

From Awareness to Action

7

STRUCTURE

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Education for the environment is a process of inquiry and action on real environmental issues. Such an enquiry process demands that students actively engage in critical or complex thinking about real problems. The development of knowledge, skills and values is not only directed towards action but emerges in the context of preparing for (i.e. the inquiry) and taking action. (Teaching for a Sustainable World UNESCO-UNEP/IEEP, 1996)

7.1

The ultimate goal of environmental education is action—action to improve the environment, prevent its degradation and sustain its well-being. For children, action can become a powerful way of learning about the environment because they get a first hand exposure to real-life situations, they begin to feel responsible for their immediate environment, and because they realize that their actions can make a difference.

Through the process of carrying out projects, children learn how to put theory and information learnt in school to practical use. Children also get an opportunity to discover the interdisciplinary linkages in their curriculum. They can get involved in issues that require research, issue analysis, in-depth discussion, planning and follow-up. They could learn to set up environmental quality monitoring activities, conduct community education initiatives, learn to plan and execute campaigns, or lobby on “specific issues at the local level.

Through action projects whether at home, school or in the community, children will realize the impact of their actions on the environment, and the linkages with the larger environment.

The sense of active participation and achievement that result from undertaking these projects will excite and motivate students, and lay the foundation for a lasting commitment to the environment.

7.2

On completion of this unit you should be able to:

- Review possibilities of projects that students can take up
- Initiate some action projects
- Systematically plan and guide the projects
- Set up and facilitate the running of a Green Club.

7.3 PROJECTS

A project is a good way of getting students to work closely together. Besides the sense of involvement in a focussed activity, the learnings from such interactions are also valuable. The students learn about working together which involves group dynamics, cooperation, compromise, problem solving, and decision making.

There are a wide range of projects that can be taken up. What kind of project you decide to take up will depend on a number of factors, including:

- the priorities, interests and skills of the group
- the time available
- the reasons for doing a project
- the resources required and available
- the preparedness of the facilitators to guide the project
- the suitability of the tasks with respect to the abilities of the students.

Every project, depending on its nature, will help in a greater or lesser degree to achieve the broad objectives of environmental education. That is, they will help to systematically lead students from awareness to action, while at the same time increase understanding skills, and develop sensitivity and responsibility.

Broadly, projects could be considered under the following heads:

Projects to learn about the environment

These, in turn, could be of two types:

- Learning about the environment in general.
- Learning about the immediate environment.

Environmental improvement projects

In these, students take up a systematic set of activities to physically improve the chosen environment (school, neighbourhood, common space, etc.).

Projects to communicate about the environment

These are projects wherein students use a variety of communication methods to reach out to others about environmental issues.

Having decided upon a topic, students can further break it up into different aspects, e.g. pollution could be looked at from the point of view of the types of pollution (air, water, etc.), causes, effects, possible ways of tackling the issue, etc. Each of these could then be taken up by smaller groups for study.

Whatever the topic, the students should be clear about what they hope to achieve by learning about it. They should plan the project properly and work within a fixed time frame. It is important to identify the resources to be used as well as the persons to contact. Finally, the students have to identify

systems for compiling, organizing and presenting the information collected.

Even while the information is being compiled, it should be regularly displayed on a soft board. The final compilation should be shared with the rest of the school through exhibitions, presentations, articles, and other means.

What are some projects that can help students learn more about environment in general?

Learning about the environment

Your attempt as the teacher-in-charge should be to get the students to look at issues holistically, analyze the issues, look beyond symptoms to understand causes, learn not to accept information at face value, and to probe and question. Learning can be done in a variety of ways.

Library research: Students can read about the subject from books and magazines and compile the information in a systematic fashion. Periodically the groups should meet to present their research findings and discuss how all the aspects fit into the theme/topic as a whole. The information compiled/collected should be presented through charts, graphs, crisp notes, etc. which can also be displayed.

Resource persons: Inviting subject experts to talk to the students will help to enrich the information search process and bring in a different perspective. Good places to locate such experts are university departments or colleges, locally active environmental groups, NGOs, etc. In case of subjects such as pollution, someone from the Pollution Control Board can help bring in technical and local information. A doctor could help relate the danger of water borne diseases to our daily lives.

The choice of resource persons must be made carefully. Do try to brief the resource persons in advance about the purpose of the project and give some idea of the context in which the talk has-been organized (i.e. after/before library research, visits, other speakers, etc.) as well as the level of understanding of the students. Sometimes a talk which is too technical or highly advanced tends to put off students.

Encourage students to take full advantage of having an expert in their midst by clearing doubts, asking questions, generating discussion, etc.

