

**EFFECTIVENESS OF TANGRAM IN MATHEMATICS TEACHING AT SECONDARY
LEVEL**

**A
THESIS
BY
NAGESWOR RAY**

**IN THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
DEGREE OF MASTERS OF EDUCATION**

**SUBMITTED
TO
DEPARTMENT OF MATHEMATICS EDUCATION
CENTRAL DEPARTMENT OF EDUCATION
UNIVERSITY CAMPUS
KIRTIPUR, KATHMANDU
2016**



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Letter of Certificate

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Thesis

By

Nageswor Ray

Entitled

“Effectiveness of Tangram in Mathematics Teaching at Secondary Level” has been approved in Partial fulfillment of degree of Master of Education.

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ACKNOWLEDGEMENT

First of all, I want to thank the Department of Mathematics Education, Central Department of Education, Kirtipur, Kathmandu for providing me support and opportunity to carry out the research work.

I am extremely indebted to my respected and honorable Supervisor Mr. Bed Prasad Dhakal, Lecture, Department of Mathematics Education, T. U., Kirtipur, for supervising my work and for providing me the valuable guidelines, suggestion and comments while preparing this study report.

Similarly, my sincere gratitude goes to Associate Professor Laxmi Narayan Yadav (Head of Department of Mathematics Education), Prof. Dr. Hari Prasad Upadhyay, Prof. Dr. Min Bahadur Shrestha, Mr. Loknath Bhattarai, Mr. Abatar Subedi, Mr. Krishna Prasad Adhikari, Mrs. Sarala Luitel and other respected teachers of Department of Mathematics Education, Central Department of Education, Kirtipur, for their valuable comments co-operation and suggestions during the whole period of the study.

I wish to express my sincere appreciation to the all Principals and mathematics teachers of sampled higher schools. I must extend my heartily thanks to Nawaraj Subedi, Yog Kumar Yadav, Puspa Lata Baral_ and other friends who gave me the constant inspiration and suggestions to bring this thesis in this complete form.

At last but not the least, I wish to acknowledge my family: father Mr. Muni Lal Ray, mother Mrs. Neniya Devi Ray, Brothers Mr. Jageswor Ray. Who, even under very difficult situation devoted a great span of their times in making me what I am now.

.....

Nageswor Ray

Abstract

This is an experimental research entitled "Effectiveness of tangram in teaching mathematics at secondary level." The objective of this study were to compare the achievement of the student taught by using tangram and without using tangram and to find out the effectiveness of the tangram in teaching mathematics at secondary level. For this study, pre-test post-test nonequivalent group design was adopted. Two public schools were chosen purposively so as to make average standard of school with respect to academic performance, physical facilities, class size and ethnicity. From each school 20 students from grade IX were selected for the sample of the study. The experimental and control group were determined by tossing a fair coin. Both experimental and control group were taught by researcher on the topic geometry at grade IX.

Achievement test was the main tool to assess achievement of students and class note were used to collect information. An achievement test was constructed, standardized and administered before the experiment started. The experiment was conducted for the duration of twenty one days. After twenty one days, another achievement test, post-test was administered on both groups and the mean score was calculated. The difference in mean achievement score were tested by using t-test at 0.01 level of significance. It was found that the mean achievement score of students taught with using tangram was higher than the mean achievement score of students taught without using tangram. Therefore, it is concluded that use of tangram is an effective means of teaching geometrical concept in secondary level.

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