



Learning Exercises for Health Training

Electronic Edition, 2008
A C Lynn Zelmer, Editor
www.zelmeroz.com/archives

Copyright © 1986, International Communications
Institute; 1990 and 2008, A C Lynn Zelmer



Learning Exercises for Health Training

A C Lynn Zelmer, Editor

Contributing Editors
Dr Ruth Harnar, Dr Amy E Zelmer

Special Contributors

The training staff and friends of the
Voluntary Health Association of India

Henry Codjoe (Ghana), John Inegbedion (Nigeria), Vijaya
Krishnan (India), Mpho Marisane (Lesotho), Marian
Mucha (Malaysia), Lynn Skillen (Guatemala/Colombia), and
Tamrat Tekle (Ethiopia),
all from the International Students Centre,
The University of Alberta.

John Roughan and friends in the Solomon Islands

Originally distributed in a limited edition by
International Communications Institute, 1986, for
Teaching Aids at Low Cost, UK
and revised 1990 for publication by
Voluntary Health Association of India

Dedicated to the memory of Sister Anne Cummins
Who encouraged the making of Govind
and created the Village of Jo-bhi-ho;
Who inspired the rest of us as we experimented
with new kinds of teaching,
with her obvious enjoyment and search for meaning;
Who loved the poor - the People whom
we want to reach and work with.

Copyright © 1986, International Communications Institute;
1990 and 2008, A C Lynn Zelmer, all rights reserved.

Permission is hereby freely given to Health Training Institutions in developing countries for non-commercial use of those materials that are original to this Manual. The editors would appreciate receiving a copy of any publications that contain these materials for their library.

Permission to reproduce materials obtained from copyrighted sources (listed below) must be obtained from the specific author or publisher noted.

Acknowledgements

Our thanks to Wickrama of Sri Lanka for the use of three of his illustrations; and Woizero Menbera of Ethiopia along with several unknown photographers for the photographic originals used in the preparation of the illustrations.

We are grateful to the following authors and publishers for permission to reprint modifications of copyright © materials:

Oxford University Press Canada for the exercise Nutrition Game, from **Nutrition in Developing Countries** by Dr. Maurice King.

Hospital Research and Educational Trust for the exercises Test Your Concentration, Grapevine or Rumor Chain and Assembling a Puzzle, from **Training and Continuing Education: A Handbook for Health Care Institutions**.

The exercise Young Woman/Old Woman: A Perception Experiment by William R. Mulford. Reprinted from: J. William Pfeiffer and John E. Jones, (Eds.), **The 1978 Annual Handbook for Group Facilitators**, San Diego, CA.: University Associates, Inc., 1978. Used with permission.

The exercise Rumor Clinic: A Communications Experiment. Reprinted from: J. William Pfeiffer and John E. Jones, (Eds.), **A Handbook of Structured Experiences for Human Relations Training, Vol. II**, San Diego, CA: University Associates, Inc., 1974. Used with permission.

John Roughan and the Solomon Islands Development Trust for the exercises Development Wheel and VQLI.

Dr. Amy E. Zelmer for the exercise Nursing Bingo.

Table of Contents

Learning Exercises for Health Training.....	1	Role Play Exercises.....	32
Acknowledgements.....	2	Developing the Role Play	32
Table of Contents.....	3	Using Role Play Materials	32
Foreword.....	6	Sample Role Play Directions.....	32
Development of the Manual	6	Quick Role Play Activities.....	33
Reality in the Classroom	6	Case Studies.....	34
How to Use this Manual.....	6	Developing the Case Study	34
Introduction to the 2008 Electronic Edition	7	Dramatizing Case Studies for Non-Literate Groups	34
Section 1 Selecting and Using Learning Exercises	8	In-Basket Exercises	35
The Basics of Learning Exercises.....	9	The Active Case Study.....	36
Learning Can Be Fun	9	What Are the Differences?.....	36
What Are They?.....	9	Section 3 Selected Exercises.....	37
Teaching with Learning Exercises.....	10	Meeting Other Participants	38
Why Use Them?	11	Purpose.....	38
Learning By Participating.....	12	Group Size.....	38
Evaluating Materials	13	Time Required.....	38
Evaluation Questions	13	Setting	38
Student Evaluations.....	13	Materials.....	38
Procedures For Using Exercises.....	15	Process	38
Preparation.....	15	Possible Learnings.....	38
Physical Facilities	15	Variations	38
Scheduling Time	15	Assembling a Puzzle: Teaching-Learning	39
Preparing Materials.....	15	Purpose.....	39
Preparing the Group (Briefing).....	16	Group Size.....	39
Operating the Exercise	17	Time Required.....	39
Follow-up Activities (Debriefing)	17	Setting	39
The Next Step	18	Materials.....	39
Section 2 Making Learning Exercises.....	19	Process	39
General Techniques	20	Possible Learnings.....	39
Simple is Best	20	Variations	40
Oral Presentations	21	Puzzle Pattern.....	40
Impromptu Skits	21	Teacher's Card.....	40
Formal Dramatizations.....	21	Trainee's Card.....	40
Reproduction.....	21	Trust Walk.....	41
Translating and Adapting Materials Across		Purpose.....	41
Cultures.....	23	Group Size.....	41
General Techniques.....	23	Time Required.....	41
Techniques Used for this Manual	24	Setting	41
Converting Terminology	24	Materials.....	41
Language Translation.....	25	Process	41
The Preparation and Use of Illustrations.....	28	Possible Learnings.....	41
Drawing Your Own.....	28	Variations	42
Using Drawings	29	District Nutrition Game	43
Adaptations of Simple Games	30	Purpose.....	43
Food Cubes	30	Group Size.....	43
Card Games	30	Time Required.....	43
Board Games	30	Setting	43
Other Games.....	31	Materials.....	43
		Process	43
		Rules for Playing	43
		Possible Learnings.....	44
		Variations	44
		Helps and Hindrances Cards	44
		Nutrition Game Board	45

Family Planning Bingo	47	Emergency Trip Rationale Sheet.....	60
Purpose	47	Two Role Plays: VHWs.....	61
Group Size	47	Purpose.....	61
Time Required	47	Group Size.....	61
Setting.....	47	Time Required.....	61
Materials.....	47	Setting	61
Process.....	47	Materials.....	61
Possible Learnings	47	Process	61
Variations	47	Possible Learnings	61
Bingo Questions.....	48	Variations	62
Bingo Cards	48	First Role Play Materials.....	62
Master Question List.....	48	Second Role Play Materials	63
Young-Old Lady, An Experiment of Perception ..	50	Jobhiho Village: A Role Play on Power.....	64
Purpose	50	Purpose.....	64
Group Size	50	Group Size.....	64
Time Required	50	Time Required.....	64
Setting.....	50	Setting	64
Materials.....	50	Materials.....	64
Process.....	50	Process	64
Possible Learnings	50	Possible Learnings	65
Young-Old Lady Picture	50	Variations	65
Variations	51	The Jobhiho Map.....	65
Following Written Instructions	52	Purpose.....	66
Purpose	52	Group Size.....	66
Group Size	52	Time Required.....	66
Time Required	52	Setting	66
Setting.....	52	Materials.....	66
Materials.....	52	Process	66
Process.....	52	Possible Learnings.....	66
Possible Learnings	52	Variations	66
Rumour Chain 1	54	Case Studies.....	68
Purpose	54	Purpose.....	68
Group Size	54	Group Size.....	68
Time Required	54	Time Required.....	68
Setting.....	54	Setting	68
Materials.....	54	Materials.....	68
Process.....	54	Process	68
Possible Learnings	54	Possible Learnings.....	69
The Original Message Sheet.....	55	Variations	69
Variations	55	Case Study: Yeshubad	70
Rumour Chain 2	56	Case Study: Arcot.....	71
Purpose	56	Thakurpur Case Study: Free Gifts?	71
Group Size	56	Case Study: Awash River Conservation	72
Time Required	56	Case study: Chandra (South India).....	72
Setting.....	56	Case Study: Ranjit (Sri Lanka).....	73
Materials.....	56	Case Study: Yekosso Zaff (Ethiopia)	73
Process.....	56	Case Study: Pill Pushers	74
Possible Learnings	56	Case Study: Jose Has No Pills.....	74
Variations	56	Case Study: Santo Domingo	75
Decision-Making: An Emergency Trip	58	Case Study: Women Only.....	75
Purpose	58	Case Study: Aba Senga (Ethiopia)	76
Group Size	58	Case Study: The Vegetable Seeds	77
Time Required	58	Case Study: The Fruit Sellers' Children.....	77
Setting.....	58	Case Study: Vishalnagar (India).....	78
Materials.....	58	Case Study: Chakrapur (India).....	80
Process.....	58	Case Study: Binnur.....	81
Possible Learnings	58		
Variations	58		

The Active Case Study	82	Development Wheel Pattern.....	86
Purpose.....	82	Notes on the Development Wheel.....	86
Group Size.....	82	Village Quality of Life Index (VQLI)	89
Time Required.....	82	Purpose.....	89
Setting.....	82	Group Size.....	89
Materials.....	82	Time Required.....	89
Process.....	82	Setting.....	89
Active Case Study: Molinyane (Lesotho).....	83	Materials.....	89
Active Case Study: Sr. Jose.....	84	Process.....	89
Development Wheel	85	Possible Learnings.....	89
Purpose.....	85	Variations.....	90
Group Size.....	85	The VQLI Recording Form Notes.....	90
Time Required.....	85	VQLI Recording Form.....	94
Setting.....	85	References	95
Materials.....	85		
Process.....	85		
Possible Learnings.....	85		



[This image has been coloured since the original publication. Compare it with the uncoloured images in this manual and ask yourself "Does the colour

add anything useful to the image for instructional purposes?" "How does this image compare with a photograph of the same people?" LZ 2008]

Foreword

Development of the Manual

This Manual has evolved from some years of experience in workshops and short courses carried out in India by the staff members of the Voluntary Health Association of India (VHAI). Participative learning experiences, such as small group discussions, case studies, role plays, simulations and educational games were a major part of those programs.

In 1983 VHAI published **A Manual of Learning Exercises for Use in Health Training Programs In India** to meet the demand for copies of the exercises. The exercises in the Manual had been extensively tested within India and portrayed typical Indian situations. They met an Indian need for a basic set of training tools that could be adapted widely across India and the many Indian languages.

The demand for similar materials outside India prompted the writing of a new exercises that reflected a variety of cultures and settings. We added a number of drawings that illustrate people and their activities in various regions of the world.

With these additions we hope that that these materials will be equally useful to both Indian and International audiences.

The Acknowledgements give thanks to the individuals and institutions who require specific credit for major contributions. We want to also thank all the trainers and trainees who contributed their successes and failures to the development of this edition. We hope that this Manual will spread their ideas and suggestions ever more widely.

Reality in the Classroom

You have a problem. You want to involve your students more fully in the practical realities of health care and community development. However, you do not have the time or money for extensive field visits. Also, it is doubtful that a satisfactory teaching situation could be found for the many topics that you want to study.

- *Can some way be found to provide 'reality' experiences inside the classroom?*

- *Is it possible to train individuals who will be 'agents of change' in their communities?*

The authors of this Manual believe that there is a solution to part of your problem. We have successfully brought real world experiences into the classroom through the use of activities such as case studies, role playing exercises, games and simulations. These activities are sometimes known as experiential exercises or interaction exercises. For convenience we'll simply call them exercises or learning exercises.

In practical terms, reality is all around us. The places where we work and live are all part of that reality. As teachers, trainers, or instructors we sometimes describe parts of that reality in a simplified form for use in our training programs.

A case study is a good example of such a simplification. A case study describes those portions of a real situation that we want to study. The authors of this Manual have found case studies and other learning exercises particularly useful for training community change agents. They also work well as tools for mobilizing the community.

When we use an exercise we need to remember that it is a simplification, not the whole situation. Trainers should look seriously at any simplifications, a good trainer will not use a learning exercise that eliminates critical elements of reality.

How to Use this Manual

This Manual is organized into three sections. Each section can be used somewhat independently as they have been designed for a specific level of expertise.

The first section gives you the information necessary to select and use learning exercises. Read this section before you begin using learning exercises and refer to it as you begin to use your first exercises. It will provide you with the background to be successful in using the exercises.

The second section gives you suggestions on how to modify or design basic learning exercises. The first exercises that you use will

probably have been developed by your colleagues or taken from books such as this one. After using these exercises you can use the techniques suggested here to make your own simple games, role play exercises and case studies. These basic techniques can be applied to a wide variety of exercises and will allow you to prepare materials specifically for your own situation.

The third section is for a person with some experience using learning exercises. It contains a number of examples of learning exercises that have proved to be successful in health teaching. Some of the exercises have been extensively field-tested in one or more countries, other exercises are adaptations to show how they may be changed for other situations. Together they will give you a basic set of exercises to help you get started. Use them in your classroom. Adapt and change them to your own needs.

Finally, this Manual is meant to be a beginning. Use it as an aid to becoming a better trainer or teacher. Adapt the materials to fit your own situation. Share the materials and expertise that you develop with your colleagues, students, patients and the community. Learning can be fun!

A C Lynn Zelmer

Australia, March 1990

Introduction to the 2008 Electronic Edition

While I haven't been back to India since the early 1990s, I have continued to be involved in development work, most recently in Vanuatu and Fiji.

While there are newer items in print form, and thousands of items on the web, I've found that the resources we developed in the 1970s and 1980s are often still appropriate. They have a very practical approach and often emphasise principles, such as pre-testing, that seem to have been forgotten by more recent authors.

Unfortunately, many are out-of-print or otherwise difficult to find, unless they have been converted to electronic form and posted on the web.

This manual was reformatted from computer archive files that had been updated in 1990 for republication by VHAI. The electronic version was released in May 2008 and is part of the www.zelmeroz.com archives.

The manual contains all of the text and illustrations of the original. The manual has been reformatted and saved in pdf format files to minimize file sizes for downloading.

Page numbering is different from the original printed version(s). Extra footnotes [in square brackets] provide updates in some areas. Some additional minor editing has also been done for this electronic edition.

Most of the ideas and exercises in the manual remain valid today. However, the references have not been updated. Use the references as a guide for searching the web. Alternatively, check your local library for current resources.

International Communications Institute closed in 1988. Lynn Zelmer now lives in Australia and can be contacted at lynn@zelmeroz.com. VHAI is still very active in India and has a web site at www.vhai.org.

A C Lynn Zelmer

Australia, May 2008



Learning Exercises for Health Training

Electronic Edition, 2008
A C Lynn Zelmer, Editor
www.zelmeroz.com/archives

Copyright © 1986, International Communications
Institute; 1990 and 2008, A C Lynn Zelmer



Section 1 Selecting and Using Learning Exercises

This section introduces you to learning exercises. The first part explains some of the basic terminology and the reasons for using learning exercises. The second part provides

techniques and questions for evaluating these exercises for your specific situation. The last part includes procedures for making effective use of some selected types of learning exercises.



The Basics of Learning Exercises

Learning activities can take many different forms. Some topics can be learned through reading. Other topics require laboratory or workshop exercises to enable the student to practice techniques. The successful training program will require a combination of techniques. This section will introduce some techniques that can bring practical experiences into the classroom.

Learning Can Be Fun

Learning occurs in many ways:

- we can sit in a classroom and listen to a lecture;
- we can read a book;
- we can practice skills under the direction of a master craftsman;
- we can experiment with new techniques and skills;
- we can think about something we have done;
- we can discuss our experiences with friends;
- etc.

We learn from everything that we do.

As children, we learn in both formal and informal educational settings. Folk tales and instructions from one's parents represent the informal setting. School represents the formal setting. Adults seem more likely to use informal learning settings. We learn from our colleagues, and from the mistakes that we make in our daily work.

Learning seems to occur best when we combine informal learning experiences and thoughtful examination of those experiences. Learning exercises are a technique to bring informal learning into the classroom. We can then reinforce these learnings with discussion and more formal instruction.

Training programs don't have to be dull, boring and serious to be useful. In our work with adults in many countries we have found that some of the best learning occurs when the learners are enjoying themselves in a learning exercise. These exercises are often boisterous and active, but they more accurately portray reality than a lecture or a reading from a book.

The learning exercises in this Manual are an attempt to make learning interesting and enjoyable.

What Are They?

Some of these learning exercises are very limited in their use, designed to reinforce one idea or technique. The cards games, board games, and 'drill' exercises fit this category.

Other exercises are open-ended and can have a variety of uses and outcomes. Role play exercises, case studies and simulations have quite specific teaching objectives; however their outcome can be quite different every time that the exercise is used.

Please note that it often requires more work to use a game or an exercise than it does to simply read lecture notes aloud. There are also some hazards involved for the unsuspecting instructor.

We firmly believe that learning should be fun for both you and your students. We also know that this will take a lot of planning and hard work. The last part of this section contains instructions for using these exercises. Section 2, *Making Learning Exercises*, contains more detailed definitions of three common types of exercise. Read on to find out how you can make your classes interesting and more useful.

The simplest exercise might involve a set of wooden cubes with the faces painted with various foods (see page 30). The student throws the cubes like dice or cowrie shells, examines the foods shown on the top, and describes a day's meals from the foods shown. The other students in the group can question the diet described, and the first student must defend his or her choices.

The children's game of snakes and ladders (see pages 30 and 43) is more complex. It has been adapted for nutrition, sanitation and public health, as well as many other health education topics. You can use illustrations (pictures or drawings) instead of words if the people using the exercise cannot read. Players are normally required to explain the health practice illustrated on the square where their token lands.

Adapting Bingo or Loto-Loto is even more complex (see page 47). Instead of calling numbers, one player calls definitions or practices which must be matched with corresponding words or abbreviations on the individual player cards. Again, pictures or drawings can be used for illiterate users.

These first three types of exercise are useful for providing drill in basic concepts, for informal use as 'fun' activities in an unmonitored situation, or as a 'reward' for completing more structured work.

The In-Basket exercise (see page 35) uses the forms, letters, memos, and other documents which someone would use in a work situation. Users are required to make decisions based upon the information provided in the documents.

Role play (32 and 6 ff) and case study (pages 32 and 6 ff) exercises are short descriptions of work situations. In a case study the description is used to guide a discussion of the events leading up to or following the event. The role play description is used as the basis of an enactment of the situation described. The participants react as if the situation was real, and the remainder of the class uses the presentation as a basis for discussion.

In-Baskets, case studies and role play exercises can be used to examine specific work or life situations. They can be used in regular classrooms with a minimum of preparation and can be focused on very specific topics.

Simulated patients are useful for training students who will have to deal with 'people' problems. The 'patients' are given a role to play and coached in their responses. The student must perform as if the patient was real.

The empathy exercise teaches communications skills. Some may be very short but many empathy exercises will take several hours to complete.

Simulations and empathy exercises often require extensive preparation and several hours to present. This Manual focuses on the simpler exercises. More complicated exercises require an experienced instructor and careful planning. Start with simple exercises in your classes. As

you gain experience you will be able to attempt more complex activities.

Teaching with Learning Exercises

Teaching styles and techniques have changed over time. Most technical and vocational areas used an apprenticeship format, the new employee learned while working. As the body of knowledge in any particular area increased it became necessary to substitute classroom instruction for work experience. Now almost all instruction is in the classroom. This makes it difficult for students to apply what they have learned in the classroom to real life.

We have found that the selective use of learning exercises can bring some of that reality back into the classroom. We have found that people learn well from being involved in these exercises. Both adults and children enjoy learning when the learning experience is familiar and based upon real-world activities.

- Exercises can be designed for individual, small group or large group use.
- They can be designed so that they can be used within the classroom timetable.
- Some exercises, like many games, can often be used by students without an instructor.
- The use of learning exercises is based upon the theory that we learn differently by doing than we do from being told.
- The exercises isolate a small piece of reality for study. The students are asked to change that reality in some way.
- People can be hurt or even die in the real world if we make a mistake. The exercises can often be very real for the participants but no one should be hurt by the exercise.

The use of these exercises depends upon the students and instructor sharing a common experience and discussing why and how the events occurred. This discussion must be followed by a discussion of how the experience applies to the real world.

The classroom where learning exercises are used in teaching or testing may be quite different from a traditional classroom. Exercises with a lot of interaction are usually noisier than

lectures because the students will be moving about and talking with each other.

Why Use Them?

Exercises can be useful in our teaching, but you make the decision whether or not to use a particular exercise based upon your knowledge of good teaching techniques. This section will list some of the advantages of using learning exercises; some of the disadvantages will be discussed later in this Manual.

