Developing Life Skills

School is also a place where children need to learn some basic life-skills. These could range from those related to life at home to that relating to the social life in the outside world. It is important that the schools spaces offers settings that can be used by teachers and children to develop and practice various life-skills that will help children to survive and cope with issues that will emerge later in their adolescent, youth and adult life. The activities designed in this section, in a subtle way, not only help in integrated learning but also help children to develop such skills. The following are some such spaces and settings for the schools:

33 The Counter Space
34 Post Box
35 Post Office
36 Kitchen as a Learning Space
37 Zero Garbage
38 Health and Hygiene
The Counter Space

Introduction

The child's world is full of make-believe. This is one of the ways in which young children relate to the world around them. Occasionally they tread into the adult world through play and prepare themselves for their future roles in society. They also need to communicate in many ways with their peer group, as well as those who are elder or younger to them. They need a space where all this is possible, in a subtle, casual way.

A counter can become a place for these activities. It has some peepholes, some cubby holes, variation in physical levels. It may also have seats in a cozy corner to sit and chat, as well as a tracing corner for money and tickets.

Teacher's Role

The teacher must be very proactive if children are to understand the full potential of the counter space. Activities must be changed from time to time. After the teacher has taken the initiative to change the activities, he can spend a day or two with the children, then he can leave children to play by themselves.

However the 'Shop' is directly related to the math curriculum and you will need to plan regular activities of buying and selling, weighing and measuring which are described below.

You will also need to take an active role in procurement of wrappers, bottles and all materials required in a shop. You can teach the children to bring containers that will store all these wrappers, bottles or cartons in the classroom at the end of the school day.

Teaching-Learning and Fun activities

Activity 1: Shop Activity in and around Counter Space

All Classes

This space, along with a trellis and seating arrangements near a tree, is an excellent area for play and dramatization. With seating for 10 to 15 children it can be used as space for learning in small groups.
Objectives

1. To develop cognitive skills for sorting, classifying, weighing, measuring of length, measuring capacity, division, fractions, making lists, buying and selling including profit, loss, surplus, simple interest, reading labels, through simulation of real life simulation.
2. To explore real-life roles and situations in fantasy, such as shopkeeper, ticket collector, postmaster and so on.
3. To have a peaceful clay modelling and craft area, where their creations can be displayed in the cubby holes.
4. To speak clearly and appropriately, understand the body language of others and deal with customers.
5. To make choices, take decisions, devise their own activities and play board games without adult interference.
6. To understand general knowledge such as expiry date, ingredients, place of manufacture, distance the product has travelled (carbon footprint), using maps to understand this.
7. To understand false advertising, bargaining, negotiation and other stepwise processes.
8. To learn to make choices that have a positive impact on the environment such as avoiding aluminium packaging. If food or objects have travelled a long distance what impact does that have on the environment?
9. To develop skills of negotiating prices.
10. To develop a sense of humour.
11. To expose children to math vocabularies such as, “reduce, excess, expensive, exact, equal, cash, credit, more, less & soon”

Suggested Activities

1. Shop activity in and around Counter Space
2. Classroom Shop Counter
3. Counter Space as Post Office, Ticket or Bank Counter

The shop activity is a small group activity for four children at a time who work together. Two children will sell and two will buy. Children should not be waiting for their turn. The next day four other children will have a turn. Other groups of children can be busy with many other BaLA activities. The shop activity simulates a real life situation for children to play and to practice buying and selling in fun ways.
Activity 2: Classroom Shop Counter
All Classes

The shop should have shelves (soap wrappers), a small box for ‘paper money’, a measuring tape and a weighing scale and litre cups to measure capacity.

The math teacher can help children make a collection of all kinds of wrappers, such as soap wrappers, biscuit wrappers, tea boxes, match boxes, tooth paste boxes, masala wrappers, and so on. Empty bottles (with original labels) of all shapes and capacities can be used to measure capacity. Arranging wrappers—soap wrappers in one place, toothpaste wrappers together etc, is an excellent sorting activity for Class 1. The ledges, cubby holes or peep holes may also be used to arrange and display the range of sorted materials.

Children can also make paper money (on the tracing tile if provided near the counter). First the teacher will need to take the children to the counter, have the children arrange the wrappers on the counter and then have a ‘customer’ come to make purchases. This type of buying and selling in class I and III is teaching addition and subtraction in a relevant manner. At first the teacher may have to be involved in this play. Children will soon understand and expand this play by themselves.

With higher classes, the teachers may purchase real cash memos from the market and teach children to draw up cash memos. Further the teacher can give problems that involve percentage, discounts, buying on credit and cash discounts.

Some Examples:
1. Govind has a shop. The price of one toothpaste is ₹40.00. On purchase of 4 tubes a discount of 10% is given. What would the cost of 4 tubes be?
2. If Rehman purchases ₹50.00 soap on credit, he will have to pay 2% interest per month. How much will he has to pay at the end of the month?
3. David is selling bath soap which says, ‘Pay for two. Get one free’. Two bars of soap are for ₹33. Geeta took 3 pieces of soap home. What will be the cost of one piece of soap?

