This section describes techniques for preparing your own materials. The first part describes general techniques which will probably apply to all materials you might prepare.

Many of the exercises described in this book are word oriented. They depend upon the use of printed (or typed) descriptions of a situation. Printed words are important, however there are also other ways of setting the stage for your exercises. In some circumstances you could read the descriptions aloud to the group. At other times you could show a drawing depicting the situation to the participants. The instructors or a group of participants could also dramatize the situation. The first part of this section briefly explores some of these techniques.

The section next explores adapting materials from one culture to another and preparing simple sketches for use with your exercises.

Finally, the section describes specific techniques for preparing three different types of exercise: the role play, the case study and simple games.

Look at these instructions to guide you in your own development of materials. We have chosen these three types of exercise as examples. There are many other types of exercise, and their preparation would be similar.
General Techniques

It is not always necessary to design a totally new activity. Excellent exercise formats exist that could be adapted to your subject area. Nursing administration students, for example, might not enjoy solving the problems of a business executive communicating with his staff; but rewrite the simulation with a hospital director of nursing and it becomes very involving. The same basic format might be rewritten again with a nursing team leader and used with student nurses about to undergo their first 'in charge' experience in a hospital unit.

Learning exercises have been in common use for over 20 years. During that time many exercises have been developed for almost every possible subject area. However, circumstances vary from country to country as well as state to state. Modifications will be required to adjust to local terminology, legislation or cultural differences. For example, you will need to change names, locales and techniques when using materials produced overseas. When working with specific cultural groups the illustrations must also be changed to represent the local people rather than "strangers with problems which do not affect us".

Finally, learning exercises have been prepared by individual trainers. They are the intellectual property of the individual who designed them and are often copyrighted. It is dishonest to copy someone else's work without giving proper credit to the original designer. Whenever possible obtain the designer's permission before copying or adapting materials.

Simple is Best

It is far easier to make relatively minor revisions to an existing exercise than it is to begin completely from scratch. Experiment with revising materials to gain experience with the use of learning exercises for your audience. Design your own exercises after you have been successful using your own revisions.

Designing or revising instructional materials can also be a valuable experience for your students. They must learn the required factual knowledge, integrate the knowledge in their own heads, and present the new knowledge or skills so that others can learn too. Producing successful materials is seldom an individual task. A team might consist of a subject matter specialist, a person familiar with the techniques of preparing learning exercises, and one or more persons to represent the user's point of view.

We have found that showing the draft materials to colleagues and friends for their comments and suggestions has invariably improved the results.

Testing of the new or revised materials should be done with a volunteer group that is similar to the eventual users.

Next, the materials should be given to another instructor to use independently; this will test the reliability of the exercise and its instructions. Revisions must be made and the materials tested again.

• Start simple. For example, if you have used a crossword puzzle with your class successfully, let them try to make their own.

• It is our experience that some of the best exercises are quite inexpensive. Fancy packaging and expensive game boards do not guarantee quality. Keep your materials simple.

• Remember to keep your exercise directly related to the instructional objectives.

Both you and your students will gain experience as you produce new materials. Eventually you will be designing your own exercises particularly suited to your local conditions.

3 [Learning exercises have undergone many changes since this manual was first written, with computer-based games being one of the variations. However, the activities presented here are still popular, and appropriate, for training. LZ 2008]
Oral Presentations
Many groups are used to learning from storytellers. These participants may feel more comfortable with explanations that are read aloud, or that are dramatized for the group. Book-oriented groups should also be encouraged to use oral techniques when you want to examine feelings rather than facts.

The simplest technique is to read aloud the printed directions for an exercise. Unfortunately this may cause some members of the group to become confused if they do not fully understand the directions. A better technique would be to paint a "word picture" through a simple dramatization. This dramatization could be done as an impromptu skit or as a formal play. Either type of drama could be recorded or live.

Impromptu Skits
An impromptu skit is a simple form of role play. The players may be one or more instructors or students. Each player should know the objectives of the skit and his/her own role. These may be explained to the players verbally or on "role play cards" as in a more formal role play exercise.

The players should also be very aware of the time limits imposed on the activity. This time limit might vary from one to ten minutes. The players should not normally need time to practice an impromptu skit. This is sometimes called improvisation.

- Introduce the exercise by explaining that the players are going to dramatize a situation that the students (class) will finish.
- Introduce the players, giving their names and roles as appropriate.
- Let the players perform for the specified time and then introduce the student exercise, discussion, role play or other activity.

Formal Dramatizations
The formal dramatization is scripted and rehearsed. The techniques for use are the same as for the impromptu skit.

A scripted play may be "read" rather than acted. This allows inexperienced players to perform the play without drama training. Designate one person to read the instructions for the setting if required. A short segment from a formal play may be as effective as the whole play.

A short segment from a radio drama, dramatic or documentary film, or other professionally produced material may be used in the same manner.

