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## UNIT 15 TOOLS AND STRATEGIES OF ASSESSMENT

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### 15 .0 INTRODUCTION

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In the previous unit you have learnt the importance of assessment in the learning-teaching processes. You have learnt about the relationship of assessment with



classroom process and expected learning outcomes. CCE is a school based assessment system of students which covers all aspects of student development. CCE is hence not a onetime event rather it spreads over the entire span of an academic session. Continuity of CCE stresses on regularity of formative assessment within short interval of time, diagnosing the learning difficulties of the students, use of corrective measures and providing timely feedback to students. When you are assessing both the scholastic and co-scholastic aspect of a student, do you think a single tool or technique (for example a classroom test) would be sufficient for the purpose? Well, you have to depend upon several tools and techniques for comprehensive assessment.

Let us learn about the fundamental concepts of the tools and techniques of assessment in this Unit so that skills to construct different types of tools to assess the scholastic and co-scholastic aspect of each student can be developed.

This unit will take about 15 hours of study.

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## 15.1 LEARNING OBJECTIVES

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After completing this unit, you will be able to:

- Identify different types of tools used to assess the holistic development of the students;
- Develop and use achievement tests as well as other tools to gather information regarding the students.
- Develop the skills to frame different types of test items in the school subjects.

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## 15.2 CONSTRUCTION AND USE OF ACHIEVEMENT TEST

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What do you understand by the concept of ‘Achievement’?

The dictionary meaning of the word Achievement is “*a thing somebody has done successfully, especially using his/her own effort and skill*” (Oxford Advanced Student’s Dictionary of Current English, 2005). For example, Bijaya, a student in class VI, can solve 10 varieties of problems relating to Simple and Compound Interest successfully but Sajan can solve only 4 varieties. We can then say that Bijaya has better achievement than Sajan in solving problems on Simple and Compound Interest. Bijaya could achieve more because he had acquired more knowledge, understanding and skills in the concepts of calculating interests in different contexts than what Sajan had acquired during same time. Achievement in this case is thus acquisition of experience to solve problems.



## Notes

In order to assess the learning achievement of the students, usually we use tests in our schools. Such tests are prepared by you or supplied to you by the authorities or procured from the open market. In what ways the tests prepared by you are different from the others? Do the tests procured from the market serve your purpose? Critically think on these issues. Most of the teachers depend upon tests to know to what extent the students have been successful in the learning–teaching process and to what extent the learning objectives were achieved by the students. The test results are reflected in the form of score (commonly known as marks) or grade. Let us consider an example.

Suppose you are teaching mathematics in Grade –II on addition of two or more than two numbers which deals with the following concepts.

- addition of two-digit numbers without carry over,
- addition of two- digit numbers with carry over,
- row wise addition of two-digit numbers,
- Word problems on addition of two-digit numbers.

After teaching the concepts, you want to know the amount of experiences of addition acquired by each individual student. In such situations, we usually use achievement tests to know the extent of learning achievement of the students with respect to the expected learning outcomes covering knowledge, understanding, application, analysis, synthesis and evaluation skills. Such type of tests also helps the teacher to compare the performance of the student's achievement with the performance of other student's achievement.

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E1. State any three uses of achievement tests in the classroom situation at elementary school level.

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Now suppose you have constructed a good test in Mathematics for class V in your school. You know your students very well and the test that you have developed gives you the required information about their achievements in Mathematics. You are very satisfied with the performance of the test. Can this test be used by another teacher serving in a school at a far distance place in the tribal area of your state or in a school situated in a city? Well, we cannot be sure. At the best we can say that the test can work equally well if the students and the school conditions are same as your school. But, in the common examinations, only one set of tests is used in all schools throughout your state. These tests are carefully constructed following a strict process called *standardization* so that it is fair for all students studying in schools situated widely apart in the state. Thus there are two categories of tests: *teacher-made tests* and *standardized tests*. The tests used in annual secondary school certificate examination in all secondary schools of your state are examples of the standardized achievement test. Through the process of standardization the following properties of the test are ensured:



- The test items used are purposefully designed to measure a clearly defined achievement domain.
- The test items are based on standard content thereby confirming the provision of using identical test to different individuals in different places at different times.
- The test can be administered precisely under the same conditions.
- A standardized procedure of administering, scoring and interpreting the results of the test are followed.

The standardized achievement test consists of high quality test items which are developed by specialists, tried out and selected on the basis of difficulty level. However such standardized tests have limited use in monitoring the learning progress and using them for furthering learning of the students. Teacher made tests have more utility in formative assessments which has been discussed in the previous unit. Let us understand the various aspects of the teacher made tests.

### **15.2.1 Teacher Made Test**

While teaching in a class, very often you have to use tests to assess levels of learning of each and every students of your class. These tests are essential for making the assessment more continuous and comprehensive. Some of you might have developed and used several such teacher made tests in your classroom to assess the student's progress on various occasions. Some important functions of the teacher-made test are:

- To reflect on the day-to-day teaching-learning activities of the school.
- To develop more efficient learning-teaching strategies.
- To know the ability of individual student. By knowing the abilities of the students, the teacher may be at an advantaged position to form different ability groups (you may refer unit 5 of Block 2 of this course).
- To diagnose the students' strengths and weaknesses, and this helps the teacher to plan for compensatory (remedial) and enrichment programmes.

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E2. Analyse the example given below:

*Mrs. Pandey plans meticulously for learning and teaching processes for her class. One day she planned to teach the concept of Highest Common Factor (HCF) to her students. She thought that before teaching the concept of HCF, she must know to what extent the students have learnt the concept of factors and multiples. So she developed a test for the purpose, administered that on her students, and then on the basis of the test results proceeded.*

- i) Do you think that the test prepared by Mrs Pandey helps her to realize her specific objectives?



- ii) How was the test useful for Mrs Pandey?
- iii) **Think of your class where you are teaching at present and write down one such example.**

The characteristics of teacher made tests are given below:

**Table 15.1 Characteristics of Teacher Made Tests**

Characteristics	Teacher made Achievement Tests
Direction for administration	No uniform directions are specified, depends upon the teacher who uses it;
Learning outcomes and Sampling of contents	Well adapted to outcomes and contents of local curriculum, The classroom teacher decides the quantum of content to be covered for a particular test;
Construction	Depends upon the classroom teacher and his/her capacity, often prepares the blue print, less scope for item analysis and try- out of the test items
Frequency of use	It depends upon the purpose of the test to serve
Purpose	To provide feedback, functions as a learning exercise, motivates the students to develop good study habits,
Use	Score comparisons and interpretations limited to that particular school not for comparison with other schools; best suited for measuring particular objectives set by the teacher.

