



UNIT 4 CURRICULAR PROVISIONS OF EVS AT THE PRIMARY STAGE

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4.0 INTRODUCTION

As you have read in the earlier units the word Environment includes everything around us. The content of environment permeates all subjects and disciplines.



You have also seen that the National Curriculum Framework 2005 has re-emphasised the recommendation of NCF 2000 that Environmental Studies should be taught as an integrated course for the entire primary stage.

Hence the syllabus of EVS based on the NCF 2005 is designed to provide an integrated perspective that draws upon insights from sciences, social sciences and environmental education. It is important to be acquainted the organisation of the syllabus in order to better understand and use the text books.

You may have seen, and may be teaching EVS textbooks, in classes 3, 4, and 5. You may have concerns, questions, difficulties, as well as positive experiences in using the textbooks.

This unit will help to address some of your concerns and doubts, and also to understand, and therefore, use the textbooks more effectively to achieve the objectives of EVS as related in the NCF 2005.

4.1 LEARNING OBJECTIVES

On the completion of this unit you should be able to:

- explain the reflection of the objectives of NCF 2005 in the EVS syllabus.
- narrate the rationale of the thematic approach in the syllabus.
- describe the process and the rationale of the organisation of the content in EVS textbooks.
- discuss the variety of features of the textbooks.
- use the textbooks as an effective teaching-learning tool/aid
- discuss the process of going beyond textbooks and classroom to meet the challenges of curricular provisions.

4.2 NCF 2005: OBJECTIVES OF ENVIRONMENTAL STUDIES

As you have read in the previous units, the present EVS syllabus is designed to forge an integrated perspective for the primary stage of schooling that draws upon insights from Sciences, Social Science, and Environmental Education.

The National Curriculum Framework 2005 indicates objectives of teaching science and social studies at the primary stage. These have been discussed in unit-2. When you read examine the list you will realise and find that it covers not just the scholastic, but also a range of other behaviours and skills which do not conventionally fit into a single “subject” or “discipline”. You will also note that there is development of a number of co-scholastic areas like abilities, attitudes and values.



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These objectives are reflected in the curricular provisions and organisation of the NCERT syllabus for EVS.

4.2.1 From NCF Objectives to the Syllabus

Environmental Studies at the primary stage is perceived as an approach to learning of environment in its totality without being burdened by any disciplinary considerations.

The NCERT syllabus attempts to reflect the above realisation and understanding in a number of ways:

- The syllabus is organised not as a list of “topics” but as “themes”. And, each theme has a few sub-themes.
- The sub-themes are organised in a spiral and progressive manner with emphasis on integration.
- The sub-themes allow for a connected and inter-related understanding to develop.
- The themes in the syllabus do not begin by listing key concepts, or rather key questions which allow each child to think, apply, and develop his/her own understanding and articulate their own learning’s and ideas.
- The thematic approach helps to bring in perspectives from different subjects and disciplines.
- The activities are only suggestive, and can be easily adapted to suit the local situations.

4.2.2 Thematic Approach in the Syllabus

Recall from Unit 1 that a child’s understanding of ‘environment’ begins with us (and our inner-self) and grows in an ever expanding series of concentric circles to include family, neighbourhood, school, community.

The thematic structuring of the content is visualised to help the child locate himself/ herself in a larger context – as part of a community, the country, etc. This thematic organisation also brings in a concept of mutual dependence of ‘self’ with ‘others’ and natural environment, providing the child with a holistic perspective of the environment and the Planet Earth which we share with all other living organisms that is plants, animals and micro-organisms, interdependent and interrelatedness of all living things and life support systems.

A significant feature of the syllabus is that it is ‘integrated’ in nature. It proposes themes which allow for a connected and inter-related understanding of different aspects of different environment – natural and soci-cultural to develop.



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The syllabus for classes III, IV, V is woven around six common themes.

1. Family and Friends
 - 1.1 Relationships
 - 1.2 Work and Plan
 - 1.3 Animals
 - 1.4 Plants
2. Food
3. Shelter
4. Water
5. Travel
6. Things We Make and Do

(Please refer NCF 2005 syllabus for EVS given in **Unit-3**)

The content of the themes is derived from the child's own experiences rather than a prescriptive body of knowledge or subject. These are presented based on the way a child encounters these in daily life. Starting with these personal experiences the child easily "connects" and builds links with theoretical knowledge.

Thus the child's understanding of 'Environment' grows in concentric circles.

