UNIT 4 EVALUATION IN ENVIRONMENTAL STUDIES

Structure

4.1 INTRODUCTION

In Unit 3 different methods and strategies for transacting Environmental Studies Curriculum have been discussed. How would you know that the methods used for a particular lesson have effectively conveyed to the pupils what it was meant to convey? In other words, you may like to know whether objectives of the lesson have been fulfilled. You may also like to know whether your teaching method was effective. You might have also undergone similar experience in your day-to-day teaching. Often you try to make a quick judgement of pupils' learning by asking questions during the course of a particular session. At the end of a unit, a unit test helps you to grade the pupils on the basis of their performance. All these activities may form a part of the evaluation process. There are different ways by which you can evaluate pupil's learning.

In this unit, we shall take up the fundamental aspects of evaluation. These are:

- Why do evaluate?

- What to evaluate?

- How to evaluate?

- When to evaluate?

- How to record the findings of evaluation?

- How to make use of the findings of an evaluation?

Apart from dealing with the above questions we shall also discuss the different tools and techniques of evaluation and the ways to develop some evaluation tools and methods for keeping records of pupil's learning.

4.2 OBJECTIVES

After going through this unit, you should be able to :

- differentiate between assessment and evaluation;

- distinguish between formative and summative evaluation by citing examples of each;

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- describe the meaning of continuous and comprehensive evaluation and identify its various components and techniques;

- apply the techniques of comprehensive and continuous evaluation;

- identify the specific problems related to evaluating process-based objectives in Environmental Studies;

- prepare sample evaluation tools;

- prepare and use simple procedure for recording pupil achievement:

- make use of evaluation data.

4.3 WHY DO WE EVALUATE?

Whenever we undertake any activity we always have in our mind the objectives of doing it. At the end of the activity we often try to find out if the activity was worth- while or not. That is, we try to assess and make value judgement of the activity. In other words, we try to evaluate our actions. Similarly, when you plan any teaching- learning activity you have some objectives in your mind. To plan further learning activities for newer experiences, you must know to what extent your pupils have achieved the objectives set forth in the earlier activity. If your pupils have not achieved these objectives, it will be useless to plan further learning experiences. Can you tell, why ?

To give valid information on how and to what extent the pupils have acquired certain skills/understanding concepts/knowledge of certain content you employ various methods to evaluate the learning. The most common and familiar method to use is a unit test. But evaluation process has many other features. What are these?

Evaluation

- helps you to find out whether your pupils have acquired requisite knowledge of facts, developed understanding of principles and generalizations developed intended skills and application ability.. It provides you with concrete and reliable evidence of pupil's learning.

- provides you with a feedback about your teaching so that you could modify the methods for better results. For example, after teaching a particular lesson you find that majority pupils are not able to give right answers, you should pause and ask yourself, the following questions:

    Did I use the correct method of communication? Were the activities conducted appropriate to the age level of pupils and according to their interest?

    Did I use language appropriate for the age group?

- provides you with the insight into the strengths and weaknesses of your teaching.

- also gives feedback about strengths of individual students as well as their weaknesses.

The process of evaluation helps you to make a value judgement about the teaching-learning process. This judgement is both in terms of growth, development and achievement of pupils and also improving your own teaching style. Hence, we can say that Evaluation is, in fact, a part and parcel of any teaching learning process. It helps to improve the performance of pupils and also your own performance.

To sum up, evaluation is a process that helps you to :

- get information on how and to what extent your pupils have acquired learning;

- obtain feedback on individual child's learning process;

- assess your own teaching;

- identify your strengths and weaknesses and make improvements accordingly;

- plan remedial teaching for slow learners;

- plan enrichment for fast learners.