Activity 3: Counter Space as Post Office, Ticket or Bank Counter
All Classes

The Counter Space can also become a post office where children sell stamps that they have previously collected. A post box can be installed on the verandah and children can write letters to their teachers and friends (See 34 Post Box and 35 Post Office for more details and ideas).
For higher classes, the counter may be a train station where children come for information about train timings, distances and cost of tickets to the distant city. This is an excellent supplement to geography lessons because children must use a train timetable and become familiar with it.

The counter can also be bank counter, where children fill-in the pay-in slips and cheques and deposite or withdraw money.

A special activity would be selling vegetables once a month. Children can be asked to bring money and weighing, buying and selling can happen in small groups through out the day.

In the low height plinths, platform, even a weekly village market (the 'haat') could also be simulated.

Other activities that can happen around the cozy seats and 'chabutras' of the shop area are clay modeling, paper crafts, origami, fantasy play, hide and seek, unch-nee ch and board games. The Cubby Holes and Peep Holes provided can be used to display children's creations. On parent's day at school, such display may be very useful for parent's to see their children's work.

**Space for Notes**
**34 Post Box**

**Introduction**

It is nice to have a Post Box in all classrooms. The ability to write expressively and coherently is a skill that is not only important; it is a skill that is gained through much practice. To become a skilled person in written communication, children must start writing their observations and thoughts from class 1 onwards. As children grow and learn, the teacher needs to encourage them to continually improve their writing skills. Unfortunately to earn high marks, many teachers ask students to copy essays or the teachers' words that he has written on the board. So, is there a way to gain writing skills without worrying about marks? Yes. Keep a Post Box in your classroom. It is non-threatening because letters do not need to be graded or marked. At the same time, it promotes a spirit of sharing and friendship within the class.

**Suggested Activities**

1. Weekly Timetable for Opening Post Box.
2. Circle Time Discussions
3. Keeping a Record
4. Student-Teacher Written Conversations

**Teaching-Learning Activities**

**Activity 1: Weekly Timetable for Opening Post Box**

**All classes**

This activity must be listed on your timetable and you must follow the weekly schedule otherwise children will think that it is not important. You will need to plan with the children about who will distribute the letters. One or two days before the box is opened, remind the children that letters need to be written. Try to make sure that no child is left out or forgotten. It would be sad if one or two children did not get a letter. When this activity becomes a regular routine, you do not need to write so much. Maybe a special letter to each child, once a month is enough. If you have forty children in your class, that means 10 letters a week. If some children of class I and II cannot write a few lines, encourage them to draw and write their name and their friend’s name on the paper and post it.

**Activity 2: Circle Time Discussions**

**All classes**

This manual has repeatedly emphasized that children learn through discussions and activities using all their senses. Daily discussions between you and the children must happen, if children are to learn. Sometimes you can take advantage of the Post Box to have children record these discussions in the form of letters or observations.
Teacher’s Role

- Put up a Post Box in your room.
- Speak to children about writing letters to one another and take their suggestions.
- Decide on which day or days, the box will be opened?
- Encourage the children to write to you, their teacher. Then you write back to them.
- Decide on various topics from time to time in consultation with the children.
- Open the box on the days that have been decided, or children will think that you do not consider this activity important.

Objectives

1. To encourage literary activities of reading and writing.
2. To communicate about meaningful events in a child’s life.
3. To write about important events in the school or community.
4. To accept mistakes as part of learning and growing.
5. To occasionally correct mistakes when you write back to the child.

Activity 3: Keeping a Record

All classes

It is important to keep one monthly sample of each child’s writing. After seven or eight months, you will be able to see the progress that each child has made. These written samples can also be shown to the parents. You will also be able to show your principal or head master and fellow teachers how satisfying and helpful a Post Box is. Occasionally you may have a student who does not progress. You now know how he/she needs to be helped. He will need some individual guidance to improve himself. All students need guidance sometimes; even children who write well can be challenged to improve their writing skills.

Activity 4: Student–Teacher Written Conversations

All classes

You, as the teacher, may have to start writing letters to each child to encourage them to write. In this way you will gain immense love and respect of each child and it will help you to know about things that the child considers important. Often teachers have to ask leading questions, as shown. You must also tell the child about important things that are happening in your life. Activities like these will help the child feel close to you and will improve writing as well as communication skills.
Introduction

The Post Office is a part of our daily lives. The postman delivers letters, money orders and magazines to us. We go to the post office to buy post cards, inland letters, stamps, deposit money in savings schemes and send money orders.

There may be a Counter Space provided in your school for a shop. It can also become a post office. Here children can sell stamps, buy money orders forms, weigh parcels and learn about savings schemes.

The Post Box in your classroom or school will become an important aspect of your Post Office activities.

Suggested Activities

1. Visit to Post Office
2. Set up a Classroom Post Office

Teaching-Learning Activities

Activity 1: Visit to Post Office

All Classes

1. You must have circle time discussions with children before you visit the post office. Ask them what they expect to see and write their answers on a chart paper.

