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CHAPTER - 1
INTRODUCTION & STATEMENT OF THE PROBLEM

1.0 INTRODUCTION:

In teaching field the world is becoming more and more competitive; quality of performance has become the key factor for teachers. The quality of the system of education is determined by the proficiency of the teachers; hence any investment in the field of education will be of little value if the teachers are weak and incompetent. Effective teachers can contribute more in classroom and in improving the whole system of education.

Ryan’s (1960), rightly remarks:

"if the competent teacher can be obtained, the likelihood of attaining desirable educational outcomes is substantial, on the other hand, although school may have excellent material resources in the form of equipment, building and text book, and although curricula may be appropriately adapted to community requirements, if the teachers are misfit on are different to their responsibilities the whole programmed is likely to be ineffective and largely wasted, as education in any country is a process to develop their people and society, and teacher has a pivotal role in the process of socialization which in turn caters to the need, and objectives and society."(1)

Today, Science is on a plane of high importance. The role of science as great social force and major influence on the economic and technological development of the country has been gaining great significance during recent years, and increasing emphasis is being laid on science education at all levels.
In today's life science has become part and parcel of our life. Several measures have been taken to strengthen science teaching, especially at the crucial stage of secondary education. Science has been introduced as a part of the curriculum so that every secondary school pupil is able to gain a basic understanding of the fundamental principles of scientific phenomena. Curriculum is formed at its best but delivery of curriculum is one of the concerns and at this stage proficiency is needed.

1.1 STATEMENT OF THE PROBLEM:

Statement of the present research is as follows.

'A STUDY OF TEACHING PROFICIENCY OF SECONDARY SCHOOL SCIENCE TEACHERS IN CONTEXT OF CERTAIN VARIABLES'

1.2 IMPORTANCE OF THE STUDY:

The discipline of education today comprises many and varied of human inquiries, and science has the major share. It is rightly said that human progress is largely the progress of science and technology. In the present study, researcher will construct and standardized the teaching proficiency test for the science teacher of secondary level.

1. This test will be helpful in finding out levels of teaching proficiency of science teachers. And will give guideline to improve levels of teaching proficiency of science teachers.

2. This test will be helpful at the time of an interview for self-financed and granted school science teachers. On the basis of their proficiency we can appoint the proficient science teacher.

3. This test will be helpful to know the relation between science teachers’ teaching proficiency and achievement of secondary schools students in science subject.
4. This research will give guideline for organizing seminar and training of Science teachers for modern developments and new methods of teaching, and it will be helpful to make progressive curriculum.

5. This test helps in performing diagnostic work among teachers and so proper remedial work can be carried out which can help in fostering proficiency of science teachers.

6. Other findings of research will give guideline for the future studies related to science teachers.

1.3 OBJECTIVES OF THE STUDY :

An objective of a research directs and organizes the path of research, so researcher decided to work on the following objectives.

1. To construct and standardize teaching proficiency test for secondary school science teachers.

2. To establish the validity and reliability of teaching proficiency test for secondary school science teachers.

3. To study the level of the teaching proficiency of secondary school science teachers.

4. To study the teaching proficiency of the secondary school science teachers in context of area of the secondary school, types of secondary school and gender of the science teacher, & their interactions.

5. To establish the norms of teaching proficiency test for the secondary school science teachers.

1.4 HYPOTHESIS:

Hypotheses are statements that can be tested statistically. Hypotheses usually make predictions about future events, existing differences among groups or existing relationship among variables. Researcher constructed following hypotheses for this study:
Ho 1: There will be no significant influence of area of secondary school on mean score of teaching proficiency test of science teacher of secondary school.

Ho 2: There will be no significant influence of types of secondary school on mean score of teaching proficiency test of science teacher of secondary school.

Ho 3: There will be no significant influence of gender on mean score of teaching proficiency test of science teacher of secondary school.

Ho 4: There will be no significant influence of interaction of area of secondary school and types of school on mean score of teaching proficiency test.

Ho 5: There will be no significant influence of interaction of area of secondary school and gender of science teacher on mean score of teaching proficiency test.

