

# Construction and standardization of an achievement test of social studies for 8<sup>th</sup> grade students.

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The Present study was undertaken as an effort to construct **Abstract:** and standardize an achievement test in Social Studies for the students of Class  $8^{th}$ . For this purpose, the content of textbook prescribed by H.S.E.B. for class 8th was taken up. Multiple choices questions were constructed by



giving equal weightage to all the chapters and expert opinions were taken. Try out was conducted on a sample of 200 H.B.S.E. students of class 8<sup>th</sup>. Item analysis was done. After revising and discarding the poor items on the basis of index of difficulty value (P) and discriminating index (D.I.), final draft was prepared. Reliability and Validity of the achievement test was also calculated.

Keywords: Construction, Standardization, Achievement test in Social Studies.

Education is an indispensable instrument for stability and progress of the individual as well as society. It involves both the teaching and learning process. Education at different levels is geared to different aims but no one can deny the fact that achievement of students continue to be the main concern and most important goal of education at all stages. Achievement is the amount of success of an individual in a specific field or area of accomplishment. Achievement is how for a particular student has been able to learn and acquire or has benefited from the learning experience given to him. It is quantity or quality of learning attained in a subject of study or group of subject after a period of instructions. To check the achievement of students, teachers and education administrators use various tests. Achievement test of educational achievement is one designed to measure knowledge, understanding and skill in a specified subject or group of subject.

Education is an important factor in the development of man. Through education, they develop a sense of discrimination and acquire different values, which make life the pride of Human species. We know very well that the future of the nation depends on students and education draw out the best capacities of human beings. With these capacities man get new knowledge, new ideas which are helpful in the development of nation.



One of the major aims of education is all round personality development of the child. But in the present scenario of formal system of education the aim has centered only on the development of academic talents of the child and the educational institution is trying their best to uplift the academic achievement. Achievement in the wider terms means educational growth which includes growth in all aspects. It means pupils knowledge, attainment and development of skills in all school subjects such as reading and writing which are assessed by the authorities with the help of achievement test, which are held in the form of school examination.

# **Need And Importance Of The Study**

This position statement presents of a social studied teaching and learning needed to achieve the levels of civic efficiency that the nation requires of its citizen. Teaching and learning in social studies are powerful when they are meaningful, integrative, value based, challenging, and active. The subject that comprise social studies- i.e., history, economics, geography, civics are rich interrelated disciplines, each critical to the background of thoughtful citizens.

A powerful and rigorous social studies curriculum provides strategies and activities that engage student with significant ideas, and encourages them to connect what they are learning to their prior knowledge and to current issues, to think are learning, and tom apply that learning to authentic situations. Social studies program prepare students to identify, understand, and work to solve the challenges facing our diverse nation in an increasingly interdependent world.

The personality trait is characterized by an enduring and consistent concern with setting and meeting high standards of achievement. Need of achievement is related to difficulty of tasks people choose to undertake. Those with low need for achievement may choose very easy task, in order to minimize risk of failure difficult task, such that a failure would not be embarrassing.

#### **Statement Of The Problem**

Construction and standardization of an achievement test of social studies for 8<sup>th</sup> grade students.

# **Objectives Of The Study**

To construct an achievement test in social studies for 8<sup>th</sup> class students. 1.

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2. To standardize the achievement test by determining reliability and validity of the test.

# **Delimitation Of The Study**

The study was delimited with respect to sample and size of the sample has been kept up to 200 students drawn from various schools of Safidon. The test in social studies was restricted to 8<sup>th</sup> class students of these schools and the items of the test were selected from the textbook of social studies of class 8<sup>th</sup>, which include geography, history & civics.

#### Methodology

# **Selection Of The Test Items**

Since the achievement test was intended for standard 8<sup>th</sup> therefore the social studies textbook was used for constructing the achievement test. The entire syllabus was thoroughly scrutinized and then items were selected from all the three parts of syllabus is history, civics & geography.

#### Pilot Form

The pilot form of the achievement test in social studies for standard 8<sup>th</sup> was prepared from textbooks of H.B. S. E.120 multiple choice questions on history, geography & civics were prepared. Each item was allotted to one mark. This test was administered on 200 students of 8<sup>th</sup> standard from various schools of Safidon.

Instructions given to the students were the same and it was stated, "I will give you an achievement test of 120 multiple choice question and you will have to answer marked as A, B, C, D, in front of item on the given question paper. You have to tick the right answer. I think everything is clear to you. Now you are ready to answer carefully. For example Q: - in which direction earth moves? (a) West to East (b) East to West s(c) South to North (d) none of these. The correct answer is A ( ) B ( ) C ( ) D ( ) Have you all understood? Any question? This test was not speed test and special emphasis was not given to record precise time.

