

# **DIPLOMA IN ELEMENTARY EDUCATION (D.El.Ed.)**

*Learning Environmental Studies at  
Primary Level*

## **Block -3 Assessment, Reporting and Remediation in EVS**



**NATIONAL INSTITUTE OF OPEN SCHOOLING**

A - 24/25, Institutional Area, Sector – 62, NOIDA

Gautam Buddha Nagar, UP – 201309

Website: [www.nios.ac.in](http://www.nios.ac.in)

EXPERT COMMITTEE		
<b>Dr. Sitansu S. Jena</b> Chairman, NIOS, NOIDA <b>Sh. B.K.Tripathi</b> IAS, Principal Secretary, HRD, Govt. of Jharkhand, Ranchi <b>Prof. A.K. Sharma</b> Former Director, NCERT, New Delhi <b>Prof. S.V.S. Chaudhary</b> Former Vice Chairperson, NCTE, New Delhi <b>Prof.C.B. Sharma</b> School of Education, IGNOU, New Delhi <b>Prof. S.C. Agarkar</b> Professor, Homi Bhabha Centre for Science Education , Mumbai	<b>Prof.C.S. Nagaraju</b> Former Principal, RIE (NCERT),Mysore <b>Prof. K. Doraisami</b> Former Head, Department of Teacher Education and Extension, NCERT,New Delhi <b>Prof.B. Phalachandra,</b> Former Head, Dept of Education & Dean of Instruction, RIE (NCERT),Mysore <b>Prof. K.K.Vashist</b> Former Head, DEE, NCERT, New Delhi <b>Prof. Vasudha Kamat</b> Vice Chancellor, SNDT Women's University, Mumbai	<b>Dr. Huma Masood</b> Education Specialist, UNESCO, New Delhi <b>Prof. Pawan Sudhir</b> Head, Deptt. of Art & Aesthtic Education, NCERT,New Delhi <b>Sh. Binay Pattanayak</b> Education Specialist, UNICEF, Ranchi <b>Dr. Kuldeep Agarwal</b> Director(Academic), NIOS,NOIDA <b>Prof. S.C. Panda</b> Sr. Consultant(Academic), NIOS, NOIDA <b>Dr. Kanchan Bala</b> Executive Officer(Academic), NIOS,NOIDA
COURSE COORDINATOR AND EDITOR		
<b>Ms. Shivani Jain</b> Programme Director, Networking and Capacity Building, Centre for Environment Education, Ahmadabad		
LESSON WRITERS		
<b>Dr. (Ms.) Lalita Agashe</b> Faculty of Education Shreemati Nathibai Damodar Thackersey Women's University (SNDT) Pune <b>Dr. (Ms.) Seema Dhawan</b> Associate Professor, School of Education Hemwati Nandan Bahuguna(HNB) Central University Srinagar Garhwal	<b>Shri Parthesh Pandya</b> Programme Coordinator School and Teacher Education Centre for Environment Education Ahmedabad <b>Ms. Nimaben Parekh</b> Teacher and Science Text book Writer-GCERT Lavad Primary School Education Department, Gandhinagar	<b>Dr. (Shri) M.J. Ravindranath</b> Senior SpecialistTeacher Education Centre for Environment Education Bangalore <b>Ms. Mamta Pandya</b> Senior Programme Director Instructional Design Centre for Environment Education Ahmedabad
CONTENT EDITOR		LANGUAGE EDITOR
<b>Prof.S.C.Panda</b> Sr. Consultant (Teacher Education)  <b>Dr. Kanchan Bala</b> Executive Officer (Teacher Education) Academic Department, NIOS, NOIDA		<b>Ms. Hema Tiwari</b> PGT(English), Kendriya Vidyalaya, Kamla Nehru Nagar, Gaziabad (U.P.)  <b>Sh. Pramod</b> Kendriya Vidyalaya, Kamla Nehru Nagar, Gaziabad (U.P.)
PROGRAMME COORDINATOR		
<b>Dr. Kuldeep Agarwal</b> Director(Academic), NIOS, NOIDA	<b>Prof.S.C.Panda</b> Sr. Consultant (Teacher Education), Academic Department, NIOS, NOIDA	<b>Dr. Kanchan Bala</b> Executive Officer (Teacher Education), Academic Department, NIOS, NOIDA
COVER CONCEPTUALISATION & DESIGNING	TYPESETTING	SECRETARIAL ASSISTANCE
<b>Mr. D.N. Upreti</b> Publication Officer, Printing, NIOS,NOIDA <b>Mr. Dhramanand Joshi</b> Executive Assistant, Printing, NIOS NOIDA	<b>M/S Shivam Graphics</b> 431, Rishi Nagar, Delhi-34	<b>Ms. Sushma</b> Junior Assistant, Academic, Department, NIOS, NOIDA

# *The Chairman's Message ....*

*Dear Learner*

The National Institute of Open Schooling (NIOS) is an autonomous organization under the Government of India, Ministry of Human Resource Development (MHRD). It is the largest open schooling system in the world with around 2.02 million learners currently on roll at the secondary and senior secondary level. NIOS has national and international network with more than 15 Regional Centres, 2 Sub-Centres and about 5,000 study centres for its Academic and Vocational Programme within and outside the country. It provides access to learner centric quality education, skill up-gradation and training through open and distance learning mode. The delivery of its programmes is through printed material coupled with face to face tutoring (Personal Contact Programmes), supplemented by use of Information and Communication Technology- Audio/Video Cassettes, Radio Broadcast and Telecast etc.

NIOS has been vested with the authority to train the untrained teachers at Elementary Level. The training package for D.El.Ed. Programme has been developed by the NIOS in collaboration with other agencies working in field. The Institute offers a very innovative and challenging Two-year Diploma in Elementary Education Programme for in-service untrained teachers in different states according to RTE 2009.

I take the pleasure of welcoming you all to this Diploma Course in Elementary Education Programme of National Institute of Open Schooling (NIOS). I appreciate your contribution in elementary schooling of the children of your state. As per RTE Act 2009, it becomes essential for all school teachers to be professionally trained. We understand that your experience as a teacher has already given you requisite skills needed to be a good teacher. Since it is now mandatory by law, you will have to complete this course. I am sure your knowledge and experience, so far accumulated by you, will certainly help you in this Programme.

This D.El.Ed. Programme is through Open Distance Learning (ODL) mode and provides you ample opportunity to be professionally trained without being disturbed from your regular working as a teacher.

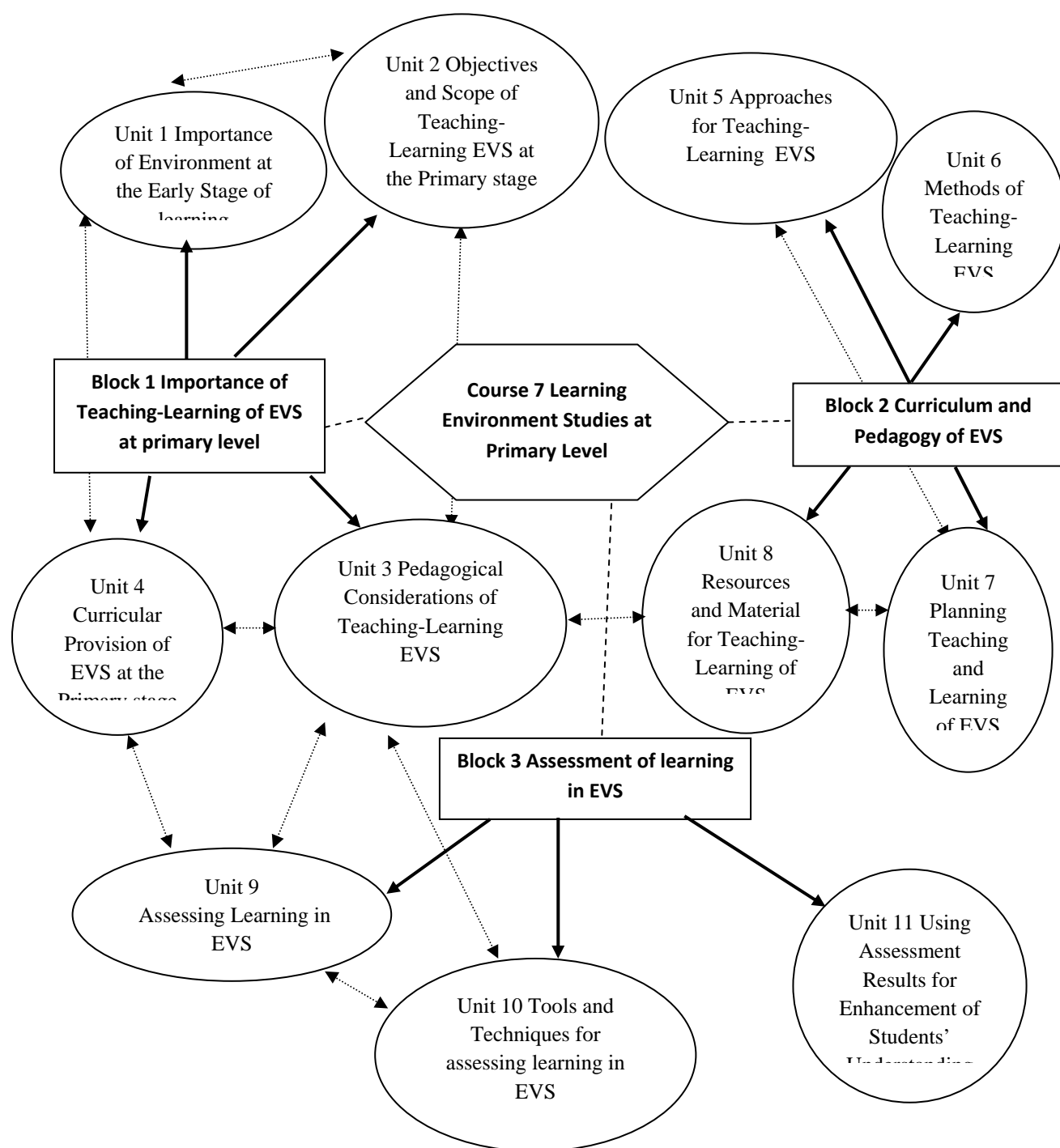
The self-instructional materials developed specifically for your use would be helpful in creating understanding and help you in becoming a good teacher apart from becoming qualified for your job.