4.4 WHAT TO EVALUATE?

Three components of Environmental Studies, i.e., **Education about the Environment; education through the environment; and education for the environment** have been given emphasis in organizing curriculum, in developing teaching learning materials and in adopting teaching-learning strategies in the classroom.

a) Learning **about** the environment includes knowledge of components of environment. These are objects, events, phenomena occurring in and around the child. It also includes knowledge of social institutions, their structure an function, local traditions, customs, culture, etc. It includes understanding of various principles, drawing of generalizations related to above aspects of the environment.

b) Learning **through** the environment means using environment and its different components as a means of learning. The environment, therefore, is used as vehicle of learning through its systematic exploration. While observing the different aspects of the environment, the children develop skills of observation, recording of data, classification and grouping of data, collection and sorting of information finding out cause and effect relationship, drawing inferences, etc. They learn to do things themselves by using all sense organs.

c) Learning **for** the environment means using the knowledge and skills to help in improving the environment. It includes feeling of concerns, need to initiate action, voluntary participation in activities related to environment protection.

While planning teaching-learning activities you should see that these aspects of Environmental Studies are taken care of In Unit 2 you have learnt how to formulate objectives of Environmental Studies.

How do we write the specific learning outcomes related to each of the above aspects? Let us look at some examples of intended learning outcomes of a specific unit. Given below are statements of some learning outcomes. Let us examine each of these outcomes to find out elements of similarity and difference. Let us also see which of these outcomes try to assess the teaching-learning processes pertaining to three aspect of Environmental Studies, discussed above.

Unit: Water

Learning Outcomes

- Recall different uses of water,

- State the different sources of water in the locality.

- Identify various sources of water in the locality, which are used for drinking and cooking purposes.

- List the ways in which the source of drinking water gets polluted.

- Devise simple methods by which water can be made safe for drinking and cooking.

- See the relationship between drinking impure/polluted water and occurence of water-borne diseases such as, dysentery, cholera, etc.

- Draw a generalization that drinking polluted water is harmful for health.

- Prepare posters to show how water gets polluted.

- List community actions that could prevent pollution of water sources, examples-poster campaign, door-to-door publicity drama/role play.

- If in a village, approach the Gram Panchayat, the leader of the local body and discuss with her the ways in which drinking water can be made safe.

The above statement of objectives covers all the three aspects, i.e., to know and to feel concern and to take community action. Technically they belong to three separate areas of learning or domains. These three domains of learning have been discussed in detail in Unit 2. You as a teacher need to know what outward behaviour of the child gives you indication that she has acquired the objectives related to these three domains.

Once again read carefully the outcomes stated in the example discussed above. Group these outcomes into cognitive, psychomotor and affective domains. To assess these outcomes it is important for you to know the overall behaviour of pupils; which could reflect whether she has achieved these or not.

Thus, you have seen that to evaluate pupil's learning achievement it is essential to break up the broad objectives into simple outcomes specifying the assessable behaviours. **However, all learning outcomes cannot be broken up into such quantifiable forms, which are tangible to assessment**. For broad parameters, action verbs that might help you to list the objectives of cognitive domain are:

- recall;

- recognize; ;

- state/define;

- distinguish;

- compare and contrast;

- identify;

- generalize;

- cite example;

- infer, etc.

The objectives of psychomotor domain have to do with manipulative skills. These skills may range from making simple drawings to finding measurements and drawing to scale. For evaluating objectives of psychomotor domain also, the learning outcomes can be stated in terms of specific assessable behaviour. The objectives of affective domain have to deal with feelings, concern and other emotions. It also deals with child's interest's attitudes and values. Since **Environmental Studies is a value- oriented education, it is all the more necessary to evaluate this aspect of learning**. The action verbs you can consider using are: volunteer, express freely, choose freely, do willingly and respond spontaneously etc. As stated earlier, the objectives expressed in behavioural terms

are for the convenience and clarity of the teachers and need not be overstressed all the time. Before we proceed further how about attempting the 'Check Your Progress' exercise given below.

Che:'. Your Progress

Notes: a) Write your answers in the space given below.

b) Compare your answers with the one given at the end of the unit.

1. Mark "T" for true statement and "F" for false.

   i) Evaluation provides us with concrete and reliable evidence of pupils learning. (T/F)

   ii) Evaluation provides us feedback about our teaching and not weakness of pupils. (T/F)

   iii) Evaluation provides us feedback about the activity we perform for teaching-learning. (T/F)

   iv) Feedback obtained by evaluation can be used for improvement of teaching-learning method. (T/F)

2. What are the three components of Environmental Studies?

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3. Write two points which we should remember while deciding what to evaluate?

