

ENVIRONMENT

मेरा शहर



प्रिय

चाम्पा
9-7-93
संपादक जी नमस्कार

19.9.93

15

INDIA

में एक आस-पास का
चित्र भेज रहा हूँ मुझे
आशा है कि आप
इस चित्र को जरूर प्रकाशित
करेंगे। मेरा पता

श्री. मो. मुस्तफा (अ)
न्य C/o S.P.M. (L.S.G.)
वाद चाम्पा 495671

POST CARD



To एक बच्चे
ई-1/208 अपरेरा
भोपाल

4 6 2 0 1 6

पिन PIN

GENERAL AIMS

For Prashika environmental studies means understanding the immediate as well as the larger, more distant, environment. It involves a study of the physical *and* the social environment, or content which would normally figure under the rubric of science and social studies.

The focus of environmental studies in Prashika is to preserve and sharpen the curiosity of the child; to allow her/him to explore and develop a feel for the environment around. It tries to create in the child a feeling of confidence and develop abilities to go deeper into the questions that arise in the mind. These include abilities that help her sort, categorize, organize and infer from observations and form new relationships. In short, the idea is to provide the child with tools that would enable her/him to learn on her/his own and not be restricted to the memorization of information.

SKILL AREAS

The major skill areas of environmental studies in Prashika are:

1. acquiring information through a variety of sources and methods;
2. recording, presenting and understanding that in-

formation; and

3. interacting with that information, trying in the process to draw inferences and to evolve a dynamic understanding of environment.

To fulfil these objectives we can use

1. on-site observation of the surrounding environment;
2. stored knowledge that children already have about their environment (such as names of trees, things sold in the market around, say, March, i.e. those aspects which do not require an observation to be made then and there but for which children have the data); and
3. information about environments with which the child is not familiar.

ACQUIRING INFORMATION

In order to acquire information a child should be able to

1. recognize characteristics of objects (colour, shape, size, texture, smell, sound – basically, discrimination skills);
2. recognize parts of a whole;
3. distinguish between objects and between incidents/processes;
4. classify and sort;

5. compare and contrast aspects of incidents and of social processes/activities; and
6. ask questions such as where, why, when, how. To be able to find out the answer to these questions from different sources (people, one's surroundings, books, etc.). Here, ability cannot be separated from developing/retaining curiosity in the child.

This implies that the child should be able to plan field visits, meet people and elicit information from them, conduct simple experiments using simple instruments like a scale or a lens. He should also gradually learn to locate required reading materials, be able to read line drawings and maps and gain the confidence to draw appropriate inferences from her/his observations.

RECORDING AND PRESENTING INFORMATION

The child should be able to

1. describe objects and events – orally and in written form;
2. keep records by maintaining a diary, making lists and maps, etc.;
3. make models (of clay, paper etc.); and
4. make collections (as of leaves, rocks etc.)

WORKING ON AC- QUIRED INFORMATION

Prashika tries to equip the child with skills and abilities to work creatively on the observations made and the information collected. It is hoped that the child will be able to analyse this information by

1. comparing and contrasting on qualitative and quantitative bases, for example
 - comparing another environment with one's own
 - comparing two different types of information (matching a description with a drawing, or a chart)
 - understanding, spotting change and growth
2. recognizing relationships through
 - comparison and contrast
 - part-whole relationships



- cause-effect relationships
 - form-function relationships
3. recognizing patterns, by
 - understanding the sequence
 - estimating the next step on the basis of given information
 4. analysing logically and drawing conclusions
 5. visualizing an unknown environment on the basis of sources, and acquired information.

THE 'SCIENCE' AS- PECT

The observation/science aspect in Prashika can be approached by

1. asking the children to do an experiment and make observations on it;
2. encouraging children to

- undertake small projects and quizzing them about the conclusions they may draw;
3. creating a situation which arouses children's curiosity and motivates them to do experiments on their own.

Children's curiosity may be aroused in a variety of ways. For example, by

1. doing something which seems like a miracle (*chamatkari prayog*);
2. creating a situation where something is to happen: everyone takes a stance, tries to predict what would happen (*poorvanumaan*) after which the envisaged experiment is done;
3. making a claim which has to be proved right or wrong by finding what kind of experiment to do (*dava*). Claims should be such that they lend

ACCORDING TO PRASHIKA . . .

All the experiments at this stage should be conducted with concrete objects or with situations that make sense to the child. It is from the known that the child will move to the unknown.

themselves to be tested by easily doable experiments or activities. They should be easy to understand and the experimental observations/results

should lead to simple conclusions directly.

