

UNIT 8

Evaluation of Teaching and learning in social science

7.1 INTRODUCTION

The term measurement is used to express a trait of an object, person or activity in standard words, symbols or units. In evaluation, these results are analysed and this analysis is done on the basis of certain social, cultural or scientific standards (Norms) and by this analysis, the relative condition of the trait of the object, person or activity is clarified. The terms measurement and evaluation, assessment are sometimes used interchangeably. The word 'evaluation' is often confused with assessment, testing and measurement. Testing is only a technique to collect evidence regarding pupil behaviour. Measurement on the other hand, is limited to quantitative description of the student behaviour. Evaluation is a more comprehensive term which includes testing and measurement and also qualitative description of the student behaviour. It also includes value judgment regarding the worth or desirability of the behaviour measured or assessed.

Thus, evaluation may not be based on measurement alone but it goes beyond the simple quantitative score.

CONCEPT OF EVALUATION

Evaluation is a broader term that refers to all of the methods used to find out what happens as a result of using a specific intervention or practice. Evaluation is the systematic assessment of the worth or merit of some object. It is the systematic acquisition and assessment of information to provide useful feedback about some object. Literally, the word 'evaluation' means to assign certain 'value' to the concerned thing, person, process or activity etc. In an educational setup, evaluation means assigning 'certain value' to the student's performance on the basis of things, facts, skills etc. in a particular period of time.

Evaluation = Measurement + Value judgement Evaluation is not synonymous with measurement. But it is depending on measurement and the pre-determined objectives (standard). Evaluation refers to the act or process of determining the value of something. In Education, it means estimating the probable worth of the activities involved in the teaching learning process, judging the worth of methods or devices

or techniques of teaching used. Evaluation helps the classroom teacher to estimate the various outcomes of the activities organised for pupil's learning. Evaluation includes measurement which is the process of quantifying the pupils' performance of achievement. Evaluation is more than measurement. It includes qualitative assessment/discrimination also, although evaluation includes measurement it is not synonymous with it. From the instructional point of view, evaluation may be defined as "a systematic process of determining the extent to which, instructional objectives are achieved by pupils". Hence, two important aspects of evaluation are:

a. Evaluation implies a systematic & continuous process.

b. Evaluation always assumes that educational objectives have been previously identified and properly formulated.

Definitions of evaluation

Tyler defined evaluation as "a systematic process of determining the extent to which educational objectives are achieved by pupils". This definition indicates that evaluation is a systematic process, and it omits casual, informal or uncontrolled observation of the pupils. This definition also implies that objectives of education have to be identified in advance. Without predetermined objectives, it is not possible to judge the progress, growth and development of students. Crombach defined evaluation as "the collection and use of information to make decisions about an educational programme".

Wheeler defined evaluation as a more general judgement of the outcome of a programme, which involves the use of observations, various tests, questionnaires, interviews, etc. His emphasis was on the processes of educational evaluation.

"Evaluation may be defined as a systematic process of determining the extent of which educational objectives are achieved by pupils" – Dandekar

According to Bradfield and Moredock, "Evaluation is an assignment of symbols to a phenomenon in order to characterize the worth of value of a phenomenon usually with reference to some social, cultural or scientific standard.

According to Hanna, "Evaluation is the process of gathering and interpreting evidence on change in the behavior of all students as they progress through school."

According to Carter Good, “Evaluation is the process of ascertaining or judging the value or amount of something by use of a standard of appraisal.”

Thus, Evaluation can be conceptualised in the following manner:

- 1) Evaluation is an act or a process that allows one to make a judgment about the desirability or value of a measure.
- 2) Evaluation is a process of delineating, obtaining and providing useful information for judging decision alternatives
- 3) The word evaluation refers to the act or process of determining the value of something.

Thus, evaluation is a systematic process of collecting evidence about students’ achievement in both cognitive and non-cognitive areas of learning on the basis of which judgments are formed and decisions are made.

Characteristics of evaluation

- It is a systematic process.
- It measures the effectiveness of learning that experiences provide.
- It measures how far the instructional objectives have been achieved.
- It is a continuous process.
- It gets data from measurement.
- It is a subjective judgment.
- It not only determines the magnitude but also adds meaning to measurement.
- It involves values and purposes.

Objectives of evaluation

- Produce suitable experiences for learning through the medium of teaching activities
- Evaluation of behavioural changes

- Determination and definition of educational objectives
- To ascertain the effectiveness of instruction in the light of attainment of stated learning outcomes.