Safety: The beginning student is often inept at his/her job, perhaps even dangerous. It can be unsafe for both the patient and the student, yet simple situations for student 'practice' are not always available. A well planned simulation or exercise may be the answer.

The student's first attempts at giving hypodermic injections, for example, can be painful, and dangerous, for the patient. We can provide a safe alternative by giving the student an orange which simulates the patient. The student gains basic needle-handling skills by injecting water into the orange.

Economy: Some experiences are far too costly and/or dangerous to set up solely as a teaching situation. Complex simulations are not always required. Perhaps the answer is an exercise using a dummy or a fellow student.

Time Compression or Expansion: Laboratory test results often take several days to obtain. For teaching purposes it is often necessary to have immediate results. Perhaps we might use a simulated (role playing) patient who comes briefed with the proper responses, and who has simulated test results for any required lab tests.

The exercise *Choosing a Village* described in Section 3 creates a new health centre, a health team, and four villages. The health team makes informal visits to each of the four villages to decide where to begin their work. Information is provided for each village and the team is asked to make a decision complete with the reasons for the decision. Many important principles can be brought out in a short time. Similar meetings would take many weeks in a live situation, even if they could be set up for teaching purposes.

Time expansion is also possible. For example, the students can be given time to discuss and decide what to do in a simulated emergency.

Selective: Sometimes it might be useful to concentrate on a single element of the problem. Exercises can exclude anything that would be distracting or confusing.

Synthesize: At the beginning of a unit we can use an exercise to introduce the topic. At the end of the unit an exercise can be used to show how the new learnings fit in with previous knowledge. The exercises can be used to demonstrate the ability to apply classroom knowledge.

Exercises that can be used for this purpose include the In-Basket, the Case Study and any of the memory drill activities.

Testing: Testing can be enjoyed instead of feared. Games and similar exercises can be used by students to test their mastery of the subject. More formal activities can be used by the instructor to assess the student's performance.

Repeatable: The exercises allow the students (or the instructor) to repeat a situation several times. Different (or additional) data can be presented each time, or the participants can merely try different techniques.

Variety: Most teachers want to provide some variety in their classes. Exercises can provide a break from normal classroom lectures. The differences between students also demand a variety in your class activities. The same exercise can be made simpler or more complex to allow for differences in ability among your classes. Section 2 will give you some guidelines for making such variations.

The authors have found that school children will react favourably to a learning exercise at almost any time. However, children often find it difficult to make the connection between the exercise and learning.

Older students and adults often have difficulty believing that learning can be fun. Once they are convinced that the instructor has a good reason for using an exercise they enter into it with enthusiasm. Their maturity and experience can lead to a good learning situation.

Learning By Participating

Simple learning exercises such as Spelling Bees and multiplication table drills have been with us for many years. Children and adults enjoy the interaction and involvement that these activities encourage. We all learn from participating in activities such as these.

The exercises in this Manual are not particularly new. They are extensions of the basic idea of learning by participating. Learners have already accepted interaction and participation for drill and memory work. Problem solving, looking at the causes and effects of behaviour, and situations requiring empathy are areas where we can apply some of the exercises in this Manual.

Potential users of learning exercises should participate in such exercises whenever we have a chance. As trainers we usually teach in the

same way that we were taught. Most of us were taught in a classroom using lectures. We therefore tend to use lectures and a formal classroom situation when we teach others. If we get some practice as participants in well run exercises we will feel more confident about using them in our own classrooms.

The authors have used exercises such as these in all parts of the world and with learners of all ages. Sometimes the exercises were simple and a light diversion from the regular classroom. At other times whole courses were designed using exercises such as those in this Manual. Some learners accept the idea of learning by participating immediately. Others must be shown how the techniques work. Almost always they will agree that they do learn while they are having fun.



Evaluating Materials

The use of any training material begins with the selection of an appropriate exercise for your particular use. Selection begins with an examination of your training objectives.

The wise trainer always begins by asking the following questions:

- *What are the learning objectives?*
- *Are the resource materials currently being used satisfactory?*
- *What are the students like?*
- *How much money and time do we have available for this topic?*

Remember that advertisements and guides can never give you a complete picture of how a particular exercise will work in your own specific situation. Look closely at a copy of the exercise, particularly the instructor's manual.

Conduct a trial run of the most promising exercises. Keep a record of your observations and participant comments for both trial runs and actual uses of all the exercises you use. This way you will eventually develop your own directory of useful materials.¹

Include the comments of other users when appropriate, but remember that this record is for your own personal use.

Evaluation Questions

When you are evaluating training exercises it is useful to have a number of questions in your mind. The following questions are used by the authors when evaluating training materials:

- *What knowledge is the student expected to have for this exercise?* Is the exercise too easy for your students? Too difficult? Does it fit within the course objectives?
- *Is there anything else that would do a better job of teaching the topic that this exercise attempts to teach?* What modifications will have to be made to use the exercise?
- *How expensive is this exercise?* How much time and effort will be required to use the

exercise? Does it require any special facilities for its operation?

- *Does the exercise portray the world in the way that we want?* Does the exercise depend too much upon chance? Does the exercise depend upon prejudice or stereotypes? Is the exercise fair?
- *Can we feel comfortable using the exercise?* Learning exercises seem to work best with trainers who have experienced exercises as a participant as well as a leader. Do you have enough experience to use this exercise? Is there too much of a chance of someone being hurt emotionally or physically?

Student Evaluations

The notes you make in evaluating materials will be of value for both selecting materials and for course planning. It is very easy to forget details over time, and your modifications to an exercise will make the original directions invalid. Your notes about how the exercise ran will be necessary to remind you of the changes.

Your students can help you evaluate materials too. One way to do this is to prepare a simple one-page sheet of evaluation questions for distribution after an exercise. Questions could include the following:

- *How useful was the exercise to you?*
- *How much did you learn from the simulation itself?*
- *How much did you learn from the debriefing?*
- *The specific points which I learned during this exercise were....*
- *Would you recommend this exercise to others?*
- *What were the strengths of this exercise?*
- *What were the weaknesses of this exercise?*
- *What improvements would you suggest for future use?*

The questions could require written answers or marks on a simple scale. The first question above, for example, could have a five point scale running from *Not Useful* to *Very Useful*.

¹ This would also be a good place to record your observations on the suitability of the exercises that you have participated in during your training.

Summarize the results for your notes, and use the results to make needed changes to the exercise.

For students who do not read or write well, ask some of these questions informally after the session is over. Again, make notes on their answers.

Brainstorming can be used to combine a review session and evaluation. Have the participants quickly list all of the points that they learned in the exercise. As usual with brainstorming, list all of the points without comment. Encourage everyone to participate regardless of how 'silly'

they might regard their response. The technique can be used the morning following the exercise, or perhaps every week on a longer course. It is best done in small group sessions (4 to 10 persons); the results can be shared with the larger group after the small groups are finished.

In practice we have tended to rely upon our own evaluations of an exercise in preference to those contained in the directories and advertisements. We normally use a participant evaluation of any exercise which we are using for the first time, or which we have developed or modified ourselves.

Simulation/Gaming Evaluation Card			
Name of Exercise:		Subject Area:	
Source:		Cost:	
Language & Level:	Age Level:	Skills Req'd:	
No. of Players:	Type of Activity:	Playing Time & Facilities Req'd"	
Objectives:			
Summary of Major Events of Exercise:			
Evaluation Comments (include Date and Source):			
Recommendation:			
Evaluator: (Continue comments on back)		Date:	

[A printed card similar to this was used by the editor in the 1970s and 80s to maintain a semi-permanent record of resources and their evaluation results. The completed cards were stored in a small metal file box.

Today it's more likely that we would use a computer database program, or a table in Word/Excel. In any case, we would have a record of resources, their potential utility, and where to obtain them. LZ 2008]

Procedures For Using Exercises

You have selected an exercise for your classroom. The exercise is one that fits your educational goals, and also fits the available time and experience of the participants. This section will give you guidance in actually using the exercise.

Preparation

The first step in running any exercise is to **Stop and Reread the Instructions** for the exercise you are planning to use.

- Read both the student's materials and the instructor's guide.
- Make a list of any special materials required, the amount of time needed to run the exercise, etc.
- *Mentally* go through the steps of the exercise noting again any places where you think that there might be difficulties.

Next, gather a small group of people and try out the exercise with them. Often you can enlist the help of your family, students, or friends to help with this trial run.

- Complete every step of the exercise.
- Make notes of difficulties.
- Make any required changes to the exercise and rerun with a trial group if necessary.
- Repeat the changes and trial runs until you are happy with the exercise.

Physical Facilities

Many exercises can be run in a standard classroom. However a standard classroom may be too small for some exercises, especially if the class must divide into small groups. Often the small groups need spaces for discussion away from the other participants.

Seminar rooms, hostel rooms, hallways, lunchrooms and outdoor spaces can all be used to create extra space for the exercise. Remember to coordinate with your colleagues when you will be using common spaces. It is useful to have alternate spaces as well. For example, we planned on using hostel rooms for small group meetings during one exercise. However our plans had to change when one of the rooms was required for a sick student.

Do not underestimate the space needs of a learning exercise. Often exercises are much noisier than a normal class, and small groups need quiet space for discussion and planning.

Scheduling Time

Learning exercises do not fit into the regular classroom schedule as easily as lectures. Some longer exercises can be broken into smaller units to fit the class schedule. Other exercises must be used in a single long time span. Schedule and book the physical facilities required, and make sure that the colleagues helping you will be free for the required time. Obviously student timetable conflicts must also be resolved.

We have sometimes forgotten that scheduling also involves a human factor. Learning from more than one such lapse we will no longer schedule a film immediately after a meal. The viewers often go to sleep. Participation in an active exercise requires energy and concentration. We therefore won't schedule an active exercise immediately before a meal if we can help it.

A day long exercise may require special arrangements for communal meals. This avoids a break in the continuity of the exercise. Sometimes however, we have deliberately broken for a meal (or tea) to give the participants a chance to get away from the exercise for a few minutes. Adult groups particularly appreciate light refreshments (tea and biscuits) during a long session.

Preparing Materials

Many exercises will not be available as a 'package' with all of the required materials.²

You will usually have to duplicate the required paper materials before using the exercise. You may also have to purchase extra materials to make the exercise work. For example, a board game or an adaptation of a traditional game might require dice or other materials to play the

² Notes on adapting the exercise for a different culture are provided in Section 2, Making Learning Exercises.

game. Some form of counter may also be required (seeds, stones, coins, etc.).

Look for substitutes for materials that aren't available locally. A tape recorder or even a role play could take the place of a telephone or paging system, mimeographed notes for letters, etc. Photographs or drawings might take the place of expensive equipment.

The following materials are extremely useful for making any exercise work:

- notepaper and pencils,
- carbon paper for making quick duplicate copies of last minute instructions,
- a large chalkboard (and chalk) or large sheets of paper (and markers, sketch pens or charcoal) for the instructor's use,
- a chalkboard (and chalk) or large sheets of paper (again with markers, sketch pens or charcoal) for each group if they will be reporting their activities. This is very important for large groups.
- coloured paper, cardboard, scissors, paste, etc. for making counters, game cards, and other miscellaneous materials.

Try and keep a stock of these materials on hand for classroom use, and try to use facilities that contain built-in resources such as chalkboards. You might also make a collection of locally available materials such as shells, hard seeds, etc., that can be used to substitute for the commercial materials that are specified for some exercises.

All this may seem like a lot of work for you, but once you have assembled your own package of materials it will be very easy to run the exercise again whenever you need it.

Prepare all the required materials well in advance of the exercise. Delays in distributing materials to participants, or a last minute panic to prepare materials can destroy the educational value of the exercise.

Last, but not least, remember to ensure that physical facilities will be available for personal needs. A day long exercise without toilets available will be a disaster.

Preparing the Group (Briefing)

A good learning situation requires a good introduction. The students need to know the objectives of the activity, and what is expected of them as participants. They need to know when and how they are to participate.

Keep the students well informed about schedule and other changes.

With groups which have not used games before we usually begin the introduction with a general explanation of experience-based education. This explanation would very briefly include a description of different styles of exercises and why we are using this exercise. All groups need an explanation of how this exercise fits within the instructional goals of their course.

The initial briefing provides an opportunity to explain special activities. Some exercises, for example, require the participants to keep a diary of events encountered during the activity. The use of simulated 'patients' requires the participants to 'pretend', this change from normal reality must be explained.

The timetable of activities should be explained during the briefing, even participants in a very short exercise deserve to know how long the exercise will take and what activities are expected. Anticipated discussion questions might be introduced at this time as well; this helps explain how the student should view the exercise.

Many social or empathy type exercises require 'roles' to be assigned to individual participants.

- It is usually useful to explain how you selected the persons for each role. This avoids the feeling that "*you are picking on me*".
- Assigning roles randomly ensures that every participant will have an equal opportunity to have a 'good' role.
- Sometimes you can ask for volunteers, but you must be careful that everyone takes part and that there wasn't any pressure on any individual to 'volunteer' for a particular part.

Learning exercises are usually most effective when every person present is involved. Passive observers, individuals who 'just want to watch', should probably be asked to leave for the

duration of the exercise. Alternatively it might be necessary to cancel or postpone the exercise.

Visitors who drop in during the exercise should also be discouraged unless the participants have previously given their approval for the visit.

In general, it has been our experience that non-involved observers destroy the purpose of the exercise. This is particularly true when the observers are line supervisors or other persons in a position of authority.

The method you use to assign roles and explain the purpose of the exercise will determine how the participants accept the 'reality' of the situation. You want participants to react as if the situation was real, you do not want people just 'playing games'.

Operating the Exercise

Generally speaking, let the exercise operate itself. Many of the simpler exercises will require no instructor supervision at all. The participants can carry out the directions for the exercises themselves, and can even provide their own briefing and follow-up discussion.

- Do let the participants make their own mistakes. Do not point out solutions that are obvious to you but not to them.
- Do not put a value judgment on 'correct' behaviour; people often learn more from their mistakes than from correctly performing an activity. One of the benefits of learning exercises is that it is safe to make mistakes. We often learn from our mistakes.
- Do not change the rules in the middle of the exercise without reason. Sometimes it is very tempting to make changes during the exercise. For example, it is very tempting to add information or withhold information from participants *to see what might happen if....?* Another temptation is to make changes if the exercise is not working as well as expected. Deliberate manipulation and arbitrary decisions are usually unrealistic, confusing and annoying.
- Do observe what is happening during the exercise, making notes where necessary. Be particularly aware of changes that the participants make to the rules so that you may improve the exercise for the next use.

Changing the rules sometimes changes the learnings too. Help the participants feel that it is 'OK' to change the rules if there are good reasons for the changes. Help them recognize the changes in rules and learnings.

- Be flexible with time limits. Individual groups will require differing times for the same activity. Watch for the completion of activities and operate accordingly.
- Be flexible in your personal style. Most learning exercises will benefit from a less authoritarian teacher role than is common in many classrooms.
- Do not explain events or interactions to participants. You should be more of a manager of the learning experience than a giver of information.
- The best preparation for running these exercises is to participate yourself; then assist someone else to run a number of exercises. Having the experience of participating will enable you to judge more readily the appropriate response to a particular event or question during an exercise.
- Above all, stay calm and accept events as they happen. Never assume a fixed outcome.
- Have fun.

Follow-up Activities (Debriefing)

Experience-based exercises require both an adequate introduction and follow-up. 'Debriefing' is used to describe the discussions and other activities required to bring the learner back into the normal world after a period of role-playing or similar activity.

The follow-up or debriefing activities might include a discussion immediately after the exercise. Other activities may take a longer time and resemble more usual assignments. All follow-up activities attempt to relate the activity to the real world. Good follow-up explains the importance of the exercise to the participant's normal work and helps improve performance.

The importance of the debriefing cannot be over-emphasized. The lack of follow-up often leaves the learner frustrated and unable to apply the skills taught by the exercise. Learning activities often involve the learner emotionally and psychologically in a way that a reading

assignment cannot. The learner needs help to understand feelings, both his own and those of the patient or client group under study.

For example, we can remember one exercise where the instructor neglected the debriefing. The exercise was simple; all of the participants were given a paper crown to wear. Each crown had a message which the wearer couldn't see, but the other participants could read and respond to. One girl's crown read "*I am a clown, laugh at me*". Whenever she spoke, we laughed. She was hurt by this laughter and became very quiet.

The instructors missed seeing her hurt, and didn't include this in the debriefing. Her hurt feelings affected the way she worked in the group and made it very difficult for her to learn.

In short, we feel that **if the time cannot be allotted to debrief the exercise, then there is not enough time for the use of the exercise.**

The students will likely learn as much from reflecting upon their reactions to events of the exercise as they will from doing the exercise itself.

Debriefing activities might be conducted individually, in small groups, in large groups, or some combination of all three.

- A short exercise, a crossword puzzle or similar game would require an opportunity to correct errors and discuss the corrections.
- Short exercises used for practice, drill or testing may not seem related to the course or the academic level of the student. Use the debriefing to fit these activities into the student's ongoing learning.
- For exercises with more complex goals we have often had groups begin with two or three discussion questions within the working groups of the exercise. The small groups can then report on their activities to the whole group.
- The instructor has the responsibility of keeping the discussion 'on topic', allowing as many people as possible to participate, and occasionally suggesting ideas or examples from his/her own experience.
- The total debriefing session often lasts more than an hour, even for a short exercise.

- Long simulations, such as hospital/clinic management exercises or casualty simulations, might best be debriefed by giving the participants a number of questions at the beginning of the exercise and asking them to keep a diary or series of reports on their activities. These notes then become a basis for discussion.
- Written assignments or readings can also be given to help relate the exercise to the regular classroom teaching.
- Some exercises generate a number of records about how the participants acted. For example, decisions may have to be made in writing, or charts completed showing action taken. These documents arising out of the exercise can also be examined to detect problems in the approach taken to a task.

The introduction should stress what to look for in the exercise. The debriefing checks out whether the participants did, in fact, learn what you wanted them to learn; and provides an opportunity to give feedback on performance.

- *Why did a particular activity or result occur?*
- *What else could have happened?*
- *What would happen if...?*
- *What would you do differently if you were in the same situation again?*
- *Of all the potential responses that you could have made, why did you choose the one you did?*

The Next Step

In this section we have explained the use of learning exercises. We have explained how to select and evaluate learning exercises for your own situation. We have explained how to set up and operate a learning exercise.

The next section shows you how to modify existing exercises to make them more useful. It also explains how to develop your own exercises using typical situations in your community that need studying. The third section of this book provides examples of exercises that have been used successfully in various parts of the world.

The next step is up to you. *Good Luck in your use of learning exercises.*



Learning Exercises for Health Training

Electronic Edition, 2008
 A C Lynn Zelmer, Editor
www.zelmeroz.com/archives

Copyright © 1986, International Communications Institute; 1990 and 2008, A C Lynn Zelmer



Section 2 Making Learning Exercises

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.



Adapted from a traditional Ethiopian heather painting.

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.³ 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.

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]

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.⁴

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.⁵

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.

⁴ To be effective the content of the exercise must be directly related to the student's course objectives.

⁵ Do not be afraid to show your materials to colleagues or students. You will become very involved in developing your materials. This makes it very hard to be objective about the faults of the exercise. Another person is usually able to see the faults better than the designer.

Oral Presentations

Many groups are used to learning from story tellers. 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.⁶

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.

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. lz 2008]

A successful technique for using drama lets the students, rather than the players, finish the skit.

- Stop the skit at a dramatic point and assign roles to the student viewers.
- Let them continue the drama to a logical conclusion.

Sometimes students will feel that they have a better solution than the players. Reassign the roles to these students and have them replay the activity using their new ideas.

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.⁷

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 (roneo, gestetner, etc.).⁸ The notes later in this Section on preparing illustrations will provide some further suggestions.

Keep your reproduction techniques simple too.

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®, saved as GIF files, and inserted into a Word® file containing the formatted text.

The Word® file was then 'printed to Adobe® 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 recordings¹⁰ 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. It 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.¹¹

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.

¹¹ 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:

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.

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 transliterated¹² into the

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 rules¹³ 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'.

continued to talk. Written communication was still impossible.