THE 'SOCIAL SCIENCE' ASPECT

Understanding space. The ability to perceive space beyond what one can immediately see is important, just as it is important to be able to represent it. Hence the importance of beginning on maps of the classroom, of the school, of the home, and of the *mohalla*, the village and its environs. In making these it is directional placement rather than proportion or scale that may be of importance. Scale can be introduced to some extent, perhaps in Class V. Maps such as those of the *tehsil* and the district, Prashika feels, cannot be understood in terms of space and direction by primary school children – they can perhaps serve to play games of the kind where place names have to be located.

For understanding the concept of a scale, the kind of clues that are given to children are very crucial. It is only some clues that make perception of proportion possible, focus that perception and enable its representation to take place.

Time. Similar efforts will have to be made to establish boundaries in terms of perception of time. However, one method that does seem to have possibilities

is the use of fantasy. This enables one to move back in time and draw comparisons.

Thus, there is a story of a wondrous 111-year-old rat visiting his old environs with a few young rats, exclaiming at how human beings now live in different dwellings, *pucca* roofs and floors (not good for your claws), eat different kinds of food, wear different kinds of clothes (not good for your incisors or your digestion), have electricity in the night to catch you, store things in metal discs or use pesticides (too bad for you generally).

There is also the story of the wooden door frame which narrates its experiences on a journey from the

ACCORDING TO A PRASHIKA MEMBER . . .

We make very creative use of the existing knowledge of children. We ask them to make lists of various kinds and then explore them for a variety of relationships. Or we ask them to make a tally of the vehicles/forms of transport observed for half an hour on the main road on market day. Which vehicles? How many? What do the numbers imply? If a similar tally is made on another day what would it imply?

forest to the house, how it was transformed into what it is now and what the history of the last three

generations of the family has been.

These forms allow us to go easily into many areas that would have been inaccessible otherwise. Such forms also enable children to decentralize themselves, a crucial element in understanding things across space and time.

Coming closer to the faraway. Visuals often serve as interesting basis for introducing children to far-away lands or people. But it is not always easy to get good visuals, particularly in the kind of settings in which Prashika works. One has to resort to verbal descriptions.

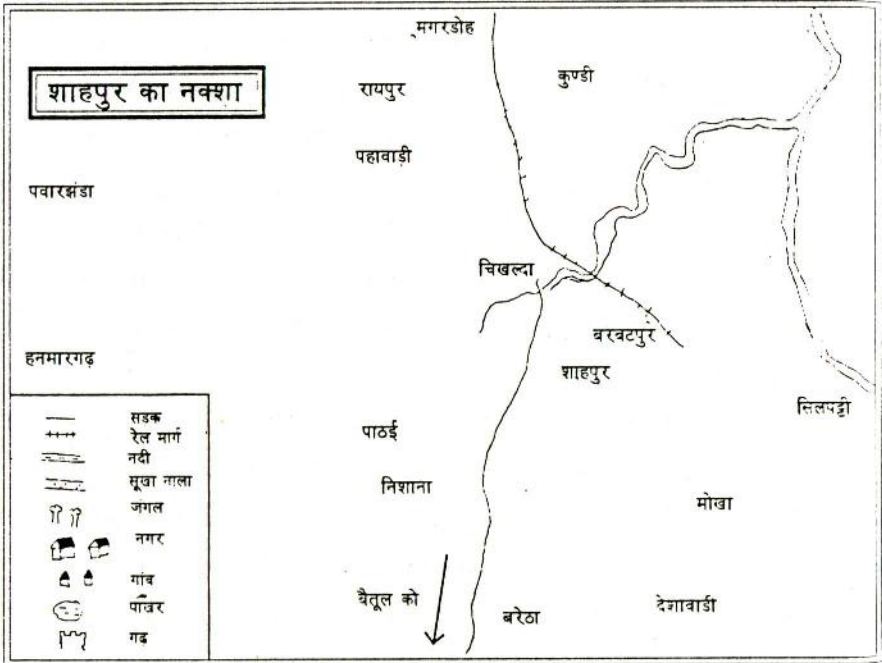
One premise is that, not having lived in that land or time, it will be difficult to give an adequate or evocative description. Thus it becomes necessary to use material that is local to target areas/periods, in that those who have actually perceived it and attempted to represent it might make a better job of it than our twice removed efforts. Such material might include fairy tales, songs, stories, jokes, poems or works of literature of *that* time or place, and which attempt to give an evocative description. Similarly children's writing or drawings might be of use.

