CONSTRUCTION AND STANDARDIZATION OF ACHIEVEMENT TEST IN ENGLISH

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Abstract

The present study was conducted to Construct and Standardize an Achievement Test in English for IX standard students . Test items were selected from syllabus of VIII grade prescribed by Punjab School Education Board, Mohali . Since the achievement test was intended for standard IX , therefore the VIII grade English textbook was used for constructing the achievement test. The entire syllabus was thoroughly scrutinized and then items were selected from the books of class VIII of P.S.E.B. In all 130 items from 14 aspects of class VIII were taken. After seeking expert opinion, items were reduced to 120. Each item was allotted one mark. Further , 20 items were rejected on the basis of difficulty level and discriminating value of the items. 100 items were selected which lie between .40 to .60. Content validity of the achievement test in English was established with help of experts' opinion i.e. English teachers of different schools. The split-half method was used to establish reliability & its calculated reliability is 0.86.

Keywords: Construction, Standardization, Achievement Test, English.

Introduction:

Man is a social animal. He is dependent on the use of language for performing all his social activities. To lead a smooth life, everybody has to express himself and the only way he can do so is through language. Of course, there are other means of communication- gestures, pictures, flags, signals and above all writing but all these are either inadequate to meet the demands of social group or else depend entirely on spoken language and are effective only in so for as they reflect this.

Among the languages in the world, English has gained universal acceptance because of a number of factors. It is rich in literature of Science, Technology, Medicine and Social Sciences. It has creative works of the highly intellectual and creative standards. According to media reports, 50 % of newspapers and scientific and technological periodicals in the world are published in English. More that 60 percent of the radio stations of the world use English as their medium. Besides, it is the language of international politics, communication, trade, commerce, industry and travel. And on the academic front, it serves as a library language.

This language deserves to be a world language as it helps linking humans across countries. There is no denying the fact that English language plays an important role in the national life of our Country. More than six decades have passed since India attained independence. English language for its rich vocabulary, elegant style and dignified use, seems to hold the key in every walk of life. The social, cultural and political life of India's teeming educated classes continue to be impressed by English language. English has been great force behind Indian Renaissance. It is so in the sense that English Literature has played an important role in bringing about modern India's socio- cultural and political Renaissance. The vast and ever growing English Literature is the greatest value and interest to us. It has inspired some of our finest minds and continues to remain a source of inspiration to noble endeavour. Further, no one can deny the fact that higher studies in Medicine, Technology, Engineering, Economics, Mathematics, Physics, Chemistry and many other subjects cannot be successfully undertaken without English. No commission or committee on education has ever recommended the discontinuance of English language from the corridors of education.

In this competitive world, the number of young people desirous of achieving excellence in specialized courses are required to have fluency in a certain foreign language of some worth and English is the only foreign language to which educated Indians find easy access. It is a foreign language which Indians have known for nearly two centuries.

Commencing with the term achievement, it is the accomplishment or proficiency of performance in a given skill or body of knowledge. The term achievement signifies accomplishment of a performance carried out successfully by an individual or a group on the completion of a task. whether, it is academic, personal or social. Thus achievement means all those behavioural changes, which take place in the individual as a result of learning experience of various kinds.

Achievement tests are designed to determine the degree of knowledge and proficiency exhibited by an individual in a specific area or set of areas. An achievement test is sometimes administered as part of the academic process into an educational program or to qualify an individual for employment or a promotion with a current employer. In other applications, the achievement test serves as a tool to measure the knowledge levels for the purpose of placing students in an educational set up where they have chance to advance at a pace that is suitable for their abilities. Attainment in English is very much based on the mastery of fundamental skills. The present school curriculum demands rapid learning and clear understanding of frequently changing syllabus and new curriculum .It is very essential for the teachers as well

as the students to have frequent and appropriate feedback of their learning in English . So achievement test is good tool for the timely appraisal of the students learning which will form the basis for learner's behaviour.