2. Plan the visit if the post office is nearby.

3. On your return to school, children will tell you what they have seen and you must record it on a chart. Read it to the children and have them read it to you. Children can then be asked to draw pictures of what they saw. Some children may be encouraged to label the pictures, by using words and sentences from the chart.
Teacher’s Role

- Plan with children to set up a Post Office in school or in the classroom.
- Plan a visit to the local Post Office.
- Assign projects relating to the Post Office in their town or village.
- Check in the math text and relate Post Office activities to the text.
- Enhance the learning of geography by using the Post Office.

Objectives

1. To enhance learning by using relevant activities that are available in the local community.
2. To duplicate some post office activities and thus enhance subject teaching.
3. To understand the purpose of the post office and activities that happen there.
4. To learn the alphabetical principle by keeping an address book.
5. To understand that activities help to cover all aspects of the school curriculum namely math, science, language, social studies and geography.

Activity 2: Set-up a Classroom Post Office

All Classes

1. Plan to set up a Post Office in the class. You can also use the outside Counter Space but supplies will need to be carried in boxes from the class as all classes use this counter. Class I and II children can make collections of stamps and envelopes by asking parents to keep used stamps. In math class, you can distribute stamps to children and ask them to add up the amount of stamps. For example, one child may have two ₹1 stamps and one ₹5 stamp. Another child may have three ₹1 stamps. You can give greater challenges to children who are able to add higher numbers.

2. Children can also collect old envelopes and reuse them to put letters in the Post Box which you already have in your room. This will encourage them to ask for the address of their friends.

3. Children can also learn to keep an address book and phone numbers of their friends. As their teacher, you can help them learn to keep addresses in alphabetical order.
Further activities

For Classes III, IV, V

1. Before visiting the Post Office, you must discuss with children what they have seen at the post office and what they expect to see. As the children tell you, write this on a large chart with a black sketch pen. This chart must be read. Reading with understanding is a curriculum goal.

2. Then discuss the trip to the post office and how the children are expected to behave and conduct themselves (e.g. make a queue, wait for their turn, observe various activities, do not disturb others). If you need help with transportation you may need to enlist the help of a parent or neighbour who has a tractor trolley or a minibus. If transport is not available, children will have to ask their parents to take them.

3. Each child will have to take a list of the questions to be asked and what is to be observed. Usually many more questions come up, once children are on site. Children then come to understand the complexity of the post office.

4. Children will need to bring back sample forms of money orders and saving schemes.

5. On return to class, you as the teacher will need to discuss how to change the Counter Space shop area into a Post Office for five or six weeks.

6. Children will then be asked to set up activities that they have seen at the post office. For example, this will include making money, weighing parcels, selling stamps and so on. Children then become active participants in their learning rather than passively memorizing the textbook. They also understand the limitations of a textbook. They learn to trust their own observation and develop a questioning mind.

7. Trace the details given on an envelope. Where has it come from? Look at these places on the map. How it may have travelled to your village or city?

Space for Notes
Further activities
For Classes VI, VII, VIII

1. These students can now study the post office in great detail. It will be useful to discover the various saving schemes and monthly income schemes. Perhaps some students can be encouraged to make monthly deposits.
2. Interest rates can now be studied in detail using real-life situations.
3. A list of rates for weight of parcels should be obtained from the post office. In school, students can weigh various parcels and decide what postage needs to be purchased.
4. A detailed study of various options when sending mail needs to be studied. For example, what is the difference between ‘Registered mail’ and ‘Speed Post’?
5. Surveys and questionnaires can be developed. Is there any difference in mails since the advent of the mobiles and Internet? How many money orders are received and sent in a day or in a month? Where do they come from and where do they go to? Look up these places on the map.
6. An interesting activity would be to follow the passage of a letter from the post box to the post office where it is sorted and put into postal bags, then sent to the train station or a postal truck. Where does it go from there and how long does it take to reach its destination?
7. Look at many letters. Where have they come from? Trace the passage of the letters by using a map. How many kilometers has it travelled? Students will also learn to use the scale that is provided on all maps.
Introduction

Because children learn by exploring their local environment, by using their senses, by talking about their experiences, it is important to have real experiences. A kitchen can provide many sensory experiences, without having to leave the school premises.

Kitchens are fairly easy to set up in a school. Most elementary schools would have the Mid Day Meal (MDM) kitchen in their schools. A covered area with a beautiful mud floor, an area for washing and cleaning and a gas stove can be made, using the grants available.

Many fruitful and happy hours can be spent chopping carrots, peeling cucumbers, mashing potatoes, slicing bananas and spreading chutney. Children will be asked to notice chemical changes that happen when pickles are made, when vinegar is added, when spices and salt are used. They will learn about proportions and ratio. They will learn to measure and estimate. These activities will be the basis for many discussions and writing activities. It is also a place to develop aesthetic of taste.

Teaching-Learning Activities

Activity 1: Science and Math in Cooking

All classes

When activities happen the teacher must be careful to point out sequences and patterns. There is order in science and math, just as there are sequences and order in cooking. Changes take place in food when ingredients are heated, cooled, beaten or other ingredients are added. All these must be recorded.
Teacher’s Role

The teacher will be responsible for organizing the kitchen. She will plan, along with the children, what cooking project is to be done. She will arrange to have children bring materials that are to be collected for cooking. This is not only to be considered a cooking lesson. Cooking is an integrated approach to learning science, math, reading, writing and for social and emotional development.