Reproduction
Many of the learning materials that you produce yourself can be reproduced in small quantity on your office typewriter or duplicator.

Any good photographic laboratory can provide duplicates of charts, x-rays or photos for inclusion. Even limited artistic skills are good enough to produce acceptable visual materials. Illustrations to be included in duplicated booklets, etc., can be prepared directly on the duplicator stencil (rono, gestetner, etc.).

The notes later in this Section on preparing illustrations will provide some further suggestions.

Keep your reproduction techniques simple too.

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6 [We were thinking of audio recording when these materials were written as video recording required too much equipment for general use. Today it is quite reasonable to bring pre-recorded video materials into the classroom using a DVD player. Do, however, ensure that you have a large enough screen for easy viewing by all participants. Iz 2008]

7 [Obviously a computer word processing program and printer are the current equivalents. LZ 2008]

8 [A scanner and image manipulation software would be the current equivalents. If you don't have this technology you can usually find a local shop that will do the scanning and optimisation (size and exposure manipulation) for a fee. LZ 2008]
• Large quantities of materials will not normally be required for use in a single institution.

• Typeset materials are very expensive; in addition, blocks for illustrations and photographs increase the costs tremendously.

• Even with blocks the quality of photographs is often very poor. In developed countries offset printing is very economical and produces high quality results. The same services may not be available in your country. Stencil duplicators are probably your first choice from a cost point of view, followed by offset printing if you can afford the costs.\(^9\)

• Silk screen printing produces illustrations and large size text materials quite economically. You, your students, or a local craftsman could easily prepare game boards, playing cards, or other materials using locally available printing materials.

\(^9\) Readers might be interested to know that this manual was typed on a small microcomputer [in 1990]. The text was recorded on a magnetic diskette in the same way that a tape recording is made. This recording was then 'played' into a computer controlled laser photo-copier which produced the text in the special typeface that you see here. The ink sketches were then pasted onto the resulting pages and duplicated on a small offset press.

This is an economical solution where the costs of typesetting are high. Similar results can now be obtained with a variety of fairly inexpensive computer printers.

[The 1990 manual was laser-printed with black 'ink' on white paper. This electronic version was also prepared on a computer. The images were scanned from a printed copy of the 1990 manual, coloured and optimised in Photoshop\(^\circ\), saved as GIF files, and inserted into a Word\(^\circ\) file containing the formatted text.

The Word\(^\circ\) file was then 'printed' to Adobe\(^\circ\) pdf format files for distribution. They can be downloaded and viewed on screen or printed in colour or black and white.

Exercise materials, posters, etc., can be prepared using a computer and printed on paper, cardstock or plastic media. Use a local computer service if you don't have the equipment to do the printing yourself.

LZ 2008]

• The package of materials that you prepare should be kept neat and in one place. A brightly coloured box or strong envelope can often be used to store the materials.

• A student or colleague with a good reading voice can be used to make tape recordings\(^10\) if required. These recordings could be used directly as resource materials for the exercise or to explain the exercise to non-readers.

• Have pride in your work. Make your materials as professional as possible. A stencil duplicator can be used to make copies of the materials, however the typing and duplication should be neat and easy to read. Professional facilities and support staff are not necessary if you use your available resources with care.

In conclusion, it is generally best to keep quantities small and produce your print materials by hand or on a stencil duplicator. Visual materials can often be prepared neatly by hand, and audio materials can use a simple tape recorder.

\(^10\) [Audio, video or these days, even the camera in your mobile/cell phone. LZ 2008]
Translating and Adapting Materials Across Cultures

Experiential or learning exercises should have some very great advantages for trainers working across cultures. The exercises provide a common basis for learning and discussion. The exercises are usually simple and few exercises have needs for expensive equipment. Language difficulties can be minimized, and exercises can be modified for local needs. However, it is our experience that there can be problems if you use these exercises in a new culture without modification.

General Techniques

Learning experiences often require miscellaneous small materials that are readily available in North American shops. Many of these materials are not essential to the operation of the exercise. In fact, the use of fancy imported items may even discourage the participants. Keep your materials appropriate to the community. Just as you are careful to avoid 'talking down' to your audience, you should be equally careful to avoid using materials that put your participants at a disadvantage.

Substitutes for dice include cowrie shells, nuts or seeds rubbed (or coloured) to make them white on one side. It is our experience that local substitutes can always be found for these materials, and the exercises are often improved by the substitution. It just takes some advance planning to find substitutes for such materials as plastic chips, paper play money, wooden Tinker Toy pieces, etc.

Students in North America are familiar with the use of learning exercises; students in other countries may be more used to lectures for learning. Trainers in North America often meet resistance from the participants who don't like 'playing games'.

You will meet this resistance as well, particularly with people who have secondary school education or above. They have been trained to believe that learning is a very serious business and that a 'teacher' is required to tell them what they need to learn. You will often need to spend considerable time to convince your students that they can learn from their own experiences.

In particular, your briefing and debriefing sessions must be very well planned.