The same themes are carried through the three years, moving outwards from the immediate 'self' of the child, to include his/her family, the neighbourhood, the locality, and the community. Thus the child begins with an exploration of the familiar, and expands his/her horizons as he/she grows. At the same time the child is also able to locate herself in different contexts – as a family member, a member of the school community, and future as a citizen of the town/city and country.

Given below is a sample of how the spiral of theme and sub-themes builds over the three years.

Theme - Family and Friends

Sub-Theme - Work and Play

Class III	Class IV	Class V
Work Around Me <ul style="list-style-type: none"> • Different occupations, idea of working time and leisure time; work inside and outside homes - gender, age, caste, economic etc aspects. 	Fun and Fights at Play <ul style="list-style-type: none"> • Different games at home and school. • Play as a way of social negotiation^ rules of each game; fights and the need 	<ul style="list-style-type: none"> • Team Games - Your Heroes • Types of games/sports, importance of team spirit in games, gender stereotyping.

Working Children

- Sensitise children to other children who work at home and outside - not as a result of family neglect but more as a systemic cause.
- Important that all children go to school.
- A sense of how child labour existed in other countries before all children began to go to good common schools.

Games We Play

- Leisure games in school and outside, past and present; for some play is work

to negotiate - ideas of fair play.

- Restrictions on play; playmates from children of different gender or class/caste backgrounds.

How They Learnt Their Skills

- Different occupations in the local region/country.
- Who does what work?
- Gender and work.

Fun at the Fair/Circus

- Ways of recreation.

- Some idea of other countries and national teams.
- Gender, class stereotyping in play.

Local Games, Martial Arts

- Local and traditional martial art forms/games. Typical practice routines; teachers; changing patterns of local games.
- Changing nature of leisure.

Blow Hot - Blow Cold

- Our breathing - estimates of different rates; chest expansion and contraction in the child's body while exhaling and inhaling; my breath - hot and humid; tacit understanding of cooling by blowing and helping a fire to burn.

Clean Work- Dirty Work

- Dignity of Labour
- Dependence of society on such essential services.
- Choice of work as a societal value.

As illustrated above, the NCERT syllabus follows a suggestive format rather than a prescriptive one. It indicates key themes and sub-themes along with their possible connections. It consciously begins with key questions rather than key concepts which can trigger the child's thinking in new directions and provide scaffolding to his/her learning process (NCERT Syllabus p91).

Integrating 'Subjects' or Forging a New Understanding?

What do we understand by General Science and Social Sciences? When we think of these 'subjects' in school we clearly have in mind some body of knowledge and also typical ways of acquiring that knowledge that we associate with each of them. These school subjects have evolved through their own



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complicated histories and are today quite different from the way sciences or social sciences are practised in the real world of specialised disciplines, such as physics, zoology, chemistry, molecular biology, history, sociology, geography, economics, political science, etc. So what happens when groups of specialists sit down to discuss what should be taught at the primary level? They naturally tend to think of 'topics' that have traditionally served as the bases of their own different

disciplines. Thus biologists (if we can use that term to somehow bring together botanists and zoologists!) would naturally propose a study of plants, animals or the human body, whereas physicists would think of sound, light, force and work, while chemists would propose studying forms of matter, properties of substances, etc. Add to this the different disciplines under the rubric of Social Sciences and we soon end up with a confounding platter of topics, which are not necessarily 'integratable', and are neither close to the way the child relates to her world.

Most primary school curricula working on an integrated approach therefore do not proceed with lists of 'topics' from different 'subjects' but instead propose 'themes' that allow for a connected and inter-related understanding to develop. This requires moving beyond traditional boundaries of disciplines and looking at priorities in a shared way. This approach has been followed for the present syllabus. Several themes were discussed to see what possibilities each of them offers, to bring together insights from different disciplines, in an interconnected manner that is basically child centered. For each theme a web of possible connections was drawn up, of concepts and skills, to explore how that may be developed over the primary years. Specialists from several different disciplines of sciences, social sciences, pedagogy, gender studies, child development, curriculum studies, etc. Discussed the possibilities of the proposed themes, pointed out the gaps, and debated on the priorities for a child centered approach. It is clear that there is no single format that can offer a uniquely satisfactory elaboration of ideas for primary school and this syllabus too makes no such claim.

This is not a prescriptive but instead a suggestive format, which indicates the key themes and sub-themes along with their possible connections. It consciously begins with *key questions* rather than key concepts, which can trigger the child's thinking in new directions and provide scaffolding to her learning process. This format is meant to help textbook writers, teachers and parents to appreciate the immense possibilities and the depth of children's understanding. It also indicates how adults can stimulate and actively support children's learning, rather than restrict or throttle it, as often happens when children are forced to memorise information they just cannot understand.



