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**Teachers' Training in  
Environmental Sanitation and Community Health  
under ODA-British Council  
Andhra Pradesh Primary Education Project**



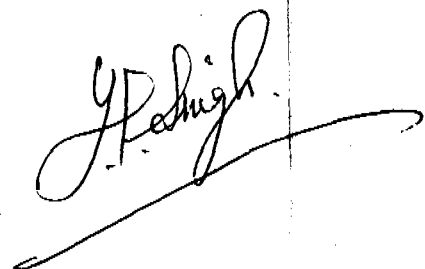
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## PREFACE

*It is a well-known fact that a healthy mind resides in a healthy body. It is also said that, "Health is Wealth". Thus, one can not underestimate the importance of health, especially community health. The individual-the family and - the community form the tripod of community health. The welfare of one is directly proportional to the welfare of the other two. Hence, it is a must to educate the community regarding health hazards and the various other nuances of community health in order to have a healthy community.*

*As a matter of fact, the family and its environment are two inseparables as they are like the two sides of the same coin. If you improve the environment, you are bound to benefit the family, and in turn the community as well. And, what better way to reach the community than the schools wherein the students are the real change-agents. This calls for an appropriate training of the trainers- which are the school teachers in this particular case. Once the teacher per se is well-versed with the Health Education curriculum, then he/she can easily and effectively teach the students and thus, prepare an entire cadre of community-health promoters through this young army of health-educators.*

*Such an agenda calls for the appropriate preparation and use of teaching aids for effective teaching pertaining to community health. This also means that the teacher or trainer should acquire the skill of a two-way communication or the participatory methodology of interacting with the trainees, i.e. the students. It is essential for the school teacher to be not only an effective instructor but also a skilful communicator, since good instruction makes even difficult subjects easy to learn. All these components are essential and inherent features of Effective Health Education, which we want to impart to the masses of India in order to have a sound and healthy nation.*



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# Chapter 1

## EDUCATING COMMUNITY REGARDING HEALTH HAZARDS

**“The family and its environment are inseparable. Improve the environment and you benefit the family.”**

The health hazards in a community include the following:

1. **Hazards outside the home** such as collections of refuse, breeding of disease-carrying insects and vermin, stray dogs, stagnant water collections, unhygienic eating places, or unprotected electrical installations.
2. **Hazards in the home** such as open fires, sharp implements, overcrowding, badly constructed houses, unhygienic food and water storage arrangements, insanitary disposal of waste water and solid wastes.
3. **Hazards in the fields** such as accidents related to the use of tools and machines, snake bites and scorpion stings, sickness related to the use of pesticides or the contact with plants and pollens.

You are responsible for dealing with most of these hazards. You can play a very important role in educating people about how to improve their living conditions. You must use your knowledge and skills to promote healthy living. Remember that you are all working as a team. Your common goal is to achieve health for all the people in your community.

*You should educate the community about the following health hazards:*

### **Hazards Outside The Home**

- (a) Collection of refuse (garbage, broken glass, paper, plastic, ashes, etc.)

#### **Hazards**

- *Provides food and breeding places for flies and other insects and rats which carry disease.*
- *Gives off foul smell.*
- *Looks ugly.*
- *Can cause fires.*

#### **Health education**

- *Improper disposal of refuse can lead to gastro-intestinal diseases.*
- *Store rubbish in light, washable dust bins with lids to prevent flies and other insects sitting on it.*
- *Empty dust bins daily into the compost pit and cover with mud or ash.*

- *Dispose off rubbish by dumping, composting, burning or feeding to animals.*
- (b) Breeding of disease-carrying insects and vermin (flies, cockroaches, mosquitoes, fleas, rats, etc.)**

### **Hazards**

- *Cause diarrhoea, malaria, kala azar and other diseases.*
- *Eat valuable food or make it unfit for humans to eat.*
- *Insects and vermin like flies, mosquitoes, sandflies and rats carry disease-germs.*
- *Control of insects and vermin is necessary to prevent diseases like diarrhoea and malaria and to control plague and typhus.*

### **Health Education**

- Ensure that refuse is hygienically disposed off.
- Ensure that sanitary latrines are used for disposal of human excreta.
- Ensure that animal dung is disposed off in a sanitary way.
- Ensure that food is stored in rat-proof containers.
- Trap or poison rats.
- Drain water collections.
- Prevent water from collecting in tins, drums or old tyres.
- Cover water tanks.
- Treat stagnant water collections with anti-malarial spray.

### **Stray Dogs**

#### **Hazards**

- *Dog bite may cause Rabies.*

#### **Health Education**

*If a person is bitten by a stray dog:*

- Refer the person to the PHC for anti-rabies vaccine.
- Observe the dog for 10 days to see if it develops rabies.
- Report to the HA(M) in the presence of stray dogs in the area. Help him in the destruction of stray dogs.
- Educate the community on the danger of having stray dogs in the area. Seek their cooperation in removing this danger.
- Protect pet dogs with anti-rabies vaccine and prevent them from coming into contact with stray dogs, jackals and monkeys.