Ask them to note down the points made by the speaker and to combine their notes to write up later. They can add this to their other notes, and integrate it into the information display.

Interviews: Another interesting way in which students can collect information is by meeting subject experts and talking to them about the topic. This will require the students to do their “homework” on the subject, that is, they should have enough information to ask leading questions to the expert, and cover the aspect as broadly, or as much “in depth” as required.

Remember that you don’t always have to look for “experts” in the conventional



sense. An interview with a traffic policeman can give students a totally new perspective on air pollution. Talking to rag pickers explores a dimension of solid waste that a professor may not touch upon. Don't forget to explore the resources from among the parents of your students. Encourage students to contribute ideas on whom they could interview.

It may not always be possible to meet a person face-to-face to interview him/her. Think of doing interviews through mail or on the phone.

Learning interviewing techniques is a task in itself and students will need to be guided before they begin. Writing up the interview is another important exercise in organizing and presenting information accurately and comprehensively.

It is better if students go in small groups of 3-4 to conduct interviews. In this case, roles should be clarified before the interview—one or two can ask the questions while others take notes. This reduces chances of missing out points. The group can get back and compare notes and observations before writing up the interview.

Audio-visual resources: Television, videos, slide shows, etc are other important sources for learning about the environment. The wide variety of television channels available today should be explored for identifying educative and interesting programmes, e.g. the DISCOVERY channel, or environmental programmes on Doordarshan. For better learning, the viewing experience needs to be focussed. One way to do this could be by asking students to write up their opinions about a certain programme; discussing these with the others and highlighting the linkages and learnings from the programmes.

Videos are an even better learning resource as viewing can be done as a group; immediate discussion is possible and there is a possibility of stopping the programme at any point to have impromptu discussion.

Slide shows also have the same advantage. Several government and non-governmental agencies have developed slide/ transparency sets on environmental issues, which would be relevant to the Club context. It would be worth contacting NGOs in the area to check the possibility of borrowing these.

Which of these resources have you used? Which did you find effective?



7.4

ENVIRONMENTAL IMPROVEMENT PROJECTS

7.4.1 Water Conservation in School

Students could take up projects which would lead them to become aware of how they use and misuse water, and teach them simple actions they could take to conserve it.

Understanding the Issue

Water is precious and there is a very limited quantity of fresh water available for use. Even with this knowledge, many people tend to waste water. It is therefore important that students internalize this concept before they take up a water conservation project.

This could be done through talks, slide shows, videos and charts that graphically demonstrate the distribution of water on earth. Students need also to understand that water has many uses.

Once they have understood how limited, and therefore precious water is, they may look around and find out whether and how it is being wasted.

Taking Action

Step 1: To get an idea of the general situation, students would need to conduct a daily survey over a period of about a week, to find out where, how and why water is being wasted in the school.

The following survey sheet suggests some basic points about information that can be collected.

School Water Survey Sheet No. 1	
1. Sources of water : Borewell/Municipal supply/ Taps/Hand-pump/Other	7. Who are the persons, other than students and teachers, using water in the school (gardeners, cooks, sweepers, etc.) :
2. Water is stored in : (tanks, <i>matkas</i> , coolers)	8. Who is the in-charge of : the pump-house?
3. No. of taps/ <i>matkas</i> in the school : (including garden, kitchen, coolers, toilets, labs, etc.)	9. How many times does he/she : start the pump in a day?
4. Are they properly covered? :	10. Note the water bill for the last : three months.
5. No. of taps left open/leaking :	
6. How much water is wasted by :	

Step 2: After the survey, the students need to compile their findings and attempt to analyze the nature of the problem. For example, were the taps dripping because they had not been closed properly, or because the washers had worn out, or due to some other reason?

Step 3: Once the situation is understood, they could begin a campaign to both conserve water themselves and to motivate others in the school to conserve water, through posters providing details of their survey (specifying the magnitude of the waste, causes and consequences of water loss, electricity bills for pumping, etc.)