8.1 Need and importance of evaluation

- Knowledge pertaining to the extent of achievement of objectives
- Knowledge of students abilities
- To know the extent of given knowledge
- Knowledge regarding achievement of students
- For stimulating and directing students
- For change and desirable improvement in teaching
- Feedback information from evaluation help parents to know the performance of their children and words
- For find out the utility of textbooks in the achievement of educational Objectives
- To give suggestions for improvement and to guide for research.
- To study the effect of the use of various means in teaching as to their place and kind of use, and to suggest measures for improvement

PRINCIPLES OF EVALUATION

As Evaluation is a means to an end, not an end in itself. There are certain principles which may provide direction to the process of evaluation and may also serve as the criteria for adopting a particular device or technique of evaluation to yield the desired positive results.

1. Determining and clarifying 'What' aspect of the evaluation The classroom teacher or evaluator should always be perfectly clear in his mind about what he is aiming to achieve i.e. what to evaluate and how to evaluate
2. Selection of appropriate evaluation techniques There are a number of evaluation techniques. Out of them one technique is appropriate in some cases which may not

be so in others. Therefore, the evaluator needs to select the one which serves his/her purpose best.

3. Determining comprehensiveness of evaluation programmes It means to assess pupils' progress in all areas. Educational evaluation, apart from testing knowledge, should also bring about student's originality and his ability to use the ideas, and his ability to think and apply the knowledge and skills already achieved.

4. For comprehensive evaluation combining a variety of evaluation techniques be adopted To make evaluation comprehensive, different types of evaluation procedures should be adopted depending on their suitability. Moreover, use of a variety of techniques provides an evaluator sufficient evidences of different aspects of pupil achievement on different objectives, because more the evidence better the evaluation.

5. Treat Evaluation as a Means to an End, not an End in itself In the teaching-learning process, evaluation should be done with a purpose, and not for the sake of evaluation only. Administering a test, scoring the scripts and collecting the data without making any use of this information for the pupils is a waste of effort.

8.1 IMPORTANCE OF EVALUATION

1) Diagnosis

(a) To locate and identify the weaknesses and strength in learning on the part of a learner.

(b) To pinpoint areas where remedial measures may be desirable.

2) Modification To provide a basis for modification of the curriculum, syllabus or courses.

3) Prediction

To bring out the inherent capabilities of a student, such as proper attitudes, habits, manipulative skills, appreciation and understanding in addition to conventional acquisition of knowledge.

4) Selection To select suitable persons for particular course or career.

5) Motivation To motivate pupils towards better attainment and growth.

6) Teaching

a) To improve instruction.

b) To ascertain how far could learning objective be achieved;

c) To provide the empirical evidences about the effectiveness of teaching strategies, tactics and aids.

7) Guidance

a) To assist a person in decision making about a course or subjects within a course and careers;

b) To enable a learner to know his pace of learning;

c) To make provision for guiding the growth of individual pupils;

d) To provide a basis for the introduction of experiences to meet the needs of individuals and groups of pupils.

8) Testing

a) To test the efficiency of teachers in providing learning experience and the effectiveness of instruction and of classroom activates;

b) To help in developing a comprehensive criterion test.

9) Grading To assign rank or grade to the learners of a given group.

10) Feedback:

To give reinforcement and feedback to teachers and learners.

NEED AND OBJECTIVES OF EVALUATION IN TEACHING AND LEARNING OF SOCIAL SCIENCE

Evaluation has become an integral part of the educational process in which social science is an important aspect at the school stage. It is the responsibility of social science teachers to carry out evaluation activities and determine to what extent the

objectives with which social science are taught are being achieved. In achieving different objectives of social science, various abilities, skills, interests, attitudes and other characteristics of students are stated, developed and measured.

Thus, through the evaluation process, one gets a clear idea of each individual student's abilities, skills, interests, etc.

i) Evaluation for instructional purposes. The evaluation of students' performance in the present examination system has been mainly used to categorise students into different groups like poor, average, good, very good, excellent etc.

However, this is not the only purpose of evaluation. Education aims at developing each individual to the fullest extent of his/her potential. Evaluation can help in achieving this aim of education. The social studies teacher must evaluate the students and provide instruction according to the ability level of students. Students can understand content better when they are taught according to their abilities.

After teaching a particular unit, the teacher can evaluate his students and on the basis of this evaluation he can get feedback regarding the concepts of the unit which might require further explanation. He can thus modify his teaching methods.