Suggested Activities

1. Science and Math in Cooking
2. Healthy Diets
3. Reading and Writing
4. Recipe – Lemon and Peppermint Drink
5. Recipe – Date laddus
6. Recipe – Pancakes from Uttarakhand

Objectives

1. To learn science and math concepts through cooking.
2. To learn to read and write using their real experiences of cooking.
3. To promote co-operation, sharing, discussion.
4. To have enjoyable sensual experiences that end with a special treat.
5. To have fun and to learn through activities.
6. To understand the importance of healthy diets.

Children will learn about the ratio of salt, asafetida (heeng), coriander (dhania), etc., according to the proportion of vegetables. They will learn to weigh, to measure mass and volume in practical ways. The writing activities must differentiate between ‘tools’ used and the ‘food ingredients’ used. The method of making the vegetable or the pickle or the sweets must be carefully and coherently explained. Thus, children develop communication skills.

Even the Mid-Day Meal kitchen in elementary schools can become a learning situation while planning, arranging, cooking and eating.

Effectively using BaLA in Elementary Schools - A Teacher's Manual
Activities can be:
1. Fruit chat
2. Sandwiches
3. Salad
4. Potato chat
5. Soaked sprouts of moong and chana
6. Lemon pickle
7. Pancakes of moong dal or besan
8. Cakes in a cooker
9. Date laddus
10. Many types of raita
11. Mango shakes
12. Many kinds of vegetables and lentils
13. Bean salads
14. Many kinds of chutneys
15. Food from your region

Activity 2: Healthy Diets

All classes
Schools must help the children bring more variety into their diets. This can be done through cooking activities. When discussions happen about the processes, be careful to also discuss the health aspects of the food which is being made. In higher classes, the teacher can discuss proteins, carbohydrates, starches, vitamins and minerals. It is interesting to note that many people think vegetables contain vitamins. Most vitamins are, in fact, lost when heated. So vitamins only can be found in raw food like fruits and salads.

Instead of telling children what they must eat, it is good to talk with them and help them decide what is healthy and what is not. Children can make a list of healthy food and junk food. This can be posted on the chalkboard in the common places. Below is a sample. It is not to be copied. Children should make their own lists with the commercial names mentioned.

<table>
<thead>
<tr>
<th>Healthy food</th>
<th>Junk Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vegetables</td>
<td>1. Cold drinks</td>
</tr>
<tr>
<td>2. Fruits</td>
<td>2. Artificial fruit drinks</td>
</tr>
<tr>
<td>5. Lentils</td>
<td>5. Noodles</td>
</tr>
<tr>
<td>7. Salads</td>
<td>7. Chips, wafers, dal moth and other fried snacks</td>
</tr>
<tr>
<td>8. Milk, curd</td>
<td>8. Commercial tomato sauce, chilli sauce with preservatives and artificial colours</td>
</tr>
<tr>
<td>9. Raitas</td>
<td>9. Excess of tea, coffee, ice creams and chocolate</td>
</tr>
<tr>
<td>10. Homemade bread</td>
<td>10. Excess of sweets with artificial colours</td>
</tr>
<tr>
<td>11. Homemade sauces</td>
<td></td>
</tr>
<tr>
<td>12. Homemade chutneys</td>
<td></td>
</tr>
<tr>
<td>13. Homemade pickles with natural preservatives</td>
<td></td>
</tr>
</tbody>
</table>
Activity 3: Reading and Writing

All classes

Children will learn to read with understanding for a purpose. They will read the recipes and will then write whatever they have seen. Sharing, writing and discussions motivates children and gives them a positive disposition to school.

Parents also understand that children are learning true skills when they see the written (not copied) reports that children bring home. They will also notice the confidence in children and their ability to plan and organize, without having to be constantly told.

Activity 4: Recipe for Lemon and Peppermint Drink

Classes I, II, III

Planning for this activity can happen on Monday.

Children will bring the ingredients on Tuesday and Wednesday.

The teacher will arrange for the utensils.

Utensils required:

1. Grinding stone - (sil and batta)
2. Large bowl for 35 glasses of drinking water
3. Large stirring spoon
4. Grater to grate ginger
5. Knife to cut lemons
6. Each child may bring a drinking glass from home

Ingredients required – for 30 children

1. Collect 15 lemons
2. Collect a piece of ginger
3. Collect about 12 leaves of peppermint
4. Collect 35 spoons of sugar
5. Collect about 6 spoons of white salt
6. Collect about 6 spoons of black salt

Method

1. Squeeze the lemon juice into the bowl
2. Grate the ginger finely and put it into the bowl
3. Grind the peppermint on a grinding stone
4. Add 35 glasses of clean drinking water
5. Add salt according to taste
6. Add sugar
7. Stir the mixture until sugar is dissolved
8. Pour into glasses and serve to the principal, teachers and staff
9. Pour into glasses and ... ENJOY!!!!!!