Best of luck in this great endeavour!!

**S.S. Jena**

Chairman (NIOS)

## Course concept Map for Course-505 Learning of Environmental Studies at Primary Level



### Credit Points (4=3+1)

Block	Unit	Name of Unit	Theory Study Hours		Practical Study
			Content	Activity	
<b>Block-1:</b> Importance of Teaching-Learning of EVS at Primary Level	<b>U1</b>	Importance of Environment at the Early Stage of learning	3	2	Understanding EVS in the context of NCF 2005 & new book
	<b>U2</b>	Objectives and Scope of Teaching- Learning EVS at the Primary stage	4	2	EVS a composite subject –Synergies with Science, Social Science and Environmental Science
	<b>U3</b>	Pedagogical considerations of EVS concepts	5	3	Field visit to understand socio-economic point of learning of specific issues
	<b>U4</b>	Curricular Provisions of EVS at the Primary stage	4	2	Case analysis of assessment of learning in EVS
<b>Block 2:</b> Curriculum and Pedagogy of EVS	<b>U5</b>	Approaches for Teaching-Learning EVS	4	2	Hands on activity on innovative teaching-learning ideas
	<b>U6</b>	Methods of Teaching-Learning EVS	5	4	Development of Teaching-learning materials on EVS
	<b>U7</b>	Planning Teaching and Learning of EVS	4	4	
	<b>U8</b>	Resources and Materials for Teaching-Learning of EVS	3	3	
<b>Block 3:</b> Assessment of learning in EVS	<b>U9</b>	Assessing Learning in EVS	4	3	
	<b>U10</b>	Tools and Techniques for assessing learning in EVS	4	3	
	<b>U11</b>	Using Assessment Results for Enhancement of Students' Understanding	3	4	
<b>Tutoring</b>			15		
<b>Total</b>			58	32	30
<b>Grand Total</b>			<b>58+32+30=120 hrs.</b>		

# *Block 3*

## *Assessment, Reporting and remediation in EVS*

### ***Block Units***

*Unit 9      Assessing Learning in EVS*

*Unit 10    Tools and Techniques for Assessing Learning  
in EVS*

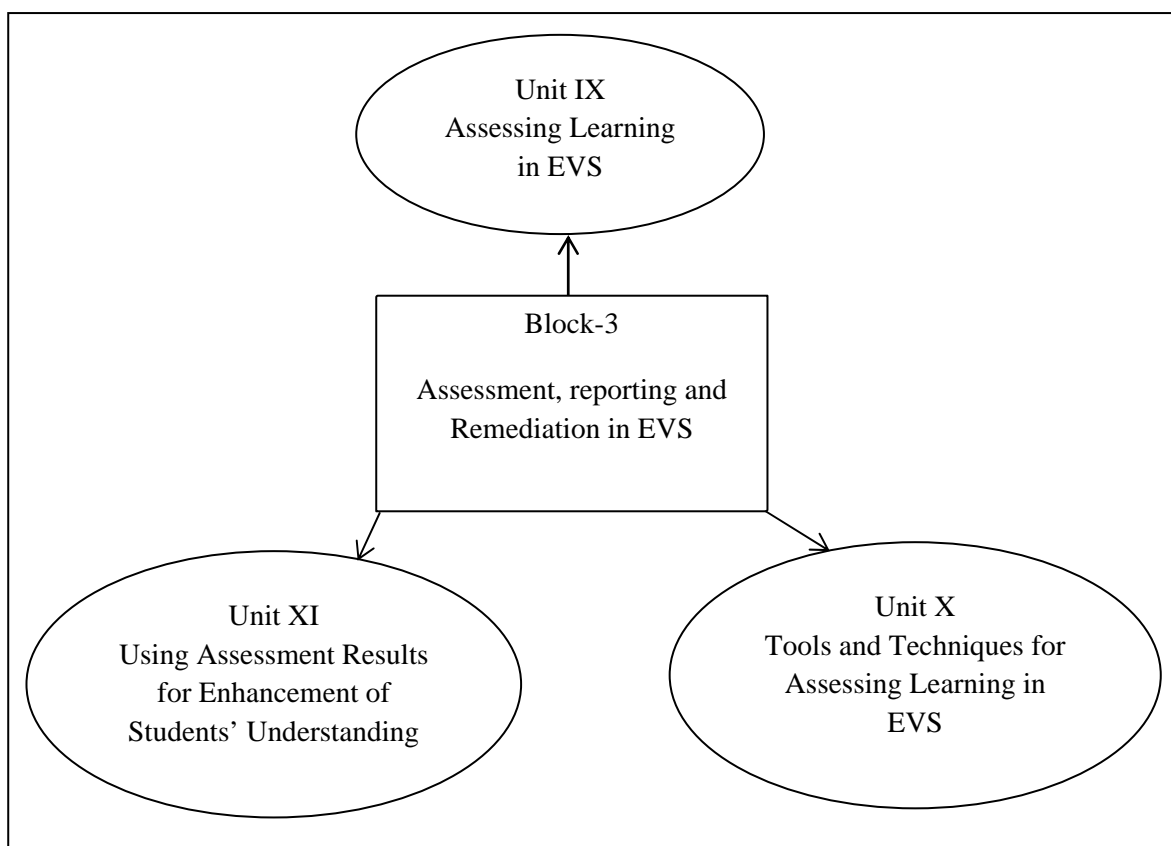
*Unit 11    Using Assessment Results for Enhancement of  
Students' Understanding*

---

## BLOCK INTRODUCTION

---

### Block-3 Assessment, Reporting and remediation in EVS



This block will empower you to-

- relate learning objectives with assessment
- describe different processes of ensuring students' learning
- explain different types of tools and techniques for assessing learning
- use the essential results for enhancing students' understanding

it has been tried in this block to make you aware of the processes of assessment, reporting the assessment result and planning remediation while engaging the learners in learning EVS. The processes of assessment are very much related to the learning objectives formulated and the activities planned to achieve those objectives. The process of assessment provide the information about the degree of success of the effort. The process of reporting helps the teacher to ascertain to a better extent about the learners performance which really helps the teacher to plan the remedial effectively. An attempt has been made in this regard while putting forth the effects in this block.

**Unit-9** familiarises you with the assessment process which empower you to ascertain the degree of success of learners in EVS. The relationship of learning objectives with that of process of assessment, the need of assessment, types of assessments and the process of making the assessment learning centred have been highlighted in this unit.

**Unit-10** describes about the tools and techniques for assessing learning in EVS. The meaning of tool in assessment, the techniques involved in the process and the essentials while assessing various learning objectives have been discussed to enable you to be a better assessor.

**Unit-11** familiarises you with the process of using the assessment result for enhancement of students' understanding. The techniques involves in reporting, students' progress and analysing the gaps in learning are put forth here so as to enable you for reviewing and improving teaching learning process. It will enhance your capacity to plan effective remediation so as to make learner successful in the endeavour.



## CONTENTS

<i>Sr.No.</i>	<i>Unit Name</i>	<i>Page No.</i>
1.	Unit 9 : Assessing Learning in EVS	1
1.	Unit 10 : Tools and Techniques for Assessing Learning in EVS	14
2.	Unit 11 : Using Assessment Results for Enhancement of Students' Understanding	28



---

## UNIT 10 TOOLS AND TECHNIQUES FOR ASSESSING LEARNING IN EVS

---

### STRUCTURE

- 10.0 Introduction*
- 10.1 Learning Objectives*
- 10.2 What is an assessment tool?*
  - 10.2.1 Developing and selecting assessment tools*
  - 10.2.2 Assessment Tools: Points to Remember*
- 10.3 Assessment Techniques*
  - 10.3.1 Oral Techniques*
  - 10.3.2 Written Techniques*
    - 10.3.2.1 Essay tests*
    - 10.3.2.2 Short-answer tests*
  - 10.3.3 Performance Tests*
  - 10.3.4 Correcting mock answers in EVS (variation of an 'essay test')*
  - 10.3.5 Observation technique*
  - 10.3.6 Additional ideas for assessment in EVS*
- 10.4 Points to consider while assessing various learning objectives in EVS*
- 10.5 Let Us Sum Up*
- 10.6 Model Answers to Check Your Progress*
- 10.7 Suggested Readings and References*
- 10.8 Unit-End Exercises*

---

### 10.0 INTRODUCTION

---

In the last section, along with the approaches for assessment in EVS, you learnt about the purpose and types of assessment. Assessment is not meant to compare and rank children against each other or against some fixed norms but it helps teachers to analyse how well each child is able to perform, to track his/her progress and to provide the necessary feedback to ensure further improvement.

Since, EVS learning objectives include cognitive, affective and psychomotor behaviour, therefore multiple assessment techniques are needed for evaluating the outcomes. Therefore, you must recognise practical tools and techniques for

recording of significant information for assessment *of* learning and *for* learning. In this section, Let us look at some tools and techniques which can be used effectively for assessment in EVS.