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The table given below illustrates the relationship between EVS objectives, its contents and transaction.

Theme: **Shelter** –EVS III (Ref: *Environmental Studies: NCERT, www.ncert.nic.in, pdf*))

Broad Objective	Theme	Appropriate questions	Key concepts/ issues	Suggested resources	Suggested activities
To train children to locate and comprehend relationships between the natural, social and cultural environment	Shelter	Mapping my neighbourhood, How big is your school? What kind of a building is it? Please draw a picture of your school and classroom. Do you know your way around your neighbourhood? Please explain to some one the way to reach the post office or the bus stand from your house.	Neighbourhood, mapping and representation in two dimensions and directions.	Survey of different areas of the school, survey of the neighbourhood.	Estimating distances, marking locations of places and drawing/ mapping from different perspectives, drawing a map of the route from your house to the nearest shop.

Check Your Progress-1

- a. Fill in the blanks to complete the following objectives of EVS as stated in NCF 2005.
- To train children to locate and comprehend _____ between the natural and socio- cultural environment (relationship, interconnection, association)
 - To nurture the _____ and _____ of the child particularly in relation to the natural environment including artefacts and people. (curiosity, interest, apathy) (creativity, intelligence, aptitude)
 - To develop an _____ about environmental issues (awareness, alertness, attentiveness)
 - To engage the child in exploratory and _____ activities to acquire basic cognitive and psychomotor skills through observation, classification, inference, etc. (hands-on, day-to-day, on-the-job)



Read and Reflect

- What is the meaning of “theme”? How does it differ from “topic”?
- Why do you think the theme of Family and Friends includes the sub-theme Work and Play?
- Why do you think the sub-theme of Work and Play includes issues of dignity of labour, and working children?

4.3 FROM THE SYLLABUS TO THE TEXTBOOKS

The EVS textbooks for classes III, IV and V have been developed based on the framework provided by the NCERT syllabus 2005 and the overall philosophy and approach of the NCF 2005.

Conventionally textbooks present a certain body of information in an organised manner with a thrust on ‘imparting’ it to the students. For teachers the textbook becomes a tool for planning and structuring their instruction to teach the contents. The teacher prepares a lesson plan and conducts the lesson.

- **Do you agree with this?**
- **Is this the process you follow in your teaching of different subjects?**

While this is traditionally the role of the textbook and the teacher, the NCF 2005 emphasises that learners formulate their own knowledge by connecting new ideas to existing ones on the basis of material/activities (experiences). In this context, the textbook is seen not as the “be all and end all” tool in the hands of the teacher, but rather one of the sources that support the creation of knowledge—a beginning in the process of teaching and learning.

The challenge in developing such textbooks was to organise and present the contents in a way that look at the environment as a totality and avoid ‘compartmentalising’ it into ‘subjects’ like science and social science.

The approach was to achieve an integration of the different aspects of a theme, and provide space for each child to explore and discover the world around.

- **Have you used the new EVS textbooks (based on NCF 2005)?** How are the contents organised in your EVS books?
- **How are these textbooks different?**

The following section shares the understanding which has shaped the content and format of the EVS textbooks and suggests how to best use the textbook as a tool in your new role as a facilitator of learning.



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4.4 THE EVS TEXTBOOKS

The selection and organisation of the content of the textbooks, the treatment of the themes, and the methodologies built-in, all come together to provide space for each child to become an active participant in looking around, exploring and discovering.

This section discusses some key features of the design and structure of the textbooks.

4.4.1 The Title

‘Looking Around’ is the title of the EVS textbooks for **classes 3, 4, and 5**.

- **What does this title communicate?**
- **How do you think that this title reflects the objectives of Environmental Education and the spirit of NCF 2005?**

‘Looking Around’ indicates the perspective that identifies with the process of teaching and learning about the environment. It assumes that the surroundings provide ample scope for observing, experiencing and connecting. It underlines that we can learn much by interacting with the world around us. It invites the child to become an active participant in look around themselves, exploring and discovering.

In the Classroom

You could begin the year by spending some time actually discussing the title of the book with the students. This will provide a good introduction to the concept of environment (as discussed in Unit 1) and how every one of us can learn about the environment from our own surroundings.

