# MEDIUM OF INSTRUCTION AND MATHEMATICS ACHIEVEMENT OF STUDENTS 

## A

## THESIS

BY<br>SAMJHANA THAPA MAGAR

FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER DEGREE IN MATHEMATICS EDUCATION

SUBMITTED<br>TO DEPARTMENT OF MATHEMATICS EDUCATION CENTRAL DEPARTMENT OF EDUCATION UNIVERSITY CAMPUS, KIRTIPUR, KATHMANDU TRIBHUVAN UNIVERSITY

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TRIBHUVAN UNIVERSITY

2017

## LETTER OF CERTIFICATE

This is to certify that Mrs. Samjhana Thapa Magar a student of academic year 2070/071 with Campus Roll No: 696/070, Thesis number 1288, Exam Roll No: 280515 and T. U. registration number 9-1-43-62-2006 has completed this thesis for the period prescribed by the rules and regulations of Tribhuvan University, Nepal. This thesis entitled 'Medium of Instruction and Mathematics Achievement of Students' has been prepared based on the result of her investigation. I hereby recommend and forward that her thesis be submitted for the evaluation as the partial requirements to award the degree of Master of Education.

(Assoc.Prof. Laxmi NarayanYadav)

HOD

Date: $\qquad$

## RECOMMENDATION FOR ACCEPTANCE

This is to certify that Mrs. Samjhana Thapa Magar has completed her M.Ed. thesis entitled 'Medium of Instruction and Mathematics Achievement of Students' under my supervision during the period prescribed the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I recommend and forward her thesis to the Department of Mathematics Education to organize final viva-voce.

(Mr. Krishna Prasad Adhikari)

Supervisor

Date: $\qquad$

## LETTER OF APPROVAL

This thesis entitled 'Medium of Instruction and Mathematics Achievement of Students' submitted by Mrs. Samjhana Thapa Magar in partial fulfillment of the requirements for the Master's Degree in Education has approved.
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## DECLARATION

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

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#### Abstract

This study intended to compare the students' achievements in mathematics taught by English and Nepali medium of instruction. The objectives of this study were to compare the mathematics achievement of students in English and Nepali medium schools and to analyze the teaching learning activities in English and Nepali medium schools. The researcher adopted mixed method research design to achieve the objectives. Firstly, the quantitative data collected through achievement test and secondly the qualitative data was obtained through classroom observation of teachers. For this study, the researcher had selected 200 students randomly from six schools as the sample of the study. Among them, three schools were English medium and three schools were Nepali medium. From these schools four mathematics teachers were selected randomly including two from each English medium and Nepali medium school. The quantitative data obtained from mathematics achievement test were analyzed and interpreted by using percentage, mean, standard deviation and $t$-test and qualitative data obtained from observation form were analyzed descriptively.

The test paper shows that, student of English medium schools secured 94 percentages in distinction, 4 percentages in first division, 1 percentage in second and third division. Students of Nepali medium schools secured 10 percentages in distinction, 28 percent in first division, 40 percent in second division, 20 percent in third division and 2 percent failed. The mean score of the students in English medium schools and Nepali medium schools students are 37.05 and 21.82 respectively. The tvalue calculated is 22.35 . Since, the calculated $t$-value is greater than tabulated value 1.96. The qualitative data obtained from classroom observation, it shows that the teaching learning activities of English medium school was effective than the Nepali medium school.


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