Notes

### 10.1 LEARNING OBJECTIVES

On completion of this unit, you will be able to

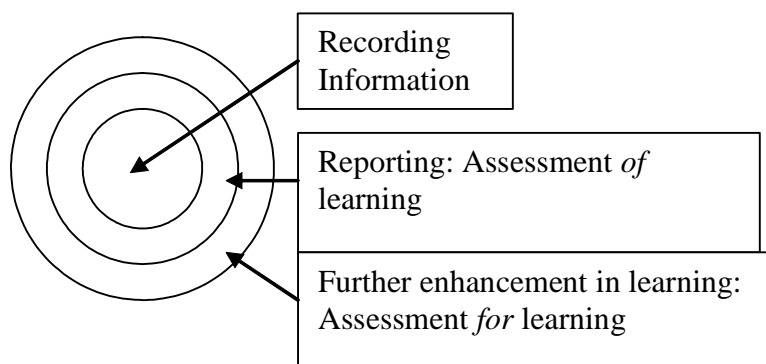
- discuss how to record information for assessment of learning and *for* enhancing learning
- explain assessment techniques which can be beneficial for EVS
- describe, select and use different tools for assessment, including the following:
  - a. Tests
  - b. Observation schedule
  - c. Checklists
  - d. Rating Scales
  - e. Audio-video recordings

#### **Assessment *of* and *for* Learning.**

Effective and informative assessment involves teachers using a variety of assessment strategies that give students multiple opportunities, in varying contexts, to demonstrate what they know, understand and can do in relation to the learning objectives.

You do it by recording the information about the level of learning of students. This information forms the basis of a record of each child's progress and development at the class and school level. When you record information with the help of any tool to know about the depth of learning of students, it is **assessment *of* learning**. On the basis of the recorded information, when you plan further activities for learning, you are practicing **assessment *for* learning**. This is also known as 'Remediation'.

For any assessment, recording of information is the centre point, around which further activities are woven. Information is obtained through assessment tools.





Notes

## 10.2 WHAT IS AN ASSESSMENT TOOL?

Assessment tools are materials that enable you to collect data for your chosen method of assessment. Such tools provide information which is used to determine whether a planned learning outcome has been achieved or not. It is important for you as a teacher to learn about a variety of enhancing the assessment tools, then advantages and limitations.

Since EVS is related to life skills, teachers should continuously strive to develop and upgrade their tools of assessment according to the demand of this composite area of study. Some of the assessment tools relevant for EVS are observation schedule, checklist, rating scale, audio video recording instruments.

### 10.2.1 Developing and Selecting Assessment Tools?

While developing assessment tools, you should need to ensure that tools are designed and live with the principles of assessment i.e. the tool is *valid, reliable, flexible and fair*. These four features will help you in developing quality assessment tools. Thus the fundamental steps in developing an assessment tool include clarifying the specific objective, choosing the most appropriate assessment technique, designing a relevant tool, trailing and refining the tool to make valid, reliable and flexible.

### 10.2.2 Assessment Tools: Points to Remember

#### 1. The Tool should match the content of teaching-learning

Test items should be based on the content and skills that are most important for the children to learn. To keep track of how well your tests reflect the learning outcomes can construct a grid, listing the learning outcomes in one axis and the assessment tools on the other. For each test item, check the learning outcome it covers.

#### 2. Tests should be valid, reliable and balanced.

A test is valid, if its results are appropriate and useful for making decisions about an aspect of children's achievement. A test is reliable, if it accurately and consistently evaluates a student's performance. In general, ambiguous questions, unclear directions and vague scoring criteria threaten reliability. It is also important for a test to be balanced, to address the key learning outcome and learning ideas

#### 3. Begin with simpler concepts

Begin a test with questions which are simpler. This will enable children to overcome their nervousness generally associated with assessment.



#### 4. Try out the timing

No purpose is served by creating a test which is too long or too short. As a rule of thumb, about one-half minute per item for true-false tests, one minute per item for multiple-choice tests, two minutes per short-answer requiring a few sentences, ten or fifteen minutes for a limited essay question and about thirty minutes for a broader essay question should be allotted. Another five or ten minutes for students to review their work should be given and in time to distribute and collect the tests should also be factored in.

#### 5. Include both direct and indirect items

Direct items ask children to demonstrate their learning while indirect ones ask them to reflect on their learning or apply the learning in given situation. Either Direct methods include objective type of tests, essays, presentations and classroom assignments. Indirect methods include surveys, projects and experiments.

Spend adequate amount of time developing the test. As you prepare a test, think carefully about the learning outcomes you wish to measure, the type of items best suited for measuring those outcomes, the range of difficulty of test items, the limits for the test, the format and layout of the test and also the scoring and analysis procedure.

#### Check your progress-1

- a) Differentiate *assessment of learning* and *assessment for learning*.

.....

.....

.....

- b) Give key features of a good assessment tool.

.....

.....

.....

### 10.3 ASSESSMENT TECHNIQUES

A technique is the process/procedure of using a tool. Thus 'tools' are instruments and 'technique' is the procedure of using that instrument. A combination of quality tools and well-organised technique results in effective and meaningful assessment.



## Notes

In NCF 2005, emphasis has been given on knowledge construction by children. Children construct their own knowledge of the environment and that learning and progress is a continuum at individual pace of the child. When such is the dynamism involved in children's learning, the question that emerges is, should all children be assessed at a single point of time through the same assessment technique? Perhaps not, because each child is unique and so is her/his learning style and preference.

Considering the dynamic nature of children's learning and their needs, the NCF has emphasised the concept of comprehensive and continuous assessment. As you know, comprehensive assessment processes require the teacher to be equipped with a variety of assessment techniques—oral, written and performance.

Let us explore some of the techniques used for assessing learning in EVS.

### 10.3.1 Oral Techniques

You must be aware of oral tests. These may take place in front of one person, a panel or a class. It allows students to respond directly to the teacher's questions or present the prepared statements. It can be a supplementary testing for the practical part of EVS. The oral questions, debate, discussion, quiz and drama are used for this purpose.

#### Advantages

- Both the knowledge of a subject and communication skills can be evaluated.
- Important for development of vocabulary and reasoning power.
- Provides immediate feedback thus allows the student to learn as they are tested.
- A large number of children can be examined at one time.

#### Limitations

- Examination of the detailed knowledge and critical thinking skills may not be done effectively.
- More time is required for planning and organising.
- Does not generate a written record automatically.

To ensure that students have access to written feedback, it is required that teachers take notes during oral tests using a checklist and provide a photocopy of the notes to the students.



### **10.3.2 Written Techniques**

In such techniques, the students are provided with self-questions and/or scenarios to be responded in a defined time. Written technique may be of essay type, short answer type or objective type.

#### **10.3.2.1 Essay Tests**

Easy items take less time to construct. Easy items can test complex learning objectives as well as processes used to answer the question. Items provide a more realistic and generalisable task for test. The items make it difficult for test taker to guess the correct answers and require test taker to demonstrate their writing skills as well as correct spelling and grammar.

#### **Advantages**

The individual answers the question in an essay form and is able to express his views independently in which there is a clear impression of his personality. By means of this, along with the achievement of the individual, his power of expression, writing ability and personality is also evaluated.

#### **Limitations**

Essay tests pose only a few questions and hence, their content validity may be low. In addition, the reliability of essay tests is compromised by subjectivity or inconsistencies in grading. .

#### **10.3.2.2 Short-Answer Tests**

Depending on the requirements, short-answer questions can call for one or two sentences or a long paragraph. Short-answer tests are easier to write, though they take longer to score, than multiple-choice tests.

#### **10.3.2.3 Objective Type Tests**

These are constructed by the teacher on the basis of his/her experience to fulfill the objectives and requirements. These are highly objective, valid, reliable and easy to score. These are preferred for quantitative assessment in EVS. Major types are:

Such tests may not necessarily be good for qualitative analysis.



Notes

### Objective Type Questions

1. Recall Type Items- Testing of previously learned facts and measuring the power of retention.
  - a. What is the percentage of nitrogen in air?
  - b. Name any shrub growing in your school campus
2. Recognition Type Items- In these, the questions are to be recognised and answered accordingly. These promote guess work and are of following kinds.
  - a. The snake does not have a spine. (True/False)
  - b. Polythene is biodegradable. (True/False)
  - c. What percentage of oxygen is present in air?

Ans.- (a) 78% (b) 25% (c) 8% (d) 21%

3. Match the following- These items provide a definite term, test taker requires to match identifying characteristics to the correct term

1. Frog	a soil quality
2. Snake	b amphibian
3. Earthworm	c fangs
	d mammal
4. Arrange the animals according to their size from smaller to bigger  
Mouse, Elephant, Mosquito, Cow, Cat, Lion, Dog.
5. Completion type- There are two types –
  - a) provision of word bank of possible words that will be filled in the blank  
(\_\_\_\_\_ is a bird(Bat, Pigeon, Honey bee, flying frog))
  - b) Provision of no word bank which require a higher level understanding and memory  
(\_\_\_\_\_gas is most essential for a living being for its survival)
6. Multiple choice- It has number of sets of answers to a question. It has minimum four alternatives from which the correct answer is to be identified. It can be used at higher classes of Primary level  
  
Advantages :- less time to administer, easy to score and grade, provide greater coverage of materials , allows wide range of difficulty

Limitation- more time to construct, do not test attitude, even encourage guessing





### 10.3.3. Performance Tests

Next technique is Performance assessment which focuses on the direct observation of a student's performance. A performance test is an assessment that requires an examinee to actually perform a task or activity. The performance is rated by a teacher or an experienced observer and useful remarks are made.

Performance tests ask children to demonstrate proficiency in conducting an experiment, executing a series of steps in a reasonable amount of time, following instructions, creating drawings, manipulating material or equipment or reacting to real or simulated situations. It can be administered individually or in groups. Performance tests can be useful in assessing learning in EVS that require students to demonstrate their skills.