4.4.2 The Selection and Organisation of Content

Just as the title of the books has moved away from the “subject” label, the organisation of content of the book also moves away from the traditional “topics”.

The syllabus for Class III to V is woven around the six interconnected themes. These themes provide opportunity for introducing aspects of science, social science and environmental education. As you know the six themes are:

1. Family and Friends-Relationships, work and play, Animals and Plants
2. Food
3. Shelter



4. Water
5. Travel
6. Thing We Make and Do

Each theme includes a number of sub-themes that touch upon different dimensions of the theme from the syllabus. These are organised in a cyclical and progressive manner with emphasis on integration.

The contents of the book are not organised thematically in the way that all lessons related to the sub-themes are given as a unit. Rather lessons related to different themes follow one another.

- **Have you already used the textbooks?**
- **How have you organised the sequence of lessons?**
- **As thematic units? As given in the book? In any other way?**

As a Teacher

The thematic organisation of the contents provides the opportunity to cut across subjects and topics. You may, if you feel appropriate, deal with all the lessons under a particular theme as a unit. Or you could go by the sequence of lessons as in the book. What is more important is that you encourage students to make the linkages between lessons, and take opportunities to cross reference, not only to the lessons in the current book, but also the EVS textbook of the previous year. Whichever way you do it, the important thing is to make the links that help consolidate the learning.

4.4.3 Integration

As has been discussed earlier the subject of EVS naturally lends itself to integration – within subjects, across themes, with the world of school and the everyday world.

Besides thematic integration that synergises different subjects, integration is also built in through the different approaches and methods of transaction, assessment, and the ‘values’ being promoted. This supports the belief that when watertight compartments between subjects are broken, it can enrich not just the ‘content’ but also the process and outcomes of teaching and learning.

A young child’s world is organised not as neatly organised bodies of knowledge, but rather it is a body of integrated experience of interacting and making sense of the world around. While organising the revised curriculum and the new textbooks the key concern has been to look at the environment as a totality and avoid approaching it in compartmentalised subjects like different streams of “science” and “social science”. Therefore that concepts that are typically dealt in biology



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like plants, or animals that are studied in zoology, or botany, or which are at the primary stage framed in the categories of 'living and non-living, are introduced not as categories but through the child's familiar experiences and surroundings. For example asking a child to list all the animals, birds, plants that he/she sees around can bring in an integrated perspective that all are part of a larger picture. For the teacher and the students the textbook is one of the means to understand and build on these observations and make their own connections.

The other important feature of the EVS textbooks is the seamless integration of social aspects with pure-science concepts and the multi-dimensional, plural realities of how we live. India being a geographically and culturally vast and diverse country it is important that we learn not only about our own environments, which are familiar to us (which can be the starting point), but also about how different people live, why there are differences, and what are the similarities despite the differences. The themes about Family and Friends (Relationships), Food, Shelter, Water, Travel, the Work We Do, offer ample scope for exposure to, and understanding of diversity. Thus the books aim at integration, and encourage the spirit and process of exploring and discovering the diversity and pluralism in the world around.

4.4.4 The Variety of Formats

The thematic organisation of the syllabus provides scope for using a wide variety of formats of lessons. These include stories, narratives, interviews, diary, news reports, poems, discussion, etc. which draw from, and build upon the child's experiences and perceptions. This is clearly seen in different formats of the lessons in all the three books.

The mix of formats, including the variety of visuals also support the different learning styles of children – some children may be more attracted by the visuals; some may make personal emotive links with the narrative; some may enjoy the challenge provided by the exercises (develop cognitive skills), and some may be attracted by the science/history/geography/language aspects.

The diverse sources of the content, and the variety of formats for presenting the content itself opens up great scope for children's curiosity, vocalisation, empathy, experimentation, exploration and discovery, and free expression.

While going through the lessons, students are automatically introduced to a variety of writing styles and formats. Thus the lessons provide interesting examples, and exercises for language learning. This supports the belief that watertight compartments between subjects can be broken, enriching not just the 'content' but also the 'communication' aspects of teaching and learning.



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As a Teacher

One way to make the lessons more interesting is to share with the children from where and how the ideas of the lesson were developed. This will help to reinforce the idea that learning can happen anywhere from anyone and not only in the class, from textbooks.

Some examples:

Lesson based on real people and their real experiences.

To name a few:

Class IV	Lesson 5	Anita and the Honeybees
	Lesson 26	Defence Officer: Wahida
Class V	Lesson 9	Up You Go!
	Lesson 11	Sunita in Space
	Lesson 20	Whose Forests

You can use the examples to encourage students to share their dreams of what they would like to do when they grow up and to support them to work towards this.