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4.5 WHEN TO EVALUATE AND THE TYPES OF EVALUATION

For deciding on the design of evaluation, it would be useful for you to ask yourself the following questions:

- When should I evaluate my pupils?

- What is my objective for evaluation? Is it for grading each child? Or is it to find out their learning difficulties?

- Should I evaluate the class as a whole and compare their performance or evaluate in groups to assess the growth and development of each child?

- How much of the learning is to be evaluated and how often?

- How shall I keep a record of evaluation?

In our educational system we often give test and resort to two types of evaluation. One type of evaluation is school-based and conducted by the teacher. It is called internal assessment. Another type of evaluation is generally conducted by an outside agency. This is called the external examination that generally means to most of you an examination or a test. At the primary stage in many states of our country there is no external examination. The evaluation of pupils is done by the teacher as a part of her day-to-day teaching. The purpose of internal assessment is to improve the levels of achievement.

This type of assessment covers both scholastic and non-scholastic aspect of pupil's achievement. It is a continuous informal part of the total teaching-learning programme.

Depending on what and why you want to evaluate the internal mode of evaluation varies. The most familiar mode of internal assessment used by any classroom teaching is a unit test. Here, you evaluate pupil's learning after completion of a unit. **A unit test** is generally a paper-pencil test. It helps you to test mostly the knowledge or cognitive aspect of pupil's learning. In this case evaluation is done after completion of a certain unit. Such type of evaluation is called **Summative Evaluation**. Sometimes a unit is very long, divided into sub-units. A series of tests are conducted, that is, after completion of each sub-unit at short intervals of time. Periodicity of pupil evaluation thus varies. When evaluation is built into the teaching-learning process and provides you with a continuous feedback about pupil's progress such type of evaluation is called **Formative Evaluation**. It helps you to diagnose the strengths and weaknesses of your pupils. It also helps to make necessary modifications in your teaching techniques.

Formative evaluation is more than giving paper-pencil test to evaluate cognitive objectives. Through continuous built-in evaluation you can make sure of pupil's growth and development in a continuous manner. You can develop a number of different types of tools to assess various aspects of pupils' growth and development. For example, before you plan a new lesson you would like to know whether pupils have pre-requisite knowledge and skills to master it. For this purpose, you can give a pre-test based on the objective of content concept essential to master the new learning. Such pre-test provides you with benchmark data. That is, it tells you the levels of learning of pupils so that you can plan the future learning experience.

Thus you see that both Formative and Summative Evaluation are part of the total process of evaluation. Unless you have built the techniques of Formative Evaluation into your teaching strategies, you cannot find out about the progress of each individual child. Therefore, we can say that teaching and evaluation are two sides of the same coin. Continuous process of assessing progress of each child helps in her growth and development. No backlog of learning or gaps in learning take place. You know that at the primary stage a policy of no detention is followed. That is, a child is automatically promoted from one class to another. Unless you ensure that each child has mastered the levels of learning for that class, she would have great difficulty in understanding what is intended for the next class. As a result she may even drop out. Often "no-detention is interpreted as no-evaluation". Hence NPE (1986) has emphasized continuous and comprehensive evaluation. What does this mean? .

Ideally, formative evaluation discussed in the earlier section is continuous and comprehensive. But in practice often only certain cognitive components, i.e., knowledge of facts are evaluated and all other domains such as psychomotor and affective objectives are left out. Comprehensive means the evaluation procedure should assess all the three cognitive, psychomotor and affective domains as well. In both scholastic and non-scholastic areas you know that all learning take place in a sequential manner - from simple to complex. Unless simple tasks are mastered,

next level cannot be learnt. Thus evaluation has to be continuous. The emphasis should be on mastery of basic skills (Science-processes) and desirable values and desirable attitudes.

The development of understanding in environmental science is dependent on the ability to carry out process skills in a scientific manner. What are process skills? Process skills are described various ways, all of which suffer from the problem of trying to draw boundaries round things which are not separable from each other. It is important to note that these aspects of practice which we call process skills are not single skills but conglomerates of coherent skills. These can be listed as observing hypothesising, predicting investigating, interpreting, findings and drawing conclusions. and communicating, etc. The interconnectedness of the skills is a feature which needs to be borne in mind.