Kaur (2005) standardized an achievement test in Mathematics for 8th Class. The reliability co-efficient was checked by split half method. The reliability Co-efficient came to be 0.88. Umesh (2007) constructed and standardized an achievement test of Geography of X class students (P.S.E.B.). The validity of the test was found to be 0.71 and the reliability was found to be 0.88. Jagdish (2010) constructed and standardized an achievement test in Punjabi Grammar for VIII standard. In all 100 items, 52 items was rejected on the basis of difficulty level and discriminating value of the items. 48 items are selected which lie between .40 and .60 difficulty value and are above 18 discriminating value. Singh (2011) standardized an achievement test in Mathematics for class 8th on 100 students of P.S.E.B. The validity of the test was found 0.54 the reliability of the test was found to be 0.88. Gupta (2012) constructed and standardized an achievement test in General Science for class VIII students to identify good, average and weak students. Reliability co-efficient calculated by spilt- half method were found to be 0.94 & 0.93. Construct and Predict validity of Co-efficient of test were found to be 0.50 and 0.59 respectively. Percentile norms were also calculated. Imam (2012) constructed and standardized an achievement test in Mathematics for 9th class on 250 students randomly sampled from six secondary schools. The reliability of test tested by split half way method was 0.92. Percentile norms were also calculated. The validity was found to be 0.87. Kaur and Singh (2014) worked on Construction and Standardization of an Achievement Test in English for Class X Students. In order to check the achievement of X class students of Punjab in English Grammar, an achievement test was constructed in English Grammar. For preliminary try out, sample of 100 students from the different schools of Fazilka and Sri Muktsar Shaib districts of Punjab state were taken and for final try out, 200 students from same districts were taken. Item analysis was carried out to find the difficulty value and discriminating power of items. Reliability of the test was calculated by Split Half Method. Validity of the test was established by comparing test marks with school marks. Percentile Norms and stanine Norms were also calculated for easy interpretation of the scores. Vasanthi and James (2016) conducted a study on Learning Difficulties in English Language of Higher Secondary Students. In this study, the investigators tried to find out the Learning difficulties in English Language of higher secondary students. Sample of the present study was mainly concentrated with the higher secondary students studying in schools following the State

Board syllabus. The investigator used a tool which was self constructed and a standardized one. Simple Random sampling technique was used to select the sample. The data were collected from a sample of 337 students from different managements like Government, Government-Aided and Private schools from Chennai and Thiruvallur districts only. The collected data was analyzed by applying descriptive and differential statistical techniques. The major findings of the study revealed that there is no significant difference between the Mean scores of learning difficulties in English of higher econdary students based on Gender, Locality and Medium of Instruction.

Objectives of the Study

1. To construct an Achievement Test in English language for IX class students.

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

Delimitations of the Study

1. The test covered the syllabus of class VIII P.S.E.B. Mohali only.

2. The sample was taken from Ferozepur district only.

3. The study was delimited to the Construction and Standardization of an Achievement Test in English for students of IX Grade Students only. **Selection of the Test Items**

Test items were selected from syllabus of VIII grade prescribed by Punjab School Education Board. Since the achievement test was intended for standard IX therefore the VIII grade English textbook was used for constructing the achievement test. The entire syllabus was thoroughly scrutinized and then items were selected from the following books of class VIII of P.S.E.B.

1. Learn your English Series – Text book for class VIII, Punjab School Education Board, SAS Nagar, edited by Dr. D.V. Jindal, Edition 2014.

2. Grammar & Composition for class VIII, Punjab School Education Board, SAS Nagar, edited by Dr. D.V. Jindal, Edition 2012.

The test is an objective type with multiple choice.

Preparing Test Items

In all 130 items from 14 aspects of class VIII were taken as prescribed by Punjab School Education Board, Mohali. Detailed description of the item along with aspects has been given in table 1.

TABLE 1 Aspect- Wise allocation of Items for the preliminary draft of Achievement Test in English for class IX

Aspect No.	Aspect	No. of Items
1	Text Book for class VIII	60
2	Prepositions	06
3	Correct form of Verb	05
4	Pronouns	06
5	Adjectives	05
6	Articles	05
7	Change of Narration	06
8	Active & Passive Voice	06
9	Choose Correct Punctuation	04
10	Noun	06
11	Tenses	06
12	Parts of Speech	05
13	Choose the correct spelling	05
14	Vocabulary Enrichment	05
	Total Items	130

Three copies of these 130 items were got photocopied and were given to three experts in the field of English language teaching. These experts were told the purpose of the research and were requested to find out if there were any defects in the language or vagueness in the format of the item/s.

Out of 130 items, 10 items were deleted by these three experts. Aspect – wise number of deleted items have been shown in Table 2 .

Table 2 Aspect- Wise Deleted Items

Aspect	No. of deleted items	Items Left
Preposition	01	05
Pronoun	01	05
Change of Narration	01	05
Active & Passive Voice	01	05
Choose Correct punctuation	02	02
Noun	01	05
Tense	01	05
Choose the correct Spelling	01	04
Vocabulary Enrichment	01	04
Other Aspects	Nil	80
	10 Deleted	120 (Left)

Pilot Form

The pilot form of the achievement test in English for standard IX was prepared from textbooks of P.S.E.B. 130 multiple choice questions from Text book for class VIII were prepared. After seeking expert opinion, items were reduced to 120. Each item was allotted

one mark. This test was administered on 100 students of IX grade from various schools of Ferozepur district.

