

**EFFECTIVENESS OF EXPERIMENTAL VERIFICATION IN
TEACHING GEOMETRY AT LOWER SECONDARY LEVEL**

A Thesis

By

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*For the partial fulfillment of the requirements for the Degree of Master of
Education*

Submitted To

Department of Mathematics Education

Prithvi Narayan Campus

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DEPARTMENT OF MATHEMATICS
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LETTER OF RECOMMENDATION

This to certify that Mr. Jaya Prakash Ghile, a student of academic year 2067/068 with Campus Roll No. 206, Exam Roll No. 480232 (2072) and T.U. Registration No. 9-2-48-3865-2006, has completed his thesis under my supervision for the period prescribed by the rules and regulations of Tribhuvan University Nepal. The thesis entitle "*Effectiveness of Experimental Verification in Teaching Geometry at Lower Secondary Level*" has been prepared on the basis result of his investigation conducted during the period of Dec. 2017 to April 2018. I hereby, recommend and forward that his thesis will be submitted for the final evaluation as the partial requirements to award the degree of Master of Education.

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APPROVAL LETTER

A Thesis

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Entitled

"A Study of Effectiveness of Experimental Verification in Teaching Geometry at Lower Secondary Level" has been approved in partial fulfillment for the requirements for Degree of Master of Education

Committee for the Viva-voce

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ABSTRACT

This is an Experimental research entitled *Effectiveness of Experimental Verification in Teaching Geometry*. The objectives of the study were ‘to compare the achievements of the students taught by using experimental verification method and traditional method in geometry’ and ‘to analyze the effect of experimental verification in learning mathematics’.

A pretest, posttest, equivalent group design was adopted to achieve the objective of the study. For this, two groups were selected by stratified sampling method from two government schools of Syangja district, which were similar in socio-economic status and result of the students from each school 20 students were selected for a sample of the study. In order to make the groups comparable a pretest was administered to both group which resulted that the groups are comparable at 0.05 level of significance. Both the experimental and control group were taught by researcher himself for 2 weeks by using and without using experimental verification respectively. Researcher taught the chapter ‘area of triangle and quadrilaterals and regular polygon’ of mathematics textbook of grade VIII prescribed by government of Nepal. Student’s behavior was observed by the researcher during the experimentation. After the completion of experimentation, an achievement test was administered on the both group. The result of test was analyzed by using t-test at 0.05 level of significance.

It is found that the mean achievement score of students taught by using experiment verification is better than the mean achievement score of the students taught by without using experiment verification. Hence there is significant difference between the achievement of students taught by experimental verification and traditional method. From the observation, it is concluded that almost of the students taught by using experiment verification were very active, laborious, regular, concentrative and competitive.

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