After this activity has happened, the Class I children will draw the pictures of the activity and label the pictures.
Other classes will write the recipe into their copybooks. Then they will write in detail how they prepared for the activity and how they did the activity.

They will also record how they disposed off the green garbage and how they cleaned up.

Classes who study English will write about the activity in English.

**Activity 5: Recipe for Date Laddoos**

**Classes III, IV, V, VI, VII, VIII**

Plan for this activity by asking all children to bring 50 grams of dates and 20 grams of peanuts and 20 grams of dry coconut.

The teacher will arrange to have 3 or 4 children bring a sieve each.

A large steel bowl and gas will be in the school. Otherwise collect wood and use a chulha.

**Utensils required:**
1. Large steel bowl
2. Large spoon
3. 4 sieves with large spaces in the jaali
4. Gas stove and cylinder
5. Large trays or plates
6. Grater to grate coconut

**Ingredients required:**
1. 50 grams of dates per child
2. 20 grams of dry grated coconut per child
3. 20 grams of peanuts or per child

**Method:**
1. Separate the dates if they are stuck together
2. Bring a large pot of water to a boil
3. Grate all the dry coconut and leave it on a plate
4. When the water is boiling put all the dates into the boiling water. This must be done by an adult
5. Let the water again come to a boil. This will take about 2 minutes
6. Remove the dates with a big spoon and put them in the sieves to drain water
7. When the dates are cool, spread a clean newspaper and put dates on them. The children will remove the center pit
8. When all the pits are removed, mash the dates while they are soft
9. Add half of the grated coconut to the date mixture
10. Take a small amount of the dates and put a walnut or a peanut in the center and make a round ball like a laddoo. Roll this laddoo in the grated coconut. Set it aside on a plate
11. When all the laddoos are made, serve them to the principal and teachers
12. Then the class will have their tiffin / Mid Day Meal and share the laddoos

Later in the day:
1. Have a classroom discussion and review the process of making the laddoos by asking:
   - What planning happened?
   - Were any mistakes made?
• Why were the dates boiled for two minutes?
• Why did we not add sugar?
• Will you make this at home?
• Why are homemade sweets better than those from the market?
• Can you bring another recipe from your mother or father?

2. Help the children to write about this activity. There must be a:
• Interesting opening sentence.
• Separate topics must be in separate paragraphs. In this case the separate topics would be: 1 Planning; 2. Collecting ingredients; 3 Collecting utensils; 4. Making laddoos; 5. Serving and eating; 6. The fun that you had!
• Some sentences should have good detail.
• An exciting concluding sentence.
• Check if all the sentences make sense.
• Check spelling and punctuation.
• Make drawings of the activity.

3. Now the children should rewrite the essay, very neatly after discussions with each other and the teacher.

4. When the essays are written, they can be laminated if desired and put in the classroom library. They should also be shown to parents.

Activity 6: Recipe for Pancakes from Uttarakhand

Classes III, IV, V, VI, VII, VIII

Cheelas, dosas or pancakes made of gram flour or moong flour are common. In Uttarakhand, they are made from rice and three types of lentils. They are also thicker than most South Indian Dosas, but not as thick as an Uttapam. Plan for the activity by asking all children to bring a small handful of rice, Arhar lentils, green split Moong lentils, black split Urad lentils, a bit of ginger, a green pepper, four whole black peppercorns and a small amount of oil. Perhaps you will want to get the oil from the school fund. It will probably take Monday and Tuesday to collect all the ingredients.

Utensils required:
1. Two large bowls
2. Three grinding stones, if possible
3. Gas cylinder and stove
4. Two heavy iron frying pans
5. Flat spoons to add oil and flip the pancakes
6. Plates and containers for pancakes

Ingredients required
1. Rice
2. Black split Urad lentils
3. Green split Moong lentils
4. Arhar lentils
5. Salt as required
6. Green peppers
7. Black peppercorns
8. Ginger
9. Oil
Method:

1. The ratio of the rice and lentils is 1 part rice, 1 part Urad, 1 part Moong, 1 part Arhar.
2. Wash the lentils and soak overnight.
3. Grind the lentils on the grinding stones along with the green peppers, black peppercorns, salt and ginger. All children should have a turn to participate.
4. Mix the mixture well and start to fry on the hot frying pans with a small amount of oil. This must be done by adults.
5. When one side is fried, turn it onto the other side.
6. The pancakes can be thicker than Dosas.
7. This activity takes a lot of time. Children can turn to other activities but make sure that all children have a chance to fry the pancakes, under adult supervision.

Conclude the activity with writing an essay and drawing as suggested above.

Space for Notes
Post Activity:

- Clean the utensils and eat the pancakes for lunch. You may also like to make chutney to be served with the pancakes.
- With classes V, VI, VII, VIII discuss the food value of the dish that has been made. Where have the ingredients been grown? How far have they travelled to get to our school?
- What was the cost of making this dish?
- Weigh the ingredients before making the dish. How many people ate the pancakes and therefore approximately how many grams did each person eat?
Introduction

India is a beautiful country, but also infamous for its garbage and filth. Often we clean our houses and throw the garbage outside the door. Often we want a clean toilet for ourselves but do not care if millions of people, especially vulnerable girls and women, do not have toilets.

