

PROBLEMS FACED BY TEACHERS AND STUDENTS IN TEACHING AND  
LEARNING GEOMETRY AT GRADE IX

A  
THESIS  
BY  
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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
MASTERS IN MATHEMATICS EDUCATION

SUBMITTED  
TO  
DEPARTMENT OF MATHEMATICS EDUCATION  
CENTRAL DEPARTMENT OF EDUCATION  
UNIVERSITY CAMPUS  
TRIBHUVAN UNIVERSITY  
KIRTIPUR

2019

### Letter of Certificate

This is to certify that **Mr. Umashankar Chaudhary** student of academic year 2070/71 with Campus Roll Number: 510, Thesis Number 1286, Exam Roll Number: 280548 and T.U. Registration Number 9-2-15-2978-2009 has completed this thesis for the period prescribed by the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal. This thesis entitled **“Problems Faced by Teachers and Students in Teaching and Learning Geometry at Grade IX”** has been prepared based on the results of his investigation. I hereby recommend and forward that his thesis be submitted for the evaluation as the partial requirement to award the degree of Master of Education.

.....

Assoc. Prof. Laxmi Narayan Yadav

(Head of Department)

Date: May 2, 2019

## Letter of Approval

This thesis entitled **“Problems Faced by Teachers and Students in Teaching and Learning Geometry at Grade IX”** submitted by Mr. UmashankarChaudhary in partial fulfillment of the requirements for the Master's Degree in Mathematics Education has been approved.

Viva Voce Committee

Signature

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Date: May 21, 2019

### **Recommendation for Acceptance**

This is to Certify that **Mr. Umashankar Chaudhary** his M. Ed. thesis entitled **“Problems Faced by Teachers and Students in Teaching and Learning Geometry at Grade IX”** under my supervision during the period prescribed the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I recommended and forward his thesis to the Department of Mathematics Education to organize final viva-voce.

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Date: May 21, 2019

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## **Declaration**

This dissertation contains no material which has been accepted for the award of another degree in any institutions. To the best of knowledge and belief this dissertation contains no material previously published by any authors except due acknowledgement has been made.

.....

(UmashankarChaudhary)

Date: May 21, 2019

## **Dedication**

To my father Binod Prasad Chaudhary

## **Acknowledgements**

My research could not be formed without the proper support and time by time encouragement and guidance of many scholars and my relatives. First and foremost, I would like to express the deepest appreciation to my supervisor Mr. AbatarSubedi for his valuable guidance and warm support. Without his persistent help this thesis would not have been possible.

My sincere thanks goes Assoc. Prof. Laxmi Narayan Yadav, Head Department of Mathematics Education T.U.,Kirtipur, Mr. Bed Raj Acharya, Mr. Krishna Prasad Adhikari and all the respected lecturers and Readers of Department of mathematics Education, FOE T.U. for their valuable suggestions and encouragements to complete this research paper. I would also like to express sincere appreciation to Prof. Dr. Siva Ram Nuupane for his inspirations, encouragement, valuable comment and suggestion.

I would also like to express my gratitude to my parents for their valuable support up to the university education. Finally, I would like to extend my thanks to Principals of my research schools and participants for their active participation.

.....

UmashankarChaudhary



## **Abstract**

This is a survey type research related to problems faced by teachers and students in teaching and learning geometry at grade IX. The purpose of the study was to find the problems faced by teachers and students in teaching learning geometry and also find the cause of the problems which are faced by teachers and students at grade IX of Rautahat district. To achieve the objectives, the researcher made tools: questionnaire, observation form and interview schedule and using simple frequency, mean and percentage in analyzing data. Five mathematics teachers and one hundred twenty five students were randomly selected from five community schools. The information obtained from questionnaire and interview guidelines were gathered together and categorized in different codes. These codes were again developed into different themes relating with conceptual framework and analyzed by cross tabulation method.

The analysis of the data indicated that there are problems in teaching and learning geometry specifically related into teaching learning activities, classroom management, school administration, evaluation techniques, methodologies, proving and verifying theorem and instructional materials. The causes of these problems found in the study are overload of students, untrained teachers, insufficient of time, lack of physical infrastructure, weak leadership, unsuitable teaching materials and traditional methodology. Most of the community schools in Rautahat district contain multicultural diverse classroom and also the students of various level and aim. Diverse classroom have diverse expectation and diverse ability of learning. Geometry itself has complex structure so it is challenging to teach in such classes. Classwork checking, homework correction, interaction in the classroom, good relation between teacher and students, role play and active participation in geometry classroom is the key point to promote instructional strengths.

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