¹³ These rules are adapted from an article by Felicity Savage and Peter Godwin, *Controlling Your Language: Making English Clear*; #4, Vol 75, 1978, **The Transactions of the Royal Society of Tropical Medicine and Hygiene**. Additional details come from **Preparing Simplified Training Materials** by A. C. Lynn Zelmer, International Communications Institute.

[The 1982 guide **Preparing Simplified Training Materials** is now available again, download it from www.zelmeroz.com/archives. LZ 2008]

- 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 translator¹⁴. Select a translator who is familiar

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 Nepal¹⁵ 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.¹⁶

¹⁵ **Communicating With Pictures in Nepal: Report of a Study by NDS and UNICEF**, Kathmandu, 1976.

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

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.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 drawing¹⁸. Select

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.

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.

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 post card 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.

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.

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.¹⁹

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.²⁰



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.

This activity has been used quite successfully as an independent study exercise for a small group.

The cubes can be carried in the pocket; and can be made locally by the health worker.

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.

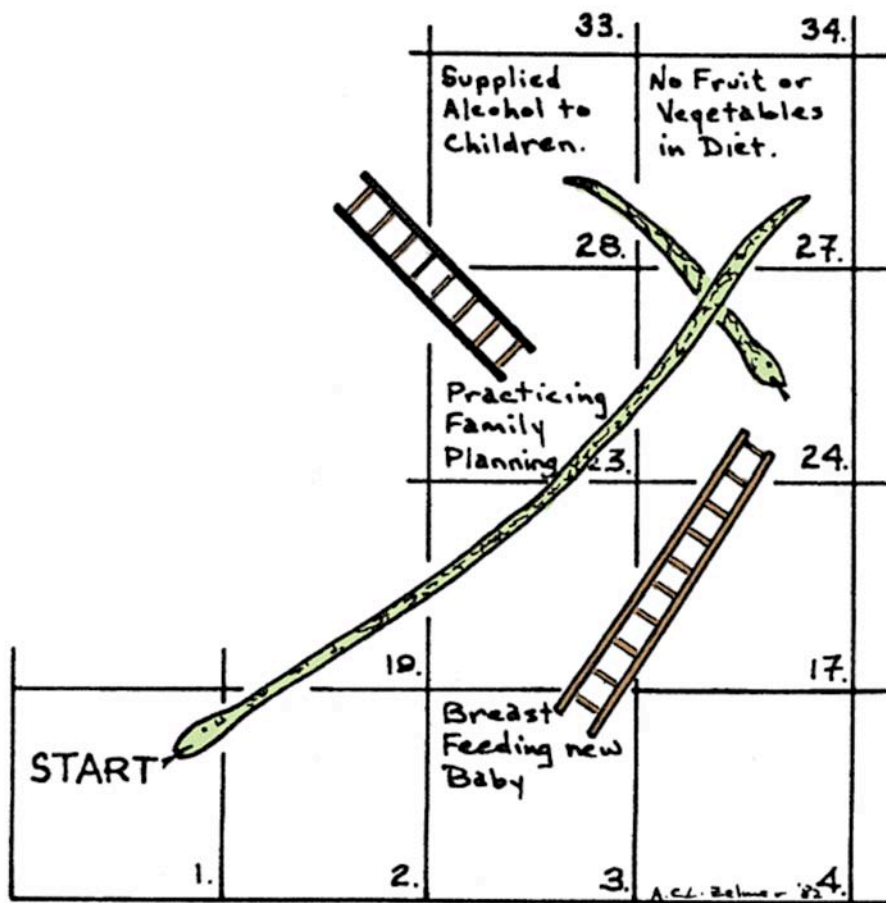
There are many other board games that can be adapted. Substitute local materials for expensive or imported items and make your own versions.

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...*"



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.

Remember that you must have a clear understanding of your objective before you start.

- 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.²²

²² None of the Case Studies in Section 3 of this Manual have any added information of this type. We wanted to illustrate fairly simple exercises that you could easily replicate.

A good discussion guide for several of the exercises might include excerpts from local government publications, etc. An inexperienced instructor might also need background information on community development theory, communication skills, etc. We have assumed that you would have access to this

- 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.²³
- 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.

information, and would have prepared student handouts, etc. as part of your course design.

²³ Editor's note: I have never had a problem with using a case study based upon an actual situation when I used the techniques described here.

I have, however, decided not to use specific situations upon the advice of my colleagues. Common sense and a good knowledge of local conditions will be your best guide to the potential social, legal or political problems involved.

- 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

²⁴ 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.

²⁵ 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.

for the trip". In some circumstances this might be as good a solution as dealing with all of the mail.



Learning Exercises for Health Training

Electronic Edition, 2008
A C Lynn Zelmer, Editor
www.zelmeroz.com/archives

Copyright © 1986, International Communications
Institute; 1990 and 2008, A C Lynn Zelmer



Section 3 Selected Exercises

This section contains a selection of exercises that have been found useful for health training. Many of the exercises have been tested during workshops and other training events. The others were written specifically for this Manual as described in the Introduction. All the exercises should be adaptable to a variety of training situations.

The exercises are provided as examples. Use them and adapt them to your needs.

The first several examples are games, a non-verbal activity and perception exercises. These are followed by a decision making exercise and several role play exercises. A variety of case studies and two tools for looking at development complete the selection. We hope that this will motivate you to use learning exercises in your health training.

Information in Sections 1 and 2 of this Manual will assist you in selecting, adapting and using these exercises. You may be able to use some of

the exercises exactly as they appear. You may have to adapt other exercises to suit your local needs.

These exercises may be translated and used in your training sessions. Please note that some have been adapted from exercises that have been copyrighted. Permission should always be obtained before reproducing these exercises, even when translated into another language.

Permission to reproduce materials obtained from copyrighted sources must be obtained from the specific author or publisher noted. Copyright (©) notices appear on some of the exercises and on the page following the title page. These notices identify the exercises that are specifically restricted.

Permission is hereby freely given to Health Training Institutions in developing countries for non-commercial use of those materials that are original to this Manual.

Meeting Other Participants

This exercise allows group members to meet every individual in the group and can have a variety of purposes. As shown here it is used to start a training session.

Purpose

An exercise to set expectations for a group learning situation.

Group Size

Essentially unlimited.

Time Required

Roughly fifteen minutes for a group of twenty participants.

Setting

Any setting where the participants can wander around and meet each other.

Materials

A large piece of paper, marking pen and pin for each participant.

Process

- Distribute the materials.
- Ask each participant to print their name in bold letters on the top of the paper.
- Ask each participant to explain, in a maximum of ten words, why they are participating in the training session.
- Have the participants pin the paper to the front of their body (onto their shirt or blouse) so that the message can be clearly seen by someone facing the individual.
- Provide 10 minutes for the individuals to circulate around the group and collect the initials of every other individual on their sheet.

As they circulate they should introduce themselves by name, read and initial the sheets presented by the other participants.

No other comments or discussion should be allowed.

- Follow the exercise with a discussion of the learnings gained from the exercise.
- Place the sheets on the wall and review them at the end of the training session to see if people's expectations were met.

Possible Learnings

- The names and faces of other members of the training group. Note that trainers and organizers should also participate.
- That not everyone has the same purpose in attending the session.

Variations

This is a very useful technique for exchanging information or gathering feedback on a session.

- Place a blank sheet of paper on each individual's back and have the other participants write a short comment on the sheet.

Guidelines for the comments might be:

Write a short description of the most interesting thing that you have learned from this individual.

- Have the individuals write a short biography of themselves on the sheet and allow discussion during the exchange period. This will take more time.
- Divide the group into pairs of individuals. Have the individuals interview each other about their background and reasons for attending the training session.

Then have them introduce each other to the large group. Again, this will take more time. It has the advantage of pairs of individuals getting to know each other.

Assembling a Puzzle: Teaching-Learning

Sometimes very simple materials can be used to illustrate quite complicated ideas. The materials for this exercise can be cut from coloured plastic or cardboard, cardboard or paper which is then coloured, or from coloured cloth.²⁶

Purpose

- To show that teaching is not an easy task.
- To bring out the difficulties faced by learners and the causes of these difficulties.
- To show the communications problems between teacher and learner (trainee).
- To bring out some principles of learning.

Group Size

Five to twenty participants.

Time Required

Forty-five minutes.

Setting

Table with two chairs, plus chairs for the rest of the group (observers) arranged in a circle around the table.

Materials

- Sufficient copies of the illustration of the completed puzzle for one for each participant.
- One set of seven puzzle pieces made according to the Puzzle Pattern.
- Teacher's Card.
- Trainee's Card.

Process

- Explain that we need more than knowledge in order to teach. We also need practical training to understand how to teach. Teaching is not always easy.
- Ask for two volunteers and seat them at the table. One will be the teacher and the other the trainee.

- Read the Trainee's Card aloud. Give the card and an envelope containing the puzzle pieces to one of the volunteers.
- Read the Teacher's Card aloud. Give the card and a copy of the completed puzzle to the other volunteer. Note: the trainee should not be allowed to see the completed puzzle.
- Explain to the remainder of the class that they will be acting as observers and should note anything that happens. Distribute a copy of the completed puzzle to each person. Again note: the trainee should not be allowed to see the completed puzzle.
- Ask the Teacher to begin.
- Stop the exercise when the puzzle is correctly completed or when both participants are frustrated.
- Lead the discussion with the whole group. Ask the teacher and the trainee if they had any difficulties, and why the difficulties happened. Ask the participants what they observed. What actions/reactions did they observe? Were the rules followed? etc.

Possible Learnings

- Learners often need encouragement.
- Both the teacher and the learner should know the goals of the learning activity.
- A demonstration is a good teaching method, especially if followed immediately by supervised practice.
- The teacher must know what she is teaching, and be confident about teaching it.
- Familiar objects and activities are easily understood. Build on "*what the student already knows*".
- Try to understand why a teaching method failed. Be able to change to another method if necessary.
- The learner must feel free to ask questions (two-way communications).
- Observers and a time limit create pressures that make it more difficult to work effectively.
- Much patience and repetition may be needed.

²⁶ Adapted from: Assembling a Puzzle, pages 127-129, **Training and Continuing Education: A Handbook for Health Care Institutions**. Chicago, IL: Hospital Research and Educational Trust, copyright © 1970. Used with permission.

Variations

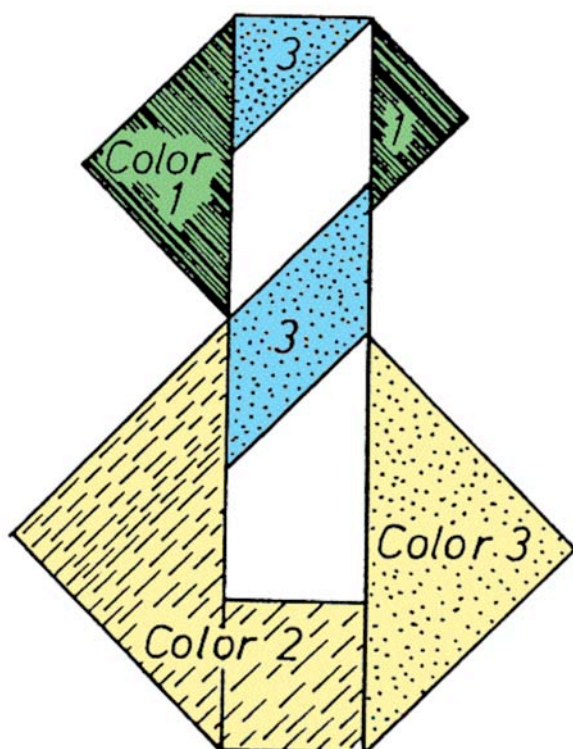
- Sit the teacher so that she cannot see what the trainee is doing.
- Give the trainee two or three extra pieces.
- Impose a time limit and encourage the participants to work faster.
- Sit the teacher and the trainee at two ends of a table. Place a dividing screen between the two so that they cannot see what the other is doing (they might also be placed back to back at separate tables).

Give them each a set of the pattern blocks; ask the teacher to build a model, explaining how he is doing it so that the trainee can copy. The two models can then be compared.

This exercise works well if it is first done as a One-Way Communication Exercise, and then repeated allowing Two-Way Communication.

Puzzle Pattern

- Make enough copies of the completed pattern below for all participants.
- Cut out one set of pattern pieces coloured as below. You can use cardboard that is coloured or you can colour it yourself. You can use stiff plastic, or you could even use cloth of various colours.



Teacher's Card

Prepare a card for the teacher with the following information.

You are the Teacher

Your job is to teach your partner how to construct a completed puzzle. The puzzle must be completed as in the picture that you have been given. You must follow these rules:

You may plan and execute your teaching in any way, except that

Your partner will only do what you instruct him to do, and

You have no feedback channel. Your partner can listen to you, but cannot have a back-and-forth conversation with you.

Trainee's Card

Prepare a card for the trainee with the following information.

You are the Trainee

Your job is to perform a construction task. Your partner will give you instructions to follow. You must follow these rules:

Do nothing unless instructed.

Do not ask questions or converse. This exercise allows only one-way communication from your partner to you.

Improvise, within reason, anything that is not covered by these rules.

Trust Walk

This exercise has been written up in a number of sources and has been a part of the authors' activities for at least 17 years. The exercise requires participants to guide blindfolded colleagues on an extended walk around nearby obstacles. The blindfolded individuals will be totally dependent upon their guide for directions, however talking between the two individuals will not be allowed.

It is a good activity for building team spirit and demonstrating the need for cooperation. It is shown here as a non-verbal exercise, however the use of words and/or sounds of encouragement can also be allowed.

Purpose

To demonstrate the need for cooperation among team members and between individuals. To demonstrate trust development between members of a team.

Group Size

Limited only by the size of the discussion facilities, in teams of two participants.

Time Required

Thirty minutes to an hour.

Setting

An area for group discussion plus a wider, but safe, area for 'wandering'. This exercise has been successfully operated in areas such as a multi-story office building and a public market. The organizers need to warn participants about potential safety hazards, however some difficult walking areas are desirable.

Materials

Scarves or other cloth items to blindfold one member of each pair of participants.

Process

- Divide the group into pairs. The division can be done on an arbitrary basis or it can be done voluntarily. Results may differ depending upon the dividing technique used.²⁷

- Explain the purpose of the exercise to the group. Identify potential safety hazards. Explain that the exercise often involves uncertainty, but that participants should not put each other into situations where there is a real danger of injury.
- Have one member of each team blindfold the other member. Explain that the 'sighted' member of the team will guide the other member of the team on a short walk into the nearby community (or building, etc.). Instruct everyone that there should be absolutely no verbal communication between team members. Team members must devise non-verbal means of communicating with each other.
- Set a time limit of 10 to 15 minutes and send the teams out for their walk.
- Call the teams back at the end of the set time limit. Have the team members exchange the blindfolds. The previously sighted individual will now be blindfolded.
- Set a time limit of 10 to 15 minutes and send the teams out for a second walk.
- Call the teams back at the end of the set time limit. Remove the blindfolds.
- Let the two team members talk with each other about their experiences for 5 to 10 minutes.
- Call the teams together into a large group to discuss the exercise and their experiences.
 - *What problems were encountered?*
 - *What techniques worked best for communicating?*
 - *What situations provided the most challenge to the teams?*
 - *What activities build trust?*
 - *What activities destroy trust?*

Possible Learnings

- Actions are more important than words in building trust.

²⁷ Pairs that are formed voluntarily may include only individuals that already trust each other. This trust level may hinder some of the more basic learnings about why and how we build trust. See the footnotes

on the next page for some examples of the differences.

- Teams work better together when members have some experience working with each other.²⁸
- It is very hard to work with an individual when there is no sense of trust. It is very easy to destroy trust by a careless action.²⁹
- Different individuals inspire trust in different ways.³⁰
- Handicapped individuals have a very difficult time coping with everyday difficulties.

Variations

- Allow participants to talk or use small sounds during the walk. This is not nearly as effective but might be useful for groups with a very low trust level.
- Allow about 5 minutes for the blindfolded individuals to walk (usually stumble) about on their own in a safe environment before sending them out with their teammate's guidance.
- Before blindfolding individuals tell them that their partner will be chosen at random from the second half of the group (normally a small amount of trust is built simply from knowing the identity of the partner).
- Orientation to the problems faced by handicapped individuals can also be

²⁸ This is an exercise that works well when it is repeated in quick succession with different individuals.

The members of a pair will usually accept each other's guidance very quickly during a second trial. They will be somewhat more reluctant to accept the assistance of someone new. They will usually be quite hesitant with a guide who has not been identified before their eyes were covered.

²⁹ A careless action can be as simple as forgetting to warn the blindfolded individual about a small step or dip in the walkway.

³⁰ The authors have found that workers on an existing work team are often surprised that they can 'trust' their supervisors to guide them on a walk like this.

Similarly, supervisors are often surprised that their subordinates do not 'take advantage' of their insecurity. This can have a profound effect upon working relationships.

accomplished by having workers use a wheelchair for a day, by tying up one leg and using a crutch, or by fastening one arm tight to the body. Simple tasks such as using a washroom become almost impossible in many countries without the cooperation of a colleague.³¹

³¹ Two artists recently [1980s] linked themselves together with a short rope that required them to go everywhere and do everything together. They remained attached for a whole year and recorded their experiences.

The lack of privacy was an obvious problem (one was male, the other female), however some of their other major problems stemmed from the need to do everything jointly. Even going through the revolving doors in a public building demanded cooperation (try getting a wheelchair through some building doors!).

This extreme example illustrated some of the problems also faced by a handicapped individual with a regular aide. Both cooperation and the lack of it can cause problems.

Exercises such as the Trust Walk can provide an orientation for health staff that cannot easily be accomplished in any other way.

District Nutrition Game

This exercise is a variation on the traditional Snakes and Ladders Game. It provides a good example of the adaptation of a traditional board game to teaching use.³²

Purpose

- To assist in recognizing the causes of malnutrition in a community.
- To encourage communities to organize action at district and local levels to prevent malnutrition.
- To illustrate the many social practices and economic factors that help and hinder good nutrition.

Group Size

Any number of groups of three to six persons. Each group will need a separate game board.

Time Required

One to one and one-half hours. Larger groups will normally take more time than smaller groups.

Setting

A flat space such as a table, box or floor and seating space for each group.

Materials

- One Nutrition Game Board for each group.
- Dice or a substitute for each group. Good substitutes include six cowrie shells, six imli seeds which have been rubbed on a stone to make one side light and the other dark, or six small flat stones painted or coloured on one side.
- Markers or tokens for each player. These will be used to keep track of the progress of each participant on the game board. These may be stones, seeds, coloured broken glass bangle pieces, or bottle tops. Their size will need to vary depending upon the size of the squares on the game board.
- One set of Helps and Hindrances Cards for each group.

Process

Divide the class into working groups of three to six players each. Distribute game materials to each group.

Introduce the game by explaining that it is an adaptation of the traditional snakes and ladders game. Read the Rules aloud and explain any difficulties. Have each group shuffle the Helps and Hindrances Cards and place them face down near the game board.

- Allow the groups to proceed at their own rates. Answer questions as they arise. Encourage the groups to discuss the reasons for the ups and downs of the game, but do not interfere.
- The game can end when the first player reaches the GOAL, or can continue until all players reach the goal.
- Conclude the activity with a discussion of the nutritional validity of the game.

Rules for Playing

- All players begin at *START: Much Malnutrition in the District*; and move their markers through the 100 numbered squares to the *GOAL: Every Child on the Road to Health*.
- Everyone puts their marker on START.
- The players throw the counters (dice or a substitute), in turn, to decide who is to begin. The person with the highest number begins first, and so on to the lowest number. Any duplicates throw again.
- By turns, the players throw the counters and move their markers ahead the number of steps (squares) shown.
- If the marker lands on a square with an arrow pointing UP to a higher square, the player must read aloud the message written on the path. The player must then try to explain why this will help improve the nutrition of children. A correct explanation will allow the player to move his/her marker to the square at the top of the path.
- If the marker lands on a square with an arrow pointing DOWN to a lower square, the player must read aloud the message written on the

³² This exercise was adapted from **Nutrition for Developing Countries** by M. King, Oxford University Press (ELBS Edition), copyright © 1978. Reproduced with permission.

path. One of the other players must then explain why this is harmful to the nutrition of children. The marker is then moved to the square at the bottom of the path. If no one in the group can explain the harmful effects of the activity the marker does not have to move down.

- Some squares are shaded. If a marker lands on one of the shaded squares the player must draw a card from the pile of Helps and Hindrances Cards. The player must explain the message on the card before moving the marker back or forwards the number of steps on the card.