### Advantages and Limitations

Performance assessment can yield valuable insights into children's learning and provides teacher with comprehensive information about students' learning style and performances. Communication between teacher and children is often strengthened and the opportunity for self-assessment is enhanced. While, it is beneficial for assessing various life skills viz. cooperation, valuing others opinion, assisting characteristics etc., it is time consuming and requires good planning, organising observation and recording skills.

### 10.3.4 Correcting Mock Answers in EVS (Variation of An 'Essay Test')

Prepare a test, in which children have to correct, expand or refute mock answers. Two weeks before the test date, distribute ten to twelve essay questions and discuss with children in the class. For the actual test, select any four from the distributed essays and prepare well-written but intellectually flawed answers for the children to edit, correct, expand and refute. The mock essay answers should contain common misunderstandings, correct but incomplete responses or meaningless concepts. In some cases, the answer should have only one or two flaws. Children will not only enjoy such tests but also develop the skills of comprehension, interpretation/judgement, editing, correcting and expression. Such tests provide opportunity for enhancing comprehension abilities at the same time critical analysis.

### 10.3.5 Observation Technique

The word observation means seeing things with a purpose. Observing behaviour is a valuable assessment technique and is indispensable in EVS assessment. You can also use this in assessing learner's skills in applying understanding of a concept or value in EVS in different situations. Besides information and knowledge, helps



## Notes

in determining students' attitudes and values. Observation techniques can be effectively used to observe classroom interactions. For example,

- Work habits and attitudes towards environment
- Ability to work independently as well as collaboratively
- Problem solving abilities
- Response to diversity in the classroom
- Development of ideas and understanding

The various tools used during observation technique include observation schedule, rating scales and score cards. Now, let us discuss some of the tools used for recording information for assessment in EVS.

### a) Observation schedule

A page in your assessment register could be assigned to each child in your class. Throughout a school term or a year, you may maintain detailed observation record for each child. Some points that you may consider for this could include:

You can develop Observation schedule for assessing your students by considering following points.

- a. Student's engagement at work
- b. Working in teams
- c. Independent work
- d. Attitude/ thoughts toward team members
- e. Resource use and management
- f. Respect for all
- g. Dignity of labour
- h. Passion for learning
- i. Applying knowledge in different settings
- j. Recommendations/follow up/feedback

### b) Rating Scale

Rating is a term applied to the expression of opinion or judgment regarding some situation, object or an action. These opinions are usually expressed on a scale either quantitatively or qualitatively. For the construction of rating scale, the teacher needs to identify the factors to be measured, places units and categories on a scale to differentiate varying degree of that factor, and describes these units in a coherent manner.


**Rating scale on understanding of waste disposal and associated values and impressions**

Notes

S. No.	Statements	Strongly Agree	Agree	Indefinite	Disagree	Strongly Disagree
1.	Keeping house clean is the responsibility of mother only					
2.	Waste material should be disposed out of the house					
3.	There should be separate dustbins for different kinds of wastes					
4.	Polythene bags should be reused					
5.	Use of paper bags in place of polythene is undesirable					
6.	I am responsible for cleanliness of my home					
7.	Waste material should be burnt					
8.	Soil gets polluted by polythene bags					
9.	Vegetable waste should be composted					
10	There should be a well-managedsanitary system in each residential colony					

**c) Audio video recordings**

Such recordings also provide valuable feedback to a teacher about his own performance as well. Such recordings can capture a range of non-verbal communication that takes place during a learning situation. Having a machine record leaves you free as it is completely unbiased and objective.



Notes

### 10.3.6 Additional Ideas for Assessment in EVS

#### 1. “Create-a-game” test

Students can be asked to create either a board game or a word game that covers a range of information relevant to EVS say the ‘world of plants’ or ‘water’ etc. Students should also be asked to include the rules and norms of the game.

#### 2. Take-home tests

These tests allow students to work at their own pace with access to books, material and other available educational resources. Take-home tests also permit longer and more involved questions and reflections, without necessarily taking away the limited classroom interaction time that a teacher gets with his students.

#### 3. Open-book tests

In an open-book test, as the name suggests, children can write their responses with the help of books. Such tests discourage unrequired rote learning.

#### 4. Group tests

Conducted either in the class or as take-home projects. Students generally respond positively to group tests. Especially for EVS, this technique will be more advantageous. You are aware about the cooperative learning (**Refer Block 2**). Remember the theory behind the cooperative learning and relate with the following example.

Sukeshi, an enthusiastic teacher, followed group test technique to assess learning in EVS in class V. She divided the class into 7 small groups of rainbow colours (Violet, indigo, blue, green, yellow, orange and red) with 5 children in each. The children in the groups had different learning abilities and styles. In the red group, Shamim and John had a fast pace of learning; Raman was average while Siddharth and Maninder enjoyed comparatively slow pace of learning. While forming the groups, Sukeshi teacher ensured that each group has a variety of learners.

#### 5. Testing in Pairs:

Pairs of children work on a single problem/concern/question. Pairs can be self-selected or assigned. A variation can be done by allowing the children to work in pairs with open books and discussion in pairs allowed but submit individual answer sheets.



Notes

**Check Your Progress-2**

1. Which technique of assessment is better for EVS and why?

.....

.....

.....

.....

.....

## 10.4 POINTS TO CONSIDER WHILE ASSESSING VARIOUS LEARNING OBJECTIVES IN EVS

➤ **Apply a variety of approaches**

Considering that EVS is concerned with a variety of learning outcomes, the mixed way approach of using multiple approaches is important.

➤ **Use a variety of testing techniques**

Children have different personalities and learning preferences so using a variety of assessment tests will help to every child to grow and learn.

➤ **Write questions that test skills**

As it is important for tests, and since EVS aims also to develop higher-order skills, teacher should use other than recall items in the test. To assess skills such as problem solving, application concepts etc. applying concepts and principles to new situations), questions should include Demonstrate, Modify, Operate, Prepare, Produce, Relate, Show, Solve and Use.

➤ **To understand children's analytical abilities** (recognition of unstated assumptions or logical fallacies, ability to distinguish between facts and inferences) test items like Diagram, Differentiate, Distinguish, Illustrate, Infer, Point out, Relate, Select, Separate, Subdivide etc. are useful.

➤ **To learn about ability of synthesis** (integrate learning from different areas or solve problems by creative thinking)

Ask questions like: Categorise, Combine, Compile, Devise, Design, Explain, Generate, Organise, Plan, Rearrange, Reconstruct, Revise, Tell.

➤ **To know about evaluation skills** (judging and assessing),

Questions should include: Appraise, Compare, Conclude, Contrast, Criticise, Describe, Discriminate, Explain, Justify, Interpret, Support.



Notes

- **Give feedback** on student performance and adapt, plan, organise activities to meet the identified needs of children. Remember to be flexible while assessing the children.

---

## 10.5 LET US SUM UP

---

Purpose of Assessment includes both assessment of learning and also enhancing learning (assessment for learning). If assessment of learning is reporting of recorded information about learning then assessment for learning should be planning and conducting activities for further improvement in learning of EVS. Recording information of learning is the key for effective assessment. Information about learning can be obtained through assessment tools. There are various tools and techniques which can be used efficiently for gathering and recording information for assessment in EVS.

Teacher should identify appropriate assessment tool for specific goals and tasks and ensure that the tools are valid and reliable. They should be very careful while selecting or developing any test for assessment. Some of the tools are observation schedule, checklist, rating scale, audio video recordings. Tests should have clear and direct links with the learning outcomes and it should be balanced, comprehensive and varied. Teachers should use qualitative as well as quantitative measures. They should choose assessment methods that allow providing both positive and suggestive feedback for enhancement of learning.

---

## 10.6 MODEL ANSWERS TO CHECK YOUR PROGRESS

---

### Check your progress-1

- a) When you record information with the help of any tool to know about the depth of learning of students, it is **assessment of learning**

On the basis of the recorded information, when you plan further activities for learning, you are practicing **assessment for learning** which is otherwise known as '**Remediation**'

- b) **A good tool should:**

1. match the content of teaching-learning
2. be valid, reliable and balanced
3. begin with simpler concepts
4. be provided with try out the timing
5. include both direct and indirect items



### Check your progress-2

Give your justified answer

---

## 10.7 SUGGESTED READINGS AND REFERENCES

---

- Source Book on Assessment for class I-V (Environmental Studies, 2008) NCERT, New Delhi
- NCF 2005, National Council for Educational Research & Training, New Delhi
- EVS textbooks class III to V, NCERT, New Delhi
- Assessment in primary Schools, draft document, National Council for Curriculum and Assessment, Feb. 2004
- [www.ncca.ie/uploadedfiles/publications/assessprim](http://www.ncca.ie/uploadedfiles/publications/assessprim)
- [www.direct.gov.uk/en/Parents](http://www.direct.gov.uk/en/Parents)
- [web.mit.edu/tll/assessment-evaluation](http://web.mit.edu/tll/assessment-evaluation)
- [www.ncert.nic.in/html/pdf/schoolcurriculum/ncfsc/ch4.pdf](http://www.ncert.nic.in/html/pdf/schoolcurriculum/ncfsc/ch4.pdf)
- [http://en.wikipedia.org/wiki/Educational\\_assessment](http://en.wikipedia.org/wiki/Educational_assessment)
- <http://unesdoc.unesco.org/images/0012/001262/126231e.pdf>
- <http://www.lbrt.nl/national-professional-association-for-remedial-teachers/faq.php>
- <http://www.mondofacto.com/facts/dictionary?remedial+teaching>
- <http://www.edb.gov.hk/index.aspx?nodeID=2607&langno=1>

---

## 10.7 UNIT-END EXERCISES

---

1. Develop an observation schedule for assessment learning of your students in a an EVS topic of your choice.
2. Describe with example, how audio-video recording can be beneficial for assessing learning in EVS?