Lessons based on real incidents, real stories

Several lessons draw upon interviews and interactions with ordinary people who in their own way, have achieved something.

Class IV	Lesson 10	Hu Tu Tu, Hu Tu Tu (A Story of Three Sisters)
Class V	Lesson 17	Across the Wall

It would be interesting to tell the students that these lessons had their origin in small news items in the newspapers, or documentary films. The textbook writers actually contacted these people and talked to them and found out their stories.

Lessons based on real places

Class IV	Lesson 1	Going to School
Class IV	Lesson 6	Omana's Journey
Class IV	Lesson 11	The Valley of Flowers
Class IV	Lesson 23	Pochampalli
Class V	Lesson 10	Walls Tell Stories
Class V	Lesson 13	A Shelter So High!



Notes

Read and Reflect

- From the list given above, identify which kinds of lessons in the EVS textbooks that you are using, can provide opportunities for the following:
- These lessons provide opportunity to learn about what motivates people to take on unusual and challenging jobs and occupations.
- These lessons are good opportunities to bring in perspectives of geography and history. This reinforces the concept of EVS as infusing science and social science aspects into an integrated way of understanding one's world.
- These lessons tell us that we can discover and learn a lot from our own elders, neighbours and people that we interact within our daily life. These should be recognised and valued as resources for learning and teaching, the textbook is not the only source of knowledge.
- These lessons provide an opportunity to use maps and other audio-visual supplements, and open up the curiosity and spirit of discovery in the students. The exercises bring in cross-disciplinary aspects, necessitating use of mathematics, history, and language.

4.4.5 Variety of Teaching-Learning Activities

Learning-by-doing, or activity approach is integral to the process of experiential learning. Such learning is more fun for the learner and teaching more fun for the teacher. Based on this premise the EVS textbooks include a wide range of teaching-learning methodologies to involve children in relating to their immediate environment (from family to community; natural to human-made).

The activities are integrated into the lessons rather than placed at the end of the lessons. These are seen as integral to the process of understanding the lesson, and building links with each one's personal context and experience.

The suggested activities help develop a range of skills including observation, recording, written and oral expression, classifying and categorising, psychomotor skills as well as creative and aesthetic sensibilities.

The objective of the activities and exercises is not so much to evaluate the students' knowledge but to provide an opportunity to students to express themselves. The students should be given enough time to work on the activities and exercises they should not be rushed as each student learns at his/her own pace.

The activities can serve not only as learning tools but also tools for evaluation as well. They provide opportunities for group and cooperative learning. They also help to sensitise learners to diversity, as well as similarities within the social and cultural context.



In the Classroom

You are welcome to innovate, develop and use teaching aids or other material/activities/exercises which fulfill the aim of the lessons. You can also encourage students to create and develop material to enrich and support the lessons.

*Sample of Range of Activities

- | | | |
|----------------|----------------------|---------------------------------|
| a. Puzzles | Class III p 54 | Match Birds and Food |
| | Class IV p 19 | Colour and Find |
| b. Games | Class III p 43 | Dumb Charades |
| | Class III p 156-157 | Web of Life |
| c. Collections | Class III p 112 | Stamp Collection |
| d. Craft | Class III p 56, p 75 | Origami, Toy Train |
| e. Art | Class III p 60, 61 | Drawing pictures & Line drawing |
| f. Cooking | Class III p 65 | Make and Eat |
| g. Map Reading | Class III p 152 | Symbols |
| | Class V p 91 | Golconda Fort |
| h. Experiments | Class V p 64 | Dissolving substances |

Check your progress -2

- a. Which kinds of activities from the examples listed above can help in all the following?
 - i. provide opportunities for children to participate in different kinds of learning experiences that involve engagement of diverse senses and abilities (creative expression, body movement etc.).
 - ii. encourage group work and peer learning
 - iii. build life skills of cooperation, sharing, negotiation and organisation.

4.4.6 Supporting Different Learning Styles

The variety of activities and exercises help to foster the multiple intelligences, giving children with different skills and abilities opportunities to participate, and thereby contribute to building confidence.

Several exercise and activities in the lessons support imagination and creative expression not only written and oral, but also through drawing and performing which could be well integrated into arts and drama classes.



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As a teacher, you need to take the opportunities offered by the books to actively involve children who may not respond as well to the more traditional linguistic or logical ways of instruction, and to develop their innate abilities and potentials.