Possible Learnings

- Players become familiar with the facts on the up and down pathways and on the cards.
- Players become able to explain how the events portrayed in the game affect nutrition.

Variations

- The participants might use the game themselves with school children or with relatives in an OPD (Out Patient Department) after they have played it once or twice in class.
- Play the game without the Helps and Hindrances Cards.
- One variation of the game was produced in a local language on a table mat and used as part of a school feeding program. The students provided their own dice and markers for playing after the meal.

Helps and Hindrances Cards

Prepare a set of 48 cards about 8 cm. by 6 cm. (3" by 2 1/2") for each playing group. Use heavy paper or cardboard.

Print one of the following Helps and Hindrances on each card.

Your local Member of Parliament becomes interested in nutrition.

GO FORWARD FIVE STEPS

School gardens go well in the district.

GO FORWARD THREE STEPS

All shops now sell food by weight.

GO FORWARD SEVEN STEPS

Medical Assistant Training School doubles student numbers.

GO FORWARD FIVE STEPS

Seed factory opened in the country; seed supply improves greatly.

GO FORWARD SIX STEPS

Shops in the district agree to stop selling feeding bottles except on the direction of a medical assistant or doctor.

GO FORWARD SEVEN STEPS

New tools arrive for young farmers club.

GO FORWARD THREE STEPS

New variety of maize is grown by most farmers in the district.

GO FORWARD TEN STEPS

Soil erosion controlled by better farming methods.

GO FORWARD FIVE STEPS

The district is given a special vote of money for nutrition.

GO FORWARD SIX STEPS

The President expresses interest in the nutrition of the people.

GO FORWARD TEN STEPS

More land is irrigated.

GO FORWARD SIX STEPS

Local nutrition groups help in the under-fives clinics.

GO FORWARD SIX STEPS

Marketing co-operatives doubles its number of depots.

GO FORWARD FIVE STEPS

Nutrition rehabilitation units opened at all hospitals and health centres.

GO FORWARD FOUR STEPS

Farmers paid for their crops soon enough for them to buy seed and fertilizer for the next season.

GO FORWARD SEVEN STEPS

Marketing co-operatives under new management and make increased profits.

GO FORWARD THREE STEPS

School feeding scheme started.

GO FORWARD FOUR STEPS

Nutrition clubs started in all schools.

GO FORWARD THREE STEPS

Improved ways of farming become widely used.

GO FORWARD TWELVE STEPS

New primary school curriculum includes nutrition.

GO FORWARD TEN STEPS

People STOP leaving the land to go to town.

GO FORWARD TWENTY STEPS

Most children in the district immunized against measles.

GO FORWARD FOUR STEPS

District Nutrition Committee fails to meet for 18 months.

GO BACK FIVE STEPS

No mechanics or spare parts to mend tractors.

MISS ONE TURN

The rains stop early and crops are bad this year. GO

BACK TWENTY STEPS

Disease called 'pops' attacks groundnuts.

GO BACK FIVE STEPS

Mothers do not buy food by weight.

GO BACK THREE STEPS

No insecticide in the depots of the agricultural co-operative.

GO BACK TEN STEPS

Monkeys steal crops in the fields.

GO BACK ONE STEP

Lack of sanitation and clean water in the district increases diarrhoea.

GO BACK TO SQUARE TEN IF YOU HAVE PASSED IT

Newcastle disease kills half the chickens in the district.

GO BACK FOUR STEPS

The father of the keenest member of the school nutrition club cannot pay for his daughter's transport to school.

GO BACK ONE STEP

Training School for preparing Auxiliary Nurses cut from the development plan.

GO BACK TEN STEPS

Fathers continue to eat the 'lion's share' of the family's food.

ALL MEN PLAYERS MISS ONE TURN

Producer's co-operative loses much money. MISS ONE TURN

Fizzy drink advertising increases.

GO BACK TO SQUARE THREE

Maize moths and weevils eat the stored maize crop.

GO BACK THREE STEPS

People do not grow maize in place of some of their cassava (tapioca).

GO BACK TEN STEPS

Pontoon across the river breaks, so fertilizer and seeds arrive too late for the planting season.

GO BACK THREE STEPS

The population of the district grows faster than the supply of food to feed them.

GO BACK TWENTY STEPS

No improvement in family budgeting.

MISS TWO TURNS

New District Governor appointed who is not interested in nutrition.

MOVE BACKWARDS NEXT TURN

Controlled price regulations for food ignored.

GO BACK SIX STEPS

All the community leaders leave the rural area for the towns.

GO BACK TO THE START

The price of eggs is fixed too high for many people to buy them. re eggs are produced than people can pay for at that price, so 20,000 eggs go bad.

GO BACK THREE STEPS

Farmers do not repay loans for farm development so no further loans can be made.

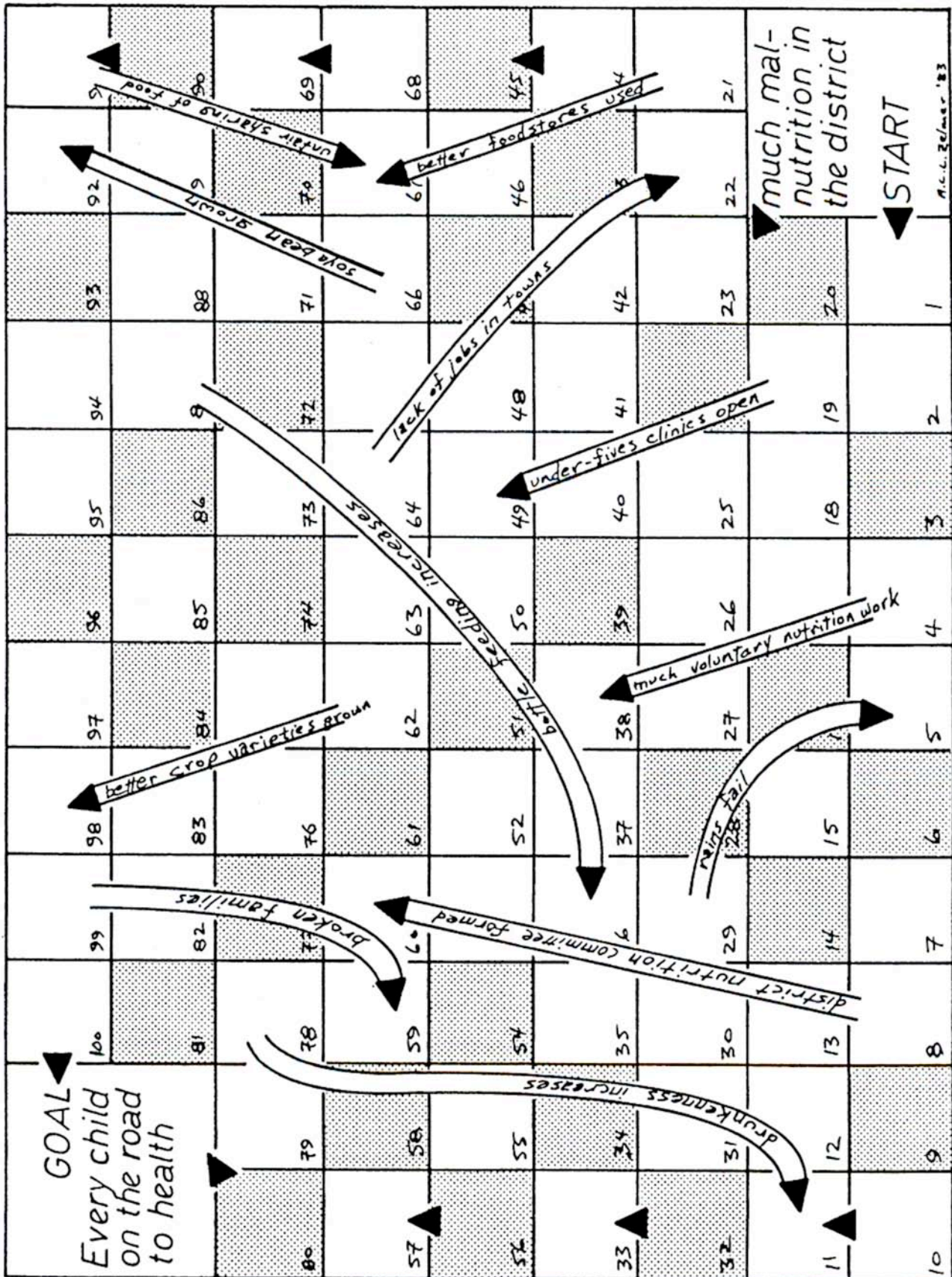
MISS TWO TURNS

Young children given beer instead of milk.

GO BACK FIVE STEPS

Nutrition Game Board

Prepare a large game board from the pattern shown for each group. A board with squares 5 cm. by 5 cm. (2" by 2") makes a good size board for a group of three to six persons. The game board may be made from plywood or veneer, heavy cardboard, felt or heavy cloth.



Family Planning Bingo

Bingo or Loto-Loto is a good base for an exercise that students can run themselves. It provides drill and practice in terminology.³³

Purpose

- To provide students with practice in recognizing and using technical terms correctly.
- To help students overcome their reluctance to use terms with a sexual connotation.
- To reinforce factual information about family planning.

Group Size

Any number of people may participate in groups of four to seven.

Time Required

About one hour.

Setting

Any informal setting where four to seven participants can work together. Desks can be pulled into a circle, participants can sit around a table or in a circle on the floor or ground.

Materials

- One *Bingo Card* per person.
- About twenty counters for each player. Small buttons, seeds, chips, or pieces of straw or paper will be satisfactory.
- One set of *Bingo Questions* per group.

Process

- Designate one person per group to be the Caller. This person should be the only person to see the *Bingo Questions*.
- The other participants are the Players. Distribute one *Bingo Card* to each player. Distribute about 20 counters to each player.
- The caller picks a question card at random and reads the question aloud to the players. The question card is then set aside so that it will not be repeated.

- Each player tries to find the answer to the question on his/her card. The answer, when found, should be marked by covering it with a counter. Note: Not all answers are on each card.
- The play continues until a player has covered five squares in a row (up, down or diagonal). A player with five squares in a row covered should call *Bingo*.
- The play then stops while the player with the Bingo reads the answers that he/she has covered and explains which question each answered. Some players may want to make written notes as the game progresses to help them in this task.
- If all five answers are correct the players clear their boards and begin another round.
- If any answer is incorrect play continues until another player calls a Bingo.
- Each player in the group should have a different card. Players should switch cards between rounds. The winner of a round can be the Caller for the following round.

Possible Learnings

- Help learn the meanings of words used in Family Planning.
- Increases knowledge of reproduction and birth control.

Variations

- The game can be made shorter by preparing cards with only 16 or 20 squares. You will need fewer questions with a smaller card.
- The game can also be made shorter by making the centre square free, perhaps with the family planning symbol on that square.
- The game can be used with people who don't read by using symbols or pictures instead of words. For example, you could use a drawing of an IUD or a sketch of the reproductive organs with specific parts identified by colour or shading.
- The same format can be used for a wide variety of subjects. You will need about 45 questions. Each question should have only

³³ This version was prepared by Amy Zelmer for the *WHO Inter-Country Workshop in Newer Educational Technologies for Nurse Educators*, Sri Lanka, 1976. Used with permission.

one answer. Prepare the cards as explained below for the new subject area.

Bingo Questions

- Prepare 46 cards about 5 cm. by 8 cm. (2 inches by 3 inches).
- Type or letter one question and its answer (shown in square brackets) on each card as in the Master Question List below.

No. 39
 Common name for IUD
 Answer: *The Loop*

Bingo Cards

- Prepare a set of seven playing cards about 15 cm. (6 inches) square as shown in the sample card on page 49.
- The cards contain the answers to the Bingo Questions. Each card should be different:
 - different arrangement,
 - different answers.
- You will need one set of cards for each group of four to seven players. Colour code the different sets so that you can ensure that each player has a different card.

Master Question List

- Rubber sheath used to prevent man's semen from getting into woman.
 [Condom]
- Operation for men, a permanent form of birth control.
 [Vasectomy]
- Operation for women, a permanent form of birth control.
 [Tubectomy]
- Popular name for oral contraceptives.
 [The Pill]
- Contraceptive method requiring no supplies, equipment or medical advice.
 [Withdrawal]
- When the ripe egg is released in the woman's body.
 [Ovulation]
- Name for the male cell which unites with the egg.
 [Sperm]
- A woman with an irregular menstrual cycle cannot use the method of birth control.
 [rhythm]

- Short form for the Intrauterine Contraceptive Device.
 [IUD]
- An ineffective method of birth control used by some women.
 [Douche]
- Something used or done to prevent pregnancy.
 [Contraceptive]
- Common side effect reported by women taking oral contraceptives.
 [Nausea]
- A woman who has must consult a doctor before taking birth control pills.
 [diabetes]
- A woman who has may have more trouble using an IUD.
 [never been pregnant]
- Not able to have children.
 [Sterile]
- Female organ which produces reproductive cells.
 [Ovary]
- Female organ where baby grows during pregnancy.
 [Uterus]
- Birth canal.
 [Vagina]
- Female organ through which egg passes.
 [Fallopian tube]
- Male organ which produces reproductive cells.
 [Testicles]
- Technical term for "egg".
 [Ovum]
- Male organ which deposits semen in vagina.
 [Penis]
- Common side effect reported by women using IUD.
 [Increased menstruation]
- Common side effect reported by women using oral contraceptives.
 [Decreased menstruation]
- If a woman used foam or jelly contraceptive she should not douche for at least hours.
 [six]
- Procedure used to terminate a possible pregnancy shortly after a period is missed.
 [Menstrual regulation]
- Female hormone commonly used in birth control pills.
 [Estrogen]

If a woman forgets to take a birth control pill she should take the next day.

[two]

The best time to insert an IUD is on the day of menstrual cycle.

[fifth]

Prolonged decreases the chance of pregnancy, but is not a safe method of birth control.

[breast feeding]

Following a vasectomy a man should use a condom or other means of birth control for weeks.

[six]

Expulsion of the foetus from the uterus before the 28th week of pregnancy.

[Abortion]

Short form for medical termination of pregnancy.

[MTP]

Term used to indicate an unborn baby.

[Foetus]

Mouth of the womb.

[Cervix]

Term which means menstruation is stopping and woman is not likely to have children.

[Menopause]

A man or woman who can have children is said to be

[Fertile]

After one intercourse, if no method of birth control is used, a woman will have one chance in of becoming pregnant.

[three]

Common name for IUD.

[The loop]

Part of the body which is cut during vasectomy.

[Vas deferens]

Diaphragm, condom and foam are all contraceptives.

[Conventional]

Rubber cap worn over cervix to prevent entry of sperms.

[Diaphragm]

Something which kills sperm.

[Spermicidal]

A girl cannot get pregnant on her first sexual intercourse. True or False.

[False]

Ovulation usually takes place 14 days before the next menstrual period. True or False.

[True]

Family Planning Bingo					Card 1
Condom	Douche	Ovum	MTP	Pill	
Tubectomy	Diabetes	Increased Menstruation	Cervix	Ovulation	
Withdrawal	Sterile	Menstrual Regulation	Fertile	Rhythm	
Sperm	Uterus	2	Loop	Contraceptive	
IUD	Fallopian Tube	6 Weeks	Vasectomy	Nausea	

Young-Old Lady, An Experiment of Perception

Everyone will not have the same perceptions from a shared experience. My feelings, thoughts and perceptions will likely be slightly different from yours on any topic. Our problems arise when the differences in perception are large.³⁴

Purpose

To understand differences in perception; and why one must try to understand the viewpoint and perceptions of others.

Group Size

A group of eight or more participants. Everyone in the group should participate.

Time Required

Twenty to thirty minutes for a small group, more for a larger group.

Setting

Classroom or meeting room with chairs or desks in a circle. Chalkboard and chalk.

Materials

One copy of the *Young-Old Lady Picture*. Pen or pencil and small piece of paper for each participant.

Process

- Show the *Young-Old Lady Picture* to the group for a short time.
- Ask each participant to write their estimate of the lady's age on their paper.
- List the ages given, lowest to highest, on the chalkboard.
- Ask the person giving the youngest age, and the person giving the highest age to try to convince one another that they are right. Notice particularly if the two participants listen to one another's arguments.
- Show the picture again. Ensure that all can see that there are indeed two ladies.

- Discuss learnings. What do the participants think that they learned? Ask questions to bring out other learnings.

Possible Learnings

- Because of differences in viewpoint, background, experience and interest we all perceive differently.
- Sometimes all answers are correct.
- When we are trying to help or teach others, we need to listen to their comments and ask questions before stating our opinions. For example, What did you feel when someone else gave an age very different from your own?
- We all need to listen. We need to keep an 'open mind', to encourage two-way communication. We should avoid criticism or ridicule of others.
- Sometimes those who are stronger force others to accept their ideas. The weaker persons seldom 'believe' what they are forced to accept.

Young-Old Lady Picture

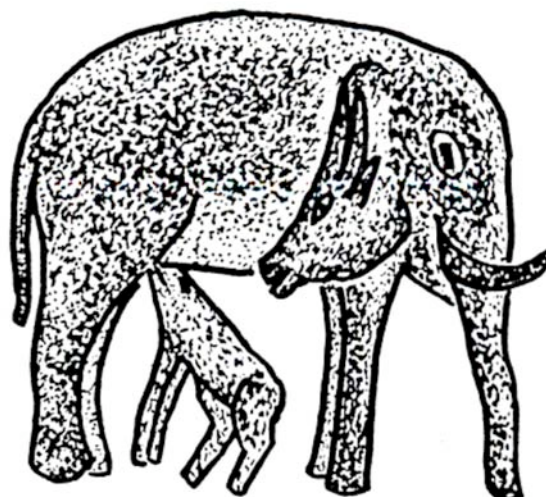


³⁴ Adapted from: J. William Pfeiffer and John E. Jones, Eds., **The 1978 Annual Handbook for Group Facilitators**. San Diego, CA: University Associates, Inc., Copyright © 1978. [Young/Old Woman: A Perception Experiment, pages 40-45.] Used with permission.

Variations

- Visual perception is very dependent upon the visual images in the society of the viewer. Many viewers outside of Europe and North America have difficulty seeing both of the women in this drawing. They are simply not familiar with the visual conventions used by the artist. Redraw the illustration so that it shows a woman with a head covering appropriate for the local area.
- Obtain an illustration of a similar visual concept that is part of your own society. The illustration to the right is taken from an ancient rock carving in South India and can be used in much the same manner as the

woman's picture. Can you see both of the cows in the drawing?



Following Written Instructions

Communications problems occur with written materials as well as when we speak. This exercise can be used to help illustrate the need to read carefully.³⁵

Purpose

To show the need for careful reading of written materials. To show the value of clearly understanding the nature of a task.

Group Size

Any size group can be accommodated. Large groups (more than 20 participants) could be divided into smaller groups for discussion purposes.

Time Required

Thirty minutes, including discussion.

Setting

Any place where the participants can read the exercise materials and can write or draw as required.

Materials

One copy of the *Written Instructions Exercise Sheet* and a pencil for each participant.

Process

- Tell the participants that they are being asked to participate in a short written communications exercise. Explain that the exercise is not a test, but that they are to work as rapidly as possible.
- Explain that you will distribute the exercise, but that no one should begin until they are given the signal from you. Explain that all other directions will be on the exercise sheet.
- Hand out the *Written Instructions Exercise Sheet* face-down. Distribute pencils as required.

- When every participant has a pencil and the exercise sheet, ask them to turn over the sheet and begin.
- Stop the class after it is obvious that all the participants are completed.
- Discuss the learnings from the exercise. Some of the participants will have ignored the first instruction and will have carried out the instructions which follow. The exercise is almost self-explanatory once everyone has read the last item.

Possible Learnings

- Even good readers can miss important directions. Poor readers may not understand written directions.
- Poorly written directions can be dangerous. Failure to follow directions can also be dangerous.
- Different people have different levels of reading skill. Some instructions cannot be done well in writing because the user cannot read well enough to follow the instructions.

³⁵ This exercise has appeared in a number of different forms, but was most likely adapted from the exercise *Test Your Concentration* in **Training and Continuing Education: A Handbook for Health Care Institutions**, pages 139-140, Copyright © 1970. Chicago, IL: Hospital Research and Educational Trust. Reproduced with permission.