## **Unprotected Water Collection**

### **Hazards**

- **Contamination by humans or animals leading to gastro-intestinal infections.**
- **Breeding place for mosquitoes.**
- **Accidents**
- **Drowning**
- **Some of the diseases which spread through water are cholera, typhoid, diarrhoeal diseases (e.g. bacillary dysentery and amoebic dysentery) and infectious hepatitis (jaundice).**

### **Health Education**

- Drink water from a safe protected source.
- Drink chlorinated water even though it may taste different.
- Boil drinking water especially at the start of the monsoons.
- Store water in clean (covered) containers.
- Draw water from containers through a tap or by a dipper with a long handle.
- Keep areas around water sources free from contamination and other sources of pollution.
- The whole community is responsible for safety of the water source.
- Prevent breeding of mosquitoes.
- Prevent children from playing in or near ponds, or hanging over the sides of wells. Educate the community about the danger of standing on the parapet of open wells while drawing water.

## **Unhygienic Eating Places**

### **Hazards**

- **Unprotected food or milk contaminated by insects and rats can lead to gastro-intestinal infections.**
- **Those handling the food may be carriers of diseases like typhoid or dysentery.**
- **Drinking water may be drawn from a contaminated source or may be stored unhygienically. This can lead to gastro-intestinal diseases.**

### **Health Education**

Educate the teashop owners about the importance of:

- Preventing contamination of food by insects and rats.
- Washing vegetables and fruits well before serving.

- Keeping nails short and clean.
- Washing hands with soap and water before cooking or serving food.
- Using water from a protected source for drinking, cooking or cleaning utensils.

## **Unprotected electrical installations**

### **Health Education**

The community must ensure that there are no live electric wires or unprotected electrical installations in the area.

- People and especially children should be warned not to touch electrical installations or wires.

## **Home Accident**

### **Hazards**

- Open fire causing burns-especially in young children.
- Sharp implements causing wounds.
- Children putting small objects into the nose, ears and mouth.
- Children swallowing poisonous substances.

### **Health Education**

- Advise mothers not to leave children alone in the house.
- Keep the children away from open fires and not to let them play with matches.
- Keep sharp implements like blades, knives or scissors out of the reach of small children.
- Keep small objects like beads, coins, etc. out of the reach of small children.

## **Overcrowding**

### **Hazards**

- Spread of air-borne diseases, e.g. tuberculosis.
- To keep medicines and poisonous substances, e.g. kerosene or insecticides out of the reach of children.
- Risk of overcrowding especially with regard to spread of respiratory diseases.

### **Health Education**

- Need for proper ventilation.
- Need for small families.
- Precautions to be taken if any member of the family is suffering from tuberculosis.

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## **Smokey Kitchens**

### **Hazard**

- Irritation of eyes leading to conjunctivitis.

### **Health Education**

- Construct and use a smokeless chulha.

## **Badly Constructed Houses**

### **Hazard**

- House collapse causing injury or death.
- Material used can easily catch fire, e.g. thatched roof.

### **Health Education**

- Houses should be built of strong material and should be repaired in time.
- Avoid the use of easily inflammable materials.
- Keep readily available the equipment for putting out fires.

## **Unhygienic Food Storage Arrangements**

### **Hazards**

- Contamination by insects and rats leading to wastage of food and gastro-intestinal diseases.
- Improper storage of grains leading to spoilage by damp.

### **Health Education**

- Protect food from insects and rats
- Use safe food.
- Do not store cooked food for too long as it gets spoilt and this encourages the breeding of germs.
- Store grain in rat-proof bins in a clean dry place.

Rat-proof bins are easy and cheap to make. They have the following advantages:

- i. The food is protected against flies and other insects and vermin. Make sure that the holes of the wire mesh are small enough.
- ii. The food is ventilated and can be kept fairly cool if the bin is placed at a proper place in the house.
- iii. The bin can be locked.



- iv. By placing each leg of the bin in a tin through containing water, you can prevent ants getting in.

## **Insanitary Disposal Of Human Excreta**

### **Hazards**

- Flies carry germs from excreta to food.
- Drinking water sources are contaminated by people defecating or washing clothes soiled by faecal matter near the water source.
- Vegetables are contaminated by persons defecating in cultivated fields. If these vegetables are eaten raw, they can cause gastro-intestinal infections.
- Walking barefoot on ground used for defecation can lead to hook-worm infection.

### **Health Education**

Motivate each householder to construct and use a sanitary latrine.

- If the open fields are used for defecation, the faecal matter should be covered with earth.
- Wash vegetables before eating them raw.
- Use footwear.

## **Uncontrolled Disposal Of Liquid Wastes**

(Sullage water from houses, i.e. kitchen water, water from bathing or washing utensils; sullage water from wells or cattle sheds)

### **Hazards**

- Mosquito breeding.
- Breeding of insects and rats.
- Risk of polluting water supplies.
- Foul smell.

### **Health Education**

- Educate the community on dangers of water collection in the vicinity of houses.
- Advise each householder to construct a soakage pit. Help those interested in getting the soakage pit made.
- Advise people to use sullage water for watering kitchen gardens. Assist those interested in starting a kitchen garden in getting the seeds and fertilizer. Take the help of an agricultural worker.