Some possible actions to improve the situation are:

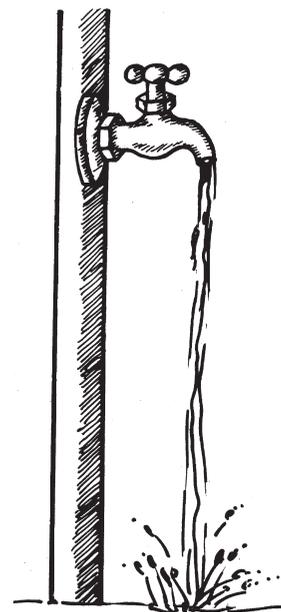
- For leaking taps, students could contact the relevant person in-charge in the school (or the principal) and discuss the findings of the survey with them, requesting that the problem be addressed. They may write an application requesting the principal to do the needful—either change the taps or repair them, and ensure, by repeatedly checking, that the problem is rectified.
- If there is unavoidable wastage of water, for example, near the drinking area or washing area, students could make efforts to use this water for irrigating plants. To divert the water, a canal, lined with clay or bricks to prevent its collapse over a period of time, could be dug from these areas to the garden.
- If stored water is left uncovered, students must ensure it is covered. For water stored in *matkas*, the students could design a lid made out of cardboard. For water stored in tanks, they could bring it to the notice of the authorities. Students should also make sure that the tank is cleaned regularly.

Once the authorities and other school members have responded with some positive action, the students must continue to monitor to ensure that the activity is sustained.

After a month/term, students should do a survey again to find out the extent of improvement in the situation.

School Water Survey Sheet No. 2

No. of taps left open during the first survey	:
No. of taps left open now	:
No. of leaking taps during the first survey	:
No. of taps that are leaking now	:
No. of leaking taps that have been repaired	:
Amount of the water bill after the campaign	:



7.4.2 Energy Audit

With the invention of electricity, life has become comfortable and we are becoming more and more dependent on gadgets of all sorts—for daily chores as well as entertainment. Students hardly realize that the increasing use of electricity has a price, not only in terms of paying the bills, but also the impact this has on the environment.

An energy audit refers to examination and verification of energy consumption in the form of electricity, gas and other forms of fuel energy, used in households, schools, industries, institutions or other public places. Energy audit undertaken periodically would reflect increase or decrease in energy used over a period of time.

A school energy audit looks at energy consumption in a school. Through this project students find out about the use of electricity for various purposes. They get to know how to conserve electricity and the importance of the inculcation of simple conservation habits, in making a marked difference.

Understanding the Issue

The students can be introduced to the topic through:

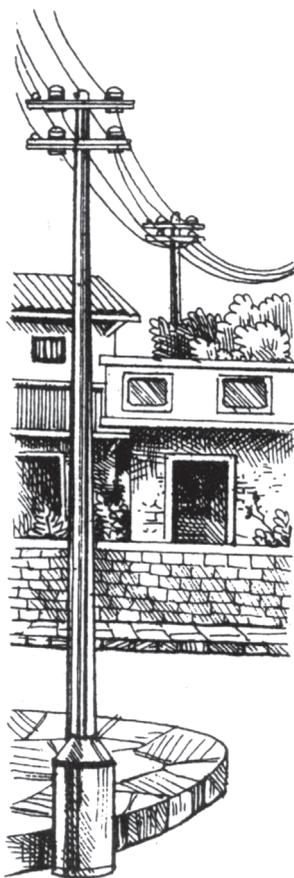
- A talk by a resource person, (for example an official from the electricity board), on production, uses and conservation of electricity. The problem of limited fossil fuels and also the problems caused by dams and nuclear fuels should also be discussed.
- A field trip could be arranged to a nearby power sub-station where the officer/engineer/ in-charge could provide students the details about how they receive electricity in their school/locality (i.e. generation in thermal/ hydro/nuclear power station, the transmission to main station to sub-station to school) and the environmental consequences of electricity generation.

Students should also be familiarized with an electricity bill. They should study what kind of information is found on the bill and discuss what each head means.

Taking Action

Once students have been introduced to the system of recording and billing electricity use, they could conduct a survey to find out where and for which appliances electricity is used in the school. They may use the given survey sheet on page 90, and add to it other items that are specific to their situation, e.g. use of pump for pumping water up to the overhead tank.

The survey should be done twice—once before the start and once after the campaign—so that the two may be compared.



Taking Action

Using the data collected during the survey, students could calculate the units and cost, of a fan and light which are not switched off for an hour, and for a day.

After the calculation, students should take up an action campaign. Some tips for taking action are listed below:

If the appliances are not switched off after use, they should put a note asking the person (s) using it to switch it off after use and also to switch off other lights and fans when leaving the room.

Form groups to patrol the campus at intervals (during recess, lunch, etc.) to determine if there are any appliances left on in unoccupied rooms, and then bring it to the notice of the person concerned. Or if they have the permission, students may enter the room and switch these off. (Prior permission is always required, as in the case of laboratories, where experiments may be going on, even during the recess.)

Talk to the school administration to get them to maintain the electrical appliances in proper condition (not letting dust accumulate on the lights, keeping them clean, following the instructions for using the electrical appliances properly, etc.)

Keep a record of the electricity bill every month to determine whether the bill has reduced after the awareness campaign. This is a great achievement for the school and this news could be displayed on the notice board and announce in the assembly.