Prashika makes use of a variety of discourses. Thus, simply giving certain information, an emo-

नक्शे - कुछ बड़े इलाके के

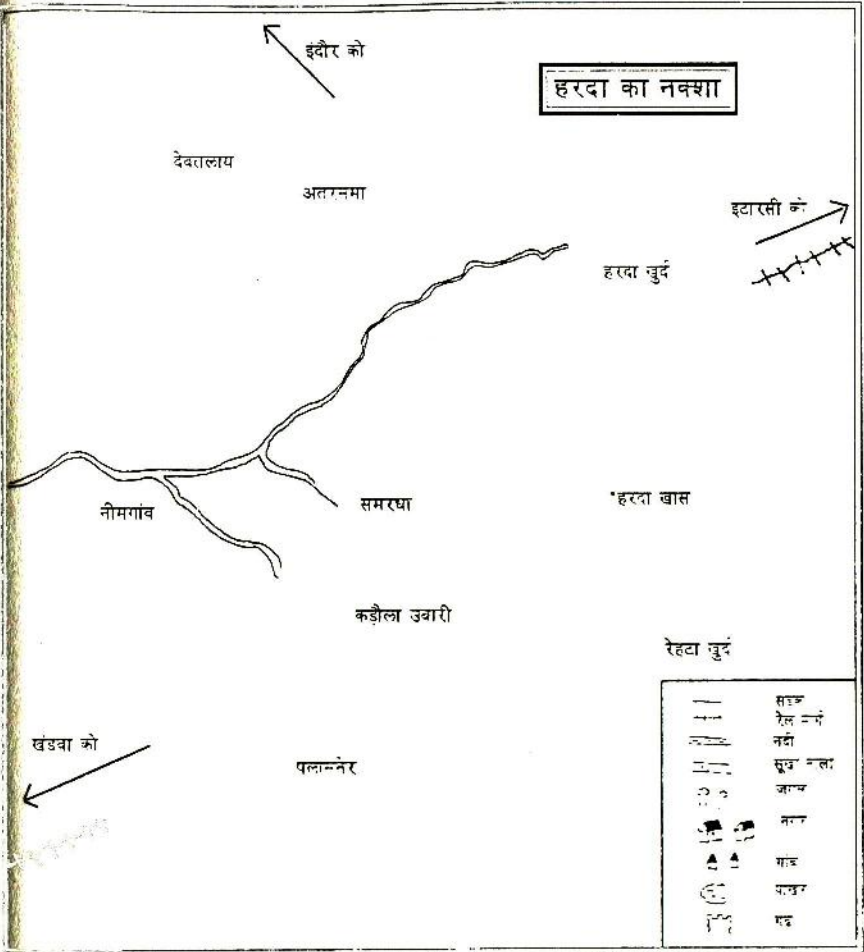
इन नक्शों में हरदा और शाहपुर दिखाए गए हैं और उनके आसपास के गांव, सड़क, नदी और जंगल। पर नक्शा बनाने में बहुत सी चीजें छूट गई हैं।

- (क) अपने गांव को या इसके पास के गांव को नक्शे में डूँडो। अपने गाँव का नाम नक्शे में सही जगह पर लिख लो।
- (ख) अपने गांव के आसपास जो भी गांव है, नदी है, तालाब है, जंगल है, नक्शे में भरओ। जिनके नाम नहीं लिखे हैं, उनके नाम लिखो।
- (ग) जंगल में हरा रंग भरओ। नदी को भी पूरा करके उनमें नीला रंग भरओ।
- (घ) आसपास की पुरानी इमारतों को भी नक्शे में दिखाओ।



A map of Shahpur
A page from KHUSHI-KHUSHI . . .

- च) तुम्हारे गांव से हरदा/शाहपुर किस रास्ते में जाएंगे, नक्शों में उंगली कर कर बताओ।
 छ) क्या नक्शों में तुम्हारे आसपास की सड़कें और रेल लाइन बनी हैं। इन्हें भी पूरा करो।
 ज) अपने क्षेत्र के बारे में (शाहपुर/हरदा) ज्यादा से ज्यादा बातें पता करें।
 (जैसे कौन से उद्योग हैं, बस स्टैंड, बाजार, बाहर से आने वाले चीजें, क्या कमल उगती है? आदि।



A map of Harda
 A page from KHUSHI-KHUSHI . . .

A PRASHIKA MEMBER SAYS . . .

We also attempt to create a situation where the students can, so to say, get their teeth into the material. That is to say, we have a presentation that lends itself to activity/being worked upon, for example, a detailed description of a factory worker's day is given – the time he wakes up, gets ready, what he eats for breakfast, what he wears, how he travels to work, what he does the whole day, the time he returns, what he does in the evening. . . . A similar detailed description of a farm worker in the same country is given, followed by a number of comparative exercises. Much can emerge about industry, agriculture and the people involved in it. This material is of the kind which allows students to draw out many things for themselves, rather than be given 'knowledge' about all this.

tional account of an event, a newspaper report, a tourist brochure description, a police/royal/administrative report of an incident, a dialogue, a speech, a catalogue of arms in armoury, instructions for using a consumer item and so on, all add to give a rich account of the land or time we have in mind.