The teacher should know how to plan, construct and use tests they prepare for getting true and accurate information regarding the learning outcomes in respect of his/her students. Otherwise, a test constructed casually may not serve our purpose and relying on the outcomes of such tests would be useless and sometimes harmful for students' learning.

What are the contents of a test? A test comprises of information regarding

- the testing event ( like Annual, Terminal, Half-yearly or Monthly, untitled),
- the class for which it is meant,
- the total time duration (usually in hours) for giving complete response to the test,



- the maximum/full marks on the test, and
- the test items, commonly known as questions as the major portion of the body of the test.

Do you know why questions are called items?

Let us examine some examples of test items given below:

1. What is the name of the capital city of Bangladesh?
2. Give three reasons for the outbreak of cholera.
3. 'Poverty is not the only reason for high illiteracy rate'. Justify.
4. The longest river flowing in India is \_\_\_\_\_ .

You will notice that statement (1) is in question form, (2) is an affirmative sentence, (3) is a negative sentence and (4) is an incomplete sentence. All these are not in question form but they do serve the purpose of testing. Each is therefore called a test item.

Depending on the types of items, there are different categories of test as given below.

- **Objective Test** – Each item of this test is of objective type (which is described in Section. 15.3 of this unit).
- **Essay Test** – Each of the items in this test is either an extended response type or a restricted response type (described in Section. 15.3 of this unit).

Again, the tests are of **three types** based on the mode of response to the items in the test:

- **Oral Test** – Answer to each item of such a test is given orally. Such types of items are very often used in beginning years of primary schools and also when a quick estimate of students understanding of a concept is need to be checked.
- **Written Test** – Answer to each item of the test is given in writing and is also called the paper-pencil test. Everyone is familiar with the written tests as it can be used in nearly all occasions.
- **Performance Test** – When answer to each item requires the student to do some activities like measuring length, weight and capacity, drawing figures, painting, arranging the blocks to produce desired designs, preparing models etc. Development of understanding, skills and creativity can be assessed using this type of test.

Sometimes, different types of items are also used in a single achievement test. In such a test, items of one type are placed together in separate section within the test. During construction of the test we decide about the inclusion of different types of items in the test. Let us think regarding the ways to construct a good test.



E3. Ms. Aditi was teaching the concept of 'conservation of energy' in class VII. While teaching she felt that some students were looking confused. She wanted a quick check of the students' understanding of the concept. Which type of test should she use for the purpose?

**Constructing a Good Test:** When would you consider the test you are using to be good? Ms. Nandita, teaching in upper primary classes, thinks that a good test should serve the intended purposes of learning the subject/unit/topic, while her colleague Mr. Prakash is of the opinion that the test is good if there is no ambiguity in the test items and are clear for each student. Another teacher Amin feels the test to be good if it can be scored without any bias and the results can be easily and meaningfully explained to the students and their parents. What Ms. Nandita, Mr. Prakash and Mr. Amin think are the characteristics of a good test for the teacher who uses the test. Therefore, a test must be constructed meticulously so that it would fulfil the characteristics of a good test.

E4. Write four characteristics of a good teacher-made test.

Constructing a good test requires the following steps:

*Planning, Writing the test items, Assembling and Editing the items, and Making the Scoring Processes.*

A good test requires adequate and extensive planning. The *planning process* gives answer to the following questions such as:

- What does the teacher want to do (i.e. Why the teacher want to use a test?).
- Why is the test being administered ( i.e. it implies the purposes of the test such as judging the student's mastery of certain essential skills and knowledge, ranking students on the basis of achievement, diagnosing the student's difficulties etc.).
- What are to be tested (i.e. specifying the content to be covered, listing the major unit objective, defining the objectives, etc.)?

For *writing the test items*, the teacher has to prepare a table of specification (normally called as a *blue print* i.e. a two-way arrangement of course content and course objectives). Look at the table of specification for a unit on Oxygen in science for class-VII given below:



*Table of specifications for a unit on Oxygen in Science for class-VII.*

Content	Objectives				
	knowledge	understanding	application	skill	total
Physical Properties	8	6	6	0	20
Chemical properties	12	9	9	0	30
Preparation	0	4	0	6	10
Use	16	11	9	4	40
Total	36	30	24	10	100

To prepare good items, the teacher need to know the subject matter thoroughly, know and understand the students to be tested, be familiar with various types of items and follow a table of specifications.

After the test items are written they are *edited* by reviewing each item on the basis of its appropriateness, usefulness, clarity to do the task, language, etc.

*Preparing a scoring process* along with the test item contributes to develop a good test. A scoring key is required to be prepared and made available with the teacher to help him/her at the time of scoring.

### 15.2.2 Unit Test

We know that in order to make the teaching-learning easier each subject for a particular class is divided into some units or topics. Each unit consists of inter-linked concepts. Though the concepts within different units are related with each other yet for convenience every unit is regarded as independent. After the learning-teaching of that unit, you need to know the extent of attainment of each student with respect to the learning of the concepts of the unit. You may not require the elaborate and long tests for this. What you require is a small test called a *unit test* which can serve your immediate purpose.

For all practical purposes, the unit test is planned considering the amount of content coverage and the expected learning outcomes and time available for it (approximately 30 minutes). If the study units are found to be too small, then after completion of 2 or 3 units, one unit test covering the units may be conducted. Similarly, for relatively bigger units more than one unit test may be planned.

#### *Purposes of Unit Test:*

- The annual and half yearly tests are normally term end summative assessment and used for purpose of promotion to the next higher class. These tests are conducted taking the content of the whole syllabus and often not possible to cover all the competencies. The unit test on the other hand is useful in assessing more competencies if administered frequently.



## Notes

- The Unit test is a type of formative assessment. It provides feedback which leads to students recognizing their learning difficulties. It also helps the teacher to modify his/her teaching methodologies and planning for alternate learning experiences for the students who have learning difficulties.
- A unit test usually covers limited competencies and is conducted in a lesser time in comparison to other summative tests. Normally the unit tests are conducted in one period of 30-40 minutes duration. So it does not affect other activities of the class and school in the date of conduct of unit test.

Think of other purposes of unit test. Share your ideas with your friends and note down those purposes. The unit test is different from other as shown in the following Box.

### Box: Features of Unit Test

- It is based on limited competencies/specific objectives.
- Testing students with it is very informal in nature i.e. unit testing is conducted within the normal classroom time without affecting other activities of the school.
- The maximum marks for a unit test is decided by the teacher. Marks secured on the unit test are less important than the diagnosis of strengths and weaknesses of students.
- The teacher also decides the time to answer the questions, total number of items to be included in the test. It is purely a teacher made test.
- Varieties of test items (oral, written, performance) can be used in the unit test. But within a single unit test types of items are limited.
- It does not rank the students on the basis of their performance rather it acts as a tool for further learning.
- As it is conducted in an informal environment, it reduces the stress of examination in the students.