The student could also display eye-catching posters with tips for conserving electricity.

Students could evaluate the outcomes of their efforts through another survey with a form similar to the one used earlier.

Calculating the Cost

Suppose a 1000 Watt electrical appliance consumes one unit of power every hour and per unit cost of electricity is Rs. 2.30. Therefore, if a fan of 60 watts runs for 24 hours, the cost to run it would be as follows:

One unit is consumed in 16 hours and 40 minutes for a fan of 60 watts i.e. 1000 minutes

herefore in 24 hours or 1440 minutes electricity consumed is=

$$\frac{1 \text{ unit} \times 1440 \text{ min}}{1000 \text{ min}} = 1.44 \text{ units would be consumed}$$

If one unit costs is Rs. 2.30 then 1.44 units costs= Rs. 3.31 (1.44 x 2.30)

Electricity Survey for the School

Appliance	class				school			
	No.	Working hrs/ month*	Number you think actually required	Should work hrs/ month*	No.	Working hrs/ month*	Number you think actually required	Should work hrs/ month*
1. Incandescent bulb a. 40 W b. 60 W c. 100 W d.								
2. Fluorescent tube light a. 20 W b. 40 W c.								
3. Fans								
4. Slide Projector								
5. TV								
6. Video								
7. Public address system								

* Approximate

Find out and answer

- How many times in a week did you find lights and fans 'on' in your class when nobody was present in the room?
- Does your school campus use energy efficient lamps (CFL) Yes/No :
- The total electricity bill for the past year of the school was :
- The total electricity bill for the past month of the school was :



Kids Did It!

Students of an eco-club associated with CEE Ahmedabad took up a project to encourage consumer efforts in electricity conservation. After having been oriented about the issue and how to tackle it, students initiated interaction with the residents about the electricity consumption of different duration of use of appliances in each home. The data thus collected was compiled and analyzed, based on which suggestions were made for more efficient use. The results were presented to the President, Secretary and residents of the complex. Tips for efficient electricity use and consumer guides prepared by the Ahmedabad Electricity Company, were distributed. Residents were requested to fill out these guides with details of consumption and meter readings.

Students collected the guides after four months and compared the bills from before and after the initiation of the project. Electricity audits in homes and subsequent energy saving measures through behaviour modification have helped in saving electricity costs by 15 per cent. These eco-club members have also formed check teams in their schools to help conserve energy and water.

To allow the eco-club members and other students in school to get a hands-on experience, energy rooms have been set up in their schools. These energy rooms have games, renewable energy products such as the solar cooker, solar lantern and energy resource material.

7.4.3 Clean up Campaigns

A campaign to clean up the school could include steps to reduce littering, planning appropriate and effective disposal of generated waste, and creating awareness among other students about the need for clean surroundings as well as motivating them to join the campaign.

Having decided that the school (classrooms, common spaces and grounds) need to be “cleaned up”, students should initiate the project with a systematic survey of what kind of litter/garbage is found in the project area and where it is a major problem, e.g. school grounds, near the canteen, corridors, etc.

Groups of students may inspect the different areas every day for one week, observing and listing the types of garbage/litter they find, the quantity and also where it was found. For example:

Type	Mon	Tue	Wed	Thu	Fri	Sat
Paper						
Plastic						
Wrappers						
Food Waste						

When will these things degrade?

Styrofoam
Eternity



Glass bottle
Unknown

Plastic bag
1 million years



Dispensable diapers
500-600 years



Alluminium can
200-500 years

Tin can
50-100 years



Leather shoe
40-50 years

Wood
10-15 years



Wool Sock
one year

Cotton rag
five months



Paper Bag
one month

Banana peel
3-4 weeks



Paper, and wrappers and plastic may be counted by the number of sheets or pieces. At the end of the week, students can compile their notes and discuss the findings.

Collection and Segregation of Waste

Once the students have become aware (through their visits, lectures and audio visuals), of the different kinds of waste generated in the school and the ways in which they could be recycled, they can then start a project to encourage proper disposal and segregation of wastes. For dry waste, such as paper or plastic, they should take the permission of the Principal to store the segregated waste, until the time of disposal. Depending on the storage space available, they could plan the intervals of disposal.

Since the success of the campaign would involve the co-operation of other students and staff members in the school, they should inform them about the project of collecting and segregating waste, through announcements in the assembly, individual class announcements, displays on the notice board and posters. The information campaign should highlight the advantages of segregation of waste, how to segregate and how the segregated waste will be disposed. They should request others to co-operate and put the different categories of waste in specified dustbins.