Thus, evaluation will improve the instructional process and enhance student's learning.

ii) Evaluation for certification. The performance of students is also evaluated by the social sciences teachers periodically as well as annually to judge the level of performance of each student and grade her/him accordingly so that certificates could be provided. The teacher judges the performance level of students in social studies. It is the final achievement level of students which is certified. These certificates are required and used for different purposes such as getting jobs, admission to various courses, etc. Guidance also can be given to students for further improvement in performance. Thus, one of the important purposes of evaluation in social studies is to certify students' performance.

There are different varieties of tests namely achievement tests, diagnostic tests, mental-ability tests, selection tests and psychological tests, besides the classroom unit tests. It is always assumed in testing that the measuring instrument or tool (test, question etc.) is of good quality and whatever evidences are gathered are dependable.

8.2 tools and techniques of evaluation in social science

- a) Validity: If the evaluation tools test what it might to test then that tool is said to be valid. For example, the tool or an instrument used to know your height should show your height. If it shows anything other than the height, then the tool is invalid.
- b) Reliability: If the evaluation tool reveals consistency while measuring at different intervals then the tool is said to be reliable.
- c) Objectivity: If the tool gives very accurate results what it supposed to give then that tool is said to be objective.
- d) Discrimination: One of the characteristics of a good evaluation tool is discrimination i.e. it should be able to separate the good from the bad or it should be able to divide the big group into small sub-groups of similar abilities.
- e) Practicability: The evaluation tool must be simple and easy to use on a large scale and it should be affordable by majority.

Classification of Tests

Tests have been classified in a number of ways. Tests vary according to form, use and type etc. Yoak and Simpson give the following classification of tests :

Form

(a) Oral examinations (b) Written examination Purposes

(a) Prognostic (b) Diagnostic (c) Power (d) Speed (e) Accuracy (f) Quality

(g) Range Organisation

(a) Essay (b) Objective

Period or time of administering

(a) Daily (b) Weekly (c) Monthly (d) Term (e) Year

Duration

(a) Short (b) Long

Method of scoring and interpreting results

- (a) Non-standardized (b) Standardized Abilities involved
- (a) Speed (b) Comprehension (c) Organization (d) Judgement (e) Retention
- (f) Appreciation etc.

Nature of material included

- (a) Arithmetic (b) Language (c) Reading (d) Spelling (e) Writing etc. Mental functions involved
- (a) Association (b) Memory (c) Recall (d) Recognition (e) Problem-solving

Types of response involved

- (a) Alternate response : (1) True - False (2) Yes - No (3) Plus - Minus
- (b) Multiple response : (1) Best Answer (2) Correct Answer
- (c) Completion
- (d) Matching
- (e) Identification
- (f) Enumeration
- (g) Essay

Classification of educational tests

The tests being used in the field of education are classified in different forms :

(I) Classification on the Basis of the Field of the Tests

1. Educational Tests: Educational tests are those tests by which educational achievements and educational problems of the students are measured; such as—achievement tests and diagnostic tests.

2. Psychological Tests: Psychological tests are those tests by which mental abilities of the students are measured; for example—intelligence tests, aptitude tests and personality tests.

(II) Classification on the Basis of Nature of the Tests On the basis of the nature of the tests, they have been divided into three classes—oral, written and practical.

Oral tests

The oral exam (also oral test or viva voce) is a practice in many schools and disciplines in which an examiner poses questions to the student in spoken form. The student has to answer the question in such a way as to demonstrate sufficient knowledge of the subject to pass the exam. Many science programs require students pursuing a bachelor's degree to finish the program by taking an oral exam or a combination of oral and written exams to show how well a student has understood the material studied in the program. Usually, study guides or a syllabus are made available so that the students may prepare for the exam by reviewing practice questions and topics likely to be on the exam. Sometimes, the oral exam is offered in schools as an alternative to a written exam for students with a learning disability, like dysgraphia, developmental coordination disorder or non-verbal learning disorder. Often parents of the students have to request that the oral exam be given to their child in lieu of the written exam.

Purpose of oral examination is:

- (a) to test oral skills that cannot be tested through written examinations.
- (b) to confirm and probe further evidences gathered through written examination whenever desired (viva);
- (c) to judge the extent to which such skills are warranted by the nature of subject; and
- (d) to make quick oral review for informal assessment of what the pupils have learnt or their deficiencies.

Advantages

- Evaluates quick thinking or reactions.

- Evaluates the student's thought processes.
- Can be evaluated by multiple listeners simultaneously.

Disadvantages

- Limited number of students may be examined at any one time.
- Difficult to standardize.
- Examiner may unintentionally give clues to the examinee
- Time-consuming and labor-intensive.
- Subjective.

Short Answer Questions:

he short answer type generally require exact answers and usually take less than five minutes to read and answer, many (very short answer) take less than a minute.

