CAUSES AND REMEDIAL WAYS OF MATHEMATICS ANXIETY IN SECONDARY LEVEL STUDENTS

A THESIS BY NIRMAL TUMROK

FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN MATHEMATICS EDUCATION

SUBMITTED TO DEPARTMENT OF MATHEMATICS EDUCATION CENTRAL DEPARTMENT OF EDUCATION UNIVERSITY CAMPUS TRIBHUVAN UNIVERSITY

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Recommendation for Acceptance

This is to certify that **Mr. Nirmal Tumrok** has completed his M.Ed. thesis entitled **Causes and Remedial Ways of Mathematics Anxiety in Secondary Level Students,** 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.

> (Mr. Krishna Prasad Adhikari) Supervisor

Date:-____

Letter of Approval

The thesis entitled Causes and Remedial Ways of Mathematics Anxiety in
Secondary Level Students submitted by Mr. Nirmal Tumrok in partial fulfillment

of the requirements for the Degree of Mathematics Education has been approved.

Viva-voce Committee

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2. Letter of Certificate

- 3. This is certify that Mr. Nirmal Tumrok, a student of academic year 2070/71 with Campus Roll Number 488, Thesis Number 1269 Exam Roll Number 280464 and T. U. Registration Number 9-2-1-352-2009 has completed this thesis for the period prescribe by the rules and regulations of the Tribhuvan University, Kirtipur, Kathmandu, Nepal. This thesis entitled Causes and Remedial ways of Mathematics Anxiety in Secondary Level Students has been prepared based on the results of his investigation. I hereby recommended and forward that his thesis be submitted for the evaluation as the partial requirements to award the Degree of Master of Mathematics Education.
- 4.
- 5.
- 6.

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Head

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13.

Dedication

To My respected parents:

Janga Bir Tumrok and Man Rani Tumrok

For their Affection and Reliance

Table of Contents 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.

Nirmal Tumrok

Date:

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Mr. Nirmal Tumrok

Absttract

Mathematics Anxiety is a fear, anxious feelings and occurs thousands of school level students. But, anxiety itself isn't a great deal the great deal is the question that; what causes it? The main focus of this study was to find out the major causes of mathematics anxiety in secondary school level students and to suggest the question how anxiety can be reduced? To answer these questions, researcher has considered qualitative research approach with case study design. The cases of the study were five students who have high mathematics anxiety score. Natural setting classroom observation, semi-structured interview schedule and focus group discussion were used as tools of information collection from related stakeholders such as; teachers, students, parents and administration. Thematic network analysis and triangulation approach of data analysis method were applied to analysis and interpretation the collected data.

As a result there were several serious causes of mathematics anxiety was found. Destruction of infrastructure of school of by earthquake, bad reading and learning environment at home, poor participatory class activities, badly engagement of students in latest social medias, lost of habit of doing homework and practices, lost of self-motivation, lack of formative evaluation system etc. contributed to yield the anxiety in mathematics. Same way, there were suggested various ideas, methods and teaching strategies to minimize such anxieties. Teaching conceptual and understanding mathematics, using technologies, audio-visual materials, promote students participation, build up habit of doing homework and practices, good cooperation and help of parents etc. were seen as major remedial ways of mathematics anxiety.

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Abbreviations

IT :	Information Technology
ICT :	Information & Communication Technology
MARS :	Mathematics Anxiety Rating Scale
MARS-R :	Mathematics Rating Scale - Revised
FGD :	Focus Group Discussion

- SEE : Secondary Education Examination
- IQ : Intelligence Quotient
- TV : Television
- 3D : 3 Dimensional