Students could request the support and co-operation of members of the school staff in-charge of cleaning the school premises and thus involve them directly in this project. The cleaning staff could be requested to collect the segregated waste and place it in the previously identified storage space.

Students could make different dustbins from used cardboard boxes for the various kinds of wastes. Each bin should be labelled for the kind of waste that should be put into it: used notebook paper, chart paper, used polythene bags, etc. Such boxes should be placed in each classroom and office, or in a common area. In the canteen, students could also place different containers for leftover food, plastic containers and bags, paper trays, etc.

In the initial phase of the project it would be useful if one or more of the students involved in the project visit the different areas of the campus/school grounds/canteen, at a specific time (during lunch hour) to ensure that the other students put the waste into the different bins.

For the success of such a project, it is important that the students' actions are encouraged by the school management and noticed by the rest of the school. The groups' performance should motivate other students to join the campaign. Such a project is sustainable only when all are involved and keeping the surroundings clean becomes a habit.

Disposal of Waste

Dry Waste

Students may find out about a local *kabadiwallah*, who picks up the segregated dry waste (paper, plastic etc.). If the quantity is large, they could make arrangements for the collected waste to be picked up at fixed intervals by a nearby recycling centre.

The profits from this could either go to the school or the class/group which organizes these programmes.

Kids Did It!

Students in several schools have thought up “eye-catching” ways of attracting attention to the problem of garbage. In Calcutta, West Bengal, children collected all kinds of trash—boxes, tins, paper, plastic bags, etc., to build a TRASH-O-SAURUS in the school lobby. This was an effective way of demonstrating how much material is thrown away.

Students in Jaipur, Rajasthan, and New Delhi, collected non-biodegradable garbage from their homes, including used tubes, clips, tetra packs and much more. Over a bamboo frame they fixed all the trash to create a huge Ravana-like garbage man. Such a ‘sentry’ at a neighbourhood plot or near a garbage dump could act as powerful way of communicating about garbage.

Source: Gayatri Moorthy, New Delhi

Organic Wastes or Biodegradable Wastes

Kitchen waste, leftover food materials, leaf litter, etc., could be recycled as compost in a compost pit. If there is a problem of space, then composting can be done in large flower pots.

In co-operation with school authorities, students could decide where in the school grounds to make a pit.

Compost manure will be ready in three to four months, which could be used in the school garden. If the prepared compost is more than what is required for the school garden, then they have the option to sell it, either in the school itself (to the staff and other students who are willing to take it) or to any shop that is willing to market it.

Make a Compost Pit

Let the students dig a pit about one half m wide, one m deep and as long as possible, preferably at the far end of the garden. Line it with straw or dried leaves and grass. Organize the disposal of organic waste into the pit as and when generated. Give a group of students the responsibility to ensure that the contents are covered with a sprinkling of dried leaves and soil everyday. Water the pit once or twice a week to keep it moist. Turn the contents of the pit every 15 days. Compost manure will be ready in three to four months.

7.5 FROM SCHOOL TO HOME

Can students do some projects at home also? Certainly. This would be useful not only to reinforce the learnings from school, but also to spread the ideas to the families by involving them in the project. For example, students can do an electricity and water- consumption and misuse survey at home also. Compiling and comparing the findings could generate interesting discussion and debate.

Another interesting home survey could be about garbage. By briefing a simple survey sheet for a week, the students can find out about the different kinds of waste generated in their house, class and in the houses in a nearby community.

Garbage Survey Sheet

Day	Paper	Glass	Plastic	Tin Foil	Kitchen waste	Other (batteries, etc.)
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Ask the students to fill in this chart at the end of each day. Glass, cans, etc. can be counted in numbers, paper in number of pieces or sheets. Kitchen waste may have to be weighed or measured in a standard measure e.g., cup or pan.

A survey of shops which students usually visit could yield interesting findings about products and packaging. These could link up to the analysis of the garbage survey findings.

Tell the students when they go home and unpack after a shopping trip, to check how much paper, plastic and other packaging material is collected. Let them become conscious of:

- What do they do with this?
- How much could they have avoided if they had carried their own bag?

Students can also undertake a market survey. They should record their observations about the products displayed.

- What kind of packaging is the most common?
- What kind is the most attractive?
- What kind of products have the maximum packaging? (Those that may spoil easily? Those that may break easily?)
- How much of the packaging is unnecessary?

From Home to Neighbourhood

Groups of students can each choose a particular neighbourhood society/ colony to survey/investigate a particular aspect - e.g., amount of vegetation in that area -number of trees, green patches (common plot, park, etc.); gardens of individual houses, etc.