Cultural differences may affect the design of certain exercises. For example, time pressure is often used to generate tension and stress. In a culture which perceives time as very flexible the exercises may not work. Examine any materials for built-in cultural biases before you adopt them for your classes.

Role play exercises require considerable care to ensure that incorrect stereotypes do not affect the value of the exercise. If is often difficult to get low status participants to perform the role of a high status individual with any degree of accuracy, and vice versa. You may need to allow individuals an opportunity to practice their roles before the exercise. Give them guidance about the behaviour and attitudes you expect.

You may also have difficulties getting mixed status groups to work well together.1

A low status employee may constantly defer to a higher status colleague, and the high status worker may feel unable to participate in a group with low status workers. One solution is to divide inexperienced groups into small learning groups for each status level. Another alternative would be to plan sessions on topics where the low status person is an acknowledged expert. The low status person will gain confidence and, in time, be able to participate as an equal.

Many exercises require a fairly high level of literacy, usually in English, for the original exercises. Do not use foreign exercises without adapting them to local language usage. Do not translate materials into a local language; write your own directions and materials directly in the language of use. This will make them easier to understand and use.

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1 The example used here refers to two workers with different work status. The same problems can occur between persons of different sex, social class, immigrant status, etc. It is the author's experience that status differences can occur in almost any work or social setting.
**Techniques Used for this Manual**

Many of the exercises in this Manual were field tested in India. Following the preparation of the Indian manual, the authors were asked to prepare a version more suited for world-wide distribution. A group of individuals with experience in a number of different areas of the world were assembled to assist in this work. These individuals met and evaluated the techniques presented in the Manual. They then adapted the cases from their individual work experiences.

Several new case studies were the result of this adaptation. They are not direct copies of the Indian cases. They use the techniques suggested by the Manual to meet the situations and needs of each particular country. It is our belief that the techniques suggested can be used in a variety of situations. Good use, however, will result from the wise adaptation of technique and content to the user’s own situation.

The adaptations often included the changing of names and locales as well as topics and questions for discussion. Where an exercise looks perfect for your situation, you can make these simple changes to make the problem more local. Other cases may suggest ideas that lead you to write your own case materials.

All of the new cases were written in a few minutes from personal experiences. They were then revised and modified by the whole group to be more readable and to remove ambiguities.

The suggested questions were developed to provoke discussion. In many cases, preparing the discussion questions was the most difficult part of the task. We had a hard time remembering that our task was to prepare discussion questions, not discuss the problems themselves.

From a teaching point of view, the most successful use of these techniques may be to ask your students to prepare similar case studies based on their own experiences. This activity will lead naturally into the discussion of the actual situation. Guidance from you will be necessary to focus on aspects of individual cases which are appropriate to the course of training, but students can become very involved in discussions that have immediate relevance to their own situations.

**Converting Terminology**

The situations in this Manual have been chosen because they are common to many countries using Community Health Workers or other development field workers. The major change required to make them useful for your discussions will likely be changing the terminology.

For example, the following partial Case Study: Sr. Jose, was written for use in India:

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**Indian Version**

*Sister Jose has just completed a ten months post graduate training in Public Health Nursing. She was told to join the Convent of Rasi.*

*Rasi is a village of about 2000 people situated 20 Km. away from the district town, where the Catholic Mission is well established. The Catholic Mission has a higher elementary school, co-educational, with 500 children out of which 350 are boarders with the Mission. These boarders come from villages situated as far as 50 Km. away from Rasi.*

*There is also, in the Mission, a Grihini Training School which can have up to 50 boarder girls and a health centre under the management of one Sister RNRM, Sister Mary, helped by one lay ANM and two locally trained girls.*

*Sister Mary has been visiting the nearby villages whenever she could find time. She generally goes to the villages with one of the Sister Catechists.*

*Sister Jose is to take over the program in the villages and is told by Sister Mary that one of the villages, Serpur, appears to be ready for selecting their Village Health Worker.*

*Sister Mary advises Sister Jose to concentrate her efforts on this village and see that the people select their VHW as soon as possible.*

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The Case could be changed for use in Latin America as follows:

**Latin Version**

Hermana Omaira has just completed a ten months post graduate training in Public Health Nursing. She was told to join the Convent of San Vicente.

San Vicente is a pueblo of about 2000 people situated 20 Km. away from the municipio, where the Catholic Mission is well established.

The Catholic Mission has a primaria, for both boys and girls, with 500 children out of which 350 are boarders with the Mission. These boarders come from pueblos situated as far as 50 Km. away from San Vicente.

There is also, in the Mission, a Mother of Jesus Training Centre which can have up to 50 boarder girls and a health centre under the management of one hermana who was a licensed nurse, Hermana Inez, helped by one lay nurse’s aide and two locally trained girls.

Hermana Inez has been visiting the nearby pueblos whenever she could find time. She generally goes to the pueblos with one of the Catechists.

