ANALYSIS OF TEST ITEMS AND STUDENTS ACHIEVEMENT SCORE OF DISTRICT LEVEL EXAMINATION: POLICY AND PRACTICE IN NEPAL

Submitted by Sher Bahadur Rawat Exam Roll No.: 28710459 T.U. Regd. No.: 9-1-21-320-2007

A Thesis Submitted to Faculty of Science and Environment Education, Tribhuvan University in Partial Fulfillment of the Requirements for the Master's Degree in Chemistry Education

> Department of Science and Environmental Education Central Department of Education Tribhuvan University, Kirtipur Kathmandu, Nepal March, 2018

Recommendation for Acceptance

This is to certify that **Ms. Sher Bahadur Rawat** has completed his M.Ed. thesis entitled **''Analysis of Test Items and Students Achievement Score of District Level Examination: Policy and Practice in Nepal''** under my supervision during the period prescribed by the rules and regulation of Tribhuvan University, Kirtipur, Kathmandu, Nepal. I recommend and forward her thesis to Department of Chemistry Education to organize final viva-voice.

Date:

.....

Kamal Prasad Acharya (Supervisor)

Letter of Approval

This thesis entitled **"Analysis of Test Items and Students Achievement Score of District Level Examination: Policy and Practice in Nepal"** submitted by Sher Bahadur Rawat in partial fulfillment of the requirements for the Master's Degree in Chemistry Education has been approved.

Letter of Certificate

This is to certify that **Sher Bahadur Rawat**, student of academic year 2074/075 with Campus Roll No. **455**, Exam Roll No. **28710459**, T.U Registration No. **9-1-21-320-2007** has completed this thesis under the period prescribed by the rules and regulation of Tribhuvan University, Nepal. The thesis entitled **"Analysis of Test Items and Students Achievement Score of District Level Examination: Policy and Practice in Nepal" embodies the result of his investigation. It is record of independent research work carried out by the researcher which has not been previously submitted for the award of any degree and other similar purpose. I hereby recommend and forward that this thesis be submitted for the partial requirements to award the degree of Master of Chemistry Education.**

Date:

.....

(Kamal Prasad Acharya)

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Dedication

This is dedicated to my respected parents Mr. Ganesh Bahadur Rawat, Mrs. Rukmani Rawat and my brother Shyam Kumar Rawat.

Declaration

This dissertation contains no material which has been accepted for the award of other degree in my institutions. To the best of my knowledge and belief, this dissertation contains no material previously published by any authors expect if acknowledgement has been made.

.....

Sher Bahadur Rawat

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March, 2018

Sher Bahadur Rawat

Abstract

The research study entitled "Analysis of Test Items and Students Achievement Scores of District Level Examinations: Policy and Practice in Nepal" was carried out. The prime concern of this study was to analyze the specification grid of compulsory science of grade eight with the respect to level of test items and scores. It is also aimed to compare the relation between the district level test items and specification grid. It also aimed to explore the teachers and students perceptions on test items of district level examination and this research also aimed to compare the achievement scores of boys and girls students in public and private schools in D.L.E.

The main focus of this study was to analyze the D.L.E. science test materials such on D.L.E. science question papers and specification grid. It was found that the questions asked for understanding level are more in number as well as marks then they were supposed to be asked but there were less number of questions from the knowledge, application and higher ability levels respectively.

From the analysis of the study, it was concluded that most of the questions were based on the understanding level. It did not fulfilled the demands of specification grid, knowledge, application and higher ability levels questions were less included in the all science questions groups. Specification grid demands 30%, 20%, 20% and 10% knowledge, understanding, application and higher ability levels questions respectively.

For this study, out of the total number of district level school with 5 private and 5 public schools was selected purposively. The sample size of this study were 100 students from the both type of schools, out of them 5 boys and girls from each school in the academic year of 2072 B.S. The random sampling was adopted for the selection of

Students from each school. 100 students were selected, out of them 5 boys and 5 girls were taken from each school.

Achievement test in science was administered to all selected students for collecting the data. Teacher's interviews questions were formed. The achievement test paper was prepared from the grade eight curriculum covering all branches of science i.e. physics, chemistry, biology, geology and astronomy. The achievement test paper comprises of 15 items for standardized science achievement test.

The result of achievement test was statistically analyzed by using tools like mean, standard deviation, and z and t-test. The z and t-test was tested at 0.05 level of significance differences to find whether there was significant difference or not in mean scorer of student achievement in science studying at public and private school at district level. In comparative analysis of scores, students of private schools got significantly higher mean scores i.e. 71.4 than that of public school i.e. 58.08. by using t and z-test, the overall findings showed that there was significant difference in the achievement of students of public and private schools. It was found that from the teachers interview questions there public schools teachers responded satisfactory answers then the private school teachers.

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