Curiosity can be used very effectively as an entry point. But it should be kept in mind that curiosity is generated more easily about objects/events and/or

ACCORDING TO A PRASHIKA MEMBER . . .

Imagine a child involved in the process of recreating the details of a given period in history through the weapons that were used at that time. We begin with the process of trying to guess exactly what each part of the armour is used for. A pictorial catalogue of the weapons of the time is given, followed by multiple-choice questions about each part of the armour/weapons, special requirements of the king, fashions, etc. As the student tries to guess each application, or form-function relationship, he is free to modify his earlier answers, as the developing logic modifies the growing picture. This process of analysing a given set of data not only builds a personal bond between the child and the data but also sharpens her/his analytical abilities and provides a meaningful outlet for her/his imagination.

personalities than concepts and abstractions.

BASIC NATURE OF INFORMATION

1. One aspect of information is that it should allow children to generate more information.
2. Prashika talks of information as open-ended (not rounded off or conceptually exhausted), of rules as having exceptions (as in the 'dava' format), of probability rather than certainty.
3. There should be an emphasis on a variety of

information. Our understanding of even commonplace words such as birds is built up through a variety of information and exposure that we have had over the years. For this it might be necessary to even talk of penguins. This does not mean that we can also talk of the atom by making a model and use that as a basis for comparison.

CHOOSING THE CONTENT

The question of content is complicated and needs to be clarified. What has been identified for the present by Prashika is the basic focus for content and certain acceptable parameters. These parameters include

1. our understanding of children;
2. what has been done in the previous class;
3. what children 'ought' to know;
4. what lies in the experience and environment of the child. (Here Prashika also uses those areas in which our intuition conflicts with observable events, for example, things of unequal weight fall at the same time, a pendulum swinging with a larger amplitude will have a shorter period, etc.);
5. something that can be expected to generate curiosity and a sense of wonder by being extraordinary (like a lizard that runs on water, and how it manages to do so!); and

6. introducing a few ideas that would form the basis of thinking and anchoring fresh experiences.

However, the question of whether there is something that is universally acceptable as content, remains.

THE TEACHER AS A SOURCE OF INFORMATION

If environmental studies classes have to remain open to fresh questions and activity and not become a packet of stale information to be stuffed into children, it is necessary that they are not bound by the limitations of the textbook. Instead they should be open to allow children and teachers to interact with each other, their environment and information resources. Can such a curriculum be formulated and implemented where the teacher, rather than the textbook, is a major source of information imparted to children? This would help in keeping the text material free of a relative overloading with attempted explanations of all the questions children may 'supposedly' ask or 'ought' to know answers to.

For this to happen, another parallel effort is needed. To help the teacher answer questions or start processes to answer questions that arise in the classroom, networks should be set up. These would answer

specific questions of specific schools or even specific children without unloading the same information on everyone.

ENMESHING

Environmental studies are linked to language and mathematics in many ways. The most obvious is in terms of activities that afford the child practice in both. But the more important aspect of this relationship is the level of abstraction, decontextualizing and decentring expected from the child.

Other aspects that delimit what can be reasonably achieved in environmental studies are: the kind of complex words introduced, complex sentence structure and complexity of the ideas involved. Also, the concentration span of the child and the rate of introducing new words in the reading materials condition the possibilities of what can be done here.

It is within all this that other aspects of environment studies are enmeshed. Messages considered important and essential for children are introduced around the environmental experience of the child and not as precepts. Care is taken to avoid making the environmental studies portion too prescriptive (do this, do that, don't do this, don't do that) and/or abstract, as in dealing with concepts of the earth,

stars, nations, the world, etc.

SIMMERING DEBATES

Some basic questions continue to surface again and again in Prashika debates about environmental studies. A few examples are given below.

1. The real world is not segmented into neat disciplines, and following the conventional discipline divisions is not, therefore, necessarily the most effective way to study it. Indeed it has been argued that to divide reality according to the neat and separate parts defined by conventional divisions into disciplines can give both an incomplete and a misleading picture of reality.
2. A number of skills and methods cut across several or even all of the sciences and social sciences and it is not useful to divide them into disciplines and learn them separately. Do some *concepts* also cut across all the disciplines?
3. It is impossible to study the world and society 'holistically'. If any sense has to be made of the world, its study must be split into subjects or pieces. The division could be in terms of existing disciplines or other formulations like themes. Is there any particular preference for this new arbitrary splitting compared to the conventional 'arbi-

trariness' called disciplines?

4. The existence of joint disciplines provides an effective method of sharing and communicating knowledge and ensures that each person does not have to start from square one in attempting a problem.
5. The existence of disciplines provides a way of categorization and systematization of information so that things can be critically and 'professionally' examined and detailed knowledge is made available.