Ho 6: There will be no significant influence of interaction of types of school and gender of science teacher on mean score of teaching proficiency test.

Ho 7: There will be no significant influence of interaction of area of secondary school, types of school and gender of science teacher on mean score of teaching proficiency test.

1.5 DELIMITATIONS OF THE STUDY:

The current study has been undertaken within the following limitations:

1. The study will be limited to the state of Gujarat only.

2. The present study is limited up to the secondary school science teachers.

3. The study will be limited to the Gujarati Medium Secondary School science teachers of Gujarat state.
1.6 EXPLANATION OF THE TERMS:

- **TEACHING:**

  Teaching is narrowly the act of instructing in an educational institution. Teaching in generic sense has three focal points: the teacher, the child and the subject. Teaching establishes the relationship between these three. In the process of teaching the teacher is an active agent to establish to develop the relationship between the pupils and the subject. Therefore teaching is considered as characteristic activity of a teacher.

  According to Sanders and Schwab (1980)

  "A complex task which involves extensive interaction with a large number of students in the same classroom. The job requires the teacher to understand clearly the complex characteristics of his pupils, because he has to encourage certain forms of behavior of his students and discourage other forms of behavior." (2)

  Henderson and Lanier (1973) the following precise definition describing the unique elements and activities practiced by a teacher. "Teacher is manipulating the variables of instruction to produce intended changes in learner’s behaviors." (3)

  Different educators define teaching in different ways.

  "Most of the definitions narrowly view the teaching process is seen as an interaction between the teacher and pupils, it only explains one set of behaviors of teacher; and more important dimensions of teaching are ignored." (4)
Several meanings of teaching, such as ‘imparting knowledge’; ‘giving lessons’; ‘training to some action’; or ‘making to know how’; described in the dictionary, are also incomplete as they lack direction regarding conditions, means and ends.

According to C.V. Good (1959)

"Functional ability to apply practical situations, the essential principles and techniques of a particular subject - matter field."

- PROFICIENCY:

From the historical point of view, the term proficiency is not new. Kinney (1952) in co-operation with California council of teacher education, used the term in his study,

“The measurement of good teacher”

According to Webster dictionary, the term, proficiency means;

“Advancement in knowledge or skill”

According to C.V. Good (1959)

“Proficiencies are of those skills, concepts and studies needed by all workers regardless of their occupations or specific jobs.”

According to C.V. Good (1973)

“Proficiency is the degree of ability already acquired”

- TEACHING PROFICIENCY:

No clear-cut definition of teaching proficiency has been identified. Therefore combining the definitions of teaching & proficiency the following operational definition can be derived.

“Teaching Proficiency means those skills; concepts and attitudes need by teachers for the act of instructing in an educational institution.”

- SECONDARY SCHOOL:

According to C.V. Good (1959),

“The division of the program of secondary education among the various comprehensive and specialized high school of a school system.”
According to Webster dictionary

“A school, as a high school, coming after elementary school from std : 8 to std : 10 is called secondary school.” (11)

❖ SCIENCE TEACHER:

According to Webster dictionary

“A person who teaches about knowledge derived from observation, study, and experiment is called science teacher.” (12)

❖ OPERATIONAL DEFINITION OF SCIENCE TEACHER:

A person who teaches science from std : 8 to std : 10 in Gujarat Secondary Education Board school.

1.7 CHAPTERIZATION:

Brief outlines of chapterization in this thesis are as under:

Conceptual understanding of teaching proficiency of secondary school science teachers, various approaches to the teaching proficiency and science teachers teaching proficiency is described in chapter : 2.

Chapter : 3 is an attempt to give a brief sketch of researches done, similar to this study in Gujarat state, India and abroad.

Chapter : 4 describes the planning and procedure for the final run of the test and statistical techniques used.

A detailed description about the teaching proficiency test, which includes information of components, item pool, population, sample information regarding try outs and reliability and validity of this test is given in the chapter : 5.

Analysis of the data and its interpretation is described is discussed in chapter : 6.

Chapter : 7 deals with brief account of present work, major findings and suggestions for further study.
CHAPTER REFERENCE


8. C.V. Good (1959) op cit, p. 115.