Because, since childhood, we have grown up, accustomed to seeing garbage on the streets, we seem to have lost our sensitivity.

Think about the millions of rag pickers who sort through garbage everyday. Can they possibly cope with the mountains of garbage? Think about the people who have to use and drink untreated water from lakes and rivers. Think about the millions of people who live in cities and have to breathe the poisoned air. Is this necessary or is there a solution to this problem?

What can individuals do?

There is an old saying 'Charity begins at home'. You may clean your house and throw the dirt on the street. Is the street not your home or your town or your state or your country? It seems that we need a larger definition of 'home'.

Teaching-Learning Activities

Activity 1: Sensitization of Children

All Classes

How can you help children become aware of the garbage around them? What projects will you do that help children see that throwing garbage in the wrong place is ugly and unhealthy? The concept of Zero Garbage tells us that garbage should be seen as a misplaced resource. At present it is a mountain of problems,
Teacher’s Role

The teacher has an extremely important role in sensitizing children to problems in our society. Garbage is a major problem. It is unhealthy for all of us and ugly to look at.

Throughout your years of teaching, you need to have many discussions with children, not only about cleanliness but also about waste management and pollution. It is our responsibility. Discussions are never enough. What systems will you put in place in your school, home and community?

All classes can be involved in garbage projects at their own level of understanding.

Suggested Activities

1. Sensitization of Children
2. Silent Workers
3. Exhibition and Workshop
4. Disposal of Three Types of Waste
5. Projects on Garbage

Objectives

1. To sensitize children about ‘Zero-Garbage’ concept.
2. To understand that there are three main types of waste.
3. To start garbage management at school (composting, recycling and burial and disposal of useless garbage).
4. To start garbage management at home.
5. To learn about the lives of people who deal with garbage.
6. To study issues of hygiene in school and home.

because it creates immense health problems, environmental problems and strains the resources of panchayats and municipal corporations. It can easily be understood that if 70% of garbage can be composted, 25% can be recycled and only 5% is really useless, then the sweepers and municipal corporation can deal with this 5%. Garbage then becomes ZERO because it has all gone to its proper place. We need to start with good garbage practices in the school. Children must not only clean their own rooms and school yard, they must dispose off the garbage in a safe and clean manner that does not harm health of people, animals, the soil and air around.
All members of the school community must be a part of the regular discussions on cleanliness including the sweeper.

Discussions must include:

1. Setting up a system for cleaning
2. Dustbins in rooms
3. Digging and managing compost pits
4. Disposal of green garbage in compost pits
5. How will recyclable garbage be sold?
6. How will the money be used?
7. How will the garbage programme move into the community?
8. What projects can happen in school and in the community?

You can receive a lot of assistance from The Centre for Environmental Education (CEE), in Ahmedabad. If your school take a membership from the CEE, you will get regular reports from them. Your school can also contact Centre for Science and Environment (CSE) and ‘Gobar Times’ to learn more in New Delhi.

Activity 2: Silent Workers

Classes V, VI, VII, VIII

A detailed study can be made by the children, of the lives of people who manage our garbage.

These studies should happen regularly and should not be superficial. It can involve following children around for a whole day as rag pickers scavenge for recyclable articles.

A visit to homes of rag pickers and kabari wallas, for an hour or two for a week can happen. Where does the recyclable garbage go to?

Who is the dalal (middle man) or who buys garbage? What are the politics of the community?

A day in the life of a sweeper can be investigated. What are their joys and sorrows? What are their health problems? What is their attitude towards education? Do teachers make sincere efforts to teach children of sweepers or are they asked to sit separately?

Do we have any right to teach these people how to live better lives? What conditions must happen so that these people can lead lives of dignity?
Activity 3: Exhibition and Workshop

All classes

The three main types of waste are:

- Green garbage that composts into the soil - leaves, grass, vegetable peelings, leftover food, animal manure, agricultural leftovers (husks, stem). This is about 70% of waste.
- Recyclable items such as plastics, paper, iron, steel, aluminum, glass. This can be up to 25% of waste.
- Useless items such as synthetic clothes, synthetic metal, batteries and cells, thin polybags, all wrappers of biscuits, numkeen, plastic-lined paper. This can be up to 5% of waste.

Samples of these three types of waste are to be collected and displayed on pin-up boards. Then the solutions to disposal are to be written, photos taken and a short school workshop can happen. This workshop will highlight garbage management activities that are happening in your school.

Activity 4: Disposal of Three Types of Waste

All classes

Before teaching about the three main types of garbage, the teachers and school administration must have three large bins, that will collect the three types of garbage.

Each class needs to have a green bin for organic waste and a blue bin for recyclable waste, which will be mainly paper.

Green bin takes green waste  Red bin takes recyclable waste  Blue bin takes useless garbage
Green = Ground        Red = Recyclable        Blue = BeKar = useless

1. Green Garbage: Green Bin

Dig a pit in the schoolyard approximately 3ft x 3ft x 3ft. This pit will hold all green waste from leaves, waste from kitchen, if you have noon meals, waste from tiffins and waste which students gather from their homes if there is no room to compost at home. Add cow dung from time to time. This compost must be kept damp but not wet. It should be covered in the monsoons. When this pit is full, cover it and let it decompose. Now dig another pit and start using it. By the time it is full, your first pit will be ready to sieve and use.