Objective Type Question:

An objective question is one which is free from any subjective bias - either from the tester or the marker. Objective questions can take various forms such as Simple recall, Multiple choice, True or false, Matching block, etc., but invariably they require brief answers with little or no writing. There can only be one right or objective answer to an objective question. A simple tick or a quick oral answer may be enough.

Essay type tests

An essay test is an assessment technique that requires students to thoroughly respond to a question or prompt by developing, organizing, and writing an original composition. The purpose of an essay test is to assess students' abilities to construct a logical, cohesive, and persuasive writing piece.

Advantages of essay type tests

- (i) Such tests induce good study habits in the pupils.
- (ii) The guess work can be eliminated to large extent.
- (iii) Such tests are easier to prepare and administer.
- (iv) By this type of tests, it is possible to measure all degrees of comprehensiveness and accuracy.
- (v) Such tests can be used by all type of schools.
- (vi) These help in developing the power of logical thinking, critical reasoning, systematic presentation etc. in the students.
- (vii) Such tests provide an opportunity to the child to show his initiative, originality of thought, fertility of their imagination, etc.
- (viii) This type of tests are considered to be best for measuring ability to organise idea effectively, ability to criticise or justify a statement, ability to interpret etc.

Limitations of essay type tests

Defects from the point of view of students

- (i) The essay type tests are less objective and so they lack validity. This type of test can reveal child's cramming capacity only.
- (ii) These tests lack reliability. A student is compelled to have a selective reading. He depends more on guess papers and so there is an element of chance.
- (iii) It keeps the students busy and full of nervous tension. The study does not spread over the whole year and is limited to a short period just before the examinations. Thus a habit of irregular study is developed in the student.

(b) Defects of essay-type tests from the point of view of the teacher

- (i) The teacher covers only a limited and important portion of course because his aim is to see that maximum number of his students pass the examination.

(ii) The teaching programme of the teacher is wholly examination oriented and the basic principle of teaching his students are given least consideration.

(iii) The teacher is compelled to encourage his students to cramming, which is not a psychological method of teaching.

(iv) Since a teacher is judged by the results of his students, so everything becomes subservient to the examinations.

(v) To show good results sometimes the teacher devotes a good deal of his time to indulge in guess work which affects his teaching.

(c) Defects from the point of view of achievement

(i) Essay type tests are not comprehensive and some students may get good marks only because the questions have been set from the portion prepared by them.

(ii) These tests are not objective and the score of a student depends on various factors such as examiners mood etc.

(iii) This type of tests is not useful from the point of view of improvement. They fail to throw light on the defects of teaching-learning process or the defects of the curriculum.

Objective tests

This is a test consisting of factual questions requiring extremely short answers that can be quickly and unambiguously scored by anyone with an answer key. They are tests that call for short answer which may consist of one word, a phrase or a sentence.

Advantages of objective type items

- A large amount of study material can be tested in a very short period of time.
- Economy of time.
- Objectivity of scoring.
- No bluffing.
- It reduces the subjective element of the examiner to the minimum

Limitations of objective type items

- Difficulty in preparing good items.
- Problem of guessing.
- Problem of cheating.
- Inefficiency in testing complicated skills.
- High printing cost.
- Emphasis on testing superficial knowledge.

Types of objective tests – 4 types

- True – False Items (Alternate Response Type)
- Multiple Choice Items
- Matching Type Items
- **Completion Type Test Items**

1) True –False test items

Here, a factual statement is made and the learner is required to respond with either true or false depending on the correctness of the statement. These are easy to prepare, can be marked objectively and cover a wide range of topics

Advantages

- can test a large body of material
- these are easy to score

Disadvantages

- Difficult to construct questions that are definitely or unequivocally true or false.
- These are prone to guessing.

2) Matching items

Involves connecting contents of one list to contents in another list. The learners are presented with two columns of items, for instance column A and column B to match content in both columns correctly.

Advantages

- Measures primarily associations and relationships as well as sequence of events.
- Can be used to measure questions beginning with who, when, where and what
- Relatively easy to construct.
- These are easy to score

Disadvantages

- Difficult to properly design. Multiple matches may be possible within the columns.
- Items used must bear some similarity
- Unclear directions how matching will occur.

3) Multiple choice test items

In a multiple choice item, a statement of fact is made. It is followed by four or five alternative responses from which only the best or correct one must be selected. The statement or question is termed as 'stem'. The alternatives or choices are termed as 'options' and the 'key' is the correct alternative. The other options are called 'distracters'.