At the general level, the teacher's role in providing children with experiences which help them develop process skills has these five aspects:

- Providing opportunity to use process skills in the exploration of materials and phenomena at first hand;

- Providing opportunity for discussion in small groups and as a whole class; tasks which are designed to require children to share their ideas to listen to others, to explain and defend their ideas will necessarily involve them in thinking through what they have done;

- Listening to their talk and studying their products to find out and processes that have been used in forming their ideas;

- Encouraging critical review of how activities have been carried out;

- Providing access to the techniques needed for advancing skills. In order to increase the accuracy of observation and measurement, for example the use of instruments needs to be taught as the need for them arises;

Check Your Progress

Notes: a) Write your answers in the space given below.

b) Compare your answers with the one given at the end of the unit.

4. Write one purpose of internal assessment.

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5. What is a unit test?

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6. What is the meaning of comprehensive evaluation?

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7. List the four fundamental processes that are involved in acquiring process skills.

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4.6 HOW TO EVALUATE: TOOLS AND TECHNIQUES OF EVALUATION

Once you have selected the design of evaluation, you must select appropriate tools. The tools should relate to objectives/learning outcomes to be evaluated. The objectives/ learning outcomes are also the starting point for designing teaching-learning activities. Therefore, let us see in what way teaching learning situation/ activity is different from evaluation. The objectives can be attained in many ways. It would vary from child to child and would depend on his/her background. However, main features of the process of attaining objectives at primary stage can be broadly categorized as:

- one objective can be attained by planning and using one activity.

- one objective can be attained by planning different activities.

- one activity can be so planned and managed that more than one objective is attained.

- There is a hierarchy within a set of objectives from simple to complex. Each of these requires different activity.

I. One objective can be attained by one activity

Objective : Pupil estimates and measures the area of a classroom.

Activity : Pupil uses a variety of units to estimate the length and breadth of the classroom, such as, hand span, pace, etc. Then they measure the actual length and breadth by using measuring tape. Next they compare the two measurements. In this way they can find out the area of the classroom. (The same activity can be varied to help pupil understand the need for standard unit of measurement).

Evaluation: Pupils may be asked to estimate and measure the length and breadth of their respective note books to find out the areas of the same. There can be many variations of this example.

The idea is to show that the teaching-learning activity as well as evaluation is based on active participation of pupils. The evaluation is performance based and is directly related to the learning outcome intended to be achieved.

II. One objective can be attained by planning and using a variety of activities

Objective: Pupil describes the parts of a flower.

Activity 1 : Divide the class into five or six groups. Give every group a typical flower. Ask children to identify and name each part of the flower.

Activity 2 : Display to the pupils a chart of typical flowers.

Activity 3 : Show the pupils a model of a flower. Ask them to identify its parts and name each part.

Evaluation: i) Show the pupils some flowers, which should be different from the one, used for the teaching session. Ask the pupils to describe these flowers.

ii) Ask the pupils to draw parts of a flower.

III. One Activity can be so planned and managed that more than one objective is attained

Activity: Visit to a Zoo.

Objectives:

● Pupils observe and record the major external features of animals that live in polar region, in hot desert and other climatic regions of the world.

● Pupils find out similarities and differences in the external features of animals of different climatic regions.

Evaluation

i) Pupils make generalizations about the effects of climate on animal features.

ii) Pupils can categorise various animals (live or pictures) according to different climatic zones. based on the specialities of their external features.

iii) Pupils make prediction on the effect of sudden change in climate condition on animals.

(Note: The above is only an example. In fact, one visit to a zoo can be planned well in advance to include possible learning experiences that a teacher intends to plan in future. Visits are expensive and time consuming. Hence, need to be used and planned carefully).

4.7 SOME SAMPLE EVALUATION TOOLS

A variety of tools and techniques are used for evaluating pupil's academic growth and development. Under the scheme of comprehensive and continuous evaluation, it is expected that all the aspects of pupils learning will be evaluated, recorded and monitored. Therefore, you must use a variety of tools and techniques. These can be grouped in two broad categories:

● Those tools which assess the academic achievement. Example, oral test, written test, performance based tests, etc.