E 4. Which of the followings is associated with a unit test?

- (a) Summative assessment
- (b) Formative in nature
- (c) Confined to limited number of competencies
- (d) Totally controlled by the teacher
- (e) Standardized achievement tests
- (f) Decides promotion to the next higher class

- (g) Used for remedial purpose
- (h) Results shared with the parents



Notes

The principles of constructing a unit test are the same as those followed in preparing a full length test. However, following are to be noted:

- The Unit tests cover limited contents/courses.
- The table of specification that needs to be followed (Blue Print) reflects the content areas in one axis whereas types of questions (oral, written and practical/performance type of items) on the other axis related to the instructional objectives (knowledge, understanding, application and skills).
- Limited number of questions which can be answered within a particular period has to be framed by the teacher.
- After preparation of the items on each content area, the teacher may arrange them systematically and then administer the test to the students in an informal atmosphere.
- The scoring pattern can be discussed with the students and finalized after the testing is over.

Observe and analyse the blue print given below:

<i>Content/language skills</i>	<i>oral</i>	<i>written</i>	<i>performance</i>	<i>Total</i>
Reading with understanding		1(3)		3
Speaking fluently on the text	1(3)		3	
Comprehension		3(2)	6	
Functional grammar	1(5)	5		
Use of language in other context		2(2)	4	
Project work on the topic			1(4)	4
<b>Total</b>	<b>6</b>	<b>15</b>	<b>4</b>	<b>25</b>

**Blue Print for a topic in Language for Class V**

This blue print is prepared for preparing a unit test in a topic on prose in 1st language (mothertongue). The number outside the parentheses (bracket) indicates the no of items whereas the number within the bracket indicates the weightage of each item. In the unit test oral, written and performance type of items are used. In one side the content/language skills are arranged whereas in the horizontal line the types of questions are arranged.



Notes

### ACTIVITY1:

Take any topic on prose from Class-V textbook of your State. Prepare a test on the basis of the blue print given above.

## 15.3 CONSTRUCTION OF DIFFERENT TYPES OF TEST ITEMS

Given below are three test items. Read them carefully.

1. What are the factors that affect the population growth of a locality?
2. Name any three characteristics of the living beings.
3. What is the name of the capital city of India?

Have you noticed any difference between the three test items given above?

In the first item the student has to describe the factors contributing to growth of population in detail. Such type of question is termed as *essay item*. Essay items are of two types based on the amount of freedom of responses allowed to the students. An essay item that requires a lot of description is termed as an *extended response type item* (item no 1 in the above example). But, in the second item above, the student has to write only three characteristics of the living beings. Such type of question is known as *restricted response type item*. The third item on the other hand requires definite answer and thus named as *objective type of item*. Let us understand different types of test items in this section.

### 15.4.1 Extended- Response Type of Item

For understanding this type of item let us do the following Activity:



## ACTIVITY: 2

Read the following questions:

1. Describe the preparation of Carbon dioxide gas in the laboratory.
2. Criticize or defend the statement- “Aurangzeb’s administrative policy led to the fall of Mogul Empire in India.”
3. Write any two physical properties of hydrogen gas.

On the basis of the above three questions, fill in the following table-(put a tick mark if that statement is applicable for that statement or put a cross mark if that is not applicable for that statement.

Table -15.3

Sl. no	Statement	Question 1	Question 2	Question 3
1.	Allows freedom to respond.			
2.	Guessing is minimum while answering			
3.	Measures ability to give several possible answers.			
4.	Enables the child to organize the ideas and present it in a written form.			
5.	Requires much time to answer the question.			
6.	The creative ability of the student is reflected in the answer.			
7.	Scoring may vary from examiner to examiner.			

If you analyse the three items given above and your answers in Table 15.3, you will observe that the nature of item 1 and 2 are quite different from item 3. While the earlier two items are extended (free) response type, the latter is a restricted response type of test item.

In the extended–response type of items, the students are given sufficient freedom in responding to the items. Such type of items permit students to decide which facts they think are most pertinent and to select their own style of organization. Thus, such items help the students to organize complex behaviours, and skills.



## Notes

It also helps the teacher in evaluating complex skills like organization of ideas, analytical skill along with understanding of concepts and principles.

Though the extended response types of items have much strength, they also have weaknesses. These responses are difficult to score objectively because the students have greater freedom of expression. The scoring depends on the examiner's own criteria of assessment and mood. For these reasons, different examiners give different scores to the same answer of such an item. There is a very little scope to cover all the expected learning outcomes in a test containing only extended response type of items.

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E 5. State any two strengths and two weaknesses of extended response type of test items with suitable examples.

E 6. Give two examples of extended response type of test items from each school subject.

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The classroom teacher can construct good quality of extended type of test items and use them for further learning of the students. While constructing such type of items the following may be considered:

- Specify the length of response for each question.
- Provide the student with some guidelines such as the points to focus in the answer.
- Provide prior information to the students regarding the weight to different points in the answer.

### 15.3.2 Restricted Response Type Items

When we put any restriction on an essay item, such that the response to is controlled or become brief, the item generated is a *restricted response item*.

Read carefully the following items:

1. *Describe your feelings towards your pet animal in 50 words.*
2. *State any two advantages of television in comparison to radio.*
3. *Explain the factors responsible for poverty in India (in five sentences).*
4. *State the reasons of your absence from the school in the space provided below.*
5. *Answer the following questions as quickly as possible (not more than 2 minutes per question):*
  - a) *During which months of the year, your state experiences monsoon?*



- b) *What is a rain shadow area?*
- c) *Why do you feel colder as you climb higher on a hill?*

You can observe that restrictions have been stated in these items to shorten and make responses more focused:

- In the Item 1 and 3, the length of response is restricted to 50 words and five sentences respectively. So the student has to select, organize and integrate the ideas within the specified number of words or sentences.
- In the Item 2, the content of response is restricted to stating two advantages of television over radio although there are more points of differences between the two.
- In the Item 4, the space for response is restricted by 4 lines. The student has to state the reasons within these four lines as given in the question-cum-answer sheet.
- In the Item.5, the duration or time of response is limited to 2 minutes per question.

Though there are freedoms for the students to express themselves, the responses are restricted. Such restrictive types of items are useful in managing time, and more objectively scoring of the responses. When carefully constructed, the restricted response items can also be the tools for measuring higher order of learning outcomes like comprehension, application, analysis, synthesis, appreciation, and creativity.