Some examples:

Class III Drawing faces and expressions (p 46-47)

Class IV Imagining and acting (p 9)

Class IV Imagining and drawing (p 136)

Class V Imaging, designing (p 85, 86)

- **Do you think that arts and craft activities can be a part of EVS teaching and learning?**
- **What is the link between art and craft and environment?**

4.4.7 Dealing with Social Issues

It is accepted that educating about the environment goes beyond the understanding of nature and scientific phenomena and processes. EVS is a process to expose students to the real world, natural and social, in which we all live; to enable them to become aware of environmental concerns and issues; to enable them to analyse, evaluate and draw inferences; and to promote positive environmental actions at the individual and collective levels.

The themes as well as the formats of the lessons in the textbooks introduce several social and cultural issues. For some children these may be a part of their daily life (issues related to access to food and water, family processes etc.) while for other these may not be things that they had ever thought of.

Some examples:

Class III Lesson 6 The Food We Eat

Class III Lesson 21 Families can be Different

Class IV Lesson 22 The World in My Hand

Class V Lesson 16 Who Will Do This Work

Class V Lesson 18 No Place For Us?

Such lessons provide an opportunity to get children to think about things that they either take for granted, or that they avoid thinking about. E.g. Who they eat with (Class IV, page 167), who they share water/food with (Class IV p 182), who does the cleaning in their school/home (Class V p 153).

Dealing with such lessons may be more challenging. There may be students who are at the receiving end of some practices (discrimination) and would relate to the lessons/stories in a different way. In every class there would be students who



may be affected by biases-religious, social, gender, and even individual differences. As teachers, while we may be aware of the situations, we may feel that this does not fall within the boundaries of the curriculum or classroom teaching. It is important not to avoid such issues, or questions that may arise from the lesson, but it is equally important to deal with the issues with sensitivity to the experiences of the students in your class.

- **Have you ever had to deal with such issues?**
 - **Some children being discriminated because of their social or economic background?**
 - **Are there children in your class who come from such backgrounds?**
 - **Have you already taught some of these lessons in your class? Have you found these difficult to handle? Why?**

It is very important that such students are not made conscious of this, but rather feel that they are not the only ones with such experiences. The discussion in the class needs to be facilitated so that all students can freely discuss such issues without shame or embarrassment.

In the Classroom

Perhaps the most challenging task is to not impose our own value systems and notions of right or wrong, and allow the free sharing of students' experiences and ideas.

4.5 GOING BEYOND THE CLASSROOM AND THE TEXTBOOK

NCF 2005 recommends that children's life at school must be linked with their life outside the school.

“Learning takes place through interactions with the environment around, nature, things and people, both through actions and through language. The physical activity of moving, exploring and doing things on one's own, with one's peers or in the company of adults, and using language to read, to express or ask, to listen and to interact - are the key processes – through which learning occurs”. (NCF 2005 p18)

It further states “The curriculum must enable children to find their voices, nurture their curiosity to do things, to ask questions and to pursue investigations, sharing and integrating their experiences with school knowledge rather than the ability to reproduce textual knowledge”. (NCF 2005 p13)



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The organisation of content and the activities, and questions in the NCERT textbook encourage students to interact outside and beyond the textbooks and the class.

Talking to family (especially elders), community members and collecting information that relates the lesson to their own life is a key characteristic of the textbooks. Every lesson provides series of opportunities for this.

A few examples:

Linking the characters in the lessons to the child's own life.

Class III, lesson 6, Chottu's House

- Chhotu divided the pipe into different parts. Write the names of different parts of your house.

Class IV, Lesson 22, World in My Home

- Do you know anybody who thinks like Akshay's grandmother? What do you think Akshay should do?

Encouraging children to bring in and share their personal context and experience.

Class III, Lesson 14, The Story of Food

- Table of who does what work in their house

Class IV, Lesson 1, Going to School

- Can you ride a bicycle? If yes, who taught you to ride?
- Have you ever been in a thick jungle?

If yes, please write your feelings about the jungles.

Class V, Lesson 21, Like Father Like Daughter

- Is your hair and skin like that of anyone else in your family?

If yes, then please name the person.

Encourage children to talk to parents, and elders and community members to find out and collect information.

Class III, Lesson 16, Games We Play

- Find out from elders what games they played when they were children.

Class IV, Lesson 12, Changing Times

- Talk to grandparents and find out when he/she was 8/9 years old where did he/she live? Did they have a toilet in their house?



Class V, Lesson 12, What If It Finishes?