Hermana Omaira is to take over the program in the pueblos and is told by Hermana Inez that one of the pueblos, Granizal, appears to be ready for selecting their Village Health Promoter.

Hermana Inez advises Hermana Omaira to concentrate her efforts on this pueblo and see that the people select their VHW as soon as possible.

Note that we have substituted terminology but haven't made any changes to reflect local custom, geography, or even patterns of writing. These other changes are more subtle, but are equally important. Sister Jose, to continue our example, might need additional revisions to reflect some of the following situational differences:

- schools in Latin America are not co-educational, thus both boys and girls would not attend the same boarding school.
- bus services are much more common than railways, so a railway problem later on in the complete case study might have to be replaced by an autobus problem. The community difficulties must be realistic.

In general, names and titles must be altered to suit local custom and terminology. Legal and political terms must also be changed.

Other terms will often need some careful study. 'Chai' can be substituted directly for 'Tea' in many cases, however a society which doesn't have a common distilled beverage cannot directly convert those terms, for example, which deal with 'home-brew' alcohol. This is where your knowledge of the local situation and common terminology becomes very important.

**Language Translation**

Translation into a foreign language becomes even more difficult.

- Some terms are simply not translatable.
- Other terms pass directly into the language without translation because of common usage.

Health and medical terminology often follow this later pattern, however the common people in the society often have non-technical terms with the same meanings as the foreign terms. The local terms should be used whenever possible to ensure that meanings are clear.

In working on adaptations for this Manual, for example, we found that the sociological term low status employee was not directly translatable into several other languages. Usually it was merely transliterated\(^{12}\) into the

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\(^{12}\) Transliteration is the process whereby a word is not translated, but is simply written using the characters of the new language. Sometimes the syllables will be accented differently in the new language.

The process of transliteration allowed the editor to communicate with the government printing services in Sri Lanka without knowing any of the local languages. The technical terminology of printing was still understandable as English as long as we...
local language. We ultimately decided that the best solution would be to translate the term into a specific local occupation. This avoided the sociological terminology entirely.

Political terms also caused problems. The Ethiopian term *Awraja* refers to a small administrative unit. It has no direct counterpart in English, although in Indian English (the form of English used in India) it might correspond to the Block, a term which itself is sometimes (probably incorrectly) compared to an English (United Kingdom) *County*.

Adaptations must make sense to the user, even if they do not exactly correspond to the original terminology. We have found that this is another occasion where a small group of people can do a better job than is possible with a single individual.

Materials that are written in English to be translated into another language will be easier to translate if some simple rules are followed:

- Use short sentences. Many readers, including translators, lose the meaning of long sentences.
- Put each idea in one simple sentence. Do not combine several ideas into one sentence.
- Use simple familiar words.
- Use the same word each time that you refer to the same idea. For example, dwelling and house are words that mean the same thing. House would be the best word to use.
- Use precise words. Do not say 'make flour' when you mean 'grind the wheat'.
- Make positive sentences. Negative ideas are harder to understand.
- Make active sentences. Active sentences tell the reader what to do.
- Use the personal and imperative forms with few pronouns.
- Repeat words and ideas if necessary to ensure understanding.
- Keep comparisons simple.
- Put in connecting words such as 'who', 'which' and 'that'.
- Avoid difficult and confusing constructions.
- Use simple tenses. When possible use the simple past or present.
- Explain things in a clear, logical order, and in time sequence.
- Write about things that happen to your readers in real terms. An abstract idea can be confusing.
- Break up your text by any means that you can think of. Make paragraphs short. Put things in lists. Use white space and illustrations to make the page more interesting.

These rules have been tested with several different languages. The same rules seem to apply to most languages when you are writing training materials. Complicated ideas require simple explanations if we want them to be understood. Remember, if the translator cannot understand the idea in the first language, the translation will be confusing.

Translation teams are better than a single translator. Select a translator who is familiar with the language.


14 [Web-based computer translation programs are now available. Language construction and slang change from one language to another so machine translations can usually only provide a general idea of the content of a message. Because computers generally translate word-by-word, rather than translating ideas, the translations also lack correct grammar for the destination language. Start with a web-based translation if necessary, but always have your translation checked by native speakers. LZ 2008]
with both the subject matter and the intended audience. A city dweller will have a difficult time writing for a rural audience in most developing countries.

Select a second person who is very familiar with the subject matter to work with the translator. A third person representing the intended audience is also a useful member of the translation team.

Test your translations on a small group representing the audience before the materials are distributed. Using the materials for their intended purpose (training, provoking discussion, etc.) is better than simply having someone read them.

Illustrations and other visual materials must also be adapted for use in a different culture. The notes on Preparing Illustrations (see next page) should be consulted before you make those changes.
The Preparation and Use of Illustrations

Visuals as well as language and materials must often be fitted to each specific community. There have been several studies in various parts of the world to determine the most effective type of illustrations to use for development communications.

