

ENVIRONMENTAL STUDIES

LOOKING AROUND

TEXTBOOK FOR CLASS IV



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FOREWORD

The National Curriculum Framework (NCF) 2005, recommends that children's life at school must be linked to their life outside the school. This principle marks a departure from the legacy of bookish learning which continues to shape our system and causes a gap between the school, home and community. The syllabi and textbooks developed on the basis of NCF signify an attempt to implement this basic idea. They also attempt to discourage rote learning and the maintenance of sharp boundaries between different subject areas. We hope these measures will take us significantly further in the direction of a child-centred system of education outlined in the National Policy on Education (1986).

The success of this effort depends on what steps that school principals and teachers will take to encourage children to reflect on their own learning and to pursue imaginative activities and questions. We must recognise that, given space, time and freedom, children generate new knowledge by engaging with the information passed on to them by adults. Treating the prescribed textbook as the sole basis of examination is one of the key reasons why other resources and sites of learning are ignored. Inculcating creativity and initiative is possible if we perceive and treat children as participants in learning, not as receivers of a fixed body of knowledge.

These aims imply considerable change in school routines and mode of functioning. Flexibility in the daily time-table is as necessary as rigour in implementing the annual calendar so that the required number of teaching days are actually devoted to teaching. The methods used for teaching and evaluation will also determine how effective this textbook proves for making children's life at school a happy experience, rather than a source of stress or boredom. Syllabus designers have tried to address the problem of curricular burden by restructuring and reorienting knowledge at different stages with greater consideration for child psychology and the time available for teaching. The textbook attempts to enhance this endeavour by giving higher priority and space to opportunities for contemplation and wondering, discussion in small groups, and activities requiring hands-on experience.

The National Council of Educational Research and Training (NCERT) appreciates the hard work done by the textbook development committee responsible for this book. We wish to thank the Chairperson of the Advisory Committee for Textbooks at the primary level, Anita Rampal, *Professor*, CIE, Delhi University, Delhi, Chief Advisor, Savithri Singh, *Principal*, Acharya Narendra Dev College, University of Delhi, New Delhi, Co-chief Advisor, Farah Farooqi, *Reader*, Jamia Millia Islamia, Delhi, for guiding the work of this committee. Several teachers contributed to the development of this





textbook. We are grateful to their principals for making this possible. We are indebted to the institutions and organisations which have generously permitted us to draw upon their resources, material and personnel. We are especially grateful to the members of the National Monitoring Committee, appointed by the Department of Secondary and Higher Education, Ministry of Human Resource Development under the Chairpersonship of Professor Mrinal Miri and Professor G.P. Deshpande, for their valuable time and contribution.

As an organisation committed to systemic reform and continuous improvement in the quality of its products, NCERT welcomes comments and suggestions which will enable us to undertake further revision and refinement.

New Delhi
20 November 2006

Director
National Council of Educational
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A NOTE FOR THE TEACHERS AND PARENTS



The team for the development of this book found it a challenging task to translate the objectives as defined in the National Curriculum Framework (NCF) 2005 while preparing this national-level textbook. The writing team would like to share some of the issues that were discussed during the process.

The child looks at the environment around her/him in a holistic manner and does not compartmentalise any topic into 'science' and 'social science', hence, it was thought essential that we too aim for this integration within the book, instead of having two disparate sections. Instead of proceeding with lists of 'topics', the syllabus itself has proposed themes that allowed a connected and inter-related understanding to develop. An attempt has been made in the book to locate every theme in physical, social and cultural contexts critically so that the child can make informed choices.

The challenge, when writing at a national-level, was to reflect the multicultural dimensions of diverse classrooms. It was felt necessary that all children feel important – their community, culture, and their way of life – are all important. While writing the book – *Who is the child we are addressing* – was the big question. Is she/he the child in big schools of the metro, or the school in the slums, a small-town child, one in a village *shala* or the one in the remote mountainous area? How do we address such diverse group? One also needed to tackle the differences of gender, class, culture, religion, language, geographical location, etc. These are some of the issues addressed in the book, which the teacher will also have to handle in her own ways.

Before discussing the concerns/issues related to this area, you go through the syllabus of this subject which is broadly divided into six themes, namely, family and friends, food, water, shelter, travel and things we make and do. It is available on the NCERT website (www.ncert.nic.in). It will help you understand the subject better.

The content in the book is centred on the child, providing her/him a lot of space to explore. There is a conscious effort to discourage rote learning and hence descriptions and definitions were totally avoided. It is always easy to give information; the real challenge was to provide opportunities to a child where she/he can vocalise, build upon her/his curiosity, learn-by-doing, ask questions, experiment, etc. In order that the child is happy to engage with the book, a variety of formats have been used – narratives, poems, stories, puzzles, jigsaw, comic strips, etc. Stories and narratives have been used as a tool for sensitising the child since a child can probably more easily empathise with characters in a story or a narrative. The language used in the book is not 'formal' but is in the 'commonly spoken' form.