- Find out from elders, when they were young what was used to cook food at home?

Encouraging children to go to different sites in the neighbourhood to observe, record, interview and investigate.

Class III, Lesson 8, Flying High

- Bird watching and recording observations.

Class IV, Lesson 12, Changing Times

- Visit to construction site and interviewing to workers about the construction. Note down your discussions and write a report.

Class V, Lesson 8, A Treat for Mosquitoes

- School campus – check and investigation
- Visit to a farm and writing a report on its environment.
- **Do you feel that such lessons and exercises will take too much extra time?**
- **What are three ways in which such lessons will be useful? Will enrich the teaching learning experience?**

In the Classroom

It is very important to provide the time and space to the students to make the connections between the lessons and their own lives and experiences, and to the community.

This will help each student to relate at a personal level to the lessons, and not to treat the content only as something to be memorised and reproduced for the exams. Asking questions that allow the students relate what they are learning in school to things happening outside, encouraging students to answer in their own words and from their own experiences, rather than simply memorising and getting the “right” answer—all these are small but important steps in helping children to develop their understanding.

It is important to support the understanding that there are multiple sources of knowledge and all these need to be valued and respected. It also provides opportunities to involve parents and community in the child’s learning process.

Most importantly it helps you, as the teacher, to contextualise your teaching to suit your specific situation, students, constraints and opportunities. It allows you to go beyond the textbook and create more situations/illustrations/examples and contexts to enrich your classroom transactions.



Notes

4.6 CHALLENGES INVOLVED IN TRANSACTING EVS

Based on what you have studied so far and your own and your own teaching-learning experiences, you would agree that many of the following are certainly strengths of EVS:

- The contents of EVS are organised thematically.
- Contents of the EVS are drawn from the children's own environment.
- Children learn about their environment through exploring and experiencing it, gathering and analysing information based on their observations and experiences, and constructing their own knowledge, enriching and enhancing it.
- Learning is planned to progress from what the child already knows, to what is to be learnt, from local to global, or from the immediate environment to community and society and beyond.
- Chapters begin with key questions initiating children into thinking and constructing their own knowledge.
- Provides scope for children's expressions – oral and written and other creative expressions, etc.

While the above are the inherent curricular strengths of EVS, its desired results depend much on the classroom teacher. As you would be well aware, different teachers would face different challenges in their regular teaching – in terms of the curriculum, classroom transactions, time and resource management, as well as dealing with individual students. These may change from time to time. The transaction of the EVS curriculum involves several additional challenges.

As you have already studied in the earlier units, EVS calls for a learner-centred approach in its transaction rather than the traditional teacher-centered approach. In other words, in the teaching-learning of EVS, learner becomes the focus rather than the teacher. As children come to the school with their own experience and understanding of their environment (which is unique to him/her), an EVS teacher has to provide learning experiences within this concrete environment of the children, enabling them to build connections/relationships and learn from the environment. It needs to be appreciated that children do not live in a generalised or contrived environment. They live in an environment which is unique to them. We need to ask the question, are we helping children to explore and understand this environment which they experience or an environment which the teacher, as an adult, has experienced?

This involves contextualising children's learning. Contextualising learning involves relating the contents of the EVS to the real world situations, enabling



children in establishing connections with what they observe and experience in their immediate environment and construct their own knowledge and understanding and applications – from self –to - family- community- society. This is what NCF 2005 emphasises as ‘knowledge construction’ by children and differentiates it from the ‘knowledge being passed on’ to the children through a rote learning method.

Because of this shift in emphasis, NCF 2005 visualises that schools should help children construct knowledge while drawing upon their diverse experiences. As you would have experienced, in the EVS textbooks revised after NCF 2005, the learning experiences are planned to provide enormous scope for children’s knowledge construction. Children need to be helped to make connections between their observations and experiences in their environment and derive meaning (new information /knowledge) or connect with their previous knowledge or which they have already mastered. As mentioned in the earlier units, this requires teachers to develop a deeper understanding and insights into the way children learn and assimilate knowledge from their daily experiences.

Educational psychologists have shown that learning occurs most only when learners process new information in such a way that it makes sense to them in their own frames of reference (memory, experience, feelings etc) and learning will be more efficient when learners work in groups or teams (collaboratively and cooperatively).