While the results of the studies do vary from region to region, the 1976 study from Nepal\(^\text{15}\) is typical. This study showed that:

- Even with high quality printing processes, many people do not recognize the content of photographs. Distractions from items in the background likely contribute to the confusion. Line drawings are often more recognizable than photographs.
- A single picture should not include a large number of objects, or attempt to portray several steps in a process.
- Drawings should be as realistic as possible. Omit non-essential background detail. Avoid the use of stick figures and similar stylisation.
- Drawings may be taken quite literally by villagers who are not familiar with the 'language of drawings'. Draw normal views of objects and include the whole object where possible. For example, the artist should draw a complete body for a person rather than using disembodied hands for an illustration. Enlarging an object or detail may lead to misunderstandings as well.
- Drawings are more likely to be successful if such things as clothing, buildings and surroundings are based on locally familiar styles.

**Drawing Your Own**

Most of the illustrations in this book were drawn by an individual without any particular drawing abilities.\(^\text{16}\)

Some of the drawings were traced from photographs. For example, the drawings of the Ethiopian grass hut and the African women pounding grain were done by tracing. Other drawings were adapted from folk art; including, for example, the Ethiopians making *injera* (bread) and the Indian perception puzzle. These drawings are all within the capability of the average reader of this book.\(^\text{17}\)

Try projecting a slide onto a white sheet of paper. Use a pencil to draw the outline of the figures on the paper. Turn off the projector; complete the drawing with a fat felt pen by following the pencil outlines. Omit the distracting background and any non-essential elements as you draw. Use paint or felt pens to colour the drawings. This is also an easy way to prepare large posters. The results will not be professional but they can be adequate for your teaching.

Photographs or drawings from other countries can often be used for starting a drawing.\(^\text{18}\) Select

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\(^\text{16}\) The book *Illustrations for Development* by George McBean, Norbert Kaggwa and John Bugembe is *A Manual for Cross-Cultural Communication through Illustration*. It was published by the Afrolit Society in Nairobi, Kenya in 1980 and contains many ideas for preparing illustrations. It also contains a course of study for artists in Africa which could be adapted to other areas.

\(^\text{17}\) Illustrators, like writers, are usually city dwellers. They often have problems drawing rural scenes that are realistic.

In one case, an illustrator drew a sleeping baby in a hammock. Unfortunately, the child was drawn sideways in the hammock so that it would have been very uncomfortable. The viewers recognized this immediately and complained.

The illustrator had simply never seen a child in a hammock. This situation was partly solved by sending her to visit a rural family.

\(^\text{18}\) [A number of the drawings in this manual were drawn from photographs as described here. The photo-based pencil drawings were redrawn in ink, then resized for publication using a photocopier. Two decades later the drawings were scanned, resized for the new format and optimised using computer software. It's also possible to 'draw' (or trace) a computer-based photograph onto a new layer using similar software. LZ 2008]
an image that shows the situation that you need illustrated. Copy the image onto a new piece of paper or card using a light pencil line. Change the setting, clothes, etc. as required to reflect local customs as you prepare the final drawing. Even where the central government or other agency has prepared 'national' materials you may need to adapt them to your own particular locality.

One project in Nepal uses large photographic posters in the cities and large towns where the viewers are most sophisticated. Smaller posters using line drawings are prepared for use in local communities. These small posters or leaflets can be made using an office duplicator or photocopier. They portray the same activities as the photographic poster but use a local setting and clothing typical for the local area.

### Using Drawings

It has been said that a picture is worth a thousand words. While this may be true in some situations, there are many situations where illustrations are not very effective. Research on the use of illustrations shows that people must learn to 'read' illustrations just as they learn to read words.

You must decide how much help your participants will need to use illustrations effectively.

Use a drawing as you would a photograph or slide to introduce a topic or to help set a scene. Large groups require large illustrations and must depend upon slides or large posters. These drawings (or photographs) must be able to be clearly viewed from the furthest corner of the room.

The authors have used drawings as small as postcard size. These small drawings can help small groups understand the setting for a case study or similar exercise. Introduce the activity with a short oral explanation and pass around the drawings for every individual to examine.

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**Caution!** There can be confusion if some people are looking at the drawings while you have gone on to something else. Retrieve the drawings and answer any questions that arise before you continue the activity.

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Role play exercises can also be more effective with the addition of drawings. One way of doing this is to display large drawings showing the physical setting of the role play. Place the drawings around the training room as if they were theatre props. Another technique would be to put the role descriptions on the back of a card illustrating the setting of the role play. The drawings should help set the mood for the exercise. A drawing for use with a role play on village development might show individuals working at agricultural tasks appropriate to the area. An illustration for a case study on urban health problems might show several children being bathed at an open air hand pump similar to those used in the local community. The illustrations should help explain the discussion topic; they should not be a distraction.