---

## UNIT 11 USING ASSESSMENT RESULTS FOR ENHANCEMENT OF STUDENTS' UNDERSTANDING

---

### STRUCTURE

- 11.0 *Introduction*
- 11.1 *Learning Objectives*
- 11.2 *Reporting Student's Progress*
  - 11.2.1 *Principles of Effective and Informative Reporting*
  - 11.2.2 *The Feedback on Assessment Results*
  - 11.2.3 *Sample Report Cards*
  - 11.2.4 *Portfolios to Report Progress*
- 11.3 *Analyzing Gaps in Learning: Investigative Testing*
  - 11.3.1 *Need and Utility of Investigative Testing*
  - 11.3.2 *Development of Investigative Tests*
- 11.4 *Reviewing And Improving The Teaching-Learning Process*
- 11.5 *Corrective Activities For Enrichment In Learning of EVS*
- 11.6 *Let Us Sum Up*
- 11.7 *Model Answers to Check Your Progress*
- 11.8 *Suggested Readings and References*
- 11.9 *Unit-End Exercises*

---

### 11.0 INTRODUCTION

---

In the previous Units, you have learnt about effective assessment and students' achievements and progress in learning EVS. As you know, assessment sets the direction for ongoing teaching and learning. It also identifies gaps in learning of concepts and skills, if any.

The rationale of assessment is thus to enhance learning. Assessment, therefore, involves much more than testing, and is an ongoing process that encompasses many formal and informal activities designed to monitor and improve teaching and learning.





However, the effectiveness of any assessment process cannot be realised unless the assessment results are used meaningfully to improve the classroom teaching-learning process. In this unit, we will discuss how best can assessment results be reported and analysed; how to identify gaps in learning and also work with different learners' weaknesses and strengths. We will also understand that once assessment is carried out, how assessment results can be used by a teacher to further plan and execute teaching-learning of EVS.

---

## 11.1 LEARNING OBJECTIVES

---

On completion of this unit, you will be able to:

- share the learning assessment results with students and parents
- identify strengths and weaknesses of students' learning.
- support and guide learners in overcoming gaps in their learning
- plan for alternative activities for identified gaps in learning
- conduct activities for further strengthening of learning

---

## 11.2 REPORTING STUDENT'S PROGRESS

---

Reporting is the second, essential part of the assessment process. It is the method of communicating the information gained from assessing a student's learning to relevant persons, including the learner himself/herself. Without this assessment loses much of its value. The purpose of reporting is to support teaching and learning by providing feedback to students, parents and teachers about students' achievement and progress; the learning process and to indicate areas for further development.

There are multiple ways of doing this: Print reports such as report cards; documentary evidences, electronic reporting, personal meetings and more. Each has its own advantages and limitations. Depending on the situation and demand, combinations of these may be used. Promptness in reporting is, however, an essential and significant criterion.

Teacher's words of assessment report mean a lot to students and parents. The teacher needs to be aware of it. He should be sensitive towards reporting the result of assessment remembering that the main objective of reporting is to help the child progress. Therefore, assessment report is often called as the Progress Report of the child.

Children and their parents remain eager to know the progress. Learning-centered positive approach to assessment helps to highlight the important aspects of progress in the report card. In addition to highlighting the specific positive



## Notes

observations of assessments, informing the gaps is an essential part of reporting. So, it should foster partnership between parents and teachers to support the student's learning and progress.

### 11.2.1 Principles of Effective and Informative Reporting

General remarks in an assessment report tell little about the progress of the child. Effective and informative reporting should thus:

- Be valid, neat and fair
- Project children's strengths as well as weaknesses
- Be student centered i.e. Students should participate in the negotiation of learning tasks and actively monitor and reflect upon their achievements and progress.
- Support students' learning and enhance their motivation and commitment to learning.
- Be time efficient and manageable. Teachers need to plan carefully the timing, frequency and nature of their reporting strategies.
- Recognise individual achievement and progress. Should be sensitive to the self esteem and general well-being of children, providing honest and constructive feedback.
- Emphasise values and attitudes. These are distinct from knowledge, understanding and skill outcomes and are an important part of learning in EVS, so should be reported efficiently.
- Actively involve parents. Teachers should ensure full participation by parents in the continuing development and review of the reporting processes.
- Convey meaningful and useful information and feedback so that students' future learning development can be planned. Student achievement and progress can be reported by comparing students' work against a standard framework of learning outcomes and by comparing their prior and current learning achievements.

### 11.2.2 The Feedback on Assessment Results

It should include:

- Qualitative feedback with grades on specific competencies or indicators. If possible, a specific area of competency can be further broken down into small observable and measurable competencies.
- The ways of helping the child's progress further.

Qualitative feedback is a description of how the child fares. A remark 'good' or 'very good' or 'needs help' is a qualitative remark, but still it does not tell much



about the child's specific level of ability. Instead if under 'discussion' if the teacher remark shows good in the first semester and very good in the second semester and in the teacher's remarks teacher provides a comment something like: "During discussion, Sudha has learnt to express her supportive and negative opinion freely and without hurting others.", then the communicative value of the Report card gets many times enhanced. The report then tells us about Sudha's specific and noteworthy progress. Though, the qualitative remark good or very good is general, the personal comment by teacher qualifies the remark on Sudha's 'progress'.

### 11.2.3 Sample Report Cards

Following example from the book 'Source Book on Assessment for class I-V (Environmental Studies) published by NCERT' throws light on a CCE based report of assessment. See the following sample:

Environmental Studies	Needs help	Can do with difficulty	Can do
Understands the functions of various organs within the body			
Recognises the relationship between personal hygiene and preservation of good health			
Recognises the need for human beings to live in a house			
Identifies different kinds of houses according to climatic condition			
Classifies different food items and nutritional value			
Identifies people who help in producing food e.g. fishermen, farmers			
Locates different states and union territories on the political map of India.			
Knows about food habits of people in different parts and its relationship with climatic condition.			

The above table lists the EVS topics and not the child's specific competencies. Also the teacher's comments are general and not specific, e.g. 'identifies different kinds of houses according to climatic conditions'.

In one school, the report card has specific indicators of child's competencies for which the remarks are good or very good. These remarks are general, but then the teacher's specific comments are also provided. See below:



Notes

## Using Assessment Results for Enhancement of Students' Understanding

	<b>EVS/SCIENCE</b>	<b>Semester – 1</b>	<b>Semester-II</b>
1	Observation Skills	G	G
2	Comprehension/Understanding	G	VG
3	Application to Real Life Situations	VG	VG
4	General Awareness	VG	VG
5	Recall/Retention	VG	VG
6	Ability to Correlate	VG	VG
7	Ability to Analyse	VG	VG
8	Class Discussion	VG	VG
9	Collection Skills	VG	VG
10	Project Work	VG	VG
11	Group Activity	VG	VG
12	Participation	VG	VG
13	Effort	VG	VG
14	Presentation (i) Oral	VG	VG
	(ii) Written	VG	VG
	(iii) Pictorial	VG	VG
15	Curiosity	G	VG
	<b>Test Grades</b>	<b>A+</b>	<b>A+</b>

What does Good (G) or very good (VG) really tell us? Do you think that reporting such as the above adds any value for the child or even the teacher. While reporting well, it is important that the teacher provides specific remarks and not just good or not good. It is also important that the child is supported by continuous assessment and hence the remarks for a child, over the months, are compared with her previous assessment remarks, as well. This will show a real progress in case of each learner.

### 11.2.4 Portfolios to Report Progress

Some schools use portfolios for reporting on student's progress. The actual work done by a child over the year can be collected in a portfolio. Teacher collects students work and compile in a separate file for each child. As the school year



progresses, the collection in the portfolio increases with the assorted collection in the Portfolio, such as:

- Drawings and sketches of family members
- Leaves, and cloth pieces of different textures and flowers
- Worksheets, answer-sheets of class work, report of a visit to a factory
- Chits expressing their feelings for friends
- Greeting cards prepared for school guests
- Cards received from friends
- Craft work of origami and clay.

Teacher should take care of the following points for portfolios

- All kind of work by the child should be included, and not only the best work.
- Rather than assessment record and test scores, the actual work carried out by the child should be put in.
- Store it carefully and present neatly to the parents when required.

**While reporting ....**

- *It is important that large number of different competencies are added so that a child's varied abilities are reported*
- *Each indicator is given a separate grade. A child can be at different ability levels for different indicators*
- *Informing the parents about the holistic approach on reporting of the child's progress in EVS is important. Conveying the teacher's concern for child's development with respect to EVS learning objectives needs to be conveyed to the parents clearly*
- *Guidance needs to be given to the parents regarding their expected participation in the child's development on the basis of analysed learning gaps.*



Notes

### Check Your Progress-1

1. Why is it essential to report students learning?

.....

.....

.....

2. Write three main principles of reporting.

.....

.....

.....

3. What is a 'portfolio' and how it helps in reporting progress?

.....

.....

.....

## 11.3 ANALYSING GAPS IN LEARNING: INVESTIGATIVE TESTING

After completing a particular unit or topic, you generally conduct a test to assess the achievements of children. After assessment, you find that some of the students have done very well while few may not have achieved all the expected learning outcomes. Now you try to find out the causes behind this. It is very essential to find out the particular area or concept where the difficulty lies or where you find major gaps in learning. To analyse these areas of learning, investigative testing is applied. Investigative testing is the basis of effective and responsive teaching, thus it leads to improved quality of learning.