Advantages

- Measures a variety of levels of learning.
- These are easy to score.
- Can be analyzed to yield a variety of statistics.
- When well constructed, has proven to be an effective assessment tool.

Disadvantages

- Difficult to construct effective questions that measure higher order of thinking and contain a number of plausible distracters.

4) Completion type test items In this, learners are required to supply the words or figures which have been left out. These may be presented in the form of questions or phrases in which a learner is required to respond with a word or several statements.

Advantages

- Relatively easy to construct.
- Can cover a wide range of content.
- Reduces guessing.

Disadvantages

- Primarily used for lower levels of thinking
- Prone to ambiguity.
- Must be constructed carefully so as not to provide too many clues to the correct answer.
- Scoring is dependent on the judgment of the evaluator.

8.7 SOCIAL SCIENCE - ACHIEVEMENT TEST

ACHIEVEMENT TEST

INTRODUCTION

An achievement test is designed to evaluate a unit during the teaching-learning process. It has a great significance in all types of instructional progress of the individual. It focuses upon an examinees attainments at a given point in time. A class room teacher depends upon the achievement tests for measuring the progress of his students in his subject area. It is very important that several educational and vocational decisions about students are taken on their performance in the achievement tests.

DEFINITION

Many of the educators has defined an achievement test in several ways. According to Thorndike and Hegan “The type of ability test that describes what a person has learned to do is called an Achievement Test”.

Gronlund observes an achievement test as “a systematic procedure for determining the amount a student has learned through instructions”.

In the words of Wiersma and Jurs an achievement “is a measure of knowledge and skills in a content area”

PURPOSE OF ACHIEVEMENT TESTS:

Achievement tests are universally used mainly for the following purposes :

1. To measure whether students possess the pre-requisite skills needed to succeed in any unit or whether the students have achieved the objectives of the planned instruction.
2. To monitor students' learning and to provide ongoing feedback to both students and teachers during the teaching-learning process.
3. To identify the students' learning difficulties whether persistent or recurring.
4. .To assign grades.

CHARACTERISTICS OF A GOOD ACHIEVEMENT TEST

1. A good achievement test is tried out and selected on the basis of its difficulty level and power of determining.
2. It should have a description of measured behaviour.
3. It should contain sufficient number of test items for each measured behaviour.
4. It should be divided into different knowledge and skills according to behaviours to be measured.
5. It should be standardized for different users.
6. It carries with a test manual for its administering and scoring.

7. It provides equivalent and comparable forms of the test.

USUES OF ACHIEVEMENT TESTS

1. It helps to get a better understanding of the needs and abilities of the pupils.
2. It helps to discover the type of learning experiences that will achieve the objectives with best possible results.
3. It helps to evaluate the extent to which the objectives of education are being achieved
4. To evaluate, to revise and to improve the curriculum in the light of these results.
5. The teacher will be able to discover backward children and providing proper remedial instruction for their betterment.
6. The teacher will be able to determine and diagnose the weakness of the students in various subjects.
7. It helps the parents in recognizing the strength and weakness of their children.
8. By studying the results of Achievement test the teacher will be able to determine whether or not the students are working at their maximum capacity.
9. It helps to determine the general level of achievement of a class and thus to judge the teaching efficiency of the teacher.

CONSTRUCTION OF ACHIEVEMENT TESTS

There are several steps involved in the construction of Achievement Tests.

Instructional Objectives

The first and the most important step in planning a test is to identify the instructional objectives. Each subject has a different set of instructional objectives. In the subjects of Science, Social Sciences, and Mathematics the major objectives are categorized as knowledge, understanding, application and skill, while in languages the major objectives are categorised as knowledge, comprehension and expression.

Design

The second step in planning a test is to make the "Design". The Design specifies weightages to different (a) instructional objectives, (b) types (or forms) of questions, (c) units and sub-units of the course content, (d) levels of difficulty. It also indicates as to whether there are any options in the question paper, and if so, what their nature is. The design, in fact, is termed as an instrument which reflects major policy decisions of the examining agency, whether it is a Board or an individual.

Blueprint

The third step is to prepare the "Blueprint". The policy decisions, as reflected in the design of the question paper, are translated into action through the Blueprint. "A blue print is a three-dimensional chart, showing distribution of questions reflecting numerical weightages in terms of emphasis to be given to different units, instructional objectives and forms of questions". The three dimensions of the blueprint consist of content areas in horizontal rows and objectives and forms of questions in vertical columns. Once the blueprint is prepared, the paper setter can select the items and prepare the question paper. It is at this stage that the paper setter decides as to how many question are to be set for different objectives.