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- E7. In assessing learning outcomes, state three advantages of extended response type items compared to other types of items.
- E8. Give three reasons of different scoring by examiners in extended response type of items.
- E9. How many restrictions can be imposed to make essay items restricted response items?
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### 15.3.3 Objective Type Items

Read the following items:

1. *Find the value of  $7 + 6 - 3$ .*
2. *Who was the first Prime Minister of Independent India?*
3. *India got independence in the year \_\_\_\_.*

We are very familiar with such type of items. These types of items are normally used in most of the tests. The answers to such items are definite and unique and



## Notes

hence can be scored objectively. Because such an item can be scored objectively (not influenced by any subjective personal criteria of the respondent or examiners), it is called an **objective item**.

Objective tests present students with a highly structured task that limits their response to supply a word, a number, a symbol or to select the answer from among the given number of alternatives. In general, objective type of items take less time to answer and easier to score uniquely than the extended or restricted response types of items.

Usually different types of objective items are used in the teacher made tests like unit tests. It is necessary for you to have a clear idea about different objective type of items.

Consider the following test items:

1. *Fill in the blank with correct answer:*

*The members of the Gram Panchayat are elected for \_\_\_\_\_ years.*

2. *Choose the correct answer from within the bracket- (3, 4, 5, 6)*

*The members of the Gram Panchayat are elected for \_\_\_\_\_ years.*

Is there any difference in Item 1 and Item 2?

Well in item 1, the student has to supply the answer by recalling from the text. But in item 2, he/she is supposed to select the correct answer from the given alternatives within the bracket. So while the first one is a *supply type of item*, the latter one is a *selection type of item*.

Let us discuss **different objective types of item** with appropriate examples.

**(a) Short answer type:**

The short answer test items are suitable for measuring a wide variety of relatively simple learning outcomes. These test items are commonly termed as direct questions. Here are some examples:

- *What device is used to measure the amount of rainfall?*
- *If 10 numbers of pens costs 45 rupees, then how much you will pay to purchase one pen?*
- *In which year the First Panipat War was fought?*

In order to respond to the questions given above the student has to recall the facts. The short answer types of items are commonly used to assess the student's knowledge on terminology, facts, and principles. It is very easy on the part of the teacher to frame short answer type of questions. While preparing such type of



test items one should be careful about the use of language and the arrangement of words in a sentence to avoid ambiguity.

**(b) Completion type:**

In some test items the students have to complete the incomplete statement. This is another form of the short answer type of item. Here are some examples:

- *A Member of Parliament in India is elected for a term of \_\_\_\_\_ years.*
- *The process of food preparation by plants is known as \_\_\_\_\_.*
- *Each angle of an isosceles triangle measures \_\_\_\_\_.*

In each item given above are of supply type of items where the students have to supply the correct answer to complete the incomplete statement. Usually one blank space is kept in one item and preferably towards the last part of the sentence. No blank space is to be placed at the beginning of the sentence. You should not, as a rule, use long and complex sentences for these items.

**(c) True-false or alternate response items:**

Note the following test items:

*Read each statement carefully. Circle T if the statement is true and circle F if the statement is false.*

- *The square root of 169 is 13. T F*
- *The Second World War ended in the year 1939. T F*
- *Every square is a rectangle but every rectangle is not a square. T F*
- *The author of the book "Wings of Fire" is Dr Man Mohan Singh. T F*

Here the student judges the truth or falsity of the statement. The other forms of true-false item are right-wrong, yes-no. Since the choice of response is restricted to only two responses, the respondent has minimum choice and is forced to choose either of the two. That is why this type of items is also called *forced choice type*. Testing for factual knowledge, understanding, application, skill and problem solving ability can be done through this type of item and are found to be useful for the young students. But it is also highly prone to guessing and can be scored quickly, reliably and objectively.



**ACTIVITY 3:**

*Construct at least 10 numbers of true-false items from one chapter of the social science text book.*



## Notes

After completing the above activity of constructing 10 true-false items, verify the items as per the criteria given below:

- a. Is each item expressed in clear, simple language?
- b. Did you use the textbook languages?
- c. Have specific determiners, like 'all', 'many', 'sometimes', 'usually', and 'always', been avoided in the statements?
- d. Have you taken partly true and partly false statements?
- e. Do the statements have any double negative words?
- f. Is there approximately equal number of true and false items?
- g. Is each item clearly true or false?
- h. Are the lengths of all the items nearly equal?
- i. Are the directions to the students clear?

While constructing true-false items, you should ensure the criteria as stated in a), f), g), h) and i) and avoid the negative criteria stated in b), c), d), and e).

#### (d) Multiple Choice Items:

Note the following item.

*Which one of the following numbers is a square number?*

- A. 2
- B. 4
- C. 6
- D. 10

Now try to answer the questions below:

- In which aspect this item is different from the true-false item?
- Is it a better form of item than a true-false item? Why?
- Have you used this type of item in your class to test the students learning progress?

The item is a multiple choice item and you might have seen such type of items in the textbooks. Such an item has the following;

- It consists of a problem (called '*stem*') and a list of possible solutions (called '*alternatives*', '*options*' or '*choices*'). The correct alternative is the *answer* and remaining alternatives are called *distracters*.



- The problem may be stated as a direct question, complete or an incomplete statement. Examples of each are given below

<i>Direct question form :</i>	<i>Complete statement form</i>	<i>Incomplete statement form</i>
In which year India got independence?	Name the year when India got independence.	India got independence in the year_____
A. 1857	A. 1857	A. 1857
B. 1919	B. 1919	B. 1919
C. 1947	C. 1947	C. 1947
D. 1950	D. 1950	D. 1950

In the above example 1947 is the answer whereas 1857, 1919 and 1950 are the distracters.

In place of one correct answer you may use the best answer type of multiple choice items. The following example can help you to understand this.

*Which one of the following factors is given consideration when selecting a city for a state capital?*

- A. *Population*
- B. *Availability of market*
- C. *Climate*
- D. *Location*

Note that all the alternatives are correct, but the option at (D) seems to be the best answer.

As a practicing teacher you need to know how to prepare multiple choice type items. Here are some suggestions.

*The stem should be meaningful and should present a definite problem.*

Compare the two examples given in the table.

<i>Example-1</i>	<i>Example-2</i>
<i>Delhi</i> A. <i>is situated on the bank of the river Ganga</i> B. <i>is the capital city of India</i> C. <i>is famous for Qutab Minar</i> D. <i>has ulingual culture.</i>	<i>The capital city of India is</i> A. <i>Mumbai</i> B. <i>Chennai</i> C. <i>Chandigarh</i> D. <i>Delhi</i>



**Notes**

What do you observe in both the examples? Which one is the better item and why?

Well in Example-1, the stem does not convey the requirement for response and makes little sense until the alternatives are read. The essence of the problem is not explicit in the stem. .