● Those tools which evaluate the development of attitudes, value, interest, skills, etc. Examples-observation, inquiry, projective techniques and socio-metric methods.

At the primary stage in the case of Environmental Studies your emphasis on evaluation could be governed by the objectives discussed earlier. Hence, the tools used should also be very simple. The most common tools that can be used are:

● Oral questioning

● Paper-Pencil Test

- Behaviour Tally-Chart

- Observation Check List

- Rating Scale.

Tools for Evaluating Academic Achievement

Oral Questioning: Oral test is a commonly used tool, particularly in cases where the pupils are not able to express themselves in writing. Oral questioning is advantageous in building feedback mechanism in a teaching-learning situation. It is essential, however, that the pupils get immediate feedback. It is also necessary to provide remedial measures.

Paper-Pencil Test: This is the most commonly used tool. These are well suited for evaluating knowledge, understanding, application and some drawing and tracing skills. These have following disadvantages:

- All objectives cannot be tested by paper-pencil test.

- It creates a formal test situation in the classroom.

- Additionally, it requires reading and writing skills on the part of the pupils.

The objective based objective type questions are not commonly used items in a paper- pencil or written test. Some examples of these types of items are:

- Completion type

- True and false

- Multiple choice

- Matching

- Essay writing

You are already familiar with completion type items that is, fill in the blanks, and the True and False items, Given below are some examples of Multiple choice and Matching type items.

1. Multiple Choice Questions

Some examples of multiple choice questions that can used in the classroom. Questions Nos. 1-10 below have four alternatives each. Only one of them is correct. Put a tick ($\sqrt{}$) against the most correct answer.

1. Which of the following activities contribute least to the: pollution?

 a) Throwing garbage in the river

 b) Digging composite pit for garbage disposal

 c) Burring of garbage

 d) Dumping garbage in a vacant plot.

2. Which of the following sources of energy are renewable?

 a) Coal

 b) Wind

 c) Petroleum

 d) Nuclear

3. Which of the following sources of energy contribute least to the environmental pollution?

   a) Solar energy

   b) Thermal energy

   c) Petroleum

   d) Nuclear

4. Which of the following causes pollution of water?

   a) Planting trees along the bank of the river.

   b) Making embankments along the banks of the river

   c) Building factories along the bank of the river,

   d) Making dame on the river.

5. Besides water and energy from the Sun, what is the other thing required for photosynthesis by green plants?

   a) Hydrogen gas

   b) Oxygen gas

   c) Nitrogen gas

   d) Carbon dioxide

6. When you burn coal, which of the following gases are produced?

   a) Oxygen and Nitrogen

   b) Nitrogen and Carbon dioxide

   c) Carbon dioxide and Oxygen

   d) None of the above.

7. In Assam, the Kaziranga National Park is the home of Indian Rhinoceros. These animals are protected here because:

   a) these are flesh eating animals and they also destroy the forest

   b) these are used for decoration purposes

   c) these are hunted particularly for their homes.

   d) these are plant-eating animals and they destroy forest.

8. Main sources of Air Pollution in big cities are:

   a) Smoke from homes

   b) Smoke from chimnies of bakeries

   c) Exhaust from motor vehicles

   d) Exhaust from industries.

9. Which of the following was main source of energy used for transport in ancient times?

   a) Wind energy from air

b) Muscular energy of animals

c) Electrical energy from water

d) Nuclear energy from atom.

10. Which of the following activities cause harm to the environment in the long run?

a) Playing of loud music

b) Planting more trees

c) Putting some fish in a pond

d) Cutting a forest

2. Matching Type

1. Match the items on the right (Column A) with those of the left (Column B) placing the correct letter within the space provided.

Column A		Column B		
1. Primary Consumer		a) Green Plants	( )
2. Secondary Consumer		b) Bacteria	( )
3. Decomposer		c) Deer	( )
4. Primary Producer		d) Snake	( )
		e) Tiger	( )

2. Some developmental aspects are given in Column A and their effects in column B. Match Column A with Column B by placing the right letter in the blank space after Column A.