Writing of Questions

The forth step after the finalization of the blueprint is writing appropriate questions in accordance with the broad parameters set out in the blueprint. The basic criteria of good question paper are validity, reliability and usability or practicability.

Validity refers to the relevance of testing or 'to the extent to which a test measures what it intends to measure'. Reliability means 'how accurately and consistently it measures the achievement from time to time, whatever it measures. A question paper is Usable or Practicable if it is easy to construct, administer, score and interpret.

There are mainly three kinds of questions - essay, short answer and objective type. Each question should be made appropriately for meeting the required instructional objectives and skills.

Short Answer Questions:

the short answer type generally require exact answers and usually take less than five minutes to read and answer, many (very short answer) take less than a minute.

Objective Type Question:

An objective question is one which is free from any subjective bias - either from the tester or the marker. Objective questions can take various forms such as Simple recall, Multiple choice, True or false, Matching block, etc., but invariably they require brief answers with little or no writing. There can only be one right or objective answer to an objective question. A simple tick or a quick oral answer may be enough.

Extended Type Question:

The extended type answer includes questions which require pupils to write a brief description, draw a map, make a list, perform a calculation, translate a sentence and so on.

Marking Scheme

The fifth step is to prepare the "Marking Scheme". The marking scheme helps prevent inconsistency in judgment. In the marking scheme, possible responses to items in the test are structured. The various value points for responses are determined and the marks allowed to each value points are indicated. The marking scheme ensures objectivity in judgment and eliminates differences in score which may be due to inconsistency of the evaluator. The marking scheme, of course, includes the scoring key, which is prepared in respect of objective type questions.

Importance of Marking Scheme

The factors contributing to variations in the standards of assessment can be controlled by supplying a detailed scheme of marking along with the expected answers so that every examiner may interpret the questions in the same way and attain the same standard of marking without being too lenient or strict or varying in his assessment. Subjectivity, is thus minimised and it is believed to give a more reliable picture of the students' performance.

PREPARATION OF AN ACHIEVEMENT TEST

Preparation of an achievement test is one of the important tasks of assessment in Social Science. This requires teachers to analyse the contents, provide judicious representation to each and every chapter of the syllabus. The authentic evaluation of the learner's performance depends upon the quality of question papers prepared by teachers. Preparing an achievement test is a systematic work. There are certain steps which need to be followed while preparing an achievement test. Let us discuss the

5.6.2 Preparation of Blue Print for the Test

On the basis of the content analysis, a blue print for the achievement test needs to be prepared before writing the items for the test. A blue print of test preparation may be defined as, “a three dimensional chart where weightage are given to content, objectives, and forms of questions in terms of marks”.

Blue print is a structure of the test which consists of the following information.

1. Content
2. Instructional Objectives
3. Types of Questions and Weightage to Marks

Let us take an example of the Blue Print as per the Chapter selected above.

Blue Print of the Achievement Test:

Information:

Subject: Social Science

Chapter: Democratic Rights

Class: IX

Total Marks: 100

Pedagogy of Social

Sciences

Weightage to the Content Areas: 1. Life without Rights – 25%

2. Rights in a Democracy – 25%
3. Rights in the Indian Constitution – 25%
4. Expanding Scope of Rights – 25%

Instructional Objectives: 1. Knowledge –30%

2. Comprehension-30%
3. Application/Reflection/Analysis – 28%
4. Skill Development – 12%

Type of Items: 1. Essay Type Items – 40% (4 items, each item 10 Marks)

2. Short Answer Type Items –36% (12 items, each item 03 Marks)
3. Objective Type Items –24% (24 items, each item 01 Mark)

3 Writing Essay Type Items

Writing test items is an art as well as science. The items need to assess the specific learning outcomes expected of the learners. They are to be written in behavioural terms by using the specific action verbs. Generally, essay type items are of two types:

1. Extended Response Type Item
2. Restricted Response Type Item

In extended response type of essay item, restrictions are not given either in terms of words, phrasing the items, or in time. This a free response type of item. On the other hand, restricted response type of item, restrictions are given to the learners in terms of phrasing the items carefully into parts, allotting marks to the parts, and also limiting the words as well as time.

Comparatively restricted response types of items are formed more scientifically and reduce subjectivity in scoring. Mostly, these types of items are asked in the examination. Let us form a few restricted response type of essay type items as per the table of specification given above (Table-3)

Writing Short Answer Type Items

Like essay type items, writing short answer type items also require certain skill of the teachers. It is the mid-way between essay type items and objective type items, in terms of length and weightage of marks. The length of short type item may be within a few lines, sentences, or a paragraph of 50 to 100 words. The style and guidelines of writing short answer type items are similar to essay type items. Short answer type questions can be phrased with suitable action verb. Let us develop some short answer type items as per the

Writing Objective Type Items

Writing objective type items is the most difficult task in preparation of an achievement test. Objective type items can be classified into recall and recognition type of items. Recall type of item can also be classified into simple recall type and completion type of items. Recognition types of items are answered in a single word or numbers in which the choices of the responses are usually given. Below given (Table 6) are the commonly used objective types of items in the examination.