Sorted recyclable materials put in separate gunny bags and taken for recycling.

Effectively using BaLA in Elementary Schools - A Teacher’s Manual
It is easy to add special worms and do vermicomposting, if there is a lot of green matter such as vegetable peelings. These worms will not die or leave if there is green matter to eat and the compost is moist.

Every three months, the pit can be opened. You will need a large sieve used to sieve sand and stones on construction sites. The mesh does not need to be very fine.

Sift the new soil, keep it aside and put the half de-composed leaves and vegetable matter back in the pit along with the worms.

The new soil will be used for the school garden and flower pots.

If your school is in a city, and there is lots of green waste that comes from children's homes, then it may become a small business for children. They can have 5 or 6 pits going. As one pit fills up, cover it, keep it moist and start another pit with worms. In 3 to 4 months, the new soil will be ready to sift. Put it in bags and sell the compost in the city. If you do not use worms for composting, the green garbage will take about four to six months to rot and be ready to use.

**Remember:** *Green Garbage goes to the Green Bin which then goes to the Ground.*

**2 Recyclable Garbage: Red Bin**

There is much garbage that is useful. We see rag pickers searching for this waste everyday. Why should they have to put their hands in dangerous garbage that has feces, germs, broken glass, bits of rusted iron, twisted nails and so on. If we keep a small bag for this garbage, we can give it to rag pickers, who will be happy to take it. Never mix up vegetable peelings and plastic or iron or broken glass. Cows and goats will eat it and become sick or die. Children will get cuts and sores on their hands. Nickel cadmium cells are very dangerous and can be recycled. Children can start to save paper, broken scales and pencil boxes. This can be weighed and sold for a small sum. The money used can be used for art supplies or a library and so on in the school.

**Remember:** Recyclable garbage goes to the Red bin which then goes to *kabari walla*.

**3. Useless Items: Blue Bin**

This is actually a small amount but it is becoming larger everyday because we eat packaged food, especially in the cities. There is no option but to send it to a municipal dump. However, if we have learned to segregate our garbage and put it in the right place, we will not see so much filth on our streets. There is a limit to the amount of cleaning that a sweeper can do. This is our home, our school, our village, and our town. If we love our country we will also keep it clean.

**Remember:** Useless (bekar) articles go to the blue bin. Which then must be buried or dumped at the *panchayati* or city municipal dump. It is never to be burned. Poisonous gases are released into the air for eternity if it is burned.

**Activity 5: Projects on Garbage**

**All classes**
As children grow into higher classes, they can complete meaningful and thoughtful projects on garbage. It is a 'win-win' situation. Children learn how to plan, execute and present a project. They become active citizens of their village and town. They learn to understand government structures. They learn to present their information after doing research. Language is then seen as an important medium to communicate and understand social issues rather than just studying for exams.

Short Street plays or *Nukkar Nataks* can be written and presented.

Children can be taught to write short articles for the local newspaper. Articles are useful only if research is carefully done. Research can be done by the children under guidance from teacher about how much and what kind of garbage is generated in their own houses or schools and how it is treated now. The teacher needs to guide the children by asking pointed and relevant questions.

When the school has a successful ongoing garbage project, teachers and older children need to extend the garbage project to the neighbourhood, village and city.

Some topics can be. Never burn Garbage!!!

- Garbage and Its Effect on Health
- The Problem and Solutions to Air pollution
- The Effects of Consumerism
- Zero Garbage
- Composting in our School
- Garbage Segregation in our School

*Space for Notes*
Introduction

Many Indian children, especially those who live in the city, do not live in clean and healthy environments. A caring and thoughtful principal and school teachers can bring health, happiness and joy into the lives of children, who otherwise must live in cramped cities or whom society has pushed to the edges. The school can compensate for deprivation as most schools have a large field for playing, proper toilets, washing and drinking arrangements. The classrooms should be spacious and airy. Trees, shrubs and flowers can give a beautiful, peaceful environment that children may not have at home. Even children who have access to parks and gardens need to experience a healthy school environment.

As part of BaLA some visuals that communicate various aspect of hygiene may be painted in spaces for drinking water, handwash, urinals, toilets, and eating.

Objectives

1. To understand the causes of poor health.
2. To remedy situations that contribute to poor health.
3. To organize regular checkups by a doctor.
4. To understand that all citizens have a right to healthful and safe living.
5. To teach sanitation and hygiene education practices at school.
6. To advocate, on behalf of children and all citizens for healthy industrial practices around.