# Chapter 2

## PREPARATION AND USE OF TEACHING AIDS ON HEALTH EDUCATION

**Teaching** aids are not only useful but also essential elements of effective teaching. As the very term signifies, the aids help in creating more conducive and productive atmosphere between the teacher and the taught as they provide better skills for the teacher and create additional interest and perceptibility in the students.

### Essentials of Teaching Aids

*The following essentials are needed to ensure better usage of teaching aids:*

1. Knowledge of learning objectives.
2. Ability of analytical and comprehensive approach to the subject matter being taught.
3. Proper selection and prioritisation of the topics constituting the subject matter.
4. Knowledge of teaching principles and skills of their practical.
5. Selection and use of appropriate channels of communication.
6. Ability to monitor the impact of the teaching exercise being adopted.
7. Expertise needed in synthesis and precision.

### Selection of The Teaching Aid

*Selection of a particular teaching aid for a particular class and with a particular purpose depends on the following criteria :*

1. The background of the students particularly in terms of age, educational level, interest, experience, level of earlier knowledge and the number of those attending the class.
2. The size of the equipment and also of the image being projected should be within the visible range of the students. Similarly, the range of the sound of audio-aids should be within the hearing range.
3. The teaching aid and the message being transmitted should be simple in use and easy in perception. The use of sophisticated equipment and complex message may not yield the desired results.
4. The message should be clear and simpler and the use of ornamental language and philosophy and expression should be avoided. This, therefore, requires that only those aids be selected which ensure understandable message.
5. The aids should be easy to carry and easy to operate.
6. Those teaching aids should be preferred which have due emphasis on important topics and communicate the message pointedly. The coverage of the message should be as balanced as possible.

7. The aid should be attractive and effective.
8. Selection of the proper place and time is very important.
9. Alternative arrangement should be made for electricity for the relevant aid.

### **Types**

Teaching aids can be categorised on the basis of different criteria. For example:

1. On the basis of the mode of projection technology
2. On the basis of the coverage of the message
3. On the basis of the senses receiving the message
4. On the basis of the category of the media

**Based on these criteria, the teaching aids can be classified as the following :**

1. ***On the basis of the mode of projection technology***

#### **Major types**

- a. Projected aids e.g. films, slides, film strips, etc.
- b. Non-projected aids e.g. flash-cards, posters, blackboard, charts, etc.

2. ***On the basis of the coverage range of the message***

#### **Major types**

- a. Individual contact media e.g. pamphlet, brochures, etc.
- b. Group contact media e.g. slide, video, tape recorder, etc.
- c. Mass contact media e.g. T.V., Radio, News paper, Magazines, books, etc.

3. ***On the basis of message reception senses***

#### **Major types**

- a. Audio aids
- b. Visual aids
- c. Audio-visual aids

4. ***On the basis of media types***

#### **Major types**

- a. Print Media e.g., newspaper, pamphlets, booklets, flash cards, charts, etc.
- b. Electronic Media e.g., radio, Taperecorder, video movie, T.V., etc.
- c. Handi-craft or self designed, self-operated, blackboards, charts, graphs, etc.

## **Aids As Prepared By Teachers**

### **Visual Aids**

#### **1. Photographs**

##### ***Essentials:***

- a. They should be big in size and clear in impression.
- b. They should be arranged in a proper order to depict a visual story. Presentation also needs skill.
- c. They should have been taken from their right direction. Use of imagination adds to the quality of the photograph.
- d. Colour photographs are better than black and white. However, even black and white photographs can be of high standard if the photographer or is highly skilled.
- e. Good photographs need not require a sophisticated camera as a rigid rule. Sometimes, a good photographer can produce wonderful results by using less costly cameras.

#### **2. Posters**

##### ***Essentials:***

- a. The posters should be drawn on a durable 30" x 30" or 30" x 28" size, preferably coloured sheet of paper meant for this purpose only.
- b. The images or drawings should be large in size, attractive in impact and proportionate to the size of the object. This does not always need a professional artist. Even a non-technical person with accuracy in figures and imagination in thoughts can produce good posters.
- c. The letters of the message and other matter should be large, simple, attractive and artistic.
- d. Use of colours in drawings makes the poster more attractive. However, even black and white drawings can be made attractive by a skilled person.
- e. Should be pasted in public places. For the classroom situation, this may be fixed on black board or poster display board, etc. This can be done with the help of thumb pins.

#### **3. Black-board as a teaching aid**

##### ***Essentials:***

- a. Should be frequently painted and polished.
- b. Use of coloured chalks makes the use more effective.
- c. Use of figures and drawings is desirable.
- d. Only one message should be conveyed at one time.
- e. Do not stand in front of the black board, use a pointer.
- f. Avoid too much use.

- g. Supplement by other aids.
- h. Do not mix speaking and writing at the same time.

#### 4. Flash Cards

**Essentials:**

- a. Generally, use a set of 10 to 12 cards on white paper.
- b. Draw simple but 'speaking' pictures.
- c. The cards should be arranged in a proper order.
- d. The number of audience should be within the reach of the message.
- e. 'News Story' presented through flashcards produces better results.

#### 5. Flannel-graph

**Essentials:**

- a. Use Flannel or khadi board.
- b. Use sand paper on the back pictures or figures.
- c. Use coloured figures or pictures.
- d. Plan the outline of talk in advance and decide when and where to use pictures or figures.