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19 [This has become particularly easy to do with computer printing. Photographs can also be used, although they have significant limitations. I have used custom designed A3 sized photographs and topic-specific posters for this purpose, both in colour and black and white. LZ 2008]

20 [Images can be distracting, especially if they are too detailed or specific. Photographs can be particularly distracting. Removing backgrounds and other non-essential elements help to isolate the main subject and can improve a photograph's utility (see example on pg 80). Some of the images in this manual have been 'scattered around' as examples. Other help illustrate the topic. Can you tell the difference? Which ones work and which don't? LZ 2008]
Adaptations of Simple Games

The good trainer will not forget simple games and similar activities simply because they are not sophisticated. The authors have adapted a number of common or traditional games to instructional use. Look at them as examples of what can be accomplished with a simple idea and equally simple resources.

Food Cubes
Games of chance using dice are common in many parts of the world. People of all ages will spend hours throwing dice, bones, shells, or some other form of marker. Normally these activities are done in groups.
A situation like this is perfect for the development of a learning game.
The cubes in the illustration were used for nutrition teaching. Each cube contains a balance of food types. Only local foods are illustrated. Different cubes would likely be needed for different parts of the world.
The cubes are simply four small blocks of wood. Each cube is approximately 2.5 cm (1 inch) to a side. The blocks are painted with the foods drawn in realistic bright colours. Thus a carrot is orange, leafy green vegetables are green, etc.
Ask one person to roll the cubes on a table or the ground. The group can then identify the foods showing on the top surfaces. Individual members of the group are then asked to explain what changes would be necessary to make a balanced meal.
Variations in the exercise could include having each member of the group turn the cubes until they have a balanced meal showing. Participants could also be asked to explain why a balanced diet is necessary, or to explain the importance of each food.

Card Games
The authors have used a number of variations of traditional card and board games.
Playing cards can be made from any stiff cardboard and coloured with paints, coloured pencils or dyes.
A set of cards with a number of sets of illustrations could be used for a 'matching' game.
Make cards with ten to fifteen different examples of each of the food groups for teaching nutrition. Make cards with various grains and pests (insects, rodents, etc.) for a discussion on food storage. Make cards with good and bad examples of village sanitation for initiating a project to cooperatively build a well.
The playing cards can also be carried in the pocket, and can be used with small groups working independently. You may need to draw up a set of Rules and the goals for 'winning'.
Often games can be developed that emphasize cooperation rather than competition.

Board Games
Board games require more work but can also be successful. Draw or silkscreen the board on cloth, heavy cardboard, or other available material.
Variations of the 'snakes and ladders' game have been used world wide. One variation in one location will be used for teaching sanitation, another person will make a version for family planning information, and another a version for cultivation practices.
Landing on a square with a 'good' practice allows the player to climb the ladder. Landing on a square with a 'bad' practice moves the player back a number of squares. The District Nutrition Game in the third Section of this book is an example of one such variation.
With this game players can be encouraged to explain the effect of the practice illustrated on a square. Failure to understand the purpose of a
good practice means the player does not advance up the ladder. Similarly the player can avoid sliding down the snake if the correct practice can be explained.

There are many other board games that can be adapted. Substitute local materials for expensive or imported items and make your own versions.

**Other Games**

We have described the design of just a few simple games. Every region has its own favourites. Some games are played by children, others by adults. Some games don’t require any special materials other than the instructions. Remember to suit the level of your game to the intended audience.

Look around you for game type activities that can be adapted to your educational needs. Adapt your design to the constraints of the traditional game and experiment. Don’t be discouraged by failure.

[Partial 10 x 10 board for community health Snakes and Ladders game. LZ 2008]
Role Play Exercises

A role play is a learning activity where two or more persons act out prepared roles or parts. The audience is usually a small discussion group. The performance serves to introduce the discussion topic to the group.

In a skit or play the actors are given an exact dialogue to follow. The players in a role play are given very general directions about what they should say and do. The players make up their own dialogue and actions as the exercise progresses. The players normally do not use costumes, make-up or props. Simple materials may be used to create effects where needed, for example padding might be used to portray pregnancy.

Developing the Role Play

- Select a simple situation or problem with a limited number of people involved. Start very simple, you can use more complex situations once you and your students have more experience with the technique.
- What do you want to learn from this problem?
- Who are the people involved; and what have they done?
- Collect all of the information that you can about the situation and the people involved. This information will help you to prepare a short script or description of the situation. Your students will each adopt the position of one of the people in the situation.
- The players need accurate information to enable them to play the roles you will assign.
- Prepare written directions for each player. The directions should set the scene for the players and indicate the individual player's actions.
- Include notes on materials or props required.
- Keep the materials simple, a short role description will work as well as a long one.

