

**IMPACT OF TPD TRAINING ON MATHEMATICS TEACHING
AT LOWER SECONDARY LEVEL**

THESIS

BY

INDRA BAHADUR KARKI

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त्रिभुवन विश्वविद्यालय
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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 CERTIFICATE

This is to certify that **Mr. Indra Bahadur Karki**, a student of academic year 2068/69 with Campus Roll Number 569, Thesis Number 1040, Exam Roll Number 281605(2069), and TU Registration Number 9-2-479-133-2007 has completed his thesis under the rules and regulations of Tribhuvan University, Nepal. The thesis entitled “**Impact of TPD Training on Mathematics Teaching at Lower Secondary Level**” embodies the result of his investigation conducted during the period 2015, in the Department of Mathematics Education, University Campus, Tribhuvan University, Kirtipur, Kathmandu, Nepal. I, hereby, recommend and forward that his thesis be submitted for the evaluation as the practical requirements to award the Degree of Masters of Education.

.....

.....

(Dr. Eka Ratna Acharya)

(Associate Prof. Laxmi Narayan Yadav)

Supervisor

Head

Date



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शिक्षा शास्त्र संकाय
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Thesis

Submitted

By

Indra Bahadur Karki

Entitled

“Impact of TPD Training on Mathematics Teaching at Lower Secondary Level” has been approved in partial fulfillment of the requirements for the degree of Masters of Education.

Committee for the Viva-voice

Signature

Asso. Prof. Laxmi Narayan Yadav

(Chairman)

.....

Prof. Dr. Hari Prasad Upadhyay

(Member)

.....

Dr. EkaRatna Acharya

(Member)

.....

Date:

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.....

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ABSTRACT

Training is considered as one of the most necessary component in mathematics teaching in Nepal, but the impact of TPD training has not been more effective to the desired level in teaching mathematics in our context. Many factors are responsible for poor transfer of TPD training in the classroom delivery. This research was undertaken in order to find the effectiveness or impact of TPD training program in teaching mathematics at lower secondary level and the real situation of teachers in mathematics teaching of government school of two resource centers of Makwanpur district.

In order to fulfill the objectives of this study, the researcher had selected 28 community schools of two resource centers of Makwanpur district by Stratified random sampling procedure. Among those schools, the researcher randomly selected 28 sample schools from which 14 trained mathematics teachers and 14 untrained mathematics teachers. Similarly, final exam's marks of 140 students in mathematics from Grade VIII were taken to analyze in which 70 students were taught by trained teachers and 70 students were taught by untrained teachers. Classroom observation form and questionnaire were used to collect the desired data.

The mean, standard deviation and two tailed z-test were used to analyze the collected data through the final examination of the academic year 2071 and the data collected through the observation and questionnaire were also analyzed on percentage basis. In comparison of student's achievements in mathematics, it was found that the mathematics achievement of students taught by trained teachers was more significant than the students taught by untrained teachers. Finally the researcher found that all the lower secondary level trained mathematics teacher's teaching learning activities were effective.

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LIST OF ABBREVIATIONS

DEO	:	District Education Officer
MOE	:	Ministry of education
TU	:	Tribhuvan University
CDC	:	Curriculum Development Center
TPDT	:	Teacher's Professional Development Training
FOE	:	Faculty of Education
DLE	:	District Level Examination
SLC	:	School Leaving Certificate
BPEP-I	:	Basic and Primary Education Project-I
NESP	:	National Education System Plan
BPEP-II	:	Basic and Primary Education Program-II
NEC	:	National Education Commission
SEDP	:	Science Education Development Project
TNA	:	Training Need Assessment
LRC	:	Leader Resource Centre
EFA	:	Education for All
NNEPC	:	Nepal National Education Program commission
NCED	:	National Centre for Educational Development

LIST OF SYMBOLS

\bar{X}	=	Mean of Scores
Σ	=	Summation
S	=	Variance of Sample Scores
%	=	Percentage
N	=	No. of students