As audio and audio-visual aids are used for higher classes and most of them are manufactured items operated with the help of electricity, the school teachers are advised to use visual aids to the maximum level. Of course, wherever facilities exist such audio aids like radios and taperecorders can also be used for better results. Similarly, the use of video films and slide projectors can also produce a better teaching environment, if the level of students is relatively higher and the required facilities exist.

Keeping in view the constraints of the use of audio and audio-visual aids as mentioned above, it is advisable that school teachers depend mainly on the use of visual aids and preferably self-designed ones. However, the success depends on their proper use as defective use of the teaching aids can be more harmful than not using them. While designing the aid, it should be kept in mind that the message is not only simple but also specific and clear. At the same time, during their use in the classroom situation, the emphasis should be given on encouraging a two way communication and promoting interaction with the students.

**Demonstration** is also one of the most effective aids. The use of such an aid is generally made in the classroom situation, especially in the laboratory. However, demonstration as an aid is more effective in field situations or 'off-the class' conditions whereby students are taken to fields or families. In schools also, the demonstrations can be organised to demonstrate different operations of cleaning the school campus, planting nurseries or school gardens, use and maintenance of school toilets, etc. For example, the use of result demonstrations can be made for comparing old and new horticultural practices in the demonstration plots, for flowers or vegetable cultivation. On the same demonstration plots, the use of method-demonstration can be made to teach students the way equipments are used for different field operations. In the field of sanitation-education, the use of demonstration as an effective teaching aid can be fruitfully

made, in case of (i) giving practical lessons on hand-washing, etc. (ii) using hand pumps, (iii) learning while playing and (iv) arranging drawing or debate competitions.

**To sum up, for more effective use of teaching aids (particularly the visual aids), the teacher should (i) familiarise himself or herself with the text and pictures as applicable, (ii) hold the flash cards or flip charts with the pictures clearly visible to the audience (iii) read out the text, appropriate to the visuals and (iv) initiate further discussion on the actual situations in the immediate surroundings.**



# Chapter 3

## EFFECTIVE TEACHING FOR COMMUNITY HEALTH

Learning takes place in the human brain. To learn, the brain interacts with the so-called five senses: seeing, hearing, taste, touch and smell. Without the signals sent to the brain by the five senses, the brain would not be able to function as a 'think-tank', it would merely control and regulate other bodily functions, e.g. breathing, etc.

Of the five senses, sight is perhaps the most powerful in learning; that's why the phrase was coined: "one picture is better than 10,000 words". Therefore, visual aids are extremely useful to make learning easier.

It is often said that we learn best by 'doing it' ourselves. Through trial and error, we learn what to do and what not to do, what is right and wrong, what is good and bad etc. However, we need others to teach us, to guide and to supervise us while learning.

The effectiveness of teaching depends to a large extent on the use that is made of these elements of doing, seeing, hearing etc. in instruction.

**The effectiveness of teaching increases when the teacher talks less, makes use of visual aids and involves the trainees. the effectiveness of teaching decreases, both when the lecture is all talk and when trainees must learn on their own from books without supervision and guidance.**

The degree of learning that takes place, is highest when the following occurs :

- Two-way communication
- Participation by trainees
- Trainees follow up the lesson through their own efforts (homework, exercises, out-of-class reading.)

The best teaching method to facilitate learning consists of the following elements :

- Talk with trainees.
- Show trainees something.
- Ask trainees to repeat.
- Give trainees practice.

The key-words are talk, show, repeat and practice. 'Talk' means a two-way oral communication. 'Show' means the use of visual aids and demonstration. 'Repeat' and 'Practice' mean the learner's opportunity to do something on his own.

The importance of two-way communication, visual aids and involvement by the trainees in the teaching and learning process is well expressed by the following maxim:

**If I hear, I (may) forget.**

**If I see, I (will) remember.**

**If I do, I know.**

Learning is best achieved by seeing and doing. Thus, a good teacher will always try to make as much use as possible of these two elements in his instruction. For example, when lecturing about first-aid products and their use, samples of these products may be shown in the classroom and a class-room- demonstration given of their practical use in an artificial situation. Although this method of teaching requires much more preparation by the instructor, it is much more effective in stimulating learning among trainees.

## **Training methods**

The effectiveness of any training method depends very much on its formula, e.g. whether or not and to what extent does the method makes use of different forms of communication such as oral, visual, etc. But equally important are the factors of the type of learner and the type of subject.

In general, it is accepted that the lecture method should only be used in teaching students at the college or university level. So-called cognitive subjects, e.g. history, sociology etc., are mainly taught by lectures, because they rely more on factual information, ideas, opinion and thoughts than on physical sensation.

On the other hand, part-time students, e.g. adults, participants in seminars and training courses etc., learn better by methods that require participation and that rely on visualization of the subject-matter. The lesson is the most commonly know of these methods. The lesson and the demonstration in combination with each other form the most effective method to teach skills and behaviour.

