Tribhuvan Sharma	Mr. Maheshwor Pokharel
Supervisor as well as Head	Member
Department of Mathematics	Department of Mathematics
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APPROVAL LETTER

A Thesis

By

Jaya Prakash Ghile

Entitled

"A Study of Effectiveness of Experimental Verification in Teaching Geometry at Lower Secondary Level" has been approved in partial fulfillment for the requirements for Degree of Master of Education

Committee for the Viva-voce		**Signature**
1.	Assoc. Prof. Dr. Tribhuvan Sharma **(Supervisor as well as Head of Department of Mathematics)**	…….
2.	Assoc. Prof. Dr. Bed Raj Acharya **(External Examiner)**	…….
3.	Lecturer Mahewshor Pokharel **(Member)**	…….

Date: 2074/12/23

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere thanks to my research supervisor as well as Head of Department of Mathematics Dr. Mr. Tribhuvan Sharma for his continuous encouragement, co-operation, guidance and valuable suggestions from the very beginning to the end of this study.

My sincere gratitude also goes to Mr. Maheshwor Pokharel, Member of Department of Mathematics for his proper guidance and constructive suggestions.

My special thanks goes to district education office Syangja, the head teachers, mathematics teachers and students of all the schools involved in this study.

Furthermore, I am very grateful to my mother Dil Kumari Ghile, elder brothers Deepak Prakash Ghile and Bijay Prakash Ghile.

Also, I would like to express my thank fullness to Mr. Krishna Prasad Bhandari, Shankar Paudel and Abhishek Bishwokarma who helped to collect the data and correct the language.

Finally, I am obligated to all the friends who assisted me directly or indirectly in completing this study and to The Creative Computer, Bagar-1, Pokhara.

Date: April 2018 Jaya Prakash Ghile

ABSTRACT

This is an Experimental research entitled *Effectiveness of Experimental Verification in Teaching Geometry*. The objectives of the study were 'to compare the achievements of the students taught by using experimental verification method and traditional method in geometry' and 'to analyze the effect of experimental verification in learning mathematics'.

A pretest, posttest, equivalent group design was adopted to achieve the objective of the study. For this, two groups were selected by stratified sampling method from two government schools of Syangja district, which were similar in socio-economic status and result of the students from each school 20 students were selected for a sample of the study. In order to make the groups comparable a pretest was administered to both group which resulted that the groups are comparable at 0.05 level of significance. Both the experimental and control group were taught by researcher himself for 2 weeks by using and without using experimental verification respectively. Researcher taught the chapter 'area of triangle and quadrilaterals and regular polygon' of mathematics textbook of grade VIII prescribed by government of Nepal. Student's behavior was observed by the researcher during the experimentation. After the completion of experimentation, an achievement test was administered on the both group. The result of test was analyzed by using t-test at 0.05 level of significance.

It is found that the mean achievement score of students taught by using experiment verification is better than the mean achievement score of the students taught by without using experiment verification. Hence there is significant difference between the achievement of students taught by experimental verification and traditional method. From the observation, it is concluded that almost of the students taught by using experiment verification were very active, laborious, regular, concentrative and competitive.

TABLE OF CONTENTS

LIST OF TABLES