### 11.3.1 Need and Utility of Investigative Testing

Investigative testing is an individually driven task and reflects the fact that each child is different. These tests are designed to analyse individual's performance and provide information on the causes of learning difficulty. The major function of investigation is to facilitate optimum development of every student by helping teacher determine the nature of learning difficulties. Investigative testing should be continuous because child's growth in various skills depends on the sequential development of each skill. Such tests are useful, if a teacher uses these more than once throughout the school year. At the beginning of the year, it guides in planning



the teaching; midyear, it determines how much students have learned so far and what is needed to strengthen these learnings; at the end of the year, it can provide an assessment of the student's learning for the whole year and guide about progress to the next grade and level of concepts. If major gaps in learning are reported among several students, it becomes obvious for the teacher to reflect upon whether something was wrong with his/her teaching process. This calls for a detailed study of learning difficulties as well as the process of learning that the children were taken through.

### 11.3.2 Development of Investigative Tests

It differs markedly from achievement test. In an achievement test, sampling of questions is not so exhaustive to cover each and every learning point as the content is generally a large portion; whereas in an investigative test, each learning point has several items, each cluster of such items forms a subtest.

The coverage of subject matter is more detailed, though based on a smaller area than an achievement test. An investigative test thus requires a very careful analysis of the content and a detailed study of the common errors likely to be made by the students.

#### Check Your Progress-2

1. The aim of class test is to .....the performance of pupils.
2. Diagnostic Test implies .....study of learning difficulties.
3. Distinguish between assessment and investigative testing

## 11.4 REVIEWING AND IMPROVING THE TEACHING-LEARNING PROCESS

We have so far understood that assessment tells about the progress of learning among students. It also helps you to identify the gaps in students' understanding and teacher's teaching. It is aimed at ensuring that every child gets immediate guidance to correct the misunderstandings and errors, and continues learning smoothly. Assessment results should be analysed and the corrective measures for improving the teaching-learning process should be initiated.

Corrective teaching-learning process is about removing distortions that have occurred into learning and/or re-designing the teaching-learning approaches to suit children's learning preferences and style. It is an effort to overcome learning difficulties.



## Notes

### Using Assessment Results for Enhancement of Students' Understanding

Teachers need to review their teaching-learning approaches for learners who require additional support. The reason for this requirement may vary from child to child. Some children do not understand a particular concept, while some children do not like a particular teacher and consequently the concerned subject; some children may have specific learning difficulties, while others may have considerably low grasping power. In each case, investigating the exact reason enables the teacher to decide the kind of improvement to be brought about in the teaching-learning process. For helping the child, the teacher may even need to seek help from a relevant expert or from the parent, a psychologist or a special educator.

Corrective teaching-learning process should begin by analysing a child's specific strengths and needs, and review how the instructional material and processes are designed to support the learning. Making children aware of their strengths and limitations and providing a method of working upon their weaknesses (based on individual needs) helps to establish a powerful positive reinforcement cycle. If the child has little desire to learn, immediate steps should be taken to try to improve the attitude through activities which makes the child enjoy learning. For corrective teaching-learning, teachers should have suitable attitude and skills. Since, corrective efforts must usually proceed on the basis of a tentative identification; the teacher must be ready to modify the corrective strategy and programme if the approach and material selected at the start seem to be ineffective. Most children learn better, if a teacher provides:

- (i) Shorter units of instruction
- (ii) More concrete associations: see, hear, feel, do etc.
- (iii) More illustration and audiovisual aids
- (vi) More time for accomplishing complex work
- (v) Personalisation of learning experiences
- (vi) Emotional involvement in the activity as in dramatics, performing arts, etc.
- (xii) Great variety of stimulation and material





Notes

### Alternative teaching-learning activities

In some cases of learning difficulties, the causal factors are relatively simple. A student may be inattentive during teaching-learning or may be committing errors due to insufficient practice, ignorance or irregular attendance.

If a student has difficulty in getting interest, then some of the following alternative activities can be tried:

- telling stories which relate the lesson to their lives;
- establishing relevancy and a purpose for learning by relating it to previous experiences;
- providing an experience, such as a field trip and then teaching the lesson;

If the student has difficulty getting started, then try

- giving a cue to begin work;
- Breaking down complex learning concepts into smaller units
- sequencing work with easier concepts/tasks at the beginning;
- providing time suggestions for each task;
- checking on progress often in first few minutes of work;
- giving clear directions;
- using peer support for the student to get started.

If the student has trouble working in groups, then

- Give role clarity among different group members;
- motivate team spirit
- provide the student with a defined responsibility or position of leadership;

If the student has trouble working independently, then

- assign a task at an appropriate level;
- lower the difficulty level of the expected learning outcome
- Begin with shorter assignments and gradually increase the amount of work required;
- provide a variety of work within an assignment (e.g., making charts, maps, or flags; drawing pictures; etc.).



Notes

## 11.5 CORRECTIVE ACTIVITIES FOR ENRICHMENT IN LEARNING OF EVS

Your main role as a teacher is to promote quality learning among the students. This is possible only when you act as a guide and the students actively participate in the process of learning. During the teaching-learning process, you have to locate and identify the areas where the learner commits mistakes. It is the crucial stage of the teaching-learning process where you have to analyse and prepare instructional material for counteractive teaching to ensure the desired quality of learning. For example:

While assessing the theme of food, a teacher noticed that most of the children in the class mentioned mother and other female members cooking food and they have a bias about it. The teacher then narrated the story of a male chef in a hotel cooking excellent food. In this case, this story serves the purpose of corrective teaching. As soon as the teacher notices the gap in understanding, she needs to apply corrective measures; otherwise the child can remain insensitive to gender stereotypes.

For corrective teaching, various activities can also be conducted, let us look at an example.

Salim, an EVS teacher had diagnosed that a group of children of class V have not understood the concept of Anaemia of the chapter '*A treat for Mosquito*' in the EVS book "*Looking Around*".

Salim after identifying the learning gap, planned the following activities as counteractive teaching to strengthen the learning of children regarding Anaemia.

- Organized an expert lecture and invited a Doctor who explained about the significance of Iron in our blood. He also talked to children about the vegetables and fruits which are rich in iron. He also showed a sample of blood report, and explained how the percentage of haemoglobin in the blood is calculated.
- Salim further planned to show a film on mosquitoes, to further enhance the knowledge of children in this subject.

Accordingly, Salim planned and prepared material where the children had plenty of opportunities to revisit and revise the concept. Enough practice was provided to them on the topic until they all understood the same.

Let us remember, corrective teaching-learning process:

- Is an integral and essential part of teaching learning; specific or investigative assessments help understand specific gaps in learning.



- Needs to be tailored to suit a child's specific problems or needs
- Needs to follow the assessment immediately
- Should be aimed at the use of teaching-learning methods different from those employed earlier
- Must be supportive of the child and should focus on learning
- Should be such that the child is able to continue learning along with the rest of the class whenever possible and therefore it is better that a child who is undergoing corrective teaching-learning experience is not separated from the rest of the class.
- The child's parents should be informed of the assessment findings and if required should be made a part of corrective teaching-learning process.

---

## 11.6 LET US SUM UP

---

In this unit, you have learnt that teachers have a responsibility to provide regular, accurate and comprehensive information about children's intellectual, social and personal development. Reporting is the process of communicating information about students' achievements and progress gained from the assessment process. We talked about the reporting of learning, its importance and points to remember while reporting to students and parents.

Investigative testing is one of the most important parts of the quality teaching-learning process. It implies a detailed study of learning difficulties. After locating the area where the difficulty lies, as a teacher you should devise some strategy to remove the problems in learning and the causes due to which the learner has faced the difficulties. This is referred to as the corrective teaching-learning process. Investigative testing leads to counteractive teaching, during which alternative activities should be planned for enhancement of learning. We finally discussed an example of how to execute corrective teaching-learning activities for enrichment of learning in EVS.

---

## 11.7 MODEL ANSWERS TO CHECK YOUR PROGRESS

---

### Check Your Progress -1

Ans1. (a) Providing feedback to students, parents and teachers

(b) indicating areas of strength and weakness for further development

Ans 2. Mention any three indicating their importance



Notes

Ans 3. The collection of actual work done by the students over the years kept in different files in a accommodating portfolio or may be a container in primary classes

### Check Your Progress -2

Ans 1. Record and report

Ans 2. Individual's performance

**Ans 3. Assessment** – The act of judging and classifying learner's knowledge, attitude, skill and belief

**Investigating Testing** -The act of detailed study of individual learning difficulties and reflecting that each child is different from one another.

---

## 11.8 SUGGESTED READINGS AND REFERENCES

---

- Source Book Assessment for class I-IV (Environmental Studies, 2008) NCERT, New Delhi
- NCF 2005, National Council for Educational Research & Training, New Delhi
- EVS textbooks class III to V, NCERT
- [www.ncert.nic.in/html/pdf/schoolcurriculum/ncfsc/ch4.pdf](http://www.ncert.nic.in/html/pdf/schoolcurriculum/ncfsc/ch4.pdf)
- [http://en.wikipedia.org/wiki/Educational\\_assessment](http://en.wikipedia.org/wiki/Educational_assessment)
- <http://unesdoc.unesco.org/images/0012/001262/126231e.pdf>

---

## 11.9 UNIT-END EXERCISES

---

1. Explain the meaning of corrective teaching. In case of one EVS theme, illustrate the use of corrective teaching for a child.
2. A teacher notices that a child of class-V is unable to understand the concept of enlarged family, where close neighbours and household animals are also considered to be our family members. Her concept of family is limited to her parents. Teacher also found that the child stays in a nuclear family and does not mix up with others during cooperative group activity. What kind of corrective teaching-learning process would you suggest?