Using Role Play Materials

- Select players from the discussion group and give them their role play directions. Allow them several minutes to read the notes and think about their role.
- Introduce the topic of the role play to the group. Provide the group members with one or two questions to be answered after the role play presentation. These questions will be the topic of the discussion after the presentation.
- Introduce the players to the group, for example "This is Ramon, a day labourer, his wife is...". Encourage the players to act out their parts as if they really were the person they are portraying.
- Start the role play and allow it to continue until the players are finished, or until you feel it is necessary to stop. When the role play is finished the players should take their places as part of the discussion group.
- The discussion leader should then help the group to answer the questions posed before the exercise. Alternatively, you might want to have several subgroups each work through the same role play and compare their experiences afterwards.

The purpose of the role play is to learn from seeing "what might happen if...". Often there will be no one correct answers and no one right way of doing something. The players show one way that the problem could be solved. Other players might solve the problem quite differently.

The role play may need to be debriefed by giving the participants a chance to explain their feelings as they played the part. They might also wish to explain alternate behaviour that they would have liked to try. The role play can often be rerun to give the participants (or other participants) the opportunity to solve the problem differently.

Sample Role Play Directions

**Ramon:** You are Ramon, a day labourer. Your wife, Maria, is pregnant. She has been unable to work for the last several weeks. You feel that she should see the local healer and get some medicine for her sickness. She needs to get back to work and help provide for the family.


Maria: You are Maria, a day labourer with five young daughters. Your husband, Ramon, is also a day labourer. You are pregnant, and three weeks ago the village health worker told you to stop working or the baby would die.

Similar directions would be needed for the Village Health Worker, the local healer, etc.

Quick Role Play Activities

Role play exercises do not always need to be planned and scheduled. An experienced instructor, working with an experienced class, can create spontaneous role play exercises.

- The instructor should be experienced in using role play exercises.
- The class should have experienced several role play exercises with the instructor.
- At an appropriate point in the class, stop the discussion or presentation. Select students and assign them roles verbally. Create these roles spontaneously out of the preceding discussion or presentation.
- Stop the role play and return to the regular activity once the point of the exercise has been made.
- Switching participants is often useful. Watchers will often say "I could have done better if...". Switch players, give the new participant(s) a general instruction such as "You are..., start the role play at the point where... happened and let's see what you can do with the situation".
- These changes, or mini-exercises can occur several times through the class and can involve a number of students as players.21

Introduction and debriefing for these exercises is often done as part of the class presentation. Your introduction might be as simple as saying "I would like two students to show the class an example of what we are talking about". Briefly explain to the two students what they are to do and start them in the role play. The debriefing could follow with the comment, "As you saw in this role play...".

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21 One of the authors has found this particularly successful in management training. It is often hard for the managers to visualize a situation. The short role play exercises dramatize a situation and provide a common experience for the whole class to discuss. One such class was discussing the techniques for managing an employee who was extremely upset. One after another, the trainees played the role of both the manager and the employee. Several trainees attempted unsuccessfully to placate the employee, each trying a slightly different technique. Once a 'manager' was successful, another 'employee' was selected and the process continued.

The class experienced about thirty such quick role plays during a single one hour class. As well, every class member had attempted to solve the problem at least once. The change of participants also demonstrated the way that a technique might work with one individual, but not with another.

The instructor's main function was to identify when each two to three minute segment had demonstrated a point and to change participants.
Case Studies

The case study is an examination of a real situation or problem. The case study often uses a written text to explain the situation. The problem or situation is discussed and the conclusions are compared with the real events.

Developing the Case Study

The materials for a case study may be as simple as a description written on a small card. More elaborate cases would require extra information. This might include maps, illustrations, pages from a patient's chart, specimens, diary pages, audiotapes, or other means of presenting additional information.

- Select a situation which illustrates the type of problem you are interested in teaching. Start simple, you can graduate to complex cases after you have some experience in writing simple cases.
- Collect and write down all the information you can obtain relating to the case. In other words, write a short description of the situation. The historical approach is often best.
- Prepare some short notes for the discussion leader. This should include the purpose of the case study and typical questions to help the discussion leader guide the group as it examines the case.
- If the discussion leader will require additional information for answering questions (e.g., results of lab tests, patient's previous history), this information should also be provided in the discussion guide.
- Simple courtesy suggests that you ask permission from the individuals and institutions involved if the case study involves a recognizable situation or could potentially be embarrassing.
- Provide fictitious names for individuals and institutions if the case requires confidentiality. You do not want to embarrass your students, the individuals or institutions involved, or yourself.
- The case study should always make an instructional point. Read the materials that you have prepared and rewrite them so that they illustrate one or two main points that you wish to present.
- Simplify the materials you have collected. Rewrite the case study to include only the relevant information.
- Make sure that the discussion questions fit the objectives of your case. Questions should direct the student to explore the consequences of their actions.
  - What would you do in this situation?
  - What do you think would happen then?
  - How do you think the patient would feel?
  - What could be done to encourage a better result?

Dramatizing Case Studies for Non-Literate Groups

Case studies are used primarily to generate discussion. Written case study materials are hard to use with individuals who do not have good reading skills. Case studies can easily be dramatized for use in such situations.
• Prepare the case study as described in this section. Use the selected cases in Section 3 as required.