Instructions given to the students were "I will give you an achievement test of 120 multiple choice questions and you will mark your answer on A, B, C, D, any option which you find correct in front of item on the given question".

The achievement test was then scored for item 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 item analysis is the set of procedures that is applied to know indices for the truthfulness or validity of items. In other words, item analysis is a technique through which those items which are valid and suited to the purpose are selected and the rest are eliminated or modified to suit the purpose. It indicates which items are difficult, easy, moderately difficult or moderately easy. This is known as item validity. The items were analyzed for discriminatory index keeping in view their 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 to the worst. Those with the difficulty level of 40% to 60%.

1)   27% scoring highest

2)   The middle 46%

3)   The lowest 27%

Then taking the lowest 27% of the right responses for every item were counted for the whole group. Similarly the number of examinees in the upper 27% group who responded to correct option were counted. Then the number of examinees in the lower group who selected the correct alternatives were subtracted from the number of examinees who selected correct alternatives in the upper group.

Item Difficulty

The index of difficulty could also be determined from a certain portion of the group of examinees. If the number of examine was ranked from highest to lowest on the basis of the total score, the upper 27% and the lower 27% may be separated for the purpose. The upper 27% may be called the upper group and the lower 27% may be called the lower group. Thus, from the total number of examined the middle 46% were set aside and only on the basis of 54% the index of difficulty of each item were determined. The index of difficulty determined

on the basis of these two extreme groups was almost the same when the entire sample of the examinees is taken into account.

The item difficulty was computed using the following formula:-

$$D.I = \frac{R_U + R_L}{N_U + N_L}$$

D.I = Difficulty Index

U = Upper 27% solving items correctly

L = Lower 27% solving items correctly

N =Total number of students of upper and lower group

Administration of the Final Form of the Test and Collection of Data

The final form of the test was then administered on 200 students of various schools of district Ferozepur. The average time taken to complete the final form of the test was one and half hour. In all 120 items, 20 items were rejected on the basis of difficulty level and discriminating value of the items 100 items were selected which lie between .40 to .60.

Table 3 Detail of Items Selected for Final Test

Aspect. No.	Name of Aspect	Number of Items
1	Text Book of class VIII	50
2	The Prepositions	04
3	Correct form of the Verb	04
4	Pronouns	05
5	Adjectives	04
6	Articles	04
7	Change of Narration	04
8	Active & Passive Voice	04
9	Choose Correct Punctuation	02
10	Noun	04
11	Tenses	05
12	Parts of Speech	03
13	Choose the correct spelling	04
14	Vocabulary Enrichment	03
	Total Items	100

Validity

The test was validated against the criterion of content validity. The Content Validity is concerned with the adequacy of sampling is a specified universe of content. The Procedure to Determine Content Validity is as follows:

To determine content validity of the test, the test item and a list of outcomes were given to the panel consisting of three experts in the subject matter and in the test items construction. The panel also completed the test so that scoring key could be verified. All the three experts agreed with the investigator on the assignment of test items to objectives 95% of the time and agreed with the scoring of the test 100% of the time. This concurrence of rates was taken as evidence of content validity of the achievement test in English.

Reliability

Reliability refers to the faith that can be put into an object, person or system. Faith is always created through accuracy and consistency of behavior. If a system of evaluation is competent enough to give an accurate and consistent view of measurement of the abilities, it may be said to be reliable. In practical language if an evaluation scheme gives B grade to a student it should always do so if repeated at different occasions and situations. The split-half method was used to establish reliability & its calculated reliability is 0.86.

Analysis of Total Sample

Mean and Standard Deviation of the scores obtained on final form of the Achievement test in English are 59.29 & 7.62 respectively.

Educational Implications

English achievement test will be an excellent tool for the appraisal for teaching learning process. These tests can give the exact rating of the learner and the teacher. This English achievement test is based on the new syllabus and test was constructed for individual student. This study will serve as fairly reliable tool in the hands of IX class teachers for assessing their pupils' performance in English. The performance on the achievement test will reveal the need for further guidance to be given to each learner and accordingly the instructions can be modified to suit the individual needs. The result of this study will help in finding out the remedial measures for the enormous failures in English.

It will help the teachers to know whether the teaching methods are effective or not and help them in bringing improvement accordingly. With the help of information provided by the achievement test, we can know where the learners stand and how to improve their performance.

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