**The four most effective training methods suitable for training the students are :**

- 1. Lesson**
- 2. Demonstration**
- 3. Exercise**
- 4. Discussion**

To clearly distinguish these for training methods from the lecture which, as experience has shown, is still used almost exclusively and entirely too much in training adults in many developing countries. We should define what is meant by a lecture:

“A lecture is a talk, sometimes illustrated with slides or film, concerning a cognitive or intellectual subject, given by a qualified expert to a sometimes large group of persons with some provisional knowledge of the subject or sufficient intelligence to field questions or debate the subject after having listened passively to the speaker for quite some time.”

The definition points out why the lecture method per se is not suitable for training students. The reason is that most subjects in the training course deal with skills and know-how; moreover, though the teachers may be actively engaged in training, still, they may not have sufficient background knowledge to debate the merits or de-merits of a certain topic.

Although the lecture has the advantage of allowing the teacher to include a lot of information, it is of no use when training adults, who are usually short in attention and comparatively slow in accepting new information. As the purpose of all training is that the trainees should be able to perform better after training, it is imperative that the instructor know whether learning takes place. Because of the lecture's mainly one-way communication, it is usually difficult for the instructor to know whether the trainees have heard and understood him properly.



## **Using instructional aids**

The purpose of instruction is learning. Instructional aids are used to make learning easier by reinforcing the spoken word; moreover, they add interest, variety and entertainment and show what things really look like. A better term would actually be learning aids.

### **Information that requires aids**

**In general, there are five situations in which one needs to use instructional aids :**

- 1. If the information is too complex to be conveyed by the spoken word alone, one must either illustrate the information or explain it by showing some kind of representation of it.**
- 2. The information must be remembered. The best way to help people to memorize or at least remember major points is by creating an impact.**
- 3. Words that may convey a different meaning to different people must be 'visualized' to ensure that all trainees know what is meant by those words.**
- 4. The trainees' attention must be captured. Words, especially in a long monologue, could become dull and boring, even putting people to sleep. Visual aids, exercises and demonstrations can make a presentation more lively and draw the attention of trainees to a particular issue. Educational training aids may be used to entertain and educate the audience; for example, many films combine entertainment with education.**
- 5. To summarize a number of points and to link them together. However, this should not be a mere repetition of the spoken text in written form. A visual or other form of presentation would enhance the effectiveness of a summary.**

### **Factors in selecting aids**

There is no single aid which is best for all situations. Aids must be chosen according to their purpose and the situation. Only those aids that are relevant to the subject and easily understood by the trainees should be used. Aids certainly should not just be put to use only because they exist. In many instances, a movie for example is shown only for the sake of entertainment, to fill up time or just to make use of it, because it is there. Never use an aid, because it happens to be available.

Another point to remember when selecting aids is that the most sophisticated aids may not necessarily be the most relevant to the subject nor appropriate for the occasion or suitable for the trainees. The choice of an aid should not be based on its glamour or for the level of sophistication it bestows on the course. For example, a role-play doesn't always need to be recorded on video to discuss it; neither should one purchase electronic equipment at great cost when printed material can also be used.

**To select the right training aids, the following factors should be taken into consideration:**

**FOR WHOM?** Sophisticated aids may be inappropriate for rural audiences. A handout for the trainees to take home may better enable them to remember important points than being shown a poster in the classroom.

**WHERE?** Will the presentation be made in a classroom or in a large hall? How many people will be there? Will everyone be able to see the aid? Is there electricity for film or slide projection?

**HOW OFTEN?** If the aid is to be used repeatedly; it should be strong and durable. perhaps it would be worthwhile to engage the services of a professional artist to ensure its attractive appearance, otherwise, the cost should be kept to a minimum, especially if the aid will be discarded after being used only once or twice.

**WHAT SUBJECT?** Is any special effect required like shock or surprise? Is a gradual build-up of the subject on a flannelboard or magnetic board necessary to enhance understanding? Will believability be enhanced when the actual object is shown? the impact that the aid has on the audience is often inherent in its form.

**FAMILIARITY?** There is a simple rule: if it is not available, or if it is difficult to get or to make, do not use it. Look for alternatives.

**COST?** Whatever your reasons may be for choosing a particular aid, first check whether the available budget makes its selection possible. Is there enough money to obtain other aids as well. Also, consider whether the aid provides sufficient clarification of a certain point to justify the cost of procuring or producing the aid.

**To summarize the above, training aids must be selected based on the following criteria:**

- **Relevance to the subject**
- **Appropriateness to the situation**
- **Necessity in view of trainees' capacity to understand**
- **Availability and cost**
- **Simplicity of preparing and using them**

### **A choice of training aids**

The best aid is the real thing. If the real thing is not available or if it is impossible to bring it into the classroom because of its size, cost, danger, rarity or any other reason, the next best thing to use is a scale model of the real thing.

When using a model, one should always explain its size (scale) or other appearance (e.g. color) in relation to the size and appearance of the real object. What may happen otherwise is illustrated by the story of the extension worker in an African country who used an outsized cardboard model of a tsetse fly to explain the danger it posed in transmitting sleeping sickness to animals and men. Afterwards, one of the audience complemented the speaker on the clear presentation, but added that he himself was not worried about sleeping sickness occurring in his district, because the tsetse flies there were much smaller than the one illustrated by the model! Apart from the real thing and a model of it, the following are the most commonly used training aids :

## **PRINTED AIDS**

- Books** : They are actually used more often as sources of reference, but single pages and pictures may be shown or copies made for distribution.
- Handouts** : These are ideal to summarize on paper the main points of the lesson for reading at home, or to give more information and details that will not be

covered in the lesson itself. "Gapped handouts" requiring completion by the trainees may give added interest.