The above approach to learning and teaching is based on the theory of learning viz., constructivism. This approach requires teachers to plan and organise learning experiences that incorporate as many different forms of learning situations / experience as possible (social, cultural, physical, biological, etc.) for children in working toward the desired learning objectives. This is clearly a challenge to teachers in the transaction of EVS, as it requires the teacher to make a conscious shift from teaching to learning, particularly when the teacher, himself / herself, has learnt through a traditional /conventional approach of classroom teaching.

Transacting EVS (integrated themes) requires teachers to move beyond the individual boundaries of disciplines (their own subject specialisations) and plan appropriate learning experiences to help children synthesise multiple perspectives and develop integrated concepts. This requires teachers to be more flexible in their approach to understanding of the concepts itself, integrate key or leading questions in their transaction and develop insights into the issues discussed.

We have seen that learning experiences in EVS must encompass a wide range of activities to help develop children’s understanding and skills. Children construct their own knowledge of the environment and progress on their learning continuum at their individual pace. When such is the dynamism involved in children’s learning, the question that comes up is, should all children be assessed at a single point of time and that too through a single mode or tool of assessment?



Notes

Considering the dynamic nature of children's learning, the NCF, 2005 has emphasised the concept of dynamic assessment. This is yet another challenge, as it demands teachers to gather more knowledge about how children think, understand and relate to environment, what are the difficulties they encounter, how they carry out EVS activities and projects, etc.

Check Your Progress-3

- a. List some of the key challenges involved in the transaction of EVS.
- b. What are the characteristics of a learner-centred approach?
- c. Contextualising EVS means: (Tick the appropriate)
 - i. Transacting EVS contents from simple to complex
 - ii. Transacting EVS contents from known to unknown
 - iii. Transacting EVS contents with examples
 - iv. Transacting EVS contents by relating it to real life situations and immediate environment of the learners

4.7 LET US SUM UP

You have seen how the syllabus for EVS for classes 3, 4, and 5 reflects the philosophy and approach of the NCF 2005. You also have an idea about the thinking and process that guided the development of the textbooks within the framework of this syllabus. This background has helped you to understand the organisation and format of the textbooks. The unit has discussed the key features of the textbooks and indicated how these can be effectively used in the teaching and learning of EVS at the primary level.

To sum up, the opportunities provided in the textbooks will help students to:

- explore the surroundings and use the environment as a learning resource
- link their daily life experiences and existing knowledge to develop new learning.
- construct meanings of the world around them.
- see the links between their experiences and the textbook knowledge.
- sharpen skills of observation, exploration, recording and reporting.
- develop a range of life skills including team work, communication, negotiation, critical reflection, decision making and problem solving.
- appreciate diversity and celebrate differences across regions, cultures and socio-economic environments.
- change from being passive recipients of information to active participants in the learning process.



In this context both the textbooks and the teachers take on a new role as facilitators to encourage learners to reflect, analyse and interpret in the process of knowledge construction.

In this process your role as a teacher becomes that of a guide—providing support in the journey to discovery and understanding. The textbooks provide a roadmap for the journey. At the same time, each teacher knows best the environment of his/her students, their interests and backgrounds, and their stage of intellectual development. Each teacher is also better aware of the constraints of his/her own situation in terms of time, numbers, resources and comfort or familiarity with subject. It is up to you as a teacher how better to use the textbooks as an aid to shape a suitable learning environment for each student.

4.8 MODEL ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress-1

- a. i. relationships
- ii. curiosity, creativity
- iii. awareness
- iv. hands-on

Check Your Progress-2

Suggest your experiences

Check Your Progress-3

- c. iv. Transacting EVS contents by relating it to real life situations and immediate environment of the learners

4.9 SUGGESTED READINGS AND REFERENCES

- NCERT (2005) National Curriculum Framework 2005, New Delhi
- NCERT (2007), Environmental Studies – Looking around, Textbook for class IV, New Delhi.
- NCERT (1991): Elementary Teacher Education Curriculum, Guidelines and Syllabi, New Delhi.
- Syllabus for classes at the Elementary Level, NCERT, New Delhi.

**Notes**

- www.eelink.net (A directory of internet resources on environment education)
- www.envis.nic.in (Listing of various ENVIS nodes and their activities)
- <http://www.esdtoolkit.org>
- <http://www.greenteacher.org>
- www.kidsgreen.org

4.10 UNIT-END EXERCISES

- i. In the context of teaching-learning of EVS “the role of the teacher changes from being a supplier of knowledge to an active facilitator, and to a co-learner in the process of knowledge construction in which the children are engaged.” (NCF 2005)

Comment on this statement with reference to the rationale, approach and design of the EVS textbooks.