

**CHALLENGES FACED BY MATHEMATICS TEACHERS IN USING ICT IN
TEACHING MATHEMATICS**

THESIS

BY

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**FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF EDUCATION**

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CENTRAL DEPARTEMENT OF EDUCATION

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Letter of Certificate

This is to certify that Mr. **Dilip Sah Lahera**, a student of academic year 2071/ 072 with Campus Roll No 467, thesis number 1488 with Exam Roll No. 28710280 and T.U. Registration No. 9-2-15-579-2010 has completed his thesis under supervision of Dr. Ganesh Prasad Adhikari, for the period prescribed by the rules and regulation of Tribhuvan University, Nepal. The thesis entitled “**Challenges Faced by Mathematics Teachers in Using ICT in Teaching Mathematics**” has been prepared based on the result of his investigation conducted during the period of March 2019 to March 2021 under the Department of Mathematics Education, University Campus, Tribhuvan University, Kirtipur, and Kathmandu. I recommend and forward his thesis for evaluation as the partial fulfillment for the requirements to award the Degree of Master of Education.

.....

(Prof. Dr. Bed Raj Acharya)

Date: February 4, 2021

Departement Head of
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A

Thesis

By

DILIP SAH LAHERA

Entitled

“Challenges Faced by Mathematics Teachers in Using ICT in Teaching Mathematics” has been approved in partial fulfillment of the required for the degree of Master of Education.

Committee of the Viva-Voce

Signature

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(Chairman)

2. Prof. Dr. Indra Kumari Bajracharya

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3. Dr. Ganesh Prasad Adhikari

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Date: March 4, 2021



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Recommendation for Acceptance

This is to certify that Mr. **Dilip Sah Lahera**, has completed his M.Ed. thesis entitled “**Challenges Faced by Mathematics Teachers in Using ICT in Teaching Mathematics**” under my supervision during the period prescribed the rules and regulations of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I recommend and forward his thesis to the Department of Mathematics Education to organize final viva-voce.

.....

(Dr. Ganesh Prasad Adhikari)

Date: February 4, 2021

(Supervisor)

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Dedication

I want to dedicate this thesis to my father Mr. Lal Bahadur Sah Lahera and Mother Mrs. Laxminiya Devi Laherin. They have always been a source of inspiration in my life who have spent their whole life to transform me from nobody to somebody.

Declaration

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

.....

(Dilip Sah Lahera)

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I am deeply indebted to my parents and family members father Mr. Lal Bahadur Sah Lahera, Mother Mr. Laxminiya Devi Laherin and my wife Amrita Sah Lahera who provided needed atmosphere and encouragement to complete this study.

Date: March 2021

.....
Dilip Sah Lahera

Abstract

The present study “Challenges faced by Mathematics Teachers in Using ICT in Teaching Mathematics” is carried out to identify the challenges faced by mathematics teachers in using ICT in teaching mathematics and to explore the possible solution to the challenges faced by teachers in using ICT in teaching mathematics. The sequential explanatory research design was adopted to conduct this study. Fifteen secondary schools of Kalaiya Sub Metropolitan, Bara were selected for sample by stratified random sampling method. Among fifteen schools, five schools were selected from rural area and ten schools were selected from urban area. Questionnaire, interview guidelines and class observation checklist were used as tools to collect necessary data. To gather information, thirty secondary level mathematics teachers were selected for questionnaire with two teachers from each sampled school by random sampling method. Out of them, five principal for interview and five teachers selected according random sampling method. The researcher used mean weightage as a statistical tool for analysis and interpretation of data collected from questionnaire. The result further authenticated by qualitative data obtained by interview and class observation.

After analysis of data, researcher found that teachers were facing challenges such as lack of ICT’s equipment and strong internet connection, lake of administrative support, lake of appropriate time, lack of separate ICT math lab, lack of technical support, lack of ICT based training, lack of software relevant to mathematical curriculum content, heavy work load and negative attitude of teacher toward use of ICT. This study recommends that both government and non-government organization should help to facilitate skilled manpower, stabilized electricity supply, hardware resources and software resources to enhance to use of ICT in government schools need to establish ICTs math lab with strong internet. And relevant stakeholders such as Ministry of Education (MOE), relevant authorities, the Rectors of the school and the mathematics teachers themselves can consider concrete mitigating steps to overcome those challenges.

Abbreviation and Symbols

ICT	:	Information and Communication Technology
FOE	:	Faculty of Education
NCED	:	National Center of Education Development
SADC	:	Southern Africa Development Community
LCD	:	Liquid Crystal Display
NGO	:	Non- Governmental Organization
EFA	:	Education for All
UNESCO	:	United Nations Economic and Social Council
IJCDMS	:	International Journal of Community Development and Management Studies

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