**Photographs** : They are a good representation of the real thing in another medium; cheap to produce and easy to pass around the classroom.

**Posters** : These come in many different sizes and forms; they may be enlarged photographs and graphic illustrations or they may contain a simple message of a few words. Posters last a long time and can be taken home by trainees for display purposes.

**Flipcharts** : These present a sequence of information, both in words and pictures, on several sheets of so-called 'newsprint (Plain paper) attached to a wooden stick or held together by metal clips, so that they can be 'flipped' back and forth. The more durable ones are made of cloth.

## **BOARDS**

**Chalkboards** : The best known of all aids, they are cheap and almost everywhere available either as a permanent fixture or in portable form. Chalkboards were traditionally black and thus called 'blackboard'. Today, their surface is often green. Their size limits the information that may be displayed on them and frequent erasure may be necessary (with flipcharts this problem does not exist). Moreover, the dust and smudging of the chalk is a drawback.

**Markerboards** : These are used as chalkboards, but their surface is made of a different material so that felt-tip pens are used to write on them. Usually they have a white or green surface which may even be magnetic. Markerboards are cleaner to use than chalkboards, and the text and illustrations are easier to read and see.

**Stickerboards** : There are several types, such as magnetic boards, flannelboards and boards using other materials and other types of adhesion. Sandpaper and toughened blotting paper, which stick, onto rough surfaces like blankets or flannelboards can be used for displays and are commonly available. In general, stickerboards are ideally suited to make colorful displays of built-up models and to show the assembly and movement of individual parts.

## **PROJECTED AIDS**

**Filmstrips and slides** : They comprise a series of still photographs projected on a screen. Modern equipment makes it possible to 'fade' one picture into another or to use multiscreen, multi-projection units with sound-synchronized timing. The sequence of the pictures can easily be altered and a persona commentary added, which makes this aid much more flexible than the motion picture.

**Motion pictures** : Also called movies or films these may be with or without sound, in black-and-white or in color. The film-size and speed varies from 8-mm, and

(super-8) to 16-mm, 35-mm, and 70-mm. For training purposes, the 16-mm type is most common. a disadvantage of films is that the instructor has no control over its message or impact; he may influence the reaction of the viewer somewhat by giving an introduction and guidelines on what to watch for during the movie, and in conducting a discussion afterwards.

**Video**

: Video is the latest and most expensive training aid. It may be used for recording role-plays, games and individual performances by trainees in order to review and discuss them. The recording equipment is rather bulky and its use required both technical skills and creative talent. Although video can be used for play-back only, there are not yet many educational films available for it.

**Overhead transparencies**

: These are projected via a very simple and quite versatile machine, which combines most of the advantages of the aforementioned printed and projected aids minus some of their drawbacks. The overhead projector can show words, graphs, pictures and even 3-dimensional objects on a screen behind the instructor, whilst the instructor, faces the trainees in the classroom. The images on the transparencies can be made before the presentation, either by hand, using special 'permanent' and 'water-soluble' pens, or on a special 'printing' machine that makes transparent copies of black-and-white and full-colour illustrations from books, magazines and other printed material. The images can be constructed in such a way that 'movement' will be simulated. One blank transparency laid on top of the glass surface of the projector may serve as a drawing board; if one uses a transparent roll or a number of loose transparencies, erasure is not necessary. A major advantage of the so-called OHP is that the classroom does not need darkening for the trainees to see the illustrations on the screen. OHP-projectors come in different sizes; among the important features to consider when buying a projector are its light intensity and its focussing capacity; a disadvantage is that the lamp is rather fragile and quite expensive.



# Chapter 4

## SCHOOL TEACHER AS AN EFFECTIVE INSTRUCTOR AND SKILFUL COMMUNICATOR

***Good instruction makes difficult subjects easy to learn***

***Bad instruction makes easy subjects difficult to learn***

**You** may have heard people say that they are no good at teaching. You may think that you also lack the ability to teach well. In saying this, one is basically concerned about one's style of presentation. However, instruction is not a performing art; it does not require you to be entertaining or humourous. Good teaching is a technique everyone can learn! The first step is to develop and use a lesson-plan; the second step is to follow some basic rules when teaching, e.g. to be attentive to the needs of trainees and to involve trainees in the teaching-learning activity.

The best way to abide by these rules is to choose teaching methods that apply the principles of a two-way communication, such as the lesson, the discussion, the demonstration and the exercise. To feel at ease and confident about the presentation, it helps to follow the lesson-plan and to avoid any discussions or activities for which you may not be prepared. Let us look into some useful suggestions on how to stick to the lesson-plan and on how to make the best use of the facilities and training-aids available.

### **Before the Presentation**

You should always arrive well in advance to get a first impression of the trainees. You may have a chat with the course organizer or the other lecturers on how the training course has proceeded so far and about the behaviour, participation and reactions of the trainees. If you have the opportunity to 'sit in' on an earlier presentation, do so by all means to get an impression of the 'group'.