---

## UNIT 9 ASSESSING LEARNING IN EVS

---



Notes

### STRUCTURE

- 9.0 *Introduction*
- 9.1 *Learning Objective*
- 9.2 *How is assessment related to objectives of teaching-learning of EVS?*
- 9.3 *Why do we need to assess student's learning?*
  - 9.3.1 *Diagnostic and guidance purpose of assessment*
  - 9.3.2 *Assessment tells about teaching too*
- 9.4 *Continuous and Comprehensive Evaluation*
- 9.5 *Types of Assessment: Formal and Informal*
  - 9.5.1 *Assessment: Formative and Summative*
- 9.6 *What makes an assessment good?*
- 9.7 *Learning-centered assessment*
  - 9.7.1 *Self assessment and peer assessment*
  - 9.7.2 *Cumulative Anecdotal Records*
  - 9.7.3 *Assessment through Projects*
  - 9.7.4 *Extent and Quality of Participation*
- 9.8 *Let Us Sum Up*
- 9.9 *Model answers to Check Your Progress*
- 9.10 *Suggested Readings and References*
- 9.11 *Unit-End Exercises*

---

### 9.0 INTRODUCTION

---

Assessment is a vital part of a student's learning environment in school. Assessment can be a cause of much happiness or distress for a child and her parents. A teacher needs to assess students regularly to check and report on their progress and make decisions about further teaching. Therefore it is important that a teacher adopts a responsible and sensitive approach towards assessment. You have already learnt about assessment in general, in Course 3, Block 4. In this unit you shall learn of many concerns such as 'what, why and how' of



Notes

Assessment in EVS. Along with the approach assessment of learning in EVS, you will also know about various tools and techniques used in assessing learning in EVS.

## 9.1 LEARNING OBJECTIVES

**On completion of this unit, you will be able to**

- state the purpose of assessing learning in the context of EVS.
- illustrate the use of Continuous Comprehensive Evaluation (CCE) in EVS
- explain the importance of different types of assessment—formal and informal, and formative and summative assessment
- list features of effective Assessment practices
- practice/use the different modes of ‘learning-centred’ approaches to assessment.

## 9.2 HOW IS ASSESSMENT RELATED TO OBJECTIVES OF TEACHING-LEARNING OF EVS?

EVS objectives aim at creating a close bond between student and her surroundings. Assessment in EVS must serve as an appropriate aid in the creation of this bond.

Assessment is the process of gathering, interpreting, recording and using information about a learner’s responses to an educational task. Educational tasks or learning experiences are based on some educational objectives. For example, when a teacher observes his students engaged in watering plants in the premises, joyfully and regularly, he is assessing their learning with reference to specific objective/s of EVS (associated with ‘attitude and values’).

## 9.3 WHY DO WE NEED TO ASSESS STUDENT’S LEARNING?

Some of the purposes served by assessment are:

- Enable quantitative and qualitative understanding of the progress of learning among the students
- Diagnose the gaps in realising objectives of EVS and take necessary measures.
- Provide feedback to students about their progress and  
Motivate and guide students in further learning



Notes

### Check Your Progress-1

*Recall the kind of assessment practice/ approach that you used in the EVS earlier.*

*How did you use this assessment to fulfil each of the three points mentioned above? Write the answer below.*

.....

.....

.....

.....

.....

### 9.3.1 Diagnostic and Guidance Purpose of Assessment

Assessment helps the teacher to diagnose problem areas in teaching-learning, which may include misconceptions, lack of comprehension or gaps in learning. This is one of the purposes of assessment but not the end. A good assessment process must go beyond diagnosis to remedy. This means that once you, as a teacher, facilitator and co-learner, have diagnosed strong and weak areas of learning among your students, your effort should now be towards guiding each student in his/her further learning. Accurate diagnosis provides guidance to the teacher about the necessary remediation. Thus guidance is the second important purpose of assessment

A good teacher uses assessment for both diagnostic and guidance purposes. She takes immediate corrective action following assessment so that learning continues; becomes effective and efficient.

### Check your progress-2

*Think of one EVS objective related to the theme 'Family and Friends' for your class. Recall any one assessment carried out by you on this theme? Did you notice any learning gaps or misconception? How did you use the feedback obtained from assessment to guide your further teaching?*

.....

.....

.....

.....

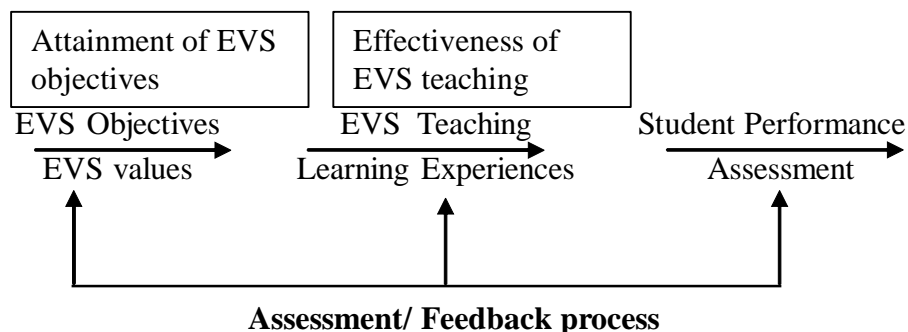
.....



## Notes

### 9.3.2 Assessment tells about Teaching too

We get feedback on students' learning through assessment. We come to know which EVS learning objective has been achieved and to what extent. Assessment also tells us about how a teacher has taught. See the following diagram. Do you see that the feedback throws light not only on student's performance, but also on EVS objectives as well as the learning experiences provided through teaching?



## 9.4 CONTINUOUS AND COMPREHENSIVE EVALUATION

Learning is a continuous process, so should be the 'assessment of learning'. Assessment helps the teacher diagnose gaps and difficulties in learning. If these are addressed as soon as they are noticed, the flow of learning can continue making the Learning process efficient and effective. Classroom assessment should be geared for accomplishing this job for every pupil. Thus good assessment process should be continuous.

I Wish the new teacher makes EVS learning as easy as riding a bicycle





Yes! I also hope so. It will be very interesting today

Yes! I also hope so. It will be very interesting today

I Wish the new teacher makes EVS learning as easy as riding a bicycle



**Fig.-**Two girls riding a bicycle to the school expecting to meet the new EVS teacher

As you may recall from Block 1 that EVS is a composite area of study. EVS learning therefore follows the holistic approach to learning. Teaching-learning of EVS is about encouraging analytical skills, critical thinking abilities among children. It is also a process to support positive attitude and clarify values. The process aims to develop a child into a citizen who is compassionate and sensitive towards diversity in environment—natural as well as social.

Assessment of learning in EVS therefore demands that the assessment process is comprehensive. Assessment should be carried out by self, peers, teacher, parents or occasionally by other school staff. This helps to create a holistic picture of the child's development.

The learners need to use head, hand and heart to attain the EVS objectives. Thus, the teacher should provide opportunities to the learners to use all the five senses, logical thinking, creative thinking as well as to develop and express their feelings. Consequently the assessment should be based on learning taking place through all the five senses, logical thinking, imagination and the feelings.

**Notes**

The teacher may use oral, written and performance modes to assess child's learning. She will need to sometimes assess each child individually, but at other times assess groups or assess the whole class together. The teacher should not overemphasise any one form of assessment, be it written or oral or activity based. Such diverse and balanced assessment makes assessment comprehensive.

Let us take example of the theme 'Food'. The comprehensive assessment can include the following-

1. Group discussion on food consumed by animals
2. Match the food item with its taste
3. Identify the food items through smell only
4. Identify fruits and vegetables by touch only
5. Hear the kinds of sound made while eating different food items, e.g. crisp and soft
6. Arranging food items in a plate that look pleasing to the eye
7. Trying out variations in making curd from milk
8. Name a food item that you enjoy eating from your own lunch box and another one, from your friend's lunch box
9. List the food items enjoyed by your friends and family members

In keeping with the The Right of Children to Free and Compulsory Education Act (RTE), 2009 CCE means: students will be evaluated on a round –the-year basis instead of being tested in through a year-end only exam. Giving every child an opportunity to experience success and enjoy learning. Look for variety of abilities that a child is good at and also help the child by supporting her/him to fill the gaps in learning through many and varied informal assessments. (Refer to the section on CCE you studied earlier in course 3, **Unit 13 & 16**)

For bringing CCE into practice, the teacher needs to be aware of what makes good assessment.

## 9.5 TYPES OF ASSESSMENT: FORMAL AND INFORMAL

Let us look at the following examples:

- A teacher is correcting a student's written response about a bird's behaviour.
- The same teacher is now listening to a conversation between two students where one of them is describing the birds that he observed at his uncle's farm.



The above examples illustrate different types of assessment being used by a teacher—formal and informal; respectively. Planned assessments like oral and written tests generally come under formal assessment. During formal assessment, children are informed that they are being assessed. Informal assessments are carried out in natural, informal settings and children are generally not told that they are being assessed. Observing children in the class, playground, during a visit; looking for noticeable behaviour of children and recording it, are some types of informal assessments.

Both formal and informal assessments help teacher to understand the student's progress. Irrespective of the type of assessment, it is important for the teacher to be aware of the EVS objectives and values underlying the process of assessment.

### 9.5.1 Assessment : Formative and Summative

Let us consider two sample assessments based on the EVS objective of 'realising the close connection between all living creatures'. This also relates to the value of being sensitive towards different living beings.

- I) A teacher was on an outdoor visit with her students. A week before that, she in her class, had discussed about roles played by insects in nature. During the visit, she saw a boy of her class smashing a bee. She talked to him and found that he was scared of bees. She once again reminded him of how bees help in pollination. Later, she also organised drama in the class to give a message that all living beings have a right to live just as we do.