Written Instructions Exercise Sheet

1. Read everything before doing anything, but work as rapidly as you can.
2. Put your name in the upper right-hand corner.
3. Did you want to come to this course? . . .
4. Draw a circle around the title of this paper.
5. Put your initials below your name.
6. Are you happy with your work? Underline: Yes or No.
7. Slap your neighbour on the back.
8. Do you like your post? Underline: Yes or No.
9. Are you satisfied with the health system in the country? Circle: Yes or No.
10. Write the name of your superior:
11. Write the name of your occupation:
12. Would you like to have more freedom in your work? Write your answer:
13. Are you happy with your friends? Circle: Yes or No.
14. If you have come this far, speak out loudly your first name.
15. Raise your hands.
16. If you have followed the instructions so far, please go to the black-board and say, I have.
17. Say loudly A, B, C, D, E, F, G.
18. Please do not utter a word until the whole group is finished the exercise.
19. Now that you have read the instructions carefully, do only what sentences 1 and 2 tell you to do. Please do not give away this exercise by way of comment or explanation. Let us see how many persons followed these instructions correctly.

Rumour Chain 1

The most common communication in an organization may be through gossip and rumours. Rumours spread very fast in an organization that does not have a good communication system. Unfortunately, rumours are usually distorted and are often incorrect.

This exercise, and the one which follows, can be used to look at the process and effects of rumours.³⁶

Purpose

To show how a message can be mixed up when sent orally through a chain of people.

Group Size

Unlimited, with a minimum of eight.

Time Required

Thirty minutes.

Setting

A room with chalkboard and chalk and a second room or waiting area. Organize the chairs or desks in a circle in the main room. The second room should be separated well enough that the participants cannot hear what is happening in the main classroom.

Materials

One copy of *The Original Message Sheet*. Five slips of paper or straws of different sizes for deciding who will take each role.

Process

- Ask for five volunteers and take them to the second room. Allow them to draw slips of paper to decide what roles they will take. The roles are Sarpanch, Social Worker, Nurse,

Doctor, and Project Director. Explain that you will be calling the volunteers into the classroom one at a time.

- Return to the main classroom and explain the exercise to the rest of the class. Explain that they will be Observers and should note what happens to the message as it goes from one person to another.
- Call in the first volunteer (the Sarpanch). Read the message aloud to the volunteer. Do not allow the volunteer to make any written notes about the message.
- Call in the second volunteer (the Social Worker). Have the first volunteer repeat the message to the second volunteer. It is important that each volunteer repeat the message in his/her own way, without help, and without notes.
- Call in the third volunteer (the Nurse) and have the second volunteer repeat the message to the third. Repeat for the fourth and fifth volunteers.
- Ask the fifth volunteer (the Project Director) to write the message received on the chalkboard so that everyone can see the final message.
- Compare the message received with the original. Ask the observers to report what they saw and heard. Ask the volunteers to discuss the experience and their feelings.
- Complete the exercise with a discussion of the problems of distorted messages in our work and life situations.

Possible Learnings

- It is impossible to remember and repeat a story with too many unfamiliar facts and names.
- Oral messages must be kept simple.
- A better understanding usually occurs if the listener repeats the message back to the speaker. The speaker can then correct for errors.
- Messages should come directly from the original source.

³⁶ Adapted from: J. William Pfeiffer and John E. Jones, Eds., **A Handbook of Structured Experiences for Human Relations Training, Vol. II Revised**, copyright © 1974. San Diego, CA: University Associates, Inc. [*Rumour Clinic: A Communications Experiment*, pages 12-13.] Used with Permission.

This variation was adapted from *Grapevine or Rumor Chain*, pages 136-138, **Training and Continuing Education: A Handbook for Health Care Institutions**, copyright © 1970. Chicago, IL: Hospital Research and Educational Trust. Used with permission.

- More than one listener at a time can save time and error.
- Main points should be emphasized.
- Write the message. Underline or capitalize the important points.³⁷
- Medical facts are more complicated than a village story. Do not try to reach too many facts in one teaching lesson or the listeners will be confused.
- Improvements in person to person communications in work situations may also be discussed.

The Original Message Sheet

Write the following message on a piece of paper or card for reading to the first volunteer.

My name is Justo Paz.

I am very angry because Jesu Benevido, who is secretary of the Farmer's Club, told me to keep my goats off his land, which he is not using.

Anyway you should know that Jesu has taken at least two bags of wheat which is given for the children's feeding program. His wife, Felicia Benevido Paniagua is supposed to be in charge of the wheat because she is the Village Health Worker in our village of Paraiso.

Besides that, Felicia Paniagua has refused to visit my wife when she was sick.

Variations

Any situation related to health activities can be used in this exercise. The following variation is set in a hospital with a Nursing Superintendent, Departmental Supervisor, Ward Sister, Senior Staff Nurse, and a Staff Nurse.

In the past it was the rule in the Dharamraj Hospital, that the Ward Sister should tell the family when a patient is put on the serious list.

Recently Mr. Biswas, the Hospital Administrator, has decided, with the approval of the Nursing Superintendent, that the Ward Sister should notify the Admissions Office, which would then send word to the patient's family.

Mr. Biswas explained that this change would centralize the responsibility for sending such information.

³⁷ [Capitalisation and underlining still work with hand written notes but not with typed (keyboarded) text. Modern word processing practice sensibly avoids words in upper case (all capitals) or underlined. Use bold or coloured text for emphasis. LZ 2008]

Rumour Chain 2

This exercise looks at how an organization uses information that comes as rumour.

Purpose

To help students solve problems that come to them as rumours.

Group Size

Six to twelve participants.

Time Required

Thirty minutes to one hour.

Setting

Room organized for a staff meeting. Chalkboard and chalk would be useful.³⁸

Materials

One copy of the *Project Director's Instruction Sheet*.

Process

- Ask for a volunteer or select an individual to act as the Project Director. Give this individual five minutes to read the *Project Director's Instruction Sheet*.
- While the Project Director is reading the instruction sheet, explain to the class that they are members of the staff of a Village Health Project. They have been gathered together by the Project Director to discuss a problem.
- Introduce the Project Director to the group and let the participants discuss the problem and its solution for fifteen to thirty minutes.
- Close the discussion when a reasonable solution has been found, when the group requests assistance or when your time limit is up.
- Ask the participants to explain their feelings about what happened. Discuss the difficulties of solving problems that arrive as rumours.

Possible Learnings

- See the notes above for Rumour Chain 1.

- Speaking directly to the source of a complaint is the only way of getting an undistorted message.
- Administrators should find out the real reason for a problem rather than reacting to a rumour.
- Good administrators should develop ways for complaints to be brought to the organization without needing to go through informal gossip channels.

Variations

- The exercise could start with the selection of the five participants: Raju, the President of the Village Health Committee, the Social Worker, the wife of the Project Director, and the Project Director. You could then pass the message through the participants as you did in the Rumour Chain 1 exercise. Ask the Project Director to call a meeting of his staff (the rest of the class) to discuss the problem.
- Role cards could be made for each participant above plus Kusum. Move the selected participants to a separate room where they cannot hear the staff meeting discussion. Explain that they could be called to the staff meeting to explain their knowledge of the facts in the case if requested by the Project Director.

³⁸ [Chalk, and chalkboards, seem to be extinct species. Today we are more likely to either use whiteboards and erasable pens, or large sheets of paper and coloured felt pens. LZ 2008]

Project Director's Instruction Sheet

You are the Director of a Village Health Project. Raju, a villager complained to the President of the Village Health Committee about a sad situation which happened yesterday. The complaint was repeated to the Project's Social Worker, who repeated it to your wife. Your wife repeated the story to you.

You must deal with this serious complaint. However, before you decide what to do, you want to get the opinion of your staff. You have called a meeting of your staff and they are gathered together.

This was Raju's complaint as told to you by your wife:

Yesterday morning was the day when Raju's wife, Sita, should have gone to Kusum, their Village Health Worker, for her pre-natal check-up. But Sita was not well and she sent her daughter, Draupathi, to inform Kusum that she would not be able to go.

Sita also told Draupathi to ask Kusum to come and visit her.

Raju says that Kusum refused to visit his wife. His wife had an argument with Kusum last week about the amount of food given to the children in the feeding program. This is why she refused to come.

Yesterday night his wife became sick and began vomiting. He went himself to Kusum and begged her to come and see his wife. Again she refused. This morning Sita had a premature boy. The baby is so small that it will not live. It is his first boy after having five daughters!

Raju says that Kusum is a bad woman. He says that he has repeatedly told the President of the Village Health Committee that she is a bad woman. But, he says, the President never did anything about it. Now he says "*if anything happens to my baby boy, I will kill Kusum*".

Your staff are waiting for you to begin.

Decision-Making: An Emergency Trip

Time is often used as a resource in exercises. In many situations it is necessary to respond quickly. In this exercise, the limited time is used to simulate the stress of a response to an emergency.

Purpose

- To develop decision-making skills.
- To develop the ability to work well under stress.
- To demonstrate group versus individual decision-making.

Group Size

Small groups of four to ten persons.

Time Required

One to one and one-half hours.

Setting

A circle of chairs or similar setting where the students can work alone for 15 minutes and then participate in a group discussion.

Materials

- One copy of the *Emergency Trip Instructions* and a pencil or pen for each participant.
- Chalkboard and chalk or similar facility for recording group responses.
- One copy of the Emergency Trip Rationale Sheet for the instructor.

Process

- Distribute a copy of the Emergency Trip Instructions to each participant. Read the instructions aloud with the group and begin timing.
- Announce the time left at the end of five, ten and fourteen minutes. Write the list of items on the chalkboard while the group is working.
- Stop the group after fifteen minutes.
- Tell the group that you are giving them an additional fifteen minutes to come to a group consensus. The group should use the list on the chalkboard to record their group's decisions.
- Announce the time left at the end of five, ten and fourteen minutes. Stop the group after fifteen minutes.

- Discuss the problems that arose in the exercise.
 - *How many people changed their lists under group pressure?*
 - *How did that make you feel?*
 - *Why did you change?*
- Discuss each item, examining the nursing reason for ranking each item as high or low priority.

Possible Learnings

- It is often necessary to set priorities.
- Making decisions under stress is difficult, pre-planning would lower the stress.
- Group decisions are not necessarily better than individual decisions. Questions of factual information will usually be improved by a group decision. However, on emotional issues or matters of opinion, the person with the loudest voice or highest status may unduly influence the group.

Variations

- Individual or group rankings could be compared with the ranking established by the instructors or the nursing staff.
- Other lists could be prepared which require a similar decision-making process.
- Concentrate the discussion on the two most popular and the two least popular items.

Emergency Trip Instructions

You are a member of the ambulance team in your small, rural hospital. You have a sudden call from a health worker who says that "a cholera patient was being brought to the hospital in a cart. The cart has had a bad accident about 5 km. (3.1 miles) off the road."

When you ask about the condition of the patient and other injured persons, you are told the following:

- The cholera patient is nearly in shock, and is complaining about a pain in the left arm and chest.
- His wife, who is eight months pregnant, is having labour pains following the accident.
- The cart driver is haemorrhaging from a wound on the scalp, and has a compound fracture of the right arm.

You have very little time to get ready but the items on the list below are in the ambulance. The ambulance will take about 15 minutes to get you as close as possible to the accident. During that time you must decide which of these items will be needed to treat your patients. You will then have to walk the last 5 km. carrying your gear.

Place the number 1 by the most important item. Place the number 2 by the next most important item. Continue through the list with the 3rd most important item, and so on, until the fifteenth (least important).

You have only 15 minutes to do this.

- . . . Cord tie
- . . . Spirits
- . . . Tourniquet
- . . . I.V. Fluids and giving set
- . . . Arm splint
- . . . Sterile dressings
- . . . Delivery forceps
- . . . Bottle of blood
- . . . Jerry can of water
- . . . Penicillin injection
- . . . Nitroglycerin tablets
- . . . Blankets
- . . . Savlon
- . . . Aspirin
- . . . Cholera vaccine

Emergency Trip Rationale Sheet

The items below have been ranked by a health specialist in their order of importance. Individual groups might change the order of items, however there would have to be a very good reason for moving an item near the top to the bottom, or vice versa.³⁹

- 1 **Jerry Can of Water:** For drinking by all patients, cleaning wounds, washing your hands, and sponging the cholera patient to reduce fever. The Jerry Can is heavy to carry, but unless you are sure there is a good supply of safe water near the accident you should take your own.
- 2 **Cord Tie:** It will be needed to tie the cord if the baby is delivered. Also, it is very small and easy to carry.
- 3 **Spirits:** Use as an antiseptic for the end of the cord if the baby is delivered, and as an emergency antiseptic for cleaning around wounds or cleaning your hands if the baby needs to be delivered.
- 4 **Sterile Dressing:** Useful to stop the bleeding from the scalp and to protect the compound fracture site from dirt. May also be used to cover the baby's cord stump.
- 5 **Savlon:** Use as an antiseptic and for cleaning wounds, your hands, etc.
- 6 **Nitroglycerine Tablets:** Maybe useful for treating the chest pain if you know that the person has a history of angina. Likely best not to use them in this case; pain may be due to the injury or fear. However, the nitroglycerine tablets are easy to carry, so you might as well take them.
- 7 **Arm Splint:** A bit bulky to carry, but would be of help in moving the cart driver. You can improvise a sling from cloth if you can't carry the splint.
- 8 **Tourniquet:** Only useful if someone is bleeding heavily from an arm or a leg (no one here); but might be useful in case the injuries were not correctly reported.
- 9 **I.V. Fluids and Giving Set:** May be useful for the cholera patient, but will require constant attention while transporting the patient.
- 10 **Blankets:** Useful for keeping patients in shock warm and for improvising stretchers, but will be bulky and heavy to carry. These may be more important if the weather is cold or it will be a long time before you can get the patient back to the hospital.
- 11 **Delivery Forceps:** Likely not necessary. The mother will either deliver spontaneously, or the labour will stop or she will need expert help from the midwife at the hospital.
- 12 **Penicillin Injection:** Not a first aid measure.
- 13 **Cholera Vaccine:** Not a useful first aid measure. Anyone who requires the vaccine can receive it back at the hospital.
- 14 **Aspirin:** Provides mild pain relief and fever reduction; not a first aid measure. Contraindicated (forbidden) for persons with stomach upset (the cholera patient).
- 15 **Bottle of Blood:** Cannot be safely administered to anyone unless their blood type is known and cross-matching is done in the lab.

³⁹ The terminology may need to be changed for your local area. A large metal water can may not be called a Jerry Can in your area, for example. The type of accident, the items themselves, and their use have been carefully selected to be as universal as possible. Medical doctors [and other health professionals] should please note that the situation requires walking and that the list of items in the ambulance represents a rural service.

In the experience of the author's, even these items would not be readily available in many ambulances. Please note that it is also assumed that the ambulance does have petrol, and that its use has been authorized. We have to make some assumptions when setting up learning exercises.

Two Role Plays: VHWs

The role play exercise⁴⁰ is particularly useful for gaining an understanding of someone else. Through playing the role of the other person we can often begin to understand the feelings (fear, hopes, etc.) and problems of another person.

Purpose

- To find out if the participants have clearly understood the concept of the Village Health Worker.
- To explore techniques for discussing and motivating village people to choose a Village Health Worker.

Group Size

The two role plays described each require five role playing participants. Another two to ten participants could observe the interaction and participate in the discussion. Larger groups should be broken into groups of seven to fifteen participants, with each group performing the same role play simultaneously in their own work area.

Time Required

About one hour for each role play.

Setting

Each group requires an area where the group can perform and be observed. classroom or similar area should have its desks pulled back to the wall, and furniture rearranged to portray the specific setting (office or home). chalkboard, etc. is often useful for the discussion following.

Materials

- Individual cards or sheets of paper with a role description or each person.
- One copy of the general setting instructions for the instructor to read aloud to the participants.

Process

- Explain the purpose of the activity. Explain that the participants will be attempting to

⁴⁰ This unit describes two role play exercises. The objectives and process directions for each role play are the same. The roles described on the role-play materials and the settings are very different. Do not get the role cards and other materials for the two exercises mixed.

portray a specific individual with his/her own needs, problems, fears, etc. The role player should attempt to actually become that person for the purpose of the exercise.

- *What would this person do now?*
- *Why would he/she do that?*
- *What family problems, fears, traditions, etc. would affect this person in a situation such as this?*
- Read the description of the general setting aloud to the whole group.
- Explain the role of the observers. The observers should watch for situations where the role player acted out of character, where the interaction was particularly good, and where the Village Health Worker could have done something else to be more effective.
- Divide the group, assigning and handing out the role cards for the role players and identifying the observers.
- Give the role players five minutes to read and prepare their roles. Have the observers move the room furniture as required and set the scene for the role play.
- Call the role players and the observers to order. Read the description of the general setting aloud again, identify the stage setting ("*This is the health centre*"), and introduce the participants.
- Allow ten to fifteen minutes maximum for the role play itself, stopping the activity when either that specific scene is finished, or when the activity has been distracted away from the purpose of the exercise.
- Ask the observers to make some specific comments from their observations, and introduce the general questions for discussion.
- It is often useful to rerun the role play with the same or different players when one of the players or observers makes the comment "I think that it would have been better if . . .".

Possible Learnings

- The Village Health Worker must listen to the needs of the villages.

- Communication means a two-way exchange of ideas.
- Most people need information before they will act, however some people will adopt new ideas without much thought of the consequences.
- There are many different approaches to the same problem, and in development work they may all be right (or wrong).

Variations

- As mentioned above, rerun the exercise with the same or new participants to try different approaches to the same problem.
- Use a tape recorder to record the conversation. This recording can be played back as part of the discussion to refresh the participants' memories of what they did. The tape can also be replayed for just one or two people who want to improve their own performance or for the whole group.
- Arrange individual discussion sessions between the instructor and a participant, or between an observer and a participant to suggest specific performance improvements.

First Role Play Materials

Prepare one card containing the description of the setting for the instructor, and individual cards describing each of the roles which follow.

Setting: *Two participants are returning to their health centre after a one month course on Village Health Workers. They want to share what they learned and experienced about Village Health Workers with their three other companions at work.*

They will meet in the Meeting Room of the health centre.

First Participant: *You are very enthusiastic about the Village Health Workers and have decided to have some in your project as soon as possible.*

Second Participant: *You were impressed by the work done by the VHWs in the project where the course was held. You think that the people in their area are very different and doubt that it would be possible for you to include VHWs in your project.*

One Nurse: *In-charge of the project. You are skeptical about the VHWs efficiency and do not believe that they can be trained to look after the health of the community.*

Two Other Workers: *[two cards] You are open to the idea, but know nothing about it. You are eager to hear the experience of the two participants. You do not reject, a priori, the idea of having VHWs with you. You feel that VHWs can be trained, and that the people from your area are probably no worse than any other.*

Second Role Play Materials

Prepare one card containing the description of the setting for the instructor, and individual cards describing each of the roles below.

Setting: *Two Health Workers have to meet the Panchayat Committee to motivate them to select a Village Health Worker for their village. The Health Workers have already discussed the idea several times with the Panchayat and the village people. Up to now the Committee and Villages do not seem to have seen the advantage of a Village Health Worker scheme.*

This meeting is at the home of the Panchayat President.

Two Health Workers: *[Make two cards] You are very keen to have a VHW. Without a VHW you know that it will be very difficult to reach the people.*

Panchayat President: *You are not keen to have a VHW now because the elections are due in three months. You fear that if there was a VHW the Health Workers would come to the village less often. You want to use the presence of the Health Workers in the village to support your election campaign. You are a good politician so you won't admit to anyone what your reasons are for opposing the VHWs.*

One Panchayat Member: *You are a Harijan. You understand the good that would come to your family and neighbours if there was a VHW in the village.*

Another Panchayat Member: *You are undecided on the idea of having a VHW in the village.*



Jobhiho Village: A Role Play on Power

The role play does not have a script. The players have a general set of directions, but they react to the situation in a spontaneous manner. They must remember the limits to their role but they play the role according to their own feelings.

This role play is somewhat more complex than the preceding two role play exercises. As described below, this is a large group exercise.⁴¹

Purpose

- To increase the awareness of the social and economic forces which affect the life of the community.
- To experience the feelings of different groups within the power structure of a village.
- To help understand the effect of these forces on health care.

Group Size

This is a large group exercise. A minimum of twelve to fifteen people are required. With care the exercise can accommodate up to forty participants.