*The distracters should be plausible and in some way related to the problem posed in the stem of the item.*

Compare two examples given below:

<i><b>Poor item</b></i>	<i><b>Better item</b></i>
<p><i>Which of the following scientists invented radio?</i></p> <p>A. <i>Marconi</i></p> <p>B. <i>Isaac Newton</i></p> <p>C. <i>Bell</i></p> <p>D. <i>Pasteur</i></p>	<p><i>Which of the following scientists invented radio?</i></p> <p>A. <i>Marconi</i></p> <p>B. <i>Bell</i></p> <p>C. <i>Samuel Morse</i></p> <p>D. <i>Edison</i></p>

Why is the item in the left hand side a poor item? Have you observed the quality of options in both the items?

Well the item in the left side of the box has four options out of which Pasteur is a scientist associated with medicine. Newton is also not associated with communication. When two options are not acting as distracters, there is greater chance of choosing the correct answer from the rest two. The student without knowing the correct answer may guess the right answer and get the mark. So in a better multiple choice item every option should appear to be a correct answer to the student who is not confident of the right answer.

- C. *An item should contain only one correct answer or clearly the best answer.*
- D. *Avoid giving irrelevant clues to the students.* This will lead students to choose the correct answer even if they do not know the answer. The clue will enable the students to identify the answer. Look at the examples given below.

<i><b>Poor item</b></i>	<i><b>Better item</b></i>
<p><i>Bipin reached the school at 11am instead of the right time at 10am. He was late by an</i></p> <p>A. <i>30 minutes</i></p> <p>C. <i>hour</i></p> <p>B. <i>45 minutes</i></p> <p>C. <i>two hours</i></p>	<p><i>Bipin reached the school at 11am instead of the right time at 10am. He was late by</i></p> <p>A. <i>30 minutes</i></p> <p>C. <i>an hour</i></p> <p>B. <i>45 minutes</i></p> <p>C. <i>two hours</i></p>



Observe, in the item given in the left hand side contains a clue in the stem of the item. The term ‘an’ provides clue for choosing the right answer i.e. hour. But in the better item, such type of clue is not given.

- E. Consider providing an “I do not know” option. Such types of items are quite useful for the teacher during the instructional process to enable the children to reflect.
- F. Try to avoid overlapping options as those may confuse the students to choose the right answer. Consider the following item:

*The average rainfall of India in the month of July is*

- A. less than 120mm
- B. less than 140mm
- C. between 140mm and 150mm
- D. more than 150mm
- E. more than 155mm

If ‘A’ is correct, then ‘B’ must also be correct. Similarly, if ‘E’ is correct, then ‘D’ must be correct. Such confusion needs to be avoided during the preparation of multiple choices of items.



**ACTIVITY 4:**

*Prepare 5 multiple choice items in any topic in mathematics, each with 4 or 5 options.*

After the finalization verify each item separately with the checklist given below. You will be able to know whether the item is a better one or not.

**Check list for verification**

- |   |     |    |
|---|-----|----|
| 1. Has the item been clearly presented?                         | Yes | No |
| 2. Is the main problem in the stem?                             | Yes | No |
| 3. Is the stem free from irrelevant material?                   | Yes | No |
| 4. Are the alternatives grammatically consistent with the stem? | Yes | No |
| 5. Are the alternatives brief and free from unnecessary words?  | Yes | No |
| 6. Is there only one correct or clearly best answer?            | Yes | No |
| 7. Are the items free of clues to the answers?                  | Yes | No |



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8. Are the numerical alternatives in numerical order? Yes No  
9. Are the alternatives homogenous? Yes No

On the basis of your verification, you may now modify the items improving their quality.

(e) **Matching Type Items:**

 **ACTIVITY 5:**

Two matching exercises are given below, identify which one is better? Write your answer giving reasons for your choice.

*Matching Exercise-1: Match column 'A' with column 'B'.*

<i>Column A</i>	<i>Column B</i>
<i>Bihar</i>	<i>Sun temple</i>
<i>Tamil Nadu</i>	<i>Patna</i>
<i>Rajasthan</i>	<i>Pongal festival</i>
<i>Orissa</i>	<i>Thar Desert</i>

*Matching Exercise-2: There are the names of the states in column 'A' and the capital cities in column 'B'. Match the states in Column A with their respective capitals in Column 'B'.*

<i>Column A</i>	<i>Column B</i>
<i>Bihar</i>	<i>Bhubaneswar</i>
<i>Orissa</i>	<i>Chennai</i>
<i>Rajasthan</i>	<i>Itanagar</i>
<i>Tamil Nadu</i>	<i>Jaipur</i>
	<i>Patna</i>
	<i>Raipur</i>

Matching item is basically a multiple choice test in which the respondent associates an item with one of several choices in the second column. Such type of test is easy to construct and score. When the learning outcomes emphasizes on the ability to identify the relationship between two things, a matching exercise seems to be most appropriate.



Definitely you will find Exercise 2 to be a better one because of the following points. The directions given are clear and complete to enable students to take the task without any problem by using homogenous (of similar characteristics) options and items in both the columns. In the exercise, Column A contains the names of four states of India and Column B contains the names of the capitals of the states. You can easily observe that in Exercise -1 although the Column A has homogenous items, those in Column B are not which makes it a poor item. Similar exercises can be given in any subject area like word and their antonyms, verbs and their past tense forms, mathematical terms and their formulae, nations and their currency etc. Thus to make the exercise an efficient method of measuring achievement the following must be there:

- Homogenous options
- Arrangement of options and items alphabetically in their respective columns.
- Unequal no of items in both the columns to eliminate the process of guessing by students.
- The options are placed in the same page which will help the students to find the answers without much difficulty.

You may add more points to the list to prepare better quality matching items.

### 15.3.4 Open ended Items

You have already learnt about different types of objective type of items and the procedure to frame such items. You are aware that, objective type item has unique and definite answer. However, can you measure all the aspects of the student through an objective type of item? Can the range of thinking of the student and his/her interest for learning be measured with the help of an objective type of item?

Well it is not impossible but difficult. Now look at the following two items:

*Item no 1: The cost price (CP) of an object is 500 rupees and it was sold at 600 rupees. Find out the profit.*

*Item no 2: An object was sold with a profit of 100 rupees. Can you find the cost price (CP) and selling price (SP) of that object?*

Item no 1 is an objective type of item having a definite answer (here 100 rupees). But for item no 2 there is no definite answer. One student may say CP is 400 rupees and SP is 500 rupees, while another student may say CP is 450 rupees and SP is 550 rupees, and you can get a lot of correct answers. This type of item is known as *open ended item* which can have a large number of correct answers or sometimes no limited number of correct answers.