Active participation of children is very important in constructing knowledge. Activities in the book that demand that children be taken for observations to the





parks, fields, water-bodies, into the community, etc., reiterates that EVS learning primarily occurs outside the walls of the classrooms. An effort has been made to relate the child's local knowledge to the school knowledge. It is important to state here that the activities given in the book are only suggestive and that both the activities and the materials can and should be, modified by the teacher according to the local contexts. Activities and exercises have been inbuilt into the chapters instead of being pushed to the end. The nature of activities in the book are so varied so that the child gets opportunities to explore, observe, draw, categorise, speak, question, write, list, etc. Several activities allow her/him to manipulate things with her/his hands so that her/his psychomotor skills are developed. Some of them explore her/his creativity and design skills as well as hone her/his aesthetic sense. All activities need to be followed by discussions to facilitate children in consolidating what they have observed and learnt. With an appropriate question or suggestion, the child's understanding can be extended far beyond the point which she/he could have reached alone.

Children are encouraged to tap sources other than the textbook and teachers, such as family members, members of the community, newspapers, story books, other reading material, etc. This stresses the fact that textbooks are not the only sources of information. To develop a sense of history, the children are encouraged to question the elderly about the past. These activities also promote the parents' and community's involvement in the school and the teacher gets an opportunity to know a child's background.

Illustrations form an important component of children's books. The writing team has kept in mind that the illustrations in this book reflect the ethos of the written material. Content development through illustrations was a major consideration. The illustrations have been used such that they complement the writing style fully. The illustrations should provide joy and also a challenge, to the child.

The book provides varied kind of opportunities for the child to work – individually, in small groups or even in larger groups. Group learning promotes peer learning and improves social interactions. Children particularly enjoy learning crafts and arts while working in groups. Children are very happy and respond with enthusiasm when their creative ventures are appreciated rather than dismissed (as unimportant).

The objective of the activities and questions in the book is not only to evaluate the child's knowledge but also to provide an opportunity to the children to express themselves. The children should be given enough time to work on these activities and questions; they should not be rushed since each child learns at her/his own pace. It is envisaged that each teacher will develop her/his own evaluation tools suitable for her/his students based on her/his own method of teaching and local contexts. For better understanding on assessment practices and procedures in EVS, NCERT has developed a source book on assessment in it for the primary stage. It will be useful if you go through this document as well. The child should be evaluated primarily on the skills she/he has

acquired while working in class or outside. Evaluation, of course, should be a continuous process and the child should be assessed as she/he observes, asks, draws, discusses in groups, etc. In order to follow the continuous and comprehensive evaluation in teaching-learning, activities and questions have been inbuilt in the text. You need to follow it in the same manner while teaching-learning.

One of the major concerns while developing textual materials was to find suitable ways to sensitise the child to the wide differences that exist within our society – in our physical abilities, economic backgrounds, behavioural patterns, etc. – things which get reflected in the way and where we live, what kind of school we go to, the way we talk, the way we think, what we eat, what we wear, our access to basic amenities, etc. We would like every child to recognise that in any society there are differences; we need to learn to appreciate and respect these differences. Teachers have to be extra-careful that such social issues are handled in a sensitive manner, especially when there are children with special needs or in difficult circumstances, in the class.

This book also brings to you some more significant elements. The bulk of the chapters in the book are based on examples from contemporary life. The chapters either tell stories of real events or inform us about exciting characters drawn from everyday life as life itself is a rich source of information and learning. Further, narratives from real life inspire us, they can bring to us an interesting point of reference, they can provide us an opportunity to revisit experiences we are familiar with.

These narrative range from success stories, achievements and also instances of disturbing behaviour patterns. The instance we selected are from the lives of lesser known people rather than from the lives of celebrities as we feel that the lives of ordinary people can be a greater inspiration and lessen the distance between object and subject. It is hoped that those exposed to these narratives will relate with them creatively rather than take them at face value. Through activities and discussion points in each chapter, great care is taken to provide such opportunities. It must be stressed that the selections are not to be viewed like an 'instant meal' to be consumed without further processing – none of the narratives, positive or negative, are intended to be blindly emulated or looked down upon and discarded. It is hoped that children and adults alike will critique them on the basis of their own unique experience, core values and skills of analysis. Such a process will enrich teaching-learning and add a dimension to children's way of understanding the book of life as they mature.

The writing team looks not only at the children, but at the teachers also, as individuals who construct knowledge and build on their own experiences. The textbook is only one of the many teaching-learning materials used by teachers. Thus, this textbook should only be viewed as an aid to the teacher, around which the teacher could organise her teaching to provide learning opportunities to children.





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