Concept of Diagnostic Testing:

The term diagnosis has been borrowed from the medical profession. It means identification of disease by means of patient's symptoms. For example, when a patient comes to a doctor, the doctor initially puts some questions to the patient to gather some basic information's about the disease and then uses other techniques to get more related information to identify the disease and its probable cause(s).

After careful analysis of these data, he prescribes the medicines as remedial treatment. Similarly, in the field of education, diagnosis has many such implications. Difficulties in learning occur frequently at all levels and among pupils of both high and low mental ability.

In order to handle such cases, the teacher also uses similar techniques like a doctor to diagnose the relative strengths and weaknesses of pupil in the specific area of study, analyse the causes for the same and then provides remedial measures as per necessity.

Since tools and techniques used in mental measurements are not that exact, objective and precise like the tools and techniques used in sciences, the teachers are cautioned to use the diagnostic data with great care for designing remedial programmes.

But it is used in education to determine the learning difficulties or deficiencies of the learner. Diagnostic test is a test used to diagnose strength and weakness of the learning in certain areas of study whereas diagnostic evaluation is centered on schooling process such as the curriculum programme, administration and so on.

When learning difficulties that are left unresolved by the standard corrective prescriptions of formative evaluation and a pupil continues to experience failure despite the use of prescribed alternative methods of instruction, then a more detailed diagnosis is indicated.

To use a medical analogy, formative testing provides first aid treatment for simple learning problems and diagnostic testing searches for the underlying causes of those problems that do not respond to first aid treatment.

Thus it is much more comprehensive and detailed and the difference lies in the types of question each of them is addressing.

The following are the salient features of Diagnostic Testing:

- (i) The diagnostic test takes up where the formative test leaves off.
- (ii) A diagnostic test is a means by which an individual profile is examined and compared against certain norms or criteria.
- (iii) Diagnostic test focuses on individual's educational weakness or learning deficiency and identify the gaps in pupils.
- (iv) Diagnostic test is more intensive and act as a tool for analysis of Learning Difficulties.
- (v) Diagnostic test is more often limited to low ability students.
- (vi) Diagnostic test is corrective in nature.
- (vii) Diagnostic test pinpoint the specific types of error each pupil is making and searches for underlying causes of the problem.
- (viii) Diagnostic test is much more comprehensive.

- (ix) Diagnostic test helps us to identify the trouble spots and discovered those areas of students weakness that are unresolved by formative test.

Dimensions of Diagnostic Test:

- (i) Who can conduct → Teacher/Researcher
- (ii) Where → School/Home/Work places
- (iii) On whom → Learners
- (iv) Purpose → Specific strength and weakness of the learner in a particular area.
- v) Length of time → Flexible in nature
- (vi) Techniques of → Test/observation/interview etc. Assessment
- (vii) Sequence → Logical and step by step
- (vii) Method of → Negotiable/Therapeutic Remediation.
- (ix) Support to → Learner/Parents/Teacher

Steps of Educational Diagnostic Test:

- (i) Identification and classification of pupils having Learning Difficulties:
 - (a) Constant observation of the pupils.
 - (b) Analysis of performance: Avoiding assignments & copying from others.
 - (c) Informal classroom Unit/Achievement test.
 - (d) Tendency of with-drawl and gap in expected and actual achievement.
- (ii) Determining the specific nature of the Learning Difficulty or errors:
 - (a) Observation.
 - (b) Analysis of oral responses.

- (c) Written class work.
- (d) Analysis of student's assignments and test performance.
- (e) Analysis of cumulative and anecdotal records.
- (iii) Determining the Factors/Reasons or Causes Causing the learning Difficulty (Data Collection):
 - (a) Retardation in basic skills.
 - (b) Inadequate work study skills.
 - (c) Scholastic aptitude factors.
 - (d) Physical Mental and Emotional (Personal) Factors).
 - (e) Indifferent attitude and environment.
 - (f) Improper teaching methods, unsuitable curriculum, complex course materials.
- (iv) Remedial measures/treatment to rectify the difficulties:
 - (a) Providing face to face interaction.
 - (b) Providing as may simple examples.
 - (c) Giving concrete experiences, use of teaching aids.
 - (d) Promoting active involvement of the students.
 - (e) Consultation of Doctors/Psychologists/Counselors.
 - (f) Developing strong motivation.
- (v) Prevention of Recurrence of the Difficulties:
 - (a) Planning for non-recurrence of the errors in the process of learning.