Column A

1. Network of Road

2. Network of Railway

3. Availability of Airways

4. Availability of Telecommunication

5. Availability of Postal Service

Column B

a) Bringing large number of commuters and freights into the city.

b) Bringing live sport events occurring outside into your home TV.

c) Bringing fresh vegetables and milk at your door-step.

d) Bringing greetings and messages from far off lands.

e) Reaching difficult terrains such as snow bound region of the country.

3. In Column A are given the causes, and in Column B the effects of pollution:, Match Column A with B.

Column A	Column B
a) Industrial wastes from factories thrown into river.	a) severe respiratory diseases.
b) Spraying of DDT on food grains and fruits.	b) growth of water plants.
c) Smoke or SO_2 from thermal power station	c) large scale death of fresh water animals
d) Fine particles from the stone crushing factories.	d) irritation and severe problems of eye.

4. Over-exploitation of natural resource are given in Column A and their resultant bad effects on environment in Column B. Match Column A with B.

Column A	Column B
a) Over-mining for iron ore	1) Extinction of species
b) Senseless killing of animals	2) deforestation
c) Indiscriminate felling of trees	3) exhausting of minerals
	4) increased steel production

III. Essay Type

1. What are the main causes of Environment Pollution? Give two examples each of the cause of Water Pollution and Air Pollution.

2. In what ways does the industry pollute the environment? Discuss.

3. What will happen if we do not stop the indiscriminate destruction of Mother Nature? Elaborate.

4. How can a balance between progress and destruction be achieved? Give your suggestion.

Tools for Evaluating Attitudes, Interest and Manipulative Skills

Observation is the simplest tool for assessing these outcomes. However, they require training for collecting information and interpreting the same for decision making. Use of any observational tool requires that the following conditions be fulfilled:

- Define setting

- Purposive stimulus

- Definition of the behaviour to be observed

- Deration of pupil-teacher interaction

- Systematic recording

- Objective interpretation

Environmental Studies teaching-learning is based on active participation of pupils in activities. Therefore, the teacher is greatly facilitated in collecting information through observation. Whenever children are involved in an activity you can observe their behaviour such as cooperativeness, willingness, interest, motivation, etc. For proper recording of these behaviours you can develop **behaviour tally chart**

where type of behaviour is shown and the number of times such behaviour occurs is tallied within a period of time. Given below is an example of a Behaviour Tally Chart

Behaviour Tally Chart

Name of Pupil ....

Class..

S.No.	Behaviour	Tally	
		Yes	No
1.	Comes to the School regularly.		
2.	Pays attention to the instructions and follows them.		
3.	Shares materials		
4.	Shows willingness to work in group		
5.	Asks meaningful questions		
6.	Records observations systematically		
7.	Takes part in group discussions		

Another example of observation as a technique is the **inventory**. An example a **Health practice inventory** is given below:

Name of Pupil ....

Class..

S.No.	Health Practice	Frequency
1.	Comes to school regularly, is well rested	Often, Sometimes Never.
2.	Keeps his face, ears, neck clean and hair well combed.	Often, Sometimes Never.
3.	Has clean hands, trimmed nails and clean teeth.	Often, Sometimes Never.
4.	Wears neat and clean clothes.	Often, Sometimes Never.
5.	Covers mouth while coughing and sneezing.	Often, Sometimes Never
6.	Washes hands after visiting toilets, and before handling food and water.	Often, Sometimes Never.
7.	Keeps personal possessions in order and clean.	Often, Sometimes Never.
8.	Maintains good posture while sitting, standing, walking or doing any other work.	Often, Sometimes Never.
9.	Participates in organized games.	Often, Sometimes Never.
10.	Follows the teacher	Often, Sometimes Never.
11.	Displays cheerfulness	Often, Sometimes Never.
12.	Adjusts well with others.	Often, Sometimes Never.

Note: After sometime these practices become a part of the child's personality, therefore some new practices can be added to the list. This inventory can be used for all classes. Health habits develop over a period of time. Therefore, this may be regularly observed and followed in all children from classes I-V.

Another sample of Behaviour Tally Chart is given below:

Behaviour Tally Chart

Name of Pupil ....