Teaching-Learning Activities

Activity 1: Relation of Health and Hygiene to Studies and Daily Life

All Classes

Health and Hygiene is a subject in environmental science and science classes. Often it is taught just for the sake of writing an exam and getting a number. We can make these classes lively and exciting by having small projects that relate these topics to our lives. For example, when we study about
Teacher’s Role

Teachers need to know why some children have poor health. The principal and teachers may need to make special efforts to have nutritious diets and a regular and consistent sports programme to develop body strength. If parents are working and cannot provide the safety and social support that all children deserve, the principal and teachers need to consider the support that the school can give. Perhaps toilets should be opened early in the morning for it to naturally dry. The schoolyard can be used as a garden and play space after school hours.

How will the water be made safe for drinking? If bathing and toilet facilities are needed perhaps a Sulabh Shauchalaya can be built close by.

If you live in an area that is industrially polluted, you will need to meet municipal authorities, members of the pollution board and concerned citizens, for environmentally safe air and water.

Suggested Activities

1. Relation of Health and Hygiene to Studies and Daily Life
2. Washing Hands Before Eating
3. Washing Hands After Going to the Toilet.
4. Eating Habits
5. Doctor, for Medical Check-up
6. Pollution

proper diet and eating habits, each child can make a list of food eaten by him / her for a week. Then the teacher can review the eating habits of students.

Depending on the age of the children, he can divide the food into the four main food groups. In younger classes a picture chart can be made. With the help of discussions and charts, children will come to understand the need for a balanced diet. An exhibition can be held where a display is made of the main food groups.
Many children do not understand what bacteria are and how they multiply. The teacher must relate the teaching of bacteria, cell division to real diseases that occur regularly.

Do children bathe in a river? Do they wash clothes in a river or a pond? Are there effluents running into the same river? Which effluents are bacterial effluents and which are chemical effluents?

Children need to understand that doctors do not have treatment for chemical effluents. Our bodies may ache, our limbs may have rashes but no matter how much medicine is eaten, there is no treatment except to avoid the pollutants.

Teachers must discuss the reasons for increased asthma and other respiratory problems. The modern generation is in contact with much more pollutants than our grandparents were. Our lungs constantly protect us from pollution around us but when is the limit reached?

Therefore, remember that teachers need to continually relate subject matter to real health issues in the community.

**Activity 2: Washing Hands Before Eating**

**All classes**

Together with the principal, teachers staff and students, a system must be devised for washing hands before eating. You may wish to have children eat at different times so that there is not a rush around the tap or hand-pump. You may have a tap for each class.

You need to decide if you will use ash or soap as a cleanser. Ash is better, if it can be neatly disposed off. Proper in sign of hands is important. After washing, hand must be dried, using your own handkerchief or napkin.

How will you make sure that children do not just wet their hands and run? Good habits must be formed at an early age. Therefore set up and maintain a system that can become a lifetime habit.
Activity 3: Washing Hands After Going to the Toilet.

All classes

If children do not have toilets at home, they will need to use the toilets at school. The school must have arrangements to support this need. The school / you will need to arrange for separate toilets for boys and girls. It is likely that there will be a need for two or three toilets and urinals depending upon the number of children.

Whatever your situation, it is important to let children lead a dignified life. Every child deserves the privacy of a toilet. What will be arrangements for washing hands? Who will help young children who suffer from diarrhea and soil themselves? These necessary aspects of life need to be discussed with children in class. Older children can be assigned to guide younger children.

What arrangements are made for young girls in class VI, VII, VIII who have menstrual periods? Female teachers must explain the changes that are taking place in the body and help girls to cope with their menses.

Activity 4: Eating Habits

All classes

From Class I, help children develop appropriate eating habits. Junk food is all around us but it must be banned. Biscuits, dal moth, noodles, bread, jalebis and so on should never be allowed in tiffins. There must be a very strong message that children must have salads and vegetables with their chapatis, rice, etc.

A list of acceptable foods can be posted on the school pin-up board. You may know a local philanthropist who might like to provide a nutritious meal once a week. Or you might like to arrange to have five or six different welfare organizations to provide a bowl of hot cooked lentils each day.

If your school is covered under a Mid-Day Meal programme, other social organizations may wish to provide fruits or salads on a regular basis.

Indians are known for their generosity. With some effort on the part of sensitive principals and teachers, no child living in a poor inner city slum, in a barren desert or on degraded saline soils, needs to suffer from a limited diet.
Activity 5: Doctor for Medical Check-up

All Classes

A regular medical checkup for all children is important. There are many doctors who gladly provide free checkups. If treatment is required, the doctor will recommend where treatment can happen. The principal and class teacher will need to continue to guide uneducated parents who may discontinue treatment through lack of time or ignorance.

Activity 6: Pollution

Classes IV, V, VI, VII, VIII

Much illness happens because of pollution. Damage to the environment or to humans and animals should not be acceptable in a progressive society. Besides studying about pollution in textbooks, children can undertake projects to learn about pollution in their village and town.

Space for Notes:
Some topics could be:

1. Garbage disposal in our town
2. Collection of newspaper articles on environmental issues
3. Advantages of using a bicycle
4. The names and characteristics of chemical emissions from trucks and cars
5. Alternatives to cars
6. Natural alternatives to common household chemicals such as detergents, toilet cleaners, insect repellents
7. Natural alternatives to synthetic clothes
8. Dangerous working conditions in our town
9. Unhealthy living conditions in our town