They could develop a questionnaire to find out about garbage from households and its management in the context of a neighbourhood. Whatever the topic for survey, students must develop a proper questionnaire to help guide and systematize their investigations. This is an important skill in itself.

They could do a survey on the incidence of water borne diseases (who is affected, what illness, how often, how much is spent on treatment, etc.).

They could survey the number and type of vehicles, investigate the uses of personal vehicles like cars, two wheelers, etc., and find out how many children go to school by bicycle, car, etc. They should also find out about shared transport (autorickshaws/ buses for school) and public transport in and around the locality (number of buses that pass nearby, how many people use these as the principal means of transport, etc.).

As important as collecting the information is the process of processing and presenting it. Groups should present the data collected and display it attractively. Discussions on similarities and differences in findings between neighbourhoods, possible reasons for the same, and suggestions for changing the existing situation are a very important part of the process.

Through action projects children can realize that irrespective of where they live there is something that they themselves can do to improve the environment. Children also realize the impact of linkages with a wider environment. Through interactions with different community members they also come to know about traditional practices that are environmentally sound, and a respect for such knowledge and wisdom.

Kids Did It!

As part of a campaign called “Clean-up Kodagu”, initiated by CEE-South, school children went out into the community to collect garbage, which was then sold to recycling agents. 50 per cent of the money generated from collecting and selling the waste was kept by the schools as corpus to form Eco-clubs, and was used for camps, excursions and other environmental education activities.

Source: CEE-South



7.6 GREEN CLUB

It is ideal if all the students can take part in the different activities and projects. However, this may not always be possible, given the constraints of time and other logistics. Sometimes a smaller group of students may be very enthusiastic and eager to participate in such activities. It is important not to miss these chances to harness the energy of the students and guide them towards positive action. One way to do this is to set up an eco club or green club.

A Green Club is a wonderful opportunity to create awareness, build attitudes and help students take up activities in the real world, in a way in which the constraints of the classroom and curriculum will not allow.

A Green Club can thus help to extend the boundaries and scope of the formal educational system, encouraging creativity, and empowering students for constructive action.

Numbers for the Club

Any teacher who is concerned about the environment can take the lead in forming a Green Club. It could be a science teacher, social studies teacher, language teacher... Enthusiastic crafts teachers and games teachers are also running successful Clubs in schools.

It goes without saying that at least one teacher is required to set up and effectively run a Green Club. However, teachers often mention that it is very difficult to cope with all Club activities single-handed. Therefore, it seems advisable that there should be at least two teachers involved in the activities—a teacher-in-charge and a supporting teacher. This also helps to maintain continuity—if the teacher-in-charge is on long leave or has to leave the school, the activities need not come to a standstill.

How many students can form a Club?

A comfortable number for a Green Club seems to be 25-35. This number is both large enough for taking up and doing projects which can have a visible impact, and small enough to be manageable.

Teachers often mention that if they register 40-45 students at the beginning of the year, they may be left with 25-30 who are really interested.

Selecting students for the Club

It is important that the students who form the Club should be interested and willing to participate in the activities. Different ways may be used to gauge their interest: those who respond to the notice about the setting up of the Club may be the interested ones. If there are too many of these, you need to use some method of choosing.

You may use your judgement and prior knowledge about the students. Alternatively, you could give some task or project and observe students' participation in this observed. Preferably, this should not be a competitive process, nor should it only judge information levels.

The task should be such that it will show the student's interest and commitment. For example, all students who show an interest in forming the Club may be asked to follow the newspapers for a week and clip out environment-related news and prepare a scrapbook. They may be asked to read and do book reviews of environment-related books available in the school library. They may be asked to do a survey of people in their neighbourhood to find out what people perceive as the major environmental problem of the area.

Where possible, all those expressing interest should be encouraged to become members. In some schools, two or three Clubs have been started to accommodate all interested students.

Composition of the Club

If all the students are from the same class, they will have the same timetable, free periods, etc., and co-ordination may be easier.

If the club is composed of students from different classes, the new group dynamics can be healthy. It may lead to some children taking up new roles and responsibilities. By having different age groups, different skills and abilities can come in. However, care needs to be taken to ensure that older children do not dominate the activities.

Many teachers prefer to have a few members from each section of standards 6, 7 and 8.

Club structure

The teacher-in-charge and co-teacher provide guidance and continuity to Club activities. It is good if the Clubs has student office bearers. These office bearers could be elected by the club members. In order to give more children a chance to take responsibility, office bearers could hold office for a period of six months, or one school term.

The student representatives will function as:

President: He/she calls the meetings; liaises with the teachers, school administration, etc., on behalf of the Club; takes a leadership role in organizing events and in planning and managing projects.