Time Required

A minimum of one hour. Larger groups require more time than smaller groups due to the process of the exercise.

Setting

A classroom or other large space. The various power groups can be assigned areas in different corners of the room.

Materials

A chalkboard and chalk or suitable substitute for drawing the community map is the only resource required.

Process

- A map of Jobhiho is included. This map may be modified for any region or country. Ask the participants to name their village.
- Draw the map of the village on the chalkboard. The map is an outline of the land

owned by the people of the village. Jobhiho Village has a river running through it; however other villages might be centred around a well, a market-place, etc.

- Call volunteers one by one to the chalkboard and ask each one to choose which part of the land is his according to the following:
 - 1st landlord owns 40% of the land.
 - 2nd landlord owns 35% of the land. - 3rd landlord owns 15% of the land.
 - 4th landlord owns 7% of the land.
 - 5th landlord owns 3% of the land.
- Ask each landlord to draw the location of his house, well and other buildings that would be typical for a landlord in the area. They should also write how many of various kinds of animals they own, what crops they grow, machinery they own, etc.

Note: The instructor must be prepared with realistic data about the community to help in this process.

- Other participants are then assigned the roles of landless labourers, craftsmen, etc. as appropriate for the local community. Give the various groups five minutes to discuss their role within their groups (landlords, landless labourers, craftsmen, etc.).
- Direct the landless labourers and craftsmen to go to the landlords and ask for work, a place to live, etc. Remind both landlords and the landless to be realistic in their acting, forgetting their own personalities.
- Let the role play continue until divisions between the 'haves' and the 'have-nots' have become obvious and feelings are aroused. Stop the play when feelings are running high.
- Lead a discussion of the experience. Some useful questions might be:
 - *How did the landless feel toward the landlords?* It is our experience that many people have difficulty talking about their feelings. They will try to answer the question "*How did you feel?*" with "*I did . . .*"

⁴¹ Learning exercises can often be combined for better learning. This exercise, for example, could be followed by a case study such as the *Case Study on Vishalnagar*.

Use this exercise to get the participants to examine their feelings instead of the specific activities that they did.

- *Was the treatment the landless received just?*
- *Did the landless try to take any action against the landlords? Were they successful? Is it easy for the poor to get power?*
- *Is the situation in the role play a common one?*
- *Can you give actual examples of injustices?*

The instructor should take care to ensure that this session doesn't become a collection of 'horror stories'.

- *How would such an atmosphere affect the work of the health teacher beginning a project in the village?*
- Summarize by asking the participants to list their important learnings from the exercise.

Possible Learnings

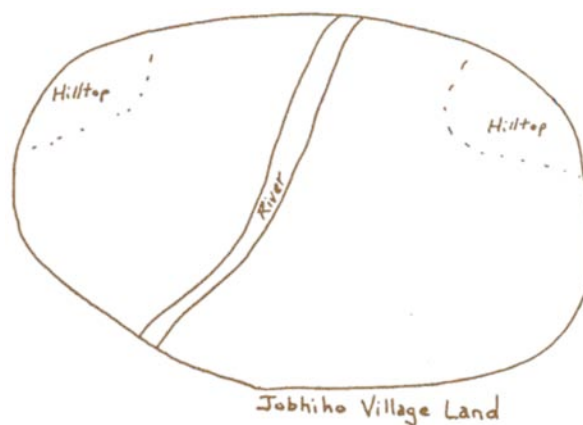
- Power is usually in the hands of the rich who are seldom concerned for the welfare of the poor.
- It is difficult to gain power without wealth or political support.
- The power of the wealthy controls almost any action taken to organize or develop a village unless great care is taken to find ways of involving all members of the community.
- Injustice of rich landlords toward poor and homeless. They have not experience unemployment or hunger; they usually have no sympathy for the unemployed, hungry or landless peasants. The rich often feel threatened by the poor.
- Labourers are desperate, angry and distrustful. They are easily turned against even one who tries to help them because they can't believe that anyone is really concerned about them.
- Smaller landlords are often more sympathetic, but are not very able to help. They are in danger from both sides when they try, and in fact, often feel that they have more to lose from change.

- The usual situation in villages is that the big landlords control the houses, jobs, Sarpanch (the landlords can buy or control voting), groups of goondas, police, etc.
- It is necessary to understand the social, political and economic situation of a village in order to know how to help.

Variations

- Establish other roles aligned with the landlords or the landless:
 - police
 - money lender
 - government official
 - community development or extension agent.
- Put pressure on the landlords and/or the landless through changes in the basic situation:
 - the harvest requires workers immediately or the harvest will rot.
 - one of the families is having a wedding. The landless workers must obtain time-off from work to attend the wedding (one week) and money for the gifts.

The Jobhiho Map



Choosing a Village for a Community Health Program

Group discussions need a strong topic to be effective as learning tools. This discussion could be used with a group of trainees at the end of their training session to apply the course learnings.

Purpose

- To encourage group decision-making activities for health trainees.
- To increase awareness of the forces in a village which affect the success of a village worker program.

Group Size

Small groups of six to ten persons, the maximum size limited by the facilities available.

Time Required

One hour or more depending upon group size.⁴²

Setting

Classroom or similar large space for the large group discussion plus discussion areas for each small discussion group.

Materials

- Chalkboard and chalk or suitable substitute.
- One copy of the Village Information Sheet for each small group participating in the exercise.

Process

- Introduce the exercise to the group, divide the participants into small discussion groups and assign a location for each discussion group.
- Give the groups twenty minutes to select the village that they recommend for a Community Health Program. Tell them that they must be ready with reasons for their choice.
- After the groups have selected their village, reassemble the small groups into one large group. Have one member of each discussion group present their selection to the whole

group. Record the selections and a summary of the reasons on the chalkboard.

- Send the small groups back into their separate locations to reconsider their choices for ten minutes.
- Reassemble the large group, check for changes in the village selection. Conduct a discussion on the selections.

Possible Learnings

- Communication and transportation facilities are important to helping people be involved in development projects.
- The objectives of a Community Health Program will determine which people will be served.
- Tradition is a strong factor in any development project.
- Health development projects are more likely to succeed if the people affected are involved in making the decisions for the projects.

Variations

- Let some of the participants role play the members of each village. They can be 'visited' and 'interviewed' by the members of the groups making the village selection.
- Let the groups establish the objectives for the Community Health Program before introducing them to the four possible villages.
- Provide the groups with a set of objectives and budget constraints before introducing the four villages.

⁴² Note: Keep the timing flexible. Adjust the time allowed for each part of the exercise if groups need more time, or if they finish their discussions earlier than expected.

Village Information Sheet

You are members of a team to choose the location for a Community Health Program. You will have a limited time to make your selection based on the information below.

Once you have selected the location for the Community Health Program you must prepare a list of reasons for your choice. One member of your team will be asked to present your selection to the large group.

Village A:

The village council is in favour of the program. There is a traditional healer in the village. The village priest is doubtful about the program.

Village B:

The leaders of the village are in favour of the program. They have offered a location for the clinic. There is a local midwife in the village.

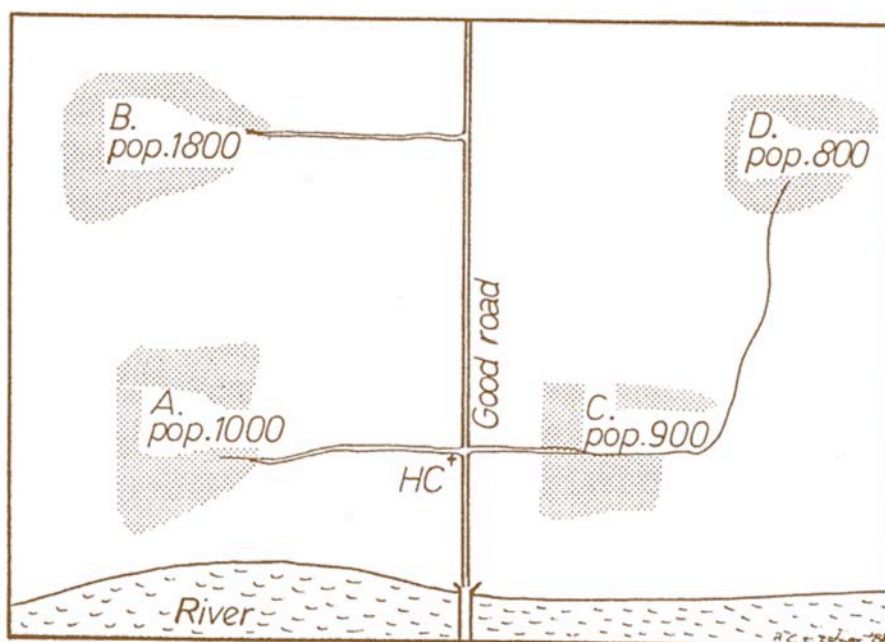
Village C:

A teacher has invited the health team to the village. The village leaders feel that a meeting of the people has to be called to decide the issue, but they themselves are in favour of the program.

Village D:

The people are very traditional and against change. They are uncooperative with strangers and the government program. Their health status is poor. The State Government is in favour of some program being developed in this village by the team. An old lady living in the village is interested in the team's activities.

Map of the Four Villages:



Case Studies

It is often possible to learn from real events. This section presents a selection of short stories or case studies based upon real events. The names and situations have been changed slightly so that it is impossible to identify the real persons who had the problems. As well, the situation has usually been simplified to remove some of the possible distractions to a group of learners.

Purpose

- To present a realistic problem for discussion.⁴³
- To develop skills in decision-making, planning, communication, etc.

Group Size

The number of participants is limited only by the number of people who can participate in a discussion group. An ideal group size might be six to 10 persons.

Time Required

Thirty minutes to two hours for each case; depending upon the complexity of the problem, the number of participants, and the group's discussion skills.

Setting

A classroom or other area where the participants can be arranged in a circle. While a case study can be presented in a conventional classroom, with the desks oriented towards the front of the class (and the instructor), it would be preferable for all of the participants to be able to see each other and face the rest of the class. The discussion circle accomplishes this.⁴⁴

⁴³ The cases which follow represent a variety of countries and subject areas. Some of the exercises have a specific country named in the title. These exercises may be appropriate for use in other localities as well. They must, however, be adapted to these new locations. Simply change the name of individuals, organizations and communities to use the other exercises. Refer to the notes and examples in Section 2 for assistance.

⁴⁴ The case study technique presented here is very informal. The authors are aware that some institutions use the case study technique as a way of presenting an ideal solution (or the instructor's

Materials

One copy of the appropriate case study description for each participant.

The case study discussion does not require that the participants be able to read. The group leader can read the case study aloud for the group. In this situation, only one copy of the case study description is required for the group leader.

The group leader (or instructor) must not use this position to control the group discussion. If every participant has a copy of the case materials it becomes easier to participate in the discussion.

Process

- Introduce the concept of the case study by explaining that you are going to read a description of a community event. The description will be followed by one or more questions and a discussion.
- Distribute copies of the case study description to each participant.
- Read the case study description aloud to the group. Stop when you come to the first question. Often more complicated case studies will be broken into a number of events separated by questions (see the examples of the Active Case Study later in the Manual).
- Ask the participants to not read beyond the question until directed. Present the question and coordinate their discussion responses.
- Add any appropriate questions that you feel would be useful and discuss.

solution) to a problem. Business classes, for example, often look at the historical activities of specific companies as models for success. We prefer to use the technique to generate genuine discussion among the participants.

Please note that the setting and the process presented here encourages all the participants to enter into the discussion. The instructor (group leader) should be encouraged to assist the discussion. In particular, the instructor should encourage all members of the group to participate.

- When the discussion begins to falter, continue on to the next section and its questions. Repeat as necessary.
- Conclude with a discussion of how this particular event fits into the students' curriculum, and its importance.

Possible Learnings⁴⁵

The possible learnings depend upon the specific case being discussed. Typical learnings would include:

- It is important to listen to the needs of villagers.
- The health worker should be very aware of the possible problems in communication that can occur between two people or two groups of people.
- The reasons that people give for a decision or an event are often the reasons that they think you want to hear.
- Events are seldom as simple as they seem at first glance.

Variations

- The participants could be asked to prepare a written response to the questions for discussion at a later time.
- The participants could be asked to prepare a case study based upon a situation in their work (or village) for discussion by the others.
- The case study could be much shorter than the cases presented here, or it could be much longer. A long case study usually involves a history of the situation, statistics about the situation, etc. Note the differences between the various cases presented here.



⁴⁵ [Some of the learnings for the **trainer** include: there are no simple answers, there isn't a single answer to most problems, and some problems have no answer.

A case study is an opportunity for participants to discuss an issue, not to come to a predetermined conclusion. [z 2008]

Case Study: Yeshubad

Fr. Ashok was a nice person. He was always ready to help others and loved people very much. He was concerned about many of the problems that the village people faced and wanted to do something to help them.

There was no primary school within 5 kms of Yeshubad. Therefore the children remained illiterate, and ignorant. Father opened a primary school with facilities up to the second standard. It was a free school, admission being restricted to Yeshubad village people only. He was himself the principal and teacher. Seminarians passing through also helped sometimes.

With food supplies gifted by Excess Relief Supplies Inc.(ERS), of the USA, Father was able to distribute free school lunches to all the school children. This attracted more parents and children. Within the first two months the school had 170 children on its register.

After six months ERS stopped supplying any more food due to unavoidable circumstances. Father had to stop distributing any school lunch. The parents got upset and some of them were very angry. Slowly they started taking out their children one by one till only 10 children were left on the school's roll. The parents said loudly to each other: *"What's the use of learning and reading so many books, anyway. That doesn't help. Nor does it feed empty stomachs. Let the children go to the field, help their elders, learn something practical and useful which fills their stomach."* It was the harvest season.

Later on it was found that out of the 10 remaining students, 6 were the children of employees engaged by the Parish. They kept their children in the school as they thought it would please Father. Father very soon closed the school. He felt let down and demoralized.

Within a few months Father regained his enthusiasm and decided to start a housing scheme as this was another need of the people. Hardly any one had a nice house in Yeshubad except the landlord, the village headman and himself. People lived in cramped, filthy, unhygienic houses with no windows.

With an ERS donation he built 20 houses for a few of the Yeshubad villagers. The houses were nice and spacious with concrete roofs. They

were well ventilated with huge windows. Each flat was an independent unit and had one living room, a kitchen and a toilet. Father regretted that there was no tap water in the houses but money was limited.

Except for the 20 lucky families receiving free houses, others were bitter and angry. They felt Father was partial to the families living in the new houses. Father explained to the people that he had money only to build 20 houses. The people felt that the Father could have got more money.

That summer Father took some guests to see the new houses. The guests, to their surprise, found that the houses were not being used as planned. Most of the families had converted the kitchen room to store grains, household rubbish, etc. and the living room was used as a good cattle shed. All the windows were sealed with stones.

The families lived in the open even with small children. When asked, one family explained: *"We love to live in the open. We are strong and can bear any weather. But the cattle cannot. They are poor dumb animals, precious to us and need such great care. Also our grain is precious. We have sealed the windows to keep it safe from thieves. This is why our cattle and grain are inside while we live happily under the clear open sky."* People also felt that it was a dirty thing to have a toilet right inside the house, and that too without any water!

"But what about the small children?", Father asked. *"Oh, Fatherji, they are farmer's kids. If God wills to take one, He will give another little one."*

Questions:

- *What mistakes did Fr. Ashok make?*
- *How could he have avoided them?*
- *What steps should he take now?*

Case Study: Arcot

Mr. Sunder was a social worker, working in a Community Development Program in Arcot district. He was interested in improving the health status of the people. He understood that the problem of ill health was related to the low economic status of the people. He understood that the best way to solve this was through economic development with people's participation.

The main problem in his barrio⁴⁶ was water for irrigation. Although most of the families had some land the produce was very little and the food was not enough for all in the barrio.

Mr. Sunder visited the President of the barrio junta⁴⁷ and discussed this problem with him. The President was very happy to hear about Mr. Sunder's plan for water development. The President called for a barrio meeting the next day in which Mr. Sunder was allowed to present his plan.

The plan was to build a large tank to help collect the rain water. As the people were very poor, he proposed that the barrio contribute free labour. The building material would be provided by Mr. Sunder's agency.

The site was chosen and the work started. After two weeks, Mr. Sunder noticed that the number of people working at the site was decreasing.

As the days went by, more and more people dropped out. Mr. Sunder was unable to find any reason for this. Finally, only a handful of people were left.

Questions:

- *Why do you think the people dropped out of the program as they did?*
- *Who do you think will benefit if the tank is built?*
- *Comment on Mr. Sunder's way of dealing with the problem*
- *If, in your area, water is the need, what information would you need before taking up any definite program?*

⁴⁶ Small village.

⁴⁷ Village Council.

Thakurpur Case Study: Free Gifts?

For the past six months, two health workers have been working in Thakurpur village. During these months they met the village people and tried to identify their main health problems.

After the six months the health workers concluded that the people of Thakurpur were not really concerned about their health. They seemed resistant to any changes suggested to them by the health workers.

For example, malnutrition was a problem in the village children. The health workers gave repeated health talks and advice during home visits. Yet nobody accepted changes in the children's feeding habits or the age of starting weaning food.

Some of the people had expected the health workers to give them something free. The health workers had discussed between themselves the possibility of distributing free food to the children under five years. This might solve the malnutrition problem.

One of the health workers, Chandra, felt that food distribution would certainly save some of the children's lives. But the other workers felt that food distribution would create difficulty in the community and alienate the people. In the end, the evils such distribution would bring, would be greater than the benefits.

Chandra pointed out that the food distribution would be an opportunity to give good health education to the mothers. This should bring the hoped for changes in the feeding habits of the children.

Questions:

- *Why were the mothers reluctant to change their habits?*
- *What are the advantages and disadvantages of free food distribution?*

Case Study: Awash River Conservation

Our farms, located by the Awash River, are troubled with soil erosion problems. The gullies are bare of trees and grass. They have steep sides where the rain water has washed away the soil. The soil is then carried by the runoff water to a nearby power dam. The dam is rapidly being silted up.

A young government Soil and Water Conservation Officer set up a demonstration project near one cooperative farm five years ago. This project involved all the members of the Peasant's Association.⁴⁸

They agreed to stop using the land in and near the worst erosion areas. These farmers were compensated for the loss of their productive land from a 2000 sack donation of FAO wheat.

The farmers treated the gullies with check dams of straw contributed by the farmers themselves. The fertilizer was supplied from government stocks. They then planted pepper trees and similar fast growing species.

The young trees quickly made a major change on the gullies in the demonstration area. The erosion was checked as native grasses returned and the planted trees grew. Several species of small animals and various birds also returned to the area.

Now several more villages want to begin similar projects.

Questions:

- *How can the project be replicated without any grain to compensate the farmers for the loss of their productive land?*
- *How would you keep the young trees from being cut by an individual for firewood?*
- *What can be done if a farmer wants to take his land back?*
- *What can be done if someone sends his cattle to graze in the conservation areas?*

⁴⁸ All the residents of one or more fairly large cooperatively run farms. For the purposes of the exercise it doesn't matter that the farms are run cooperatively, the Peasant's Association could be any representative community group.

Case study: Chandra (South India)

Chandra is a social worker in a small community in Rajapalayam in South India. She visits the people of the village very often and gives advice to the people about the importance of having a small family. She always advises the families to have no more than two children by saying, "*we are two so we will have two*".

Gopi works in a small textile factory in the village. He earns Rs. 350/ a month and supports his wife and two little girls.

His youngest daughter was 2 years old when Chandra visited them and found Mrs. Gopi pregnant again. Chandra told her to undergo sterilization after the birth of the third child. Mrs. Gopi said her husband always wanted a boy as his first child. He could not get one and hence tried for second and third.

Despite Chandra's advice, Gopi tried again and a fourth girl was also born. Gopi finds very hard to live in the village with his Rs. 400 salary (he got an increment of Rs. 50 after 5 years). He is thinking of leaving his job and moving to a very remote area.

Questions:

- *Many cultures have a preference for male children. How can a worker encourage families to accept the children that they have?*
- *Is the sex composition of a family more important than the size of the family? Why?*
- *What kinds of actions will improve Gopi's financial situation?*
- *What kind of community pressures can be brought to bear on Gopi to get him to change his attitude?*
- *What can Mrs. Gopi do if she wants to stop having more children?*

Case Study: Ranjit (Sri Lanka)

Ranjit was the elected headman at Koodala village. He was very much interested in improving the health status of the villagers. The village had a small elementary school and a government hospital. Most people made their living either by working in the "saw mills" (timber factory) or by farming.