It is recommended that you check your appearance in the mirror before entering the classroom to avoid any distractions resulting from loose buttons, different colour socks, stains on your clothes, etc. To be properly dressed according to local custom is important, as it shows the trainees that you respect them and care about them. It also gives the impression that you consider important your teaching task and the subject to be taught.

Finally, you must also find out about the seating arrangement, the location of the audio-visual equipment and other training aids in the classroom, the lighting and ventilation, and if needed, whether chalk, felt-tip pens and OHP transparencies are available. Make any changes that you feel are necessary, if permitted to do so, and try out any new or unfamiliar equipment before the start of your lesson.

The seating arrangement is very important in training. Seating can make a difference in how trainees feel about the teacher and his approach to the instruction. Some possibilities are:

### **Making the Presentation**

#### **The Lesson Plan**

Always begin your lesson on time and keep an eye on the clock to check the passing of time. If there is no clock in the classroom, place your own watch in front of you on the lectern or desk. To stay within the time given to you, stick to your lesson-plan.

In the lesson-plan, you have already indicated how you will introduce your subject to get the attention of the trainees and to arouse their interest. Obviously, you must begin by introducing yourself. To put the trainees at ease and to stimulate participation, it may be helpful to ask them to introduce themselves - if it is not possible to do so because of time constraints or if you already know them, you could begin by asking a few trainees at random what they know about the subject and what they expect to learn during this period.

Do not forget to inform the trainees whether they must take notes or not. Whether you should encourage note-taking during instruction is difficult to say, because it may be distracting; moreover, to listen and write at the same time is not always easy. If you are going to hand out previously prepared notes, tell the trainees what you have covered in these notes, so that they will know what to write down and what not. Except for very special purposes, never dictate; this practice belongs to primary schools only.

Do not talk for more than 20 minutes at a time as the average adult's attention-span for listening is about 20 minutes. Try to break your talk with a class activity such as a question-and-answer period, a brief discussion, an exercise or role-play. Perhaps you can show slides or a movie, if relevant to the subject.

## Participation

As the old cliché goes, 'time flies' when people are interested and active. To make trainees become interested in the subject and to stimulate their active participation, use a variety of approaches:

- **Tell them anecdotes and stories**
- **Use audio-visual aids**
- **Ask them questions, their opinions and experiences**
- **Have them do exercise, role-plays and games**
- **Talk with them and stimulate group discussions**

**THE MORE ACTIVE AND INVOLVED TRAINEES ARE, THE MORE AND THE BETTER THEY WILL LEARN.**

In a **PRACTICAL LESSON**, most of the time should be devoted to do-it-yourself. As a rule-of-thumb, allocate 10 per cent of the time for introductory remarks and initial explanations, 25 per cent for demonstrating the skill, and the remaining 65 per cent of the time for imitation and practice of the skill by the trainees.

The four basic steps to carry out a **DEMONSTRATION** are:

1. First, demonstrate the entire practice or skill at normal speed. This shows the trainees what is possible and what will be expected of them. You do not always need to give a verbal explanation as silence may reinforce the impact of the demonstration.
2. Second, demonstrate the skill step by step and at a slower-than-normal pace. You should now also explain each step. Difficult steps should be repeated several times.
3. Third, a few or all of the trainees should imitate each step under your supervision and should tell you what they are doing as they do it. Once all the steps are understood, the trainees should once more perform the entire practice.
4. Fourth, all trainees should practice the skill individually to become adept at it and to attain

the desired standard of performance.

### **Questions-And-Answers**

At various times during the presentation you should stop talking to ask trainees a question or to answer questions that they may ask. The most effective technique is first to ask the whole class the question in order to make everyone think; pause briefly to hold their attention; then select one person to give the answer; comment on the correctness of the answer: if the answer is good, praise the trainee; if the answer is wrong, simply ask another trainee for an answer.

Difficult questions should be saved for the brighter trainees and simpler questions asked of the less intelligent ones so as to maintain their own confidence and their trust in you. Never say "wrong" or "no" to a trainee's answer as that could embarrass him and he may become discouraged, afraid or unwilling to answer further questions. If trainees persistently give the wrong answers, the questions may be too difficult or there is something wrong with your teaching. **Do not blame the trainees, but improve your presentation.**

You should encourage trainees to ask questions provided that their questions are relevant to the subject-matter. If you do not know an answer, say so! Ask whether one of the trainees knows the answer. Otherwise, promise them that you will try to find the answer after the lesson. If a question-and-answer period leads you away from the actual subject, try to pick up the original point as soon as possible. Do not allow trainees to drag you into a discussion for which you are not prepared or which you do not consider useful at that particular moment.

### **Proper Use of Training Aids**

The most commonly available and widely used aid for visualizing verbal information is the CHALK-BOARD. Yet, it is too often used as just a scratch-pad: poor writing, smudging of chalk, a jumbled lay-out are the well-known symptoms of this kind of abuse.