This **timely assessment** provided the essential feedback to teacher about a gap in the boy's learning. This is an example of **formative** assessment.

The teacher takes immediate remedial action for removing obstacles in learning. Formative assessment thus helps the teacher diagnose impediments to learning and help the teacher take a corrective action then and there.

- II) This instance is about a chapter-end test in an EVS class. The teacher asked a question, written to understand how well the students have understood the close relationship between humans, plants, insects and other animals. Besides the written test the teacher also organised group discussion which helped her in summative assessment.

This assessment of students' performance, at the end of teaching the EVS theme of 'Our Family and Friends', helped the teacher to know exactly the number and names of students who lacked the understanding of this important EVS concept, attitude and value. This **summative assessment** helped the teacher to diagnose major gaps in the students' knowledge and understanding. The teacher found that out of the forty students, while all have understood the importance of close relation among the family members; fourteen have not been able to understand



Notes

relationship between humans and other creatures. On realising this, the teacher arranged a talk by a nature enthusiast for her students.

### Check Your Progress-3

*How will the student's learning in the above mentioned scenario be affected if (a) the teacher did not conduct the summative assessment? (b) The teacher did not interpret the result to realise students' understanding and the gaps in it? How would learning be affected if the corrective action was not taken at all, and if not taken immediately?*

*Both kinds of assessment—formative and summative—are essential and play important roles in helping teacher understand students' progress and facilitates learning in the class.*

.....

.....

.....

.....

.....

## 9.6 WHAT MAKES AN ASSESSMENT GOOD?

When do we say that an assessment process has been good one? We can say that an assessment will be good and effective only when the assessment has been valid, reliable, fair and flexible. These are the four important features of good assessment.

- Valid assessment is the one which is relevant to the EVS objectives and also to the learning experiences provided. It addresses the essential skills and knowledge and dimensions of competency, as well as more importantly values.
- Reliable assessment produces consistent outcomes when applied by different teachers in a range of contexts. Objective assessment like 'match the pairs' is likely to be more reliable than subjective assessment such as essay writing.
- Fair assessment does not disadvantage any student and takes into account the personality and preferences of every student being assessed.
- Flexible assessment tools and processes make an assessment suit/ relevant in a range of teaching learning contexts.



Further a good assessment process must be aimed at critiquing the learning and not the learner. It should also focus on the teaching-learning process as well, and not on the outcome only. Thus a good assessment process should be learning centred.

---

## **9.7 LEARNING-CENTERED ASSESSMENT**

---

Till now we have been talking of assessment being ‘learning centered’ in various ways. It means that a teacher needs to use assessment with the focus on learning. To bring it into practice, the teacher can use various modes of assessment. You already know of oral, written and performance modes. Some other modes of assessment can be

- self assessment
- peer assessment
- cumulative anecdotal records
- assessment through projects
- extent and quality of participation

### **9.7.1 Self Assessment and Peer Assessment**

There are different modes of assessing what a child has learned. Occasionally the child himself/herself and his/her peers need to assess the learning, and the teacher should make it an important part of the learning process. Mathew Sir asked every child to describe an animal or bird that they have actually observed, during a class presentation. After that he asked each child to list two good things and one aspect that needed improvement in their own presentation. This was a form of self assessment. For different topics, he continued the self assessment every week for a month and asked the children to notice gradual improvement in the same aspects where one needed improvement. Would you like to try this out in your class? What will be the benefits of this kind of self assessment?

When a child appreciates the map of school premises, drawn by a friend, it is peer assessment. The teacher can ask each child to appreciate a special skill of the classmate sitting next to her and record it as a peer assessment.

Various kinds of self assessment as well as peer assessment can add much value to the overall assessment process. Appreciation by self and classmates makes the child feel better about self. It can help the child build self esteem. During cooperative learning, group members are often asked to rate the positive social behaviour of other members like helping and encouraging. A word of caution, the teacher needs to take care so that self and peer assessment neither become a tool of excessive praise nor undue criticism for any child.

**Notes****Sociometry**

Developed by Jacob Moreno (1887 – 1974), the purpose of sociometry is to facilitate group task effectiveness and satisfaction of participants by bringing about greater degrees of mutuality amongst people and greater authenticity in relationships.

Teachers know that the groups of children they work with are more than an aggregation of individuals. They know that the groups have form and structure: that there are patterns of sub-groups, cliques, and specific friendships. Some children are liked by their group more than others. Some are also less liked and often even rejected by their group. The patterns of friendship and rejection play an important role in determining how the group will react to learning situations, and to various types of group management techniques which teachers might wish to use.

Sociometry is an important tool of peer assessment. Generally it helps the teacher know the popular and loner children and children's groups in the class. Following picture gives an idea of how the sociometry techniques helps teacher understand student interrelations in a class.

**9.7.2 Cumulative Anecdotal Records**

Manorama teacher often uses anecdotal records in assessment. She always carries her small diary and a pen with her, ready to note down significant and interesting details of students' behaviour. One day, she happened to see in her class that the student Bittu gave coloured chalks to Rinku, whose parents could not afford to buy the same. During visit to a bakery with her students, she noticed Fatima asking many questions about baking of biscuits. Manorama teacher noted both the incidences in brief. One day, while going home with friends, Seeta saw a snake and keeping her cool, managed to take the group away to safety. After hearing the story from Seeta, Manorama teacher made a note of Seeta's courage and leadership qualities. Bobby was afraid of dogs, and children often teased him. Manorama teacher came to know of it when she found Bobby beating other children and asked him for the reason. She tried to take away his fear of dog by getting a pet dog in school once a week for a few weeks and gradually Bobby overcame his fear for dogs. She noted this change in Bobby and reported it in the progress book.



### Check Your Progress-4

- Why does Manorama take note of such episodes/ observations? Suppose you are in her place, describe how are you going to use these records?

.....

.....

.....

.....

.....

On different occasions, different types of incidences are noted by the teacher. Such observations, on each child, get accumulated in the teacher's diary. At the end of the year, different notings for every child make a cumulative anecdotal record for that child.

### 9.7.3 Assessment Through Projects

Projects make an integral part of teaching learning EVS. Two aspects of children's learning can be assessed through projects. One is their learning of the EVS content and other is the general EVS objectives like the social skills and values. When children carry out a group survey of a local water body, green area and the birds in the vicinity, the teacher can assess a variety of aspects related to not just the content but also other skills, such as:

- Ability to effectively communicate with local communities
- Presentation quality of the project report
- Quality of participation — Students can be asked questions such as (i) name the group members who often helped each other (ii) name the friends in your group (iii) were you able to resolve differences of opinion during the group work? (iv) did you share the resources?
- Ability to think and analyse processes and relations in real life situation.

### 9.7.4 Extent and Quality of Participation

The learners while being engaged in the process of learning in school plant they undergo variety of situations of participation in discussing with peer and teacher. The learners are of different types from the point of view of their participation. Some are quite active and raise various questions based on their view points and try to formulate knowledge on their own if given chance. The extent of their



**Notes**

quality of participation is least dependent on teacher's presence resulting in increasing retention of knowledge they become rich source of feedback on the quality of learning situations for the teacher even their participations become self-monitored and self-assessed to a great extent.

Second group of learners mostly accepts view point of the teacher obediently accepts whatever comes to it and try to internalise without raising little questions. As a result the scope of feedback gets restricted. They also show the dependency syndrome on teachers resulting in less efficient retention. This provides less scope for effective learning centred assessment.

The third category carries some learners who are not very much interested in the learning process. Under compulsion they are in the class. They find little interest in learning if given chance they prefer to run away from the class. They seldom participate in learning activities and mostly dependent on rote learning. The extent of their mental presence due to their childhood status is very much dependent on teacher's presence in the class resulting in less retention of knowledge. The poor quality of participation provides little scope for learning centred assessment. Here, as a teacher your role must be very specific in creating situations where the extent and quality of learner participation be maintained resulting in effective learning centred assessment.

---

## 9.8 LET US SUM UP

---

Assessment is a critical part of formal teaching learning process. Good assessment is about assessing learning and supporting learners in overcoming shortfalls in her learning process. For assessment to be effective, it must be continuous and comprehensive, reliable, valid, fair and flexible. Positive teacher's outlook towards the process of assessment in the classroom as a tool to support learning can make learning meaningful. A variety of learning centred approaches can help achieve the process of assessment.

You will learn about tools and techniques of assessment in the next part of this unit.

---

## 9.9 MODEL ANSWERS TO CHECK YOUR PROGRESS

---

### Check your progress-1

Answer will be subjective from your experience you have to write the answers

### Check your progress-2

Answer from your own experience appropriate to the situation created





### Check your progress-3

Answers appropriate to the situation

### Check your progress-4

Given your own expert opinion appropriate to the situation

---

## 9.9 SUGGESTED READINGS AND REFERENCES

---

- <http://fcit.usf.edu/assessment/basic/basicc.html>
- <http://www.learningandteaching.info/teaching/assessment.htm>
- [learnline.cdu.edu.au/t4l/teachinglearning/assessmentvet.html](http://learnline.cdu.edu.au/t4l/teachinglearning/assessmentvet.html)
- [www.cal.org/flad/tutorial/reliability/3andvalidity.html](http://www.cal.org/flad/tutorial/reliability/3andvalidity.html) )

---

## 9.10 UNIT-END EXERCISES

---

1. Review the various assessment interactions that you had with your students during last year. Highlight the types of assessment used by you. Critique each one of them for its effectiveness.
2. Share your experiences of assessing a child's learning in a group work situation. What key criteria did you use for the same.