Ranjit found some young men going to toddy⁴⁹ shops after work and spending a good proportion of their earnings on drink. These men were not supporting their families. Their children were not sent to school but wandered around the bus stations. There they helped people by carrying things to their homes and earned 30 to 50 "cents" a day. This money helped replace some of the money that their fathers spent on arrack.

Ranjit talked to one of the young men who had become an alcoholic. He told Ranjit that "*his parents were responsible for his condition*". The man said his parents exploited him when he was a small boy and this had developed an anger in him. Ranjit heard similar stories from other young men.

Questions:

- *What action can the headman take in this situation?*
- *What will happen to the young children of these sometimes alcoholic parents?*
- *What could a volunteer health or social worker do in this situation?*
- *The young men claim to have been exploited by their parents. They appear to be exploiting their own children in the same manner. What can be done to stop this cycle of child abuse? How can you help prevent child labour when the families need the money?*
- *Who is responsible for the young men's drinking problems? How can the health worker make them see that they are responsible for their own behaviour?*

⁴⁹ A locally made liquor. The more refined liquor is called arrack.

Case Study: Yekosso Zaff (Ethiopia)

'Yekosso Zaff' is a tree whose seeds are traditionally used by people suffering from tapeworm. Large quantities of the seeds are ground and soaked in a small amount of water for a day or so before administering. The paste, called Kosso, is then thinned with water to a drinkable consistency or mixed with 'Tella' or 'Tej'⁵⁰ to reduce the bad smell and taste.

The use of Kosso has not been limited to small towns and rural areas. Kosso is much cheaper and more accessible to the poor than are the modern tablets. The major problems of the use of Kosso are that the mixture can be easily contaminated and there is no particular dosage limit. This often results in complications associated with the liver.

On the other hand, urban people suffering from tapeworms are able to obtain unprescribed and expensive tablets from the pharmacies. Their treatment often fails because there is no proper diagnosis to determine the species of tapeworm present.

Questions:

- *How can a health worker prevent abuses of the medical system? For example, what can be done to prevent a pharmacy or clinic selling medications without a prescription?*
- *How would you develop a community program to inform people about the hazards of drug use?*
- *What is the role of the 'modern' worker when traditional health treatments are being used?*
- *How can the traditional health worker be involved in development programs?*
- *Where can the worker (and the public) get correct information on the use/abuse of drugs and herbs (traditional or modern)?*

⁵⁰ Tella is a fermented drink made from grain, Tej is a fermented drink made from honey.

Case Study: Pill Pushers

Residents in a small town have recently been complaining about the large number of drugs being prescribed by government health professionals. One couple had fifteen different drugs prescribed for their newly born child. They are concerned as a child needing fifteen different drugs must be very sick. Moreover, as poor rural folks, they don't have the money to buy all the drugs.

Lower cost traditional remedies and traditional healers are gaining more respect from the rural folks unhappy with this expensive pill-bottle medicine. The rural dwellers believe that the traditional healer at least understands them and supplies value for their payment.

It seems ironic that the government is promoting the concept of low cost health care for rural areas when unscrupulous medical practitioners and "pill-pushers" are increasing the costs. However, low wages and the expectations of their patients often force both traditional and modern practitioners to over-prescribe medications.⁵¹

Questions:

- *Can the village health worker (traditional or modern) be influential in the community without dispensing pills? Is this important?*
- *How does the lowest level health worker (traditional or modern) get 'status' in the community without a kit of 'medicines' to administer?*
- *Who has more influence in your area, the modern health worker or the traditional healer? Why?*
- *Should anyone be able to dispense drugs? Or should drugs only be available through controlled sources? What kind?*
- *How should medical practitioners be paid?*

Case Study: Jose Has No Pills

Jose, a peasant farm labourer, has recently been appointed as a part-time health worker on the farm where he works. The government provides a very small allowance and training in 'preventive health care'. The land owner allows Jose time during the work day to conduct his health activities.

Jose started an information program about nutrition, better child care and preventing tooth decay. His fellow workers seemed quite pleased with the work that Jose was doing.

Last week, a friend who had been badly hurt in an accident in the cane fields came to Jose for treatment. Jose tried to explain that he wasn't trained to treat such problems and sent his friend to the government clinic about 30 km. away.

The friend has now been off work for almost a week and his family has had to travel to the clinic everyday to help look after him. Today, the land owner came to Jose and abused Jose for not treating his friends. *"I let you have time off during the work to be a doctor, but you won't do it. I have cut your pay and won't allow you to loaf on the job any longer."*

Now the preventive health care program seems to be in ruins.

Questions:

- *What is the real problem here?*
- *What can the health worker do to get status without dispensing pills and treating injuries?*
- *What is the difference between preventive health care and medical services?*
- *What responsibility does the land owner have to provide medical care for employees injured on the job?*
- *What would you do if you were Jose in this situation?*
- *Should first aid training be a required part of the training for any health worker? Why or why not?*

⁵¹ Practitioners in this area, as in many other areas, make a commission [sometimes their sole income] on all medications sold in the pharmacy.

Case Study: Santo Domingo

Magdalena is the health promoter in the vereda⁵² of Santo Domingo. She has earned the trust and respect of the families in her first year as a health promoter.

Part of her success is related to the nutrition program which she carried out in cooperation with Bienstar Familiar.⁵³ This has been well received by the 25 families in her vereda.

Recently she was encouraged by the maternal child nurse-consultant in Salud Publica to embark on a program of vaccination for all the children up to age eight. Magdalena met with the mothers of the children to explain the benefits of immunization and to establish the date and time for the vaccinations.

Running the vaccination clinic requires a bus trip into the regional capital to obtain the vaccines stored in dry ice. This takes most of the day prior to the clinic. The day of the first clinic Magdalena felt that she had worked hard to bring this benefit to her vereda. Much to her disappointment, only four families brought their children.

Later, one of her mother's friends in the vereda told Magdalena that there had been talk among the adults that the vaccines would cause sterilization among their children.

Questions:

- *What could Magdalena have done differently when setting up this program?*
- *What could Magdalena have done so that more families would have participated in the program?*
- *What can Magdalena do now?*
- *How can you change public opinion? In this case, the villagers believe that the vaccines will cause sterilization. Describe what you would do to change this belief.*

⁵² A small administrative unit.

⁵³ A community service organization.

Case Study: Women Only

One morning Mrs. Antobam left her two year old son with her husband, Kofi Antobam.⁵⁴

She rarely left her child at home when she went to work in the fields, but this morning the child was still sleeping when she decided to leave. She was responsible for looking after the children, but there was urgent work in the fields as well.

Unfortunately, the boy had developed a cold the previous night and awakened with a sharp and continuous crying.

Not knowing what to do, Kofi started out to fetch his wife from the fields which were about three miles away. Becoming angry he returned to the house without fetching his wife.

As the son lay sick on his sleeping pallet, Kofi continued to curse and abuse his wife and planned the punishment that he would mete out to his wife when she returned.

After various attempts to stop the crying, Kofi took the child to his sister's house. There he learned that the two women had gone to the fields together. "*Damn these women*", he roared.

Questions:

- *Why do you think that Kofi was unable to look after his sick son?*
- *Is there any reason why men should not share in caring for their children, even when it involves cleaning the children or looking after a sick child?*
- *Suggest ways that you might deal with a problem like this if it occurred in your village.*

⁵⁴ The agricultural work in this area is done by the women. Men have traditionally been the warriors and hunters.

Case Study: Aba Senga (Ethiopia)

Ato Euketu Tiruneh is a recently graduated agricultural extension agent assigned to a village 35 km east of Modjo.

Since his arrival in the village he has opened an extension office. He met a few elders and other influential people. He has also visited the surrounding villages. He was able to select seven 'model' farmers on whose lands he would establish demonstration plots. Ato Euketu recognized the importance of joining in community activities and has joined one of the local senbetes.⁵⁵ This organization meets monthly and exchanges views, helps reconcile quarrels, etc.

At one of the senbete meetings he learned that Aba Senga (a fast spreading cattle epidemic) was attacking the cattle in a nearby village. Already it was spreading to nearby villages.

Ato Euketu was angry and puzzled that his office hadn't been informed of the disease. He was also amazed that the people of that village hadn't come to him for free vaccines for their cattle. After some thought he decided that there must be some reason for their failure to act and questioned the members of the senbete further. He later went to the afflicted village to observe the situation.

At the home of Ato Bitchenkew he was told that despite the use of traditional medicines, Ato Bitchenkew had already lost three cattle and had a dying cow as well. Ato Bitchenkew stated that he had been visited by a 'curse' as he was the only villager with affected cows.

Ato Euketu responded that if the villagers had come before the outbreak of the epidemic he could have provided vaccines for all the cattle in the village free of charge. He argued that vaccinated cows did not die from Aba Senga and that he would arrange for a vet-technician to treat the dying cow and the other cows in the village, all free of charge.

Ato Bitchenkew would not agree with this and stated that "*the modern medicines would not work as even the strongest traditional medicines*

had not worked". He insisted that there must be a curse.

After much discussion he informed Ato Eketu that "*We have tried this modern medicine that you are talking about long before you came. We were forced to pay Birr 0.25⁵⁶ per head of cattle! And what were we left with? The cattle died and we had paid our money to kill them! Almost all of the vaccinated cattle died, so we decided that we wouldn't use a vet-technician ever again! Thanks to God it has been a long time since they were here. Now you come and tell us that the vaccines are a good thing!*"

"Please Ato Euketu, you have been good to us so far, and we don't want any trouble. Please leave us alone!"

Later, Ato Euketu heard the same story from his closest friends among the farmers.

Questions:

- *How could this happen?* Ato Euketu knows that the vaccines and vet-technician are provided free of charge.
- *What should Ato Euketu do to save the cattle in the other villages in the area?*
Should he use coercive measures to force the vaccination of all the cattle?

⁵⁵ Community organization, lowest level political organization.

⁵⁶ The Birr is the Ethiopian unit of money.

Case Study: The Vegetable Seeds

Malgini works in an office in Colombo. Every weekend she returns to her home village where her parents and grandfather still live.

Malgini purchased several packets of vegetable seeds from the market which she has planted in the yard near the family home. She has also shown her mother how to prepare these vegetables to supplement the usually meagre diet for the grandfather and smaller children in the family.

Her younger brothers and sisters love taking fresh carrots and peas from the garden and eating them fresh. Her grandfather appreciates the softer cooked vegetables rather than the rough lentil diet that he was having trouble digesting. All members of the family are much healthier.

As well, her grandfather has begun showing off the garden to all of his friends and neighbours and tends the garden during the week. The neighbours are now pressing Malgini to get seeds for them. However Malgini cannot afford enough seeds to satisfy everyone.

Questions:

- *What kinds of development does this project demonstrate?*
- *How would you deliberately try to establish such a garden growing project?*
- *What can Malgini do now?*

Case Study: The Fruit Sellers' Children

A health worker visited the village of Mengabong Besar⁵⁷ with the agricultural extension agent to observe the results of a kitchen garden project. The extension agent has had a project in this village for three years. The women of the village take homemaking courses, including a course on caring for a kitchen garden.

The health worker observes that each household has a beautiful garden with leafy greens such as sayur pahit, sayur puteh and sayur manis. Some of the families even have well-tended papaya trees and buah marquisa (passion fruit) trees.

The whole village is neat, the weeds have all been removed and there is an abundance of vitamin-rich garden produce. One woman boasts of the money that she has made from selling her produce at the Sunday tamu (market).

However, the worker also observes that the village children are pale and look malnourished.

Questions:

- *Why might the children be looking malnourished in an area that has so many fine foods?*
- *How would the health worker find out the real reasons for the problem that he observes?*
- *What factors cause people to raise fruits and vegetables for market rather than using them for their own diets?*
- *What kind of food taboos exist in your home town area?⁵⁸*
- *Why are 'Western' food habits more desired than local foods in some areas?⁵⁹*

⁵⁷ This case specifically describes a village in Malaysia, however the authors have observed the same situation in other countries.

⁵⁸ In the area of this case study the people believe that some kinds of bananas cause dizziness and that boys who eat papaya will become too feminine.

⁵⁹ In this area, apples, oranges and grapes, all very costly, are preferred to local fruits because of television advertising.

Case Study: Vishalnagar (India)

A group of Health Workers were living in a Health Centre one mile away from Vishalnagar.

A landlord of this village requested that the Health Workers open a dispensary. He agreed to donate land for the building. The Health Workers opened the dispensary.

After they had been working there for about six months some people from the village threw stones at them. The Health Workers were at first shocked by this violence. After some days they decided to ask an outside agency to help them find out what had gone wrong.

The outside agency did a survey of the village and found some of the information below:

- **Population:** Vishalnagar has a population of 525. There are 90 households in the village. The average number of people per house is 5.8. The average number of children per house is 2.7.

- **Economic structure:** Most of the village people depend on agriculture for their livelihood. The total acreage under cultivation is about 400 acres.

- **Land holding pattern:** The land of the landlords is cultivated by tenants but there is no document to prove the tenancy. These tenants are small farmers and landless labourers.

At harvest time 50% of the produce goes to the landlord and the remaining 50% (after subtracting the price of seeds, fertilizers, electricity bill) is distributed among the tenants.

- 1 farmer has 250 acres
- 1 farmer has 100 acres
- 1 farmer has 30 acres
- 17 families have some land (less than 2 acres each)
- 66 families are landless labourers
- **Income:** There are 36 cows, 16 bullocks and 19 buffaloes in the village. Except for 10 animals the rest of the livestock belong to the three landlords. The animals are cared for by the Harijans for which the Harijans receive Rs. 3 to Rs. 5 per month as wages. For farm

labour women are paid Rs. 2/- per day and men are paid Rs. 4/- per day.

- **Credit:** The landlords are the main money lenders. There are no cooperatives or banks in the village.

The village people take loans mostly to buy grains when they have no work, for marriages and for funerals. They have to repay the loan during the harvest season and the amount is cut off from their wages. The interest rate is between Rs. 10 - Rs. 100 per month. Normally after the loan has been cut off a labourer gets no more than Rs. 15 - 20.

- **Housing:** The landlords live in good houses. Most of the Harijans live in little huts.

A few years ago the Government donated some land to 30 Harijans to build their houses. As some of the land was outside the Panchayat's limit the Harijans were not able to get finances to build all the houses. Only 15 houses could be completed.

At the time of the survey seven of the 15 houses were in the hands of the landlords (mortgaged). The houses in the possession of the landlords were rented out to the Harijans for Rs. 10 per month.

- **Political structure:** The Panchayat office is situated in the neighbouring village. There are two panchayat members in Vishalnagar. These two members are the puppets of the landlords. After their election to the Panchayat, they have got the Government grant to dig two drinking water wells, electrify the village and build the 15 Harijan houses.

- **Religious groups:** The whole village celebrates the festivals of different religions together.

- Hindus - 66.2%
- Christians - 33.5%
- Muslims - 0.3%

- **Caste Structure:** There are 3 main castes in the village:

- Reddys - 25.7%
- Harijans - 37.2%
- Vaddas - 17.4%

- Others - 19.7%

Of these the Reddys are the dominant caste. Untouchability against the Harijans is still practiced. The Harijans are not allowed to take water from the same well.

- **Health status:** The staple diet is ragi, dhal and green vegetables. The rich landlords have two meals in a day whereas the poor people have only one. There were no serious illnesses in the last year except for two cases of asthma. The mortality rate in children is low. 10% of the Harijan families had limited their family size by the birth control operation.
- **Health services:** There are no private practitioners in the village. The Government hospital is about 2 miles away. The dispensary run by the Health Workers does not get more than one or two patients per day. The Health Workers were giving medicines, grains, milk powder and clothes to the landlord for distribution among the poor but these things never reached the poor.
- **Needs:** When asked what the people needed most, the majority expressed their wish to have a house of their own. Some of them are living in rented houses belonging to the landlords. (If the labourers fail or refuse to work in the fields of the landlord, the landlord would simply lock the houses. The other people are staying in huts.)

Another need the village people expressed was a school. The poor people also asked to be provided with cattle as there was no possibility of them acquiring any land. In spite of the poverty and misery many expressed the desire to build a place of worship.

Needs in order of people's priority:

- Houses
- School
- Cattle
- Temple
- Better wages

Questions:

- *Identify the powerful and the powerless groups in the village Vishalnagar.*
- *Discuss the different ways in which the powerful group dominates the powerless group.*
- *Discuss the reasons why the health workers were stoned.*
- *What could they have done to avoid this reaction?*
- *Which one of the priorities should the health workers take up now and give reasons for your choice.*



60

⁶⁰ [This image has been added for the 2008 electronic edition. As well as being appropriate for the case study, it's an example of a photograph with the background removed. LZ 2008]

Case Study: Chakrapur (India)

Chakrapur is about 20 km from a Community Health project base. It is in a hilly area and is quite cut off from other villages. The people depend on each other for survival. Very few of them are literate. Caste feeling is not very strong in the village.

- 45% of the villagers are Yadavs
- 25% of the villagers are Brahmins
- 20% of the villagers are Harijans⁶¹
- 5% of the villagers are Kumbhars
- 5% of the villagers are Muslims

The people requested the Community Health Project (CHP) to open a health clinic 2 years ago and gave full cooperation. They provided a place for the clinic and repaired the road partly through shramadan⁶², Panchayat's⁶³ cash donation and a Food for Work program started by the CHP.

Later the project director decided to train a Village Health Worker (VHW). He chose Lakshmi, an intelligent, though poor, Kumbhar woman. After the training Lakshmi was very efficient and responsible in her work. The villagers were quite satisfied with her. She was therefore also made responsible for distributing bulgar and milk in a feeding program for the village children.

Some months later a Farmers' Club was formed for the benefit of all in the village. The club committee had a representative from all caste groups. The project's social worker was also a member of this committee. He was supposed to coordinate the different activities of the program in the village, though the project director had the ultimate authority.

Recently the Farmers' Club criticized the VHW's work. They felt she was distributing only half the bulgar and suspected she was cheating. They complained to the social worker. They also told him that the VHW was of "low moral character". The social worker, who respected both the club members and the VHW,

went to investigate. He found the VHW was actually distributing less bulgar and told the project director about this.

After some days the Farmers' Club demanded that the 2 village volunteers helping the VHW be replaced by people chosen by the club. The VHW knew the project director had faith in her. She argued that her helpers were already trained in their work and the children listened to them. She saw no reason to waste time and effort in training new people.

The matter was left as it was. Two months later the VHW asked all the parents of children in the feeding program to pay Rs. 0.25 per month for the food. She also ordered them to bring some salt to be mixed with the bulgar. The Brahmins and Yadavs of the village were adamant that their children should not consume Harijan's salt as that amounted to breaking the 'sacred' caste code. They threatened the VHW with dire consequences if she went ahead with her proposal.

The VHW, secure in her position, ridiculed them as 'High Caste Fools'. She threatened the Brahmins and Yadavs by saying, "*I'll see to it that you get no work in the Food for Work program.*" Of course she had no authority to say this.

A heated discussion followed. One of the members of the Farmers' Club slapped the VHW.

Questions:

- *What are the reasons that led to this situation?*
- *What was the basic problem in the community?*
- *In your opinion who was responsible for allowing the situation to become worse and why?*
- *How could this situation have been avoided?*
- *What should the project director do now? What should the social worker do now? What should the VHW do now?*

⁶¹ Lowest class group, formerly called 'untouchable'.

⁶² Volunteer village labour.

⁶³ Local government unit.

Case Study: Binnur

A group of Health Workers wanted to start a health centre in a small town. This was Binnur, with a population of 4,000 people. They contacted a funding agency to find out if help would be available.

The funding agency was willing to finance the project provided that a good community health program was developed in the nearby villages. They wanted the planned health centre to be a base centre for intensive Community Health activities.

The health workers called a consultant to help them in planning their program. This consultant spent a few days with the health workers. During that time the health facilities of the tehsil⁶⁴ were studied, as well as the reasons why the health workers wanted a centre there.

It was found that there was a government hospital in Binnur itself. This hospital had 30 beds, an O.T. (Operating Theatre) and delivery room facilities. The staffing pattern was quite good with 3 doctors and 6 nurses. There were also two private doctors in Binnur.

However the closest Primary Health Centre was very far away, more than 25 km from Binnur, and there was no sub-centre in and around Binnur.

