

**EFFECTIVENESS OF INSTRUCTIONAL MATERIALS IN TEACHING
MATHEMATICS**

**A
THESIS
BY
DHANA JOSHI**

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

**SUBMITTED
TO
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CENTRAL DEPARTMENT OF EDUCATION
UNIVERSITY CAMPUS
TRIBHUVAN UNIVERSITY
KIRTIPUR KATHMANDU
NEPAL**

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LETTER OF CERTIFICATE

This is to certify that Mrs. Dhana Joshia student of academic year 2070/71 with Campus Roll No: 215, Thesis number 1302, Exam Roll No: 280408 and T.U. registration number 9-2-690- 64-2009 has completed this thesis under my supervision and guidance Dr. Bed Raj Acharya during the period prescribed by the rules and regulations of Tribhuvan University, Kirtipur, (Kathmandu), and Nepal. This thesis entitled “**Effectiveness of Instructional Materials in Teaching Mathematics**” has been prepared based on the results of her investigation conducted during the prescribed period under the Department of Mathematics Education, Central Department of Education, University Campus, Tribhuvan University, Kirtipur (Kathmandu), Nepal. I recommend and forward that her thesis be submitted for the evaluation as the partial requirements to award the degree of Master of Education.

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Letter of Approval

A

Thesis

By

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This thesis entitled “**Effectiveness of Instructional Materials in Teaching Mathematics**” has been approved in partial fulfilment of the requirements for Degree of Master of Education.

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RECOMMENDATION FOR ACCEPTANCE

This is to certify that Mrs. Dhana Joshi has completed her M. Ed. thesis entitled **“Effectiveness of Instructional Materials in Teaching Mathematics”** under my supervision during the period prescribed by 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.

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DEDICATION

This work is affectionately dedicated to my father **Mr. Kirshan Datt Joshi**

And mother **Mrs. Radha Joshi**

Who even in a very difficult situation gave me a great span of their

Life for what I am now.

DECLARATION

This thesis 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.

Date -----

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.....
Dhana Joshi

ABSTRACT

The main objective of this study is to explore the “Effectiveness of Instructional Materials in Teaching Mathematics”. The design of the study adopted experimental design involving with pre-test, post-test, non-equivalent experimental. The study was conducted in one of the public school in Darchula district. To achieve the objectives the researcher selects 50 students of grade VIII. The research used random sampling method to select the respondents. Tools for data collection were Achievement test and interview guideline. The experimental and control groups were taught by the researcher on the topic of Geometry Line and Angle, Triangle of grade VIII with and without using instructional materials. Pre-test was administered before the experiment start. The experiment runs for the duration of 15 days. After 15 days post-test was administered on the both groups and the mean scores was calculated. The results were drawn on the basis of t-test at 0.05 level of significance.

Finally, the researcher concluded that the uses of instructional materials had greatest effect on achievement of the students rather than without using instructional materials. These findings show that students in experimental group scored higher marks than students in control group where instructional materials were not applied. Mathematical achievement of basic level at grade VIII significantly depends on the use of instructional materials. When instructional materials are used, the usage of instructional materials has an added advantage on the mathematics achievement level of the lower secondary level students. So, teaching Geometry by using different instructional materials score higher achievement than teaching without using instructional materials.

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