Class ....

S.No.	Behaviour	Tally	
		Yes	No
1.	Accepts and performs assigns role in a group activity.		
2.	Makes careful observation of the object under study.		
3.	Makes precise measurement and record of what is observed.		
4.	Follows instructions of the group leader.		
5.	Cooperates with other members of the group.		
6.	Asks questions about things that she does not understand.		
7.	Make attempts to find out answer to the queries by consulting books/asking elders.		
8.	Reaches conclusion based on the data at hand.		

Rating Scale

Name of the Pupil.................................Date......................Class...................

S.No.	Behaviour	Rating					
		A	B	C	D	E	N/O
1.	Washes hands with safe water before handling food.						
2.	Uses clean utensils for keeping food.						
3.	Keeps food items covered.						
4.	Does not eat food items exposed to dust and flies.						
5.	Washes hands before and after meals.						

Rating : A - Always   B - Often   C- Sometimes   D - Rarely
              E - Never

Some suggestions for implementing effective programme of evaluation

- Recognize individual difference among pupils. Try as far as possible, to meet the individual needs of pupils. Look for the disparity in home background of pupils. If possible, try to supplement instruction in case of first generation learners.

- Do not depend on periodic and terminal examination. Resort to continuous evaluation inside and outside the classroom based on observation. Keep a summary record of observation so as to arrive at scientific judgement on pupil's progress. This will help plan further learning experience.

Check Your Progress

Notes: a) Write your answers in the space given below.

b) Compare your answers with the one given at the end of the unit.

8. How would you differentiate assessment from evaluation? Justify your answer.

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9. What is Formative Evaluation?

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10. What is Summative Evaluation?

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11. Define Continuous and Comprehensive Evaluation and write down their various components.

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12. What are the various techniques of Comprehensive and Continuous Evaluation?

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13. Prepare ten multiple choice type questions from unit of EVS test.

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4.8 LET US SUM UP

1. In this unit, you have read about the evaluation of pupil's learning. Evaluation is needed to assess and make value judgement of the activity. It provides you with concrete and reliable evidence of pupil's learning.

2. Learning for the environment means using the knowledge and skills to help in improving the environment. It includes feeling of concerns, need to initiate action, voluntary participation in activities related to environmental protection.

3. School-based evaluation or internal assessment is best for both teachers and pupils. To design the evaluation you must select appropriate tools. The tools should be related to learning outcomes. A variety of tools are used for evaluating pupil's academic achievement and development like oral test, written test, observation and projective techniques. Hence, the tools used should be very simple.

5. The most common tools that can be used at primary stage are as follows:

    ● oral questioning

    ● paper-pencil pupil achievement test

    ● behaviour tally-chart

    ● observation check list

    ● rating scale

Oral questioning tools is one of the best tools for the pupils because through this, pupils can develop their expressing ability. Another way, it provides immediate feedback.

5. Paper-pencil test is a commonly used tool which helps us in evaluating knowledge, understanding, application, drawing and tracing skills of the school going children specially at the primary stage. Through this tool we can use a variety of questions for evaluating them, such as true and false, multiple choice, matching, essay type, etc.

6. Though observation, behaviour tally chart and rating scales are other used tools for evaluating the pupil's achievement, but in these tools teacher's role is more important than children. Teacher must be very careful about this.

ANSWERS TO CHECK YOUR PROGRESS

1. i) True,   ii) False,   iii) True,   iv) True

2. Education about the environment, education through the environment and education for the environment - you may elaborate further.

3. i) The main thrust of the curriculum, and ii) specific learning outcomes.

4. To improve the levels of pupil achievement.

5. Evaluation done after completion of a unit, the content is broken into units.

6. Comprehensive evaluation means that the evaluation procedure should assess the cognitive, psychomotor and affective dominas as well.

7. Open ended.

8. Assessment is for a limited purpose whereas evaluation is more comprehensive. Elaborate further on this.

9. Continuous comprehensive in built in the teaching-learning process.

10. After completing a unit towards the end, more formal.

11. Oral tests, written (multiple choice, objective) observation, tally charts etc.

12. Open ended.

13. Open ended.