Secretary: Keeps the minutes of the meetings; sends copies of the minutes to concerned persons including Principal, parents, etc.; maintains the record of attendance of members; prepares the report of activities at the end of every school term and one at the end of the year.

Treasurer: He/she collects and manages all the money of the Club; keeps accounts of the funds received, spent, etc.

Materials Manager: Is in charge of the safe keeping of all the equipment, materials, books, videos, charts, etc., of the Club.

It is worthwhile to make special efforts to ensure that it is not just the teacher-in-charge and office bearers who decide what happens at meetings. It may be a good idea to have one or two different members plan each meeting as they like.

A Pledge

I Shailla, proud member of Snow Leopard eco-club pledge to do my best:

To improve the environment of my home, my school and neighbourhood.

For this, I will plant and look after one tree this year

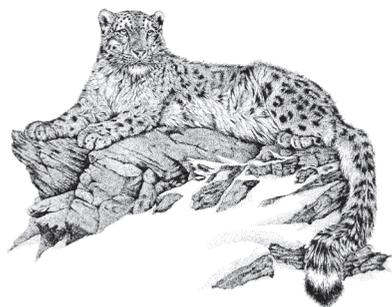
I will not waste water

I will switch off lights and fans

I will not waste paper

And I will learn more about the environment

So I can help improve it.



Club identity

Students will feel a part of something special if their Club has an identity. First, of course, the Club must have a name. This name could be selected by the students themselves at the first meeting.

It would also be nice if the Club could have a logo or symbol. This symbol can appear on all Club related items—e.g. dustbins made by Club members and put up in the school; pamphlets they distribute; the bulletin board allotted to them.

This way, other students, teachers, etc., immediately know that a particular activity has been undertaken by the Club. They could also have a badge/belt/arm band, etc., which they could wear to school (everyday if permitted, or on the Club Meeting Days).

The Club could also have a pledge that all members have to solemnly take and adhere by. The pledge could be developed by the members. Rather than being stated in general terms, like a pledge to 'save the environment', it would be useful to include in the pledge issues that concern the life and immediate environment of the students, and actions that are actually achievable. Club members may also compose and sing their own club song.

Management Support to the Club

Having the Principal's support for Club activities is half the battle won. The teacher-in-charge must keep the Principal informed about the process of setting up the club as well as ongoing and proposed activities of the Club. Ideally, the planning of the Green Club should be the collective effort of the administration, staff and students. If this is not possible, it is important to ensure that all are kept informed.

The Principal must be invited to attend special functions of the Club such as the inauguration, an exhibition, etc., as well as occasional meetings of the Club. The Principal could also be requested to brief, or give permission to brief, other teachers and school staff about the school Eco-Club and its activities. This will be helpful in getting their cooperation, if required. For example, it may be necessary to work with school gardeners or cleaning staff for some projects. In case a project is being planned which needs the cooperation of these staff, it might be a good idea to invite them to one of the meetings when the project is being discussed.

They can act as judges for certain events; some could be called in as resource persons; a few parents may also accompany the group for field trips, camps, etc. They must, of course, be invited for any Club functions and events.

Involving parents

Parents may, naturally, have strong feelings about what their children should be doing with their time in school and outside it. It is therefore important for the success of Club activities that they are informed about, if not directly involved in the programmes that their children undertake. If the parents are convinced that the Club will lead to the overall development of the child, and

will involve the child in constructive activities, they will usually be ready to support the activities.

It is desirable that parents know about the Club that the children are going to be part of, the kind of activities that they will be involved in, the time and other resource commitments, etc., even before the children are enrolled. One way to do this might be to send a letter to the parents along with the Club enrolment form for the parents to fill.

Parents can also be involved in the Club's activities. They can act as judges for certain events; some could be called in as resource persons; a few parents may also accompany the group for field trips, camps, etc. They must, of course, be invited for any Club functions and events.

The Club and the School

It is important to let the rest of the school know about the Club and its activities. This will not only make the Club members feel important, and more responsible for their actions, it could also motivate other classes to take up similar activities or join/form Clubs.

One way to do this is for the Club to have a space (notice board/blackboard), etc., at a place where the whole school can see it. On this, they can put up reports of activities, photographs, interesting news items, etc. Club members could use the Bulletin Board to run competitions, quizzes, etc., for the other students.

With the Principal's permission, the Club representatives could report on the activities or present something in the assembly. Putting up an annual exhibition to which all are invited is also a good way of making the Club's presence felt. Camps, treks, etc. could be made open for the other students also.

Do you have any kind of environmental club in your school? How similar or different is it in terms of structure and functioning from the points discussed above?