**To properly use the chalkboard you should:**

- **Write small (lower-case) block letters as these are easier to read than handwriting and 'all-capital' letters.**
- **Walk along the chalkboard when writing to keep the lines straight.**
- **Use only good quality chalk and bold colours.**
- **Plan beforehand the lay-out of what you want to draw and write on the chalkboard.**
- **Use two chalkboards if possible; one to write on before the class starts, the other one for writing as you go along.**

When using an OVERHEAD PROJECTOR, you should beforehand prepare most of the text and visuals. Never use this aid to project a typewritten text, as it will hardly be visible owing to the small size of the letters; a better alternative is to prepare a handout. Do not show very elaborate tables or graphs; rather 'blow up' parts or details for visibility and simplicity.

When showing a MOVIE, first explain why the movie will be shown and what special points the trainees should watch out for. After having shown the movie, ask the trainees to describe what they have seen; then show the movie, ask the trainees to describe what they have seen; then summarize its main points and move on to the next part of your lesson.

When showing PHOTOGRAPHS to the class, make sure they can be seen by all; pass them around, if necessary. Try to have enough copies of the relevant pages from a book, a brochure,

etc, to hand out to the trainees so that they may keep them for future reference.

AIDS are supposed to reinforce and enhance learning, but they will not do so automatically. If an aid is wrongly chosen or badly designed, it may confuse rather than help the trainees to understand better. Likewise, when a training aid is not used properly - for example, if it is used at the wrong moment, if it is difficult to see, or if it is presented in a poor manner - then its effect will be counter-productive. Such aids become an obstacle rather than be helpful in learning.

In your lesson-plan, time should have been set aside for the conclusion, which may consist of a brief summary of the main points and a final question-and-answer period. Although it is preferred to stop at the agreed time, do not stop in the middle of a discussion or when trainees are completing an exercise; tell them that only a few more minutes are left to end the session and, if possible, ask them whether they wish to continue the discussion or exercise at another time, either individually or as a group.

If any question or problem spring up during the lesson that could not be dealt with immediately (for example, an individual problem, which does not affect the whole class), then you should deal with it after the lesson during a break or, for example, in the lunch period. You do not have to **re-invent the wheel** to become a good teacher; you will be half-way there if you apply the basic rules that were given in this lecture.

### **Teachers Role As a Skilful Communicator**

Although it was previously said that teaching is not a performing art, it can not be denied that eloquence in speaking, self-confidence and, at appropriate times, a humorous approach will enhance the overall effect of instruction. To be able to do this is partly a matter of style and partly a matter of skill. The latter can be developed and learned through practice.

**To become a skilful communicator, one has to develop the skills of:**

- **Speech delivery**
- **Class management**
- **Certain "do's and don't"**

### **Speech Delivery**

Obviously, teaching is not the same as making a speech or delivering an address, although the teaching process involves a narrative of some length by the teacher. Therefore, some aspects of good public speaking also apply to teaching.

First of all, one must speak strongly, but not shout, so as to make sure that the voice carries to the back of the class. To do so without shouting, formulate words clearly, without undue accent, and be sure to make the end of sentences audible too, i.e. do not '**drop**' your voice.

Always speak in short sentences, and use simple language. When having to use technical language, try to spell out and explain the words and terms as fully as possible. Perhaps, write them down on the chalkboard or overhead projector.

Also, vary the tone and pitch of your voice, but do not exaggerate it. Pause at specific intervals. Be firm and friendly in your way of speaking.

### **Class Management**

To ensure that the lesson proceeds in an orderly manner, it is essential that the teacher stays



'in control'. At the same time, his natural leadership should encourage trainees to become actively involved. An important feature of a teacher's management style is to show respect for his trainees. A few basic rules and easy-to-follow guidelines may help you to 'run a smooth class' :

- **Be friendly, good humoured and approachable.**
- **Be firm, fair and sympathetic.**
- **Respect the opinions of your trainees and never make fun of them.**
- **Never bully your trainees or bluff them.**
- **Be patient and give praise when deserved.**
- **Maintain discipline and show no favouritism.**
- **Deal with troublemakers individually, either before or after the class; do not insult or shout at them in front of others.**

### **Do's And Dont's**

To get the attention of the trainees, to create interest and stimulate participation in the lesson, there are several things that you can do, but there are also things that you should not do. Some of the "do's and dont's" of teaching are:

#### **Do's**

- Ask a lot of questions and encourage trainees to ask questions.
- Let trainees occasionally write their answers on the chalkboard.
- Call trainees by their name and give personal attention to them before and after the class.
- Give clear instructions on what you want trainees to do, especially when introducing an exercise; let one trainee repeat your instruction!
- Vary your approach, your voice, your manner and your style; be lively and enthusiastic.
- Keep strictly to the time given to you. If you are well-prepared and follow your notes, you should have no problem in utilizing your own and the trainees' time most effectively.

#### **Dont's**

- Don't expect or demand a lot of participation in the beginning, especially when trainees do not yet know each other.
- Don't come on too strong; don't be loud, overly assertive or overly confident. Don't try too hard to be funny, especially not with a new group of trainees.
- Don't 'force' yourself, but try to be natural at all times.
- Don't always call on the same person or persons. To do so is permissible only during the first hour or the first day with trainees who exude confidence, so as to give the other (shy) trainees a chance to adjust.
- Don't let individual problems interfere with the regular class hours.