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The objective type items or such other items which have definite or fixed number of correct answers are called *closed-ended items*. You can observe the differences between the closed-ended and open-ended items from the examples given below.

Closed-ended Items	Open-ended Items
1. Fill up the blank in $5 + \text{---} = 9$	1. Which numbers when added give 9?
2. Write the word by suffixing 'ing' to play.	2. Write down as many words adding 'ing' like playing, looking etc.
3. Draw a triangle with two adjacent sides of 5cm and 9cm with measure of included angle to be $60^\circ$ .	3. How many ways can you draw a triangle?
4. Which is the main material used in building pucca houses besides cement and mortar?	4. How many ways can you use a brick?
5. Who controls the teachers and students in a school?	5. If you were the headmaster what would you do to improve your school?

Hence we can say:

- In objective type of item, there is a chance of guessing. The students may guess the answer from the given options. In that case, though the child has not acquired the concept but he/she can manage to get full credit for that item. But in case of open ended items there is a little chance of guessing. If the child has not understood the concept then he/she cannot give the answer. Thus, open ended items avoid guessing.
- Open ended items as a tool expects understanding of the problem by the student. It helps in measuring the understanding of the student. It also promotes divergent thinking (encouraging more number of solutions to one problem). The child can think about the answers from different angles.
- As discussed earlier in unit 1, learning is a meaning making activity. Open ended items create scope for assessing whether the student is able to draw meaning of a concept. It is difficult to measure it through objective type of items. If the child is able to give multiple answers to an open ended item, we may say that s/he is able to make meaning.
- Open ended items eliminate the effects of rote learning.
- Open ended items encourage and create a scope for better learning at the early years of schooling. Young children may not give correct answer to the objective type of items, because they have very little attention span. They



cannot focus for a long time to one type of activity. But in the open ended items, the children can focus on the question and its multiple answers which lead to further learning.

- The objective type of item is characterized by definite answer. Unable to give correct response to that item discourages the student for further learning and reduces his/her learn ability. On the contrary, the open ended items give a sense of success because there is multiple numbers of correct answers and there is possibility to give at least one correct answer by the student.

E8. Some statements are given below. Read them carefully. Put tick mark against the correct statements and cross mark against the incorrect statements

- a) Extended response type of item is an essay type of item
- b) Objective type of items is more preferable in measuring the creative ability of the students.
- c)  $5+2=$ \_\_\_\_, is a selection type of item.
- d) Every supply type of item can be converted to selection type of item.
- e) Matching type of item is a form of multiple choice types.
- f) In a multiple choice type of item, the incorrect options are known as stem.

## 15.4 CONSTRUCTION AND USE OF QUALITATIVE TOOLS AND TECHNIQUES

***Situation 1:** Mr. Samir teaches Mathematics in primary classes. During the course of teaching he observes the children as to how they respond to different questions, whether they have genuine interest towards mathematics learning, whether they are performing the mathematical projects and assignments in time and properly. Besides, he administers a test to assess whether the children have understood the concepts which were taught.*

As you learnt earlier, assessment/evaluation of learning is based on both the qualitative and quantitative description of a child's performance. To know the status of the quality and quantity aspect of the child's performance the classroom teacher has to use various types of tools and strategies. Let us discuss this with the help of the following situation:

In the above example, instead of using the achievement test only, the mathematics teacher used various modes of assessment like use of a test, observation during the course of teaching, project works and assignments relating to those concepts. These tools and techniques yield mostly qualitative results. You might have realized that all information about the behaviour of the children cannot be gathered



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by using tests or any single tool or method. The student's performance in both the scholastic and co-scholastic areas can be comprehensively evaluated by tools and techniques combining both quantitative and qualitative information.

### 15.4.1 Observation

In course of your teaching and doing other activities with children in your school you might have experienced several peculiar natures of children which you do not get to know from any tests. You might have observed how children behave in and out of classroom, how they interact with other children, their areas of interest, their likes and dislikes, their emotional states and other such information all of which can help you to assess the progress and hindrances in their learning in addition to the information from the tests.

Systematically observing students in natural setting (also in simulated setting) is a useful technique for gathering data about student's performance in different curricular and co-curricular activities and about their affective behaviour. Student's progress and behaviour in areas like speaking, handwriting, singing, dancing, dramatization, punctuality, effective use of time, cordial relationship, giving respect to the elders cannot be evaluated through paper-pencil tests. These can be assessed through observation techniques. An observational technique implies the use of a particular observational tool such as check list, rating scale or anecdotal record. According to Lehmann, (1999), the process of observing and recording an individual's behaviour is what is meant by the term observational technique

You can observe your students from a very close quarter through participating or collaborating with them as their equal in their activities (*participant observation*) or you can observe them from a distance when they are busy in several activities individually or in groups (*non-participant observation*). You can *observe* them in action *directly* when the students are aware of being observed or *indirectly* when students are not aware of being observed. Observations can also be *purposive* (done intentionally with a definite plan) or *incidental* (chance observations of peculiar behaviours). But, frequent observation, either directly or indirectly of student's work provides continuous feedback about the learning progress of the student. You can detect errors or problems at right time and take corrective measures to overcome them.

Given below are some suggestions for effective observation which is more scientific and valid:

- Plan well in advance what is to be observed and prepare an observational list.
- Do not take more behaviour for a single observation, take only one or two.
- Use clear and unambiguous terms in the observation tools.



- Carefully record and summarize the observation immediately otherwise there is a chance of forgetting.
- Incidentally when you observe some peculiar behaviour, try to record it immediately and later include it in your plan for further observation to check whether the behaviour was accidental or not.

### 15.4.2 Check List

The behaviour of the students differs in different situations. The teacher’s observation and record of the behaviour of a particular student plays an important role in evaluation procedure. Check list is a tool which helps the teacher to record the student’s performance in specific activities. Check list usually contain list of behaviours, characteristics that are either present or absent.

<i>Activities</i>	<i>Put tick mark if done correctly</i>
1. Collection of required instruments	_____
2. Taking a piece of white paper	_____
3. Sharpening the pencil	_____
4. Correct use of the instruments	_____
5. Performing construction stepwise	_____
6. Naming of the geometrical figure	_____
7. Any other (Please specify)	_____

A checklist to record the student’s performance in performing geometrical construction is given below:

The checklist enables to note the presence of an event, behaviour, characteristics of a student by marking tick mark in the column meant for that behaviour trait. After filling the check list, you can use it for planning the modification of your strategy facilitating for better learning. The particular checklist allows the teacher to check the skills in which the student need further training, characteristics of student’s behaviour. If you are using such a check list for observing group behaviour, then you have to look for the activities of the majority members of the group and try to note the behaviour of the deviants along with the observed behaviours included in your checklist.