Construction of Diagnostic Test:

The following are the broad steps involved in the construction of a diagnostic test. Diagnostic Test may be Standardized or Teacher made and more or less followed the principles of test construction i.e., preparation, planning, writing items,

assembling the test, preparing the scoring key and marking scheme and reviewing the test.

The Unit on which a Diagnostic Test is based should be broken into learning points without omitting any of the item and various types of items of test is to be prepared in a proper sequence:

1. Analysis of the context minutely i.e., major and minor one.
2. Forming questions on each minor concept (recall and recognition type) in order of difficulty.
3. Review the test items by the experts/experienced teacher to modify or delete test items if necessary.
4. Administering the test.
5. Scoring the test and analysis of the results.
6. Identification of weakness
7. Identify the causes of weakness (such as defective hearing or vision, poor home conditions, unsatisfactory relations with classmates or teacher, lack of ability) by the help of interview, questionnaires, peer information, family, class teacher, doctor or past records.
8. Suggest remedial programme (No set pattern).

Motivation, re-teaching, token economy, giving reinforcement, correct emotion, changing section, giving living examples, moral preaching's.

Materials Used in Diagnostic Test:

Classroom teachers, principals, supervisors and qualified diagnosticians use the following resources and materials in making educational diagnoses more vibrant:

1. Test records (Standardized and Teacher made).
2. Pupils' written work (themes, compositions, home assignments and test papers).

3. Pupils' oral work (discussion, speeches and oral reading).
 4. Pupils' work habits (in class activities, participation, peer relationship, independent work, interest, effort etc.).
 5. Physical and health records (school and family records about vision, hearing, dental, general).
 6. Guidance and cumulative record data (family) background, anecdotal references, school activities).
 7. Interview with pupil (problem or trouble and elimination of misconceptions).
 8. Parent conference (pupil problems at home, parent interpretation).
 9. Self-guidance (completing assignments, independent work and seeking teacher help).
 10. Clinic or laboratory aids (vision tester, audio-meter eye photographs, tape recorder etc.).
- (i) Attitudinal change.
 - (ii) Will Power and patience of the teacher.
 - (iii) Time Scheduling .
 - (iv) Sequencing of Study.
 - (v) Faulty method of data collection and test.
 - (vi) Maintaining records impartially.
 - (vii) Costs.

REMEDIAL TEACHING

While diagnosis is the process of investigating the learners' difficulties and the reasons for this, its follow up leads to actions that may help children make up their deficiencies. This step is generally termed Remedial Teaching. So you have to be skilled in preparing or arranging for such materials which may be used to undertake corrective instruction and thus enhancing the quality of learning.

The following points should be kept in mind while selecting appropriate instructional material:

- i) The corrective material should be designed to correct the students' individual difficulties.
- ii) You have to analyze the work of slow learners by means of observation, interview and Diagnostic Testing. A careful consideration of the three may help decide what kind of corrective material is to be designed and whether material will be adequate to correct the specific difficulties of learners.
- iii) The corrective material should be graded, self-directive and should permit students to work independently. Written directions, which accompany the material, should be easily readable and comprehensible by the students.
- iv) The corrective material must permit individuals to progress according to their pace.
- v) The material should encourage systematic recording of evidence of pupils' progress.

The diagnosis made on the basis of a graded test provides a definite direction to remedial teaching. The teaching-learning strategy should of course, put emphasis on exercises in the relevant area of difficulty until mastery is achieved. Further testing would be desirable to examine the impact of remedial teaching.

Conclusion:

In this article you have learnt about Diagnostic Testing which is the most important part of the teaching-learning process. It implies a detailed study of learning difficulties. Its aim is to analyze, not to assess.

The nature and purpose of Diagnostic Testing is to identify the areas of difficulties where the learner commits errors. The stages of diagnostic testing are:

- i) Identifying the students who need help.

ii) Locating the error/learning difficulties.

iii) Discovering the causal factors.

After locating the area where the difficulty lies, as a teacher you will devise some strategy to remove problems in learning and the causes due to which the learner has faced the difficulties. The strategy used by you to remove the weakness of the learner is known as remedial teaching. Diagnostic Testing leads to remedial teaching in which you have to prepare instructional material for quality learning, adopting different methodologies as per needs of the individual or a particular group.