• Rewrite the materials, if necessary, so that they can be used as role play materials. The major changes required will likely be to divide the information into 'public' information available to everyone, and 'private' information available only to selected individuals.

• Write role cards for the individuals required. Alternatively, you can write a script for a more formal presentation as a play.

• Be prepared to read the directions aloud. The public information can be heard by all of the players. Other information should be communicated to the appropriate individuals in private.

In-Basket Exercises
This is a simple variation of the case study with a specific objective. An In-Basket is a file, basket or holder for the in-coming mail. Typically, an administrator would have three baskets, one for in-coming mail, one for mail that has been seen but not disposed of, and a third for out-going mail. The in-coming mail is normally in random order, and does not yet have any priority attached to it.

The In-Basket exercise presents the materials from an administrator's in-coming mail. The participant is asked to read the materials and make a decision based upon general principles. A time limit is often imposed. This type of exercise is very good for pointing up the need to work cooperatively, and/or to delegate responsibilities.

Typically such an exercise begins with directions such as:

You are Ram Singh, Administrator for the District Hospital. You have just returned from a short leave and have been notified by the Regional Medical Officer of Health (MOH) that he wants to see you immediately (his office is 90 km. away in the regional capital). Before you leave you decide to try and clear some of the work from your desk.

The attached documents represent the mail and other messages waiting for you. Make a note on each item indicating what decision you would make, or what you want done about the item. Your driver will pick you up in one hour to begin the trip to the Regional Office.

• The case could be presented in the form of a number of documents taken from an institution's files or an individual's In-Basket.24

• Some care must be taken with materials. Some of the materials should indicate important decisions which the administrator would want to leave for a later date, others should seem to demand an immediate response.

• You will need somewhere between fifteen and thirty items to be effective. Additional items can be added during the exercise in the form of telephone messages, etc.

• Prepare the necessary forms to create an authentic collection of mail that illustrates a teaching objective. Remember to disguise local institutions and individuals with fictitious names. You don't want to alienate your colleagues, especially if the situation is potentially embarrassing.

• The participants are allowed to work with the materials for a specified length of time. A discussion should follow on the general situation and the disposition of each item.

• It is often useful to have a 'real-world' administrator give his or her ideas of how to dispose of each item in the in-coming mail. Do NOT, however, assume that there is only one possible solution to the problem.25

The exercise Decision-Making: An Emergency Trip in Section 3 of this Manual is similar to an In-Basket exercise in many respects. There isn't a proper example of an In-Basket in this Manual because of space limitations. Hopefully we have presented enough information that you could prepare your own.

A participant in one session run by the authors decided that the best solution was to tell an Assistant to look after the mail. He then "went home to pack
The Active Case Study

The active case study is a more detailed examination of a real activity. In health training, the participants usually look at a patient description and the health actions for that patient. The consequences of the action would also be presented.

The stress in an active case study is on developing the ability to make decisions. The case study does not normally present the best 'solution'. Students are encouraged to present their own ideas.

Active case studies seem most appropriate for teaching problem solving skills or for learning how to apply basic principles.

- An active case study might break the information about a nursing case into a number of individual steps.
- The case information would be presented to the students with an interruption just prior to a nursing activity.
- A number of possible nursing activities would then be proposed and the students would select the activity that they believe will be best.
- The discussion leader would then present either the actual activity used in a specific case or follow the plausible results of the activity selected by the students.

The active case study can be used by a single student as a form of self-instruction. It is perhaps best to use the technique with small groups of three to eight students to encourage learning from each other. The discussion leader may be the instructor, an advanced student, or simply a student who has reviewed the materials before use.

Every active case study consists of materials describing each step of the case and relevant discussion questions at the end of each major step.

- Break the information down into several steps, keeping to the order a health worker would encounter the information in real life.
- Write each step on a separate piece of paper or card. Prepare a discussion guide for each step.
- Remember that you should explore some of the logical alternatives that might be presented by the student. These alternative strategies might alter the presentation of your case. (Keep it as simple as possible.)

What Are the Differences?

The active case study is a detailed look at a real situation. It works very well for getting the participants to look at the consequences of their actions. We have suggested an active case study for a nursing situation. The same technique could be adapted to the training of village level health workers, agricultural extension agents, and other community workers. The examples in Section 3 of this Manual are designed for helping teach workers to communicate better.

We also described the simple case study. We have suggested that the difference between these two tools is one of student involvement. For us, the case study is used as a discussion generating tool. Use it when you have a topic that doesn't require student involvement or result in action on the part of the participant. A case study might be used, for example, to observe what happened in a community during a crisis situation. The active case study would be used to help participants decide what they would do in a specific crisis situation. The planning steps would be very similar for the two tools. The case study would normally not require as much time or class preparation to conduct.

Note that the active case study requires the involvement of the student in the exercise.
A regular case study is used simply to generate a discussion without the involvement.