**ACTIVITY 5:**

Prepare a two separate check lists to record the cleanliness habit of Grade I and Grade IV students respectively. Administer the respective tool to 10 students of each grade.



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The check list is useful for you in a variety of ways. These can be adopted for a number of purposes according to the need of the students/ teachers and class. Learning outcome which involve process and personal social development can be easily evaluated by recording evidences of growth in respect of specific learning outcomes. In evaluating the processes which can be divided into a series of clearly defined, distinct and specific actions, checklists are most useful. Check list is also very easy to prepare and simple to use.

### 15.4.3 Rating Scale

Sometimes you may be facing some queries about the performance of your students from different quarters. The parent may be asking, “*Is my child showing interest in games?*”, “*Does she dance well?*”, “*What about the overall performance of my son in Science?*”

The Headmaster might be enquiring, “*Are you satisfied in the cleanliness habits of students in your class?*”, “*How was Sunita’s exhibits in the interschool science exhibition appreciated by the visitors?*” And so on.

How do you reply to such queries?

Usually our responses are in qualitative terms like ‘*just average*’, ‘*excellent*’, ‘*above average*’, ‘*satisfactory*’ etc. In other words, we are rating the attributes in a scale ranging from extremely negative level ‘*poor*’, or ‘*unsatisfactory*’ to extremely high level, ‘*excellent*’, or ‘*highly satisfactory*’ etc. In brief, we are rating the performances or attributes in a rating scale, without being much aware of it.

A rating scale is an instrument that requires the rater to assign the rated object that has numerals assigned to them. Rating scale resemble checklist, but it is used when finer descriptions are needed. In check list what do you do? You merely indicate the presence or absence of a characteristic through a checklist. But in a rating scale you have to indicate the status or level of quality of what is being rated. Look at the two tools given below.



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**TOOL-1**(Check list on participation of a student in school activities)**Activities** *put a tick mark if the student is active.*

1. Student is active in class projects. \_\_\_\_\_
2. The student relates to his peers. \_\_\_\_\_
3. The student participates in group discussion. \_\_\_\_\_
4. Student is active in sports activities. \_\_\_\_\_
5. Student is active in club activities. \_\_\_\_\_

**TOOL-2** (rating scale on participation of a student in school activities)

Please encircle the number on the right of each question indicating the level of active involvement of the student as per your observation and judgment.

1- Unsatisfactory, 2- Below average, 3-Average, 4- Above average, 5- Outstanding

1. Student is active in class projects. 1 2 3 4 5
2. The student relates to his peers. 1 2 3 4 5
3. The student participates in group discussion. 1 2 3 4 5
4. Student is active in sports activities. 1 2 3 4 5
5. Student is active in club activities. 1 2 3 4 5

What differences do you observe between the two tools? In which way a rating scale is different from a check list? Which gives more qualitative description of student behaviour?

Well the above rating scale is a 5-point scale, where the student's behaviour is rated as outstanding(5), above average(4), average(3), below average(2),and unsatisfactory(1). Similarly you can also prepare 3-point rating scales. The qualitative descriptions can be quantified by encircling the appropriate number signifying the emphasis given by the cater on the behaviour of the student.

#### 15.4.4 Questionnaire

To assess various traits of student behaviour, a questionnaire found to be effective. Consider the limitation of interview as discussed earlier. Interviewing a large number of respondents is time consuming and need a lot of labour. On the other hand, a questionnaire is a viable alternative to save time and energy. At a time a large number of respondents can give information through a questionnaire. In a questionnaire, some items on the issue/topic are placed in a written form. The



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respondents have to answer the questions. The questions should be such that those elicit facts and not opinions. The facts or information provided as the response to questions can be verified or cross checked. Analysing the answers we can arrive at appropriate and valid conclusions. For example, information about the engagements of children in learning activities at home and the type and frequency of support provided by the family after school hours can be elicited through a well prepared questionnaire.

A Questionnaire is useful in providing adequate, accurate, unbiased data as required. On the basis of the objective and purposes of information, the items (questions) for a questionnaire are developed. Then the questionnaire is administered to the respondents. It may be kept in mind that the respondents should be made aware that their responses will be kept anonymous. After that, the data collected are analysed.

### 15.4.5 Interview

Interview is an effective technique to collect information directly by face to face personal conversation with some specific purpose. When we need to find the reason for a particular behaviour in the student, asking him/her personally is the best way to elicit. The confidence, which the student carry of his /her teacher, will help the teacher in getting correct information. Depending upon the nature of the task, the interviewer can ask open-ended or closed ended questions to the students. The information received through the interview should be carefully recorded for arriving at a conclusion. Prior to the interview, the interviewer should prepare an interview schedule to record the information. The interview schedule helps the interviewer to focus on the points. Structured questions might simplify the categorization and summarization of responses; they might also restrict what the subject is permitted to say. But on the other side, unstructured interviews allow the respondent more freedom. Interviews are quite useful in questioning young children and illiterates. While interviewing a respondent the following precautions may be taken into consideration:

- Ask such questions which will satisfy your purpose.
- Allow time for the respondent to answer.
- Try to build trust and confidence in the respondent.
- Make rapport with the respondent, this will ensure stability of the interview.
- Bring clarity in the questions.

Interview allows probing and clarification of the respondents' position, but it is expensive and time-consuming, because interview is done with one individual at a time in a face-to-face manner.



### 15.4.6 Portfolio

A student portfolio is a collection of pieces of student's work selected to serve a particular purpose. It not only contains the works of the student but also the best works of the students. Student's portfolios are often used as an effective instrument for assessing the students.

Portfolios can serve as an effective tool in fostering skills in self- evaluation which leads to independent thinking. When the students create, collect some extraordinary work it is kept in their portfolio. The students may be asked to include some form of self -evaluation and thoughtful reflection on each entry in their portfolio. By this, the portfolios provide students with opportunity to show what they can do with reflection and self- evaluation. The portfolio of all the students can be displayed in a regular interval by the teachers in presence of all the students, parents and teachers. This creates an opportunity for further learning as well as involvement of parents in the school activities. It provides a platform for discussion on the student's strength and the positive aspect of their personality. The strengths of portfolio are given below in the box:

#### *Strength of Portfolio*

- *Develops skill among students in evaluating the strength and weakness of their own work.*
- *Helps students to take responsibility for setting goals and evaluating their progress.*
- *Creates opportunity to collaborate and reflect on students' progress*
- *Gives concrete examples of student's development over time as well as their current skills.*
- *Creates opportunity for parents to assess the performance of their children.*

While using portfolio for both learning and evaluation purposes the teacher has to specify the purpose, provide guideline for selection of portfolio entries, define student's role in selection and self-evaluation, specify the evaluation criteria and use portfolios in instruction and communication.