The achievement test was then scored for items analysis. Each correct alternative answer was given one mark and zero for each incorrect answer. Skipped questions were not included in the analysis.

#### **Item Analysis**



The items were analyzed for discriminatory index keeping in view there difficulty level. After the administration of the pilot form of the achievement test and the scoring of the test, the test papers were arranged from best of the worst. Items with the difficulty level of 40% to 60% & Discrimination Index 0.2 and above were retained in the achievement test.

# **Item Difficulty**

Total number of examinees was ranked from highest to lowest or vice versa on the basis of their total scores. Then upper 27% and the lower 27% of the examinees are separated naming them as upper and lower groups. Thus, middle 46% of the examinees are kept aside

Index of difficulty (p) was calculated by using the following formula:-

$$P = \quad \underline{\qquad R_U + R_L} \\ \\ N_U + N_L$$

Here,

 $R_U$  = number of examinees in the upper group answering the item correctly.

 $R_L$  = number of examinees in the lower group answering the item correctly.

 $N_U$  = number of examinees in the upper group.

 $N_L$  = number of examinees in the lower group.

#### **Discrimination Index**

Discrimination index was calculated by the 27% rule. The group was divided into three parts, the best 27% is named as upper group and 27% from the worst end was termed as lower group. The remaining 46% students constituted the middle group. For item validity discrimination index was calculated.

Discrimination index (D.I.) was calculated by using the following formula:-

$$D.I. = U - L$$

$$N/2$$

Here,



U = the number of students in the upper group who responded correctly.

L = the number of students in the lower group who responded correctly.

N =the total number of students.

Items with the discrimination index 0.2 and above were retained.

#### Administration Of The Final Form Of The Test And Collection Of Data

All 43 items were eventually chosen for the final form, which were administered on 200 students from various schools of Safidon. These were English medium as well as Hindi medium schools following the H.B.S.E. curriculum. Instructions were given to students before the test to be started. The tests were then scored, each correct response obtaining a mark. The average time taken to complete the final form of the test was one hour.

## Validity

Content validity of the achievement test in mathematics was established with help of expert's opinion i.e. social studies of different schools.

### Reliability

The split-half method was used to establish reliability & its calculated reliability was 0.81.

#### References

- Garrett, H.E. (1998). Statistics in Psychology and Education. Vikas Publication, New Delhi
- Gaur, R.N. (1973). Standardization of an achievement tests in different aspects of Hindi for matriculation students of Haryana. Second survey of research in education, 1978,556.
- Kapoor (1968). Construction and standardization of an achievement test of Home science. First survey of research in education 1974, 390.
- Ketkar, S.R. (1982). Construction and standardization of unit tests in Mathematics for standard 8<sup>th</sup> (Marathi medium) based on the syllabus of Maharashtra state, Ph.D., Edu, Poona. Third survey of research in education, 1983), 735.
- Khandewala (1981). Constructed and standardized of an achievement test in Physics for class 8th in vidarbh Region. Third survey of research in education 1983), 735.
- Kulkarni, S.S. (1970). All Indian survey of achievement in mathematics (Primary, Middle and High School) NCERT, New Delhi.



- Lakshmi, P.D.(1971). Construction of an achievement test for standard 6<sup>th</sup> Arithmetic, M.Ed University of Bombay.
- Lekhi and Seema (1994). Construction and standardized test in Chemistry for high school students. Dissertation master reports, www.eric.ed.org.
- Neelam (1989). Construction and standardization of an achievement test in Hindi for class 10<sup>th</sup> students. An unpublished M.Ed dissertation, Panjab University, Chandigarh.
- Seema (1991). Construction and standardization of an achievement test in Chemistry for class 8th students. An unpublished M.Ed dissertation, Panjab University, Chandigarh.
- Singh, A.K.(2010). Tests, Measurements and Research Methods in Behavioural Sciences. Bharti Bhawan (Publishers & Distributors), New Delhi.
- Singh, K. (2007). Construction and standardization an achievement test in English for 10<sup>th</sup> class. An unpublished M.Ed. dissertation, Panjab University, Chandigarh.
- Singh, T. (2011). Construction and standardization of Mathematics achievement test for 8<sup>th</sup> class. An unpublished M.Ed dissertation, Panjab University, Chandigarh.
- Umesh (2007). Construction and standardization of achievement test of geography. An unpublished M.Phil dissertation, Panjab University, Chandigarh.