Running a Green Club

Time

Time availability is usually the first problem that teachers encounter. Some options that could be explored are:

- If the school has club or extra curricular activity periods, these may be utilized.
- Time set aside for SUPW (Socially Useful Productive Work) may be used.
- In some cases, students may be able to come early, go late or come on holidays.

As is to be expected, if Club activities are planned before the beginning of the school term, it is easier to accommodate the activities.

It is desirable to set aside at least two periods a week. Of this, some time will be spent on the regular meetings of the members. The rest of the time will be spent on doing projects and undertaking activities that have been planned.

Certain types of projects will demand that students work individually or in groups outside of school hours also. The Club members must decide whether they want to take up such projects or not.

The Space

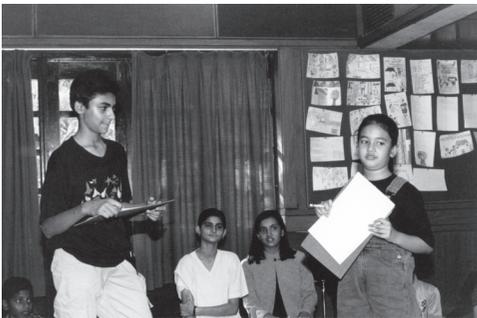
The space problem is another one that Clubs often face. Meetings should preferably always be held in the same place so that there is no confusion. This should be a place which can comfortably seat all the members. If possible, the seating arrangements should be unlike a normal classroom. For example, students could sit around a table, or in a circle on chairs, or on the floor. There should also be enough space to display and spread out material. If the school grounds have a secluded corner under a shady tree, this could be an ideal venue. In many schools, an empty classroom, craft room or labs are used for Club meetings.

Apart from the meeting space, it would be useful if the Club could be allotted a lockable cupboard in which all the material, equipment and work-in-progress can be kept.

The Meetings

A green club meeting could be planned so as to meet most of the objectives:

- Re-affirm commitment to the Club: This could be achieved by taking the pledge, singing the Club song and signing a Club register.
- Report on ongoing activities: This could be done in the form of short reports presented by subgroups appointed for various tasks e.g. a Water Patrol could report on how many taps were found leaking and how many were found left open at the end of recess during the week, and what they intend to do about this. A group which has taken up the task of convincing householders in a neighbourhood to have their own compost pits could report on how many households have been visited, how they are persuading the community members to undertake composting, etc.
- Plan for upcoming events/future activities: Anyone who has a project in mind could make a presentation on it. All members could discuss it and participate in planning it. Responsibilities would need to be allocated, deadlines set, etc.
- Learn something new about the environment: Films/ slide shows, etc., could be screened, or resource persons called in to deliver a lecture. Members themselves may research and present on some topic, or present reviews of relevant books they have read, etc. These may be further discussed.



- Display talents, enjoy and be enriched: Small groups may be asked to present environment-related skits, songs, poems, stories, dances, etc., each time.

A meeting should be an opportunity to discuss and share ideas, views on common issues and plan activities and projects to be undertaken by the club.

Some key Club related issues will also need to be discussed, e.g. How do we celebrate Wildlife Week? How do we ensure that the trees we plant survive?

Depending on the kind of activities for the week, a meeting may take 20-40 minutes.

For some special meetings, the principal of the school, administrator, etc., may be called in.

There could be sub-committees of students for ongoing Club activities—e.g. Water Patrol, Electricity Patrol, Garbage Management, School Gardens, etc.

If there is a club in your school, how does it function in terms of time, space & activities?

The Activities

There is a wider range of activities that the club members can undertake. They can take up specific projects in the school. Some of these are described in the preceding pages. The club can perform the role of an ongoing eco-monitor for the entire school by spreading awareness on environmental issues, creating teams to check wastage (of water, electricity, paper) in the school. They can start a campaign to keep the school clean and green. The club can choose to do any one project through the year or take up a series of activities depending on time and resources available.

Planting the seeds for a Green Citizen

The outcome of the club activities and projects extend beyond the immediate short term objectives such as saving water. First hand involvement and real-life experiences offer tremendous opportunities for learning and application of learning.

Participation in Green Club activities can help plant the seeds of a responsible attitude towards the environment, and a sense of personal responsibility for a better future.

7.7



Develop a plan to involve your class in monitoring wastage of water or of electricity in the school.

- How will you orient the class?
- Will you divide the class into groups or will the entire class work as a single group?
- What aspects will they monitor?
- What kind of survey sheet will you develop to help in this?
- How will you instruct students to compile the data?
- How should they present the data?
- What will you do with the findings of the survey?

(credit points: 5)