Portfolio of work collected over a period of time (for a term or the entire school year) can be particularly effective for purposes of formative evaluation. For example, from the collection of creative writing of the students for a period of time( say 6 months), the teacher can assess the progress of students in grammar, organization of ideas and their progressive development over that period of time. The students may also evaluate their works along with their teacher jointly by developing evaluation criteria. Thus, it can be concluded that the portfolios can



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be integrated with the classroom instruction; used for developing self-evaluation skills, and through activity the students take the responsibility of their own learning.

 **ACTIVITY 6:**

*Devise a portfolio to use in assessing student progress in science experiment in the grade you are teaching.*

### 15.4.7 Project

Projects are quite useful in establishing a link between the knowledge inside the textbook and the life of the students. According to Ballard, “A project is a bit of real life that has been imparted into the school”. Project work in different school subjects creates avenues for learning of higher order skills like constructive and creative thinking. In project, a problem is posed to the students and they find solution to it. The projects can be undertaken either by individual student or by students in small groups. Example of a project is given below:

*Seasonal variation in the bird population- place where they are found, how they fly (direct, gliding, dipping etc), description of their body (size, shape, colour, parts of the body etc), gait, call, food and food habits, nest, eggs ( number, size, colour) etc.*

Similarly projects on beautification of school campus, plants in the neighbourhood, survey of the local industries can be carried out by the students. Conducting a project involves various activities like choosing a project, planning for it, executing, evaluating and recording.

Projects can act as an effective technique for evaluation of student’s behaviour in both scholastic and co-scholastic areas. It helps the teacher to get information about the student’s ability in applying the knowledge in different situations. Besides, it enables the teacher to know the student’s skill in recording the data, analysis of the data, documentation of the project. The student can also assess his/her own performance in those areas. Personal traits like sincerity, neatness in doing a work, adoption of systematic procedure, working in group situation can also be evaluated with the help of projects.

 **ACTIVITY 7:**

*Prepare a list of 10 projects which are suitable for the students of the class where you are teaching.*



### 15.4.8 Case study

Case studies are in-depth investigation of an individual, a family, a school, or a group of children. In education, case studies are typically conducted to determine the background, environment, and characteristics of children with problems. By gathering pertinent data about the present status, past experience and other related incidents, we can develop understanding of the present behaviour and performance of a problem child like a truant, slow student, aggressive or depressed child. The qualitative analysis of these data is helpful in constructing a comprehensive and integrated picture of the case. In case study approach, the investigator (teacher) collects data from a particular individual and confine their interest to that individual as a unique case or collect data from a small group of individuals, which form a unit for in-depth study.

Case studies can be vertical (collecting information about the child over a long period of time) or may be horizontal or cross sectional (Collecting information of recent period from all possible sources about the child).

However, subjective bias is a constant threat to objective data gathering and analysis techniques. The investigator should be thoroughly familiar with the skills which are associated with the conduct of case-studies. To conduct a case study the following steps may be followed:

- Determining the present status of the cases- this can be done by direct observation. You may take the help of any type of test; consult with the parents, peers to get information about the child.
- Determine the most probable antecedents- this information helps in formulating workable hypotheses.
- Verification of antecedents
- Diagnosis of the causes and planning for remedial measures in the light of the causes.
- Follow-up of the cases.
- As an effective technique, case study gives information about the case in identifying the problems and plan for strategic development.

#### **ACTIVITY 8:**

*Identify one or two student who is irregular in attending your school. Consult their parents, peers to get information. Find out the causes of such type of behaviour. Develop strategies to check such unwanted activities. Write a report on that case.*



Case study helps the teacher to develop appropriate strategies for addressing the problems of the child who create hindrances in his/her learning. This enables the teacher to have a comprehensive assessment of the case.

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## 15.5 LET US SUM UP

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- Achievement test is quite useful in measuring the learning acquisition by particular student in different subjects. Based upon the nature of learning outcome and content measured, quality of test item, procedure of administering and scoring and interpretation the teacher-made tests are prepared.
- According to the modes of response, three types of test items such as oral, written and performance based (practical works) can be developed and used. The classroom teacher while preparing the teacher-made tests should use all types of items.
- Unit test is basically a teacher-made test which is formative in nature. The unit test is informally conducted by the teacher. It provides credible feedback to the teacher regarding his/her teaching methodologies as well as to the students regarding his/her learning progress and difficulties. Further it is used for remediation and enrichment purposes.
- The test items are classified under two broad headings-essay type and objective type. The essay types of items are extended response type and restricted response type.
- Different types of objective types of items like short answer type, multiple choice type, matching type, alternate response type etc. can be used by the teacher.
- Open-ended items are quite useful to discourage cramming and enabling the student for divergent thinking.
- Evaluation techniques like observation, interview, case study, and portfolio are quite useful for assessing behavioural traits of the student. For that, tool like observation schedule, interview schedule, check list, rating scale and questionnaire can be used.

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## 15.6 MODEL ANSWERS TO CHECK YOUR PROGRESS

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- E1. Achievement tests are useful in knowing to what extent the student has acquired knowledge and skill in a particular topic, comparing the achievement among students regarding the acquisition of knowledge. It further helps the teacher to group children, diagnose individual learning difficulties etc.
- E2. Oral questions



- E3. A. good teacher made test should cover limited no of competencies  
B. should be able to identify leaning difficulties of the pupils.  
C. can contain variety of items
- E4. The statements in (b), (c), (d), (g) and (h) are associated with unit test.
- E5. A variety of different mental processes and skills can be measured by the extended response type of items. It permits the teacher to assess the extent to which the student is able to compose an answer and present in an effective way. Such types of items are easy to prepare in comparison to the restricted response type of item.
- E6. Teachers with varied content knowledge, scoring on the basis of handwriting by some examiner, too much emphasis on grammar and spelling by the examiner etc are some reasons for different among examiner in scoring extended response type of items.
- E7. Mainly four types of restrictions are normally imposed. Those are restriction I length of response, content of response, space for response and duration of response.
- E8. a.  $\checkmark$  b.  $\times$  c.  $\times$  d.  $\checkmark$  e.  $\checkmark$  f.  $\times$

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## 15.7 SUGGESTED READINGS AND REFERENCES

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## 15.8 UNIT END EXERCISES

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1. Prepare a specification for an oral or performance test by stating the abilities which are to be tested, and outline the test material needed.
2. Prepare a unit test for any subject. Use oral, written and performance type of items in it.
3. Develop a sheet for portfolio entry in language development. The sheet may contain detailed entry about the portfolio, space for the student why s/he selected that portfolio, date of entry, special feature of the portfolio, teachers comment on strong point and something to consider or areas needing work for. Ask your students to fill up the sheet on the basis of their portfolio.