The health workers had already visited many of the nearby villages. They had discussed the proposed project with the people and were well received by them. The health workers were much interested in developing a good Community Health Program in these villages.

Plans were made accordingly and presented to the funding agency which willingly financed the project. Part of the donation covered the recurring cost of the centre for a 3 year period. After that period the centre was to be fully under the responsibility of the society sponsoring the health workers.

This society had signed an agreement to that effect with the funding agency, but relied fully on the health workers to support themselves.

As time passed, the health workers realized that the health centre's activities would never bring

sufficient income to cover all the expenses of the program.

A private doctor was employed part time. He started admitting his private patients in the health centre. As he was a surgeon, he suggested that one of the health centre's rooms be converted into an operation theatre. This was done. With this, the work load on nursing care increased considerably and the health workers had very little time left for village visits.

After a three year period, the health centre was revisited by the funding agency. They wanted to find out the impact of the Community Health Program in the villages benefiting from it.

To their surprise, they found no Community Health Program! Instead, they found a private nursing home where most of the patients admitted were private patients undergoing elective surgery.

Questions:

- *Which needs did the health workers intend to meet when they planned their project?*
- *Whose needs did they want to meet?*
- *After three years, which and whose needs do they actually meet?*
- *Is the service actually given by the health centre absolutely needed by the people?*
- *What do you think of the role of the sponsoring society in this case?*

⁶⁴ Administrative unit.

The Active Case Study

The cases which follow are more complex than the simple case studies in the previous section. These cases all require the participants to actually produce a plan or a program. They also have more than one stage to their discussion process.

These cases have been selected as a beginning in the use of active case studies. A more complete active case study should have a discussion guide, suggested solutions, etc.

A complete active case study could perhaps be used as an independent study package without the intervention of an instructor. Such a complete case study is beyond the scope of this Manual.

Purpose

- To present a realistic problem requiring a solution.
- To develop skills in decision-making, planning, communication, etc.

Group Size

As with the more usual case study format, the number of participants is limited only by the number of people who can participate in a discussion group. You may prefer to have the participants work cooperatively in small groups of three or four.

Time Required

One to three hours for each of the cases presented here. The time required is dependent upon the complexity of the case presented and the group's discussion skills.

Setting

A classroom or other area similar to the requirements for a case study. Additional work areas may be required for the small work groups.

Materials

- One copy of the appropriate case study description for each participant. You may wish to prepare the case study materials so that the participants cannot read ahead in the presentation.
- Paper and other writing materials for preparing the problem solution materials.

- Chalkboard or alternatives for presenting the various solutions to the large discussion group.

Process

- Explain the activity to your class. The objective of the exercise should be stated clearly.
- Read the first section of the case study. Note that you may want to dramatize the case when several people are represented in the case, or when the case presents problems which involve emotional issues.
- Pose the discussion questions or work problem.⁶⁵
- Allow the participants enough time to prepare a reasonable solution to the problem⁶⁶, however stop them once they have exhausted their own resources for solving the problem.
- Allow the participants to present their solutions to the whole group. Briefly summarize the discussion when the participants are finished, or when you have reached the end of the allocated time. Use this summary to introduce the next step of the case and continue.
- At the end of the case restate the objective of the exercise and summarize the strategies used.

⁶⁵ The active case study encourages the participants to look at different strategies for solving a health care problem.

You should indicate that certain actions are unsafe or unethical if they are proposed by the participants. You should encourage them to explore the logical consequences of each action.

You should NOT suggest that there is only one solution to the problem. Remember that every situation is different, the textbook answer will not always work, and some problems may not have a reasonable solution.

⁶⁶ [This first stage can be done individually or in small groups. LZ 2008]

Active Case Study: Molinyane (Lesotho)

Molinyane is a small village of 300 inhabitants. It is located about 30 minutes by bus from Mohale's Hoek, the capital of one of the 10 Districts of Lesotho sharing a border with the Republic of South Africa. Molinyane is governed by a resident chief and his attendants. Tau is a young man of roughly 30 with a wife and five children. He is a migrant labourer who is currently employed at Western Deep Levels, a coal mine in South Africa. The mine is about 24 hours away by train. Tau generally manages to get home twice a year for one to two weeks at a time.

Mathabo, his wife, was expecting their sixth child when she became very sick. She was also supervising the building of their new home. Tau expected it to be completed by the time that he returned home for Christmas. As is common in their area, Tau had been sending money home for the construction. Mathabo had been hiring workers and helping carry water, bricks, etc.

The doctor at the government hospital in Mohale's Hoek advised Mathabo to slow down. She was afraid that Tau would be angry if the house was incomplete when he returned.

Unfortunately, when Tau returns home the house is finished but Mathabo has had a miscarriage and lost the baby. Tau accuses her of having "fooled around" during his absence and blames her for the loss of their baby.

Stop Here for the First Discussion Questions:

- *Why do the men have to leave the village?*
- *What can be done to provide employment within the community?*
- *What responsibilities must the wife assume when the husband is absent?*
- *What might the community do to help families with non-resident males?⁶⁷*

Continue:

As a result of many such incidents, the Molinyane community has developed a series of educational seminars under the supervision of Sister/Nurse Mokoena, a public health worker based in Mohale's Hoek. The program is designed to teach the men and women of Molinyane the basics of Health Care for expectant mothers and the usefulness of family planning.

Further Questions:

- *Can any program be successful without the husbands as well as the wives? How can a program be organized to reach the husbands?*
- *Who should be responsible for actually doing the "training" involved in the program? With the wives? With the husbands?*
- *Is it possible to make any changes in this situation when the political situation remains unchanged?*
- *What changes would you make in this situation? How would you proceed to make these changes? (Prepare a written proposal)*

⁶⁷ Participants could prepare a written proposal at this stage if you wish.

Active Case Study: Sr. Jose

Sister Jose has just completed a ten months post graduate training in Public Health Nursing. She was told by her superior to join the Convent of Rasi. Rasi is a village of about 2,000 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.

The Mission also has 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. Sister Mary is 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. She 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. Sister Jose should see that the people select their VHW as soon as possible.

Stop Here for the First Questions:

- *Before Sister Jose can go ahead with this plan what should she know?*
- *Prepare a plan for Sister Jose showing what she should do in Serpur village.*

Continue:

Sister Jose started regular visits to the villages and gave special care to Serpur. She took time to meet the leaders and the people of the community. She discussed with them the need for change and the important function of the Village Health Worker in their community.

People and leaders listened but did not react as positively as expected by Sister Jose. In fact, they hardly show any interest in the idea at all.

Stop for More Questions:

- *What might some of the reasons be for this disinterest?*

- *What should Sister Jose do now?*

Continue:

Realizing the people's lack of enthusiasm Sister Jose started to ask them questions and to listen to them more carefully. What was their worry? What were their problems? All of them were talking of one problem and one problem only: *"The railway track passes through our village but no train stops here."*

If a train could be made to stop in the morning on its way to the district town and in the evening on its way back this would be a big boost for the development of the village. The milk of the cooperative could easily be taken to town, the children could go to high school, products of the village would find their way to town at a better price.

More Discussion:

- *What should Sister Jose do now?*
- *What will happen if all of the local milk and produce can be sold as a cash crop in the larger town?*

Continue:

Sister Jose went to the district town and discussed this problem with the railway authorities there. She learnt that the railway authorities had already decided to make some of the trains stop nearby and the plan was to be implemented soon. Sister Jose communicated the good news to the village leaders.

After one week, when she visited Serpur, the village leader presented her one woman who had been chosen by the village to be their Village Health Worker.

Final Questions:

- *Why did the village decide suddenly in one week to choose their Village Health Worker?*
- *Comment on Sister Jose's approach.*

Development Wheel

This exercise provides a tool for a community to examine several aspects of development. It asks village people to see development as an exercise concerning all of life.

Too much development talk and action has been about material growth only. This tool brings in two other needed growth areas: personal and social.⁶⁸

The Development Wheel can be used in conjunction with the *Village Quality of Life Index* (VQLI) described in the next exercise. The Development Wheel helps people understand development in a theoretical way. The (VQLI) puts that theory to practical use looking at specific village development activities.

Purpose

- To show that the three areas of growth must come at the same time.
- To allow villagers to score the development progress in their own village.

Group Size

Two equal but mixed groups small enough for a group discussion.

Time Required

A minimum of three hours. The groups will require about one hour for their Development Wheel scoring. They then need to meet together to combine (average) their two scores. Additional time is needed to introduce the exercise and discuss the results.

Setting

A comfortable meeting place within the community being scored.

Materials

- Individual Development Wheel blanks for each participant.
- Large Development Wheel blanks for use during the discussion.
- A copy of the background information (Notes on the Development Wheel) for the group leader.

Process

- Explain the exercise, divide the villagers into two equal but mixed groups and distribute the blank wheel forms.
- Ask each villager to mark from one (1) to ten (10) dots in each spoke of their individual wheels. These marks indicate where each villager thinks he or she stands on each part. One dot indicates 'poor'. Ten dots indicates 'best'.

It is probably useful to explain the meaning of each spoke as the villagers mark that particular segment.

- Mark the collective score for the group on a large Development Wheel by totaling the individual scores and dividing by the number of participants. Mark the resulting scores as dots on each spoke.
- At the end of the scoring, join the end dots together with a line to see how 'round' the village Development Wheel looks (see example).
- When both groups in the village have completed their work, put both scores together on a large Development Wheel. This will give the village a picture-view of the village development.
- The groups can discuss the resulting picture-view at steps four and five. The picture-view gives a better feel for the state of development than many spoken words.

Possible Learnings

- Development includes personal growth, material growth and social growth.
- Illustration of whether an individual community is moving towards development or further away from it.

⁶⁸ This tool was developed in the Solomon Islands and reflects the needs of villagers there to identify ways in which their situation can be improved. Modifications for inclusion in this Manual include simplifying the background information and removing terminology specific to the Solomon Islands.

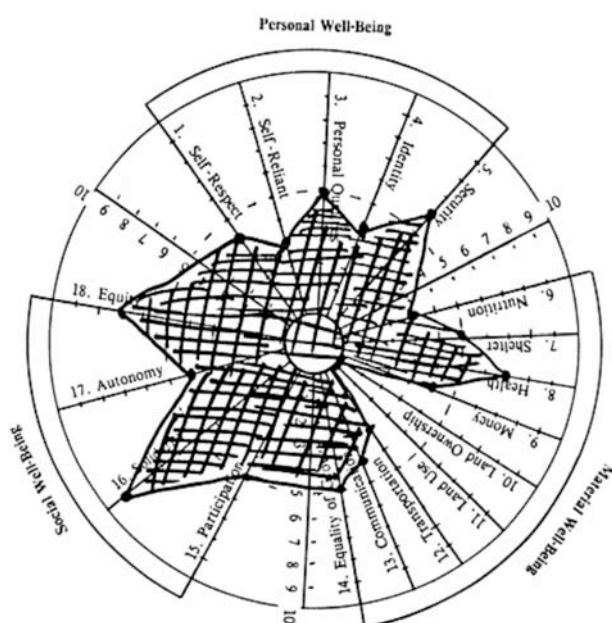
Used with the permission of John Roughan and the Solomon Islands Development Trust.

- Society needs human development (steady satisfaction of the body, mind and spirit) and social development (man-made environment that should go with human development) if the society is going to be strong politically.

If one or more parts are not growing, then the political life of that community is poor.

Development Wheel Pattern

Use the Development Wheel on the following page as is for individual scoring. Enlarge the wheel to poster size for large group use. The Wheel below has been filled in (and then reduced in size) as an example.⁶⁹



Notes on the Development Wheel

A wheel figure is used to show that all three growth areas must come at the same time. A standard development answer for Third World nations is that material growth must come first before a nation (or a village, or a person) can have the other two.

Our answer requires all three. If all three do not grow well together, then there really isn't any

⁶⁹ [The major dip in this example comes from dissatisfaction with land ownership and land use. It is likely that the villager completing this wheel is landless and is unhappy with land use. This correlated with autonomy result, and may be seen as a cause for the low nutrition index.

Question for the group include "What can/should be done to improve this villager's situation and/or perceptions?" LZ 2008]

progress. A Development Wheel which has sharp points reflects a development situation which will not develop very far.

The Development Wheel picture helps village people visualize the meaning of having a high score in one area while having a low score in another area.

At the end of the exercise, when the trainer shows the completed Development Wheel it become clear to village people where they are weak. It shows the necessity of going for all three growths at the same time to have a smoother time. The troughs between the sharp edges show where more work needs to be done.

Personal Growth:

This section of the wheel measures how an individual feels about him/herself. It looks at those special feelings inside a person that enrich a person's life, not the things that he/she owns.

- Self-Respect: confidence in one's own ideas and abilities; having dignity; not afraid of what others say. [Opposite: submissive, fearful]
- Self-Reliant: possibility of following one's ideas and plans without outside help; not relying on others for one's living. [Opposite: dependent upon others for food, housing and living]
- Personal Qualities: resourceful, humane, intelligent, strong character. [Opposite: poor self-picture]
- Identity: person is not only an individual but also relates well to others in society. [Opposite: replaceable; not sure of oneself, distant from others in community]
- Security: the life and affairs of person are at peace; little anxiety, free of fear; life is usually certain, sure and stable; little or no violence in individual's life. [Opposite: fear is usual, patterns of violence]

Material Growth:

This section is about having power; about the things a person needs to be more, not just what a person wants. It goes beyond simply having more money to look at all sections of material growth.

- Nutrition: daily balanced eating (root crops, vegetables and some kind of seafood or meat product). [Opposite: too little food, or just one kind of food, e.g.: potato]
- Shelter: good house built off the ground and comfortable during rain and cool weather. [Opposite: house full of holes, too small]
- Health: free of most serious diseases; village, family and person have a pattern of life with few diseases. [Opposite: much sickness, e.g.: malaria, worms, diarrhea]
- Money: easy to earn money to buy things which are not made in the area. [Opposite: must leave area to work for money]
- Land Ownership: most village persons own land for growing food, planting cash crops and getting housing materials. [Opposite: land owned far from village or by only one person]
- Land Use: garden land and housing material easily available to all in village. [Opposite: land owners make it hard for others to use land for gardens]
- Transportation: quick and inexpensive transportation available when required, e.g.: for hospital trips, to market or to work. [Opposite: very difficult or expensive to travel to necessary places]
- Communication: village persons have reliable information on decisions which affect life; formal or informal education, literacy, reliable mass media. [Opposite: most information by way of rumour]
- Equality of Growth: material growth items come almost equally to all people in the village. [Opposite: only a few in the village are growing materially]

Societal Growth:

This section looks at the growth between persons; those things which help society to grow. The first two parts are about individuals and families, this part is more about the structure of society.

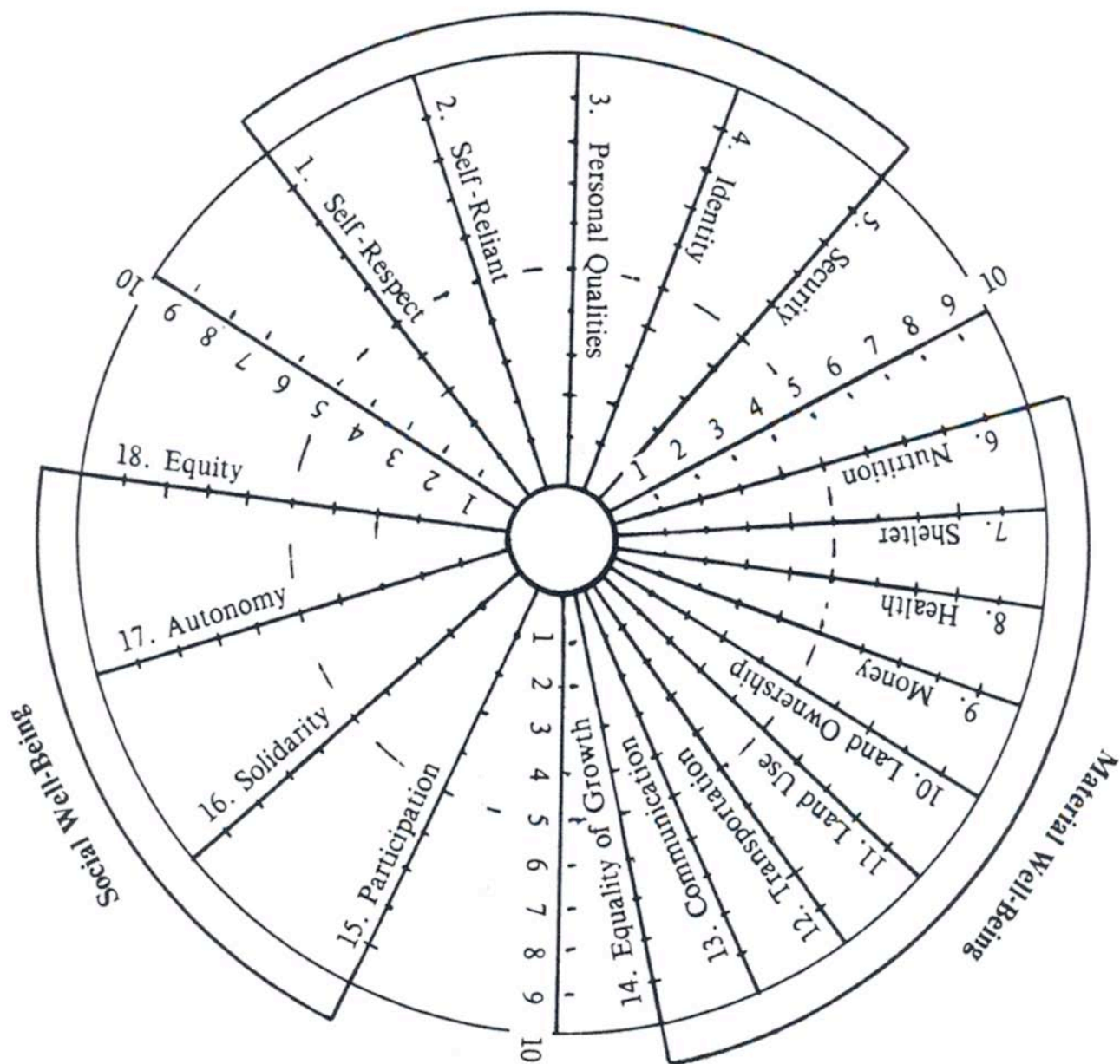
- Participation: most village people cooperate with others on almost equal terms; dialogue (discussion) is normal on most community

issues. [Opposite: leaders do not seek the opinions of others in the community]

- Solidarity: village people share major values of the society, and act from them; more sharing than taking; sharing of food and labour common. [Opposite: money is far more important than human relationships]
- Autonomy: community has strength to withstand power struggles from outside the community; community understands and solves its own problems. [Opposite: outside rules, values and ways more important than community's ways]
- Equity: all parts of the community benefit almost equally from an interaction, e.g.: buyer and seller in a store; with structural equity each part of the community is treated equally, e.g.: woman feeds pigs and gets most of the money for them when they are sold. [Opposite: community members take advantage of others]



Personal Well-Being



Village

Date

No. of Participants

Village Quality of Life Index (VQLI)

The VQLI⁷⁰ is used to help a village move along the road to being and acting like a community.

Typically village people are more concerned with family affairs than with public affairs. They become more like a community when they are also concerned with public affairs.

The existence of a community is evident when public areas of the village are well cared for. These would include the drains, rubbish removal, Health Committees, and public meeting places.

Purpose

The goal of the exercise is to have village people realize that their lives are in their own hands. It leads to an understanding that bettering village conditions depends far more on their own efforts (village organization, communal power and community work) than what others (government at all levels, aid agencies) could do for them.

Its immediate purpose is to help answer the question "*What should we do to begin development*".

Group Size

Divide the members of an individual village into discussion groups with a maximum size of perhaps 20 people. Dividing the participants into two or more smaller groups will aid their discussion. The groups can be combined later in the exercise to look at the overall results.

Time Required

One and one-half hours approximately.

Setting

Physical setting suitable for small group discussions and later combination into a single large group.

⁷⁰ These notes are quite specific to the Solomon Islands and would need to be modified before use in your community. For example, the notes give a high value to a house raised off the ground. This is very important in the Solomon Islands because of the heavy rainfall. Another style of housing would be very much more important in other places.

Used with the permission of John Roughan and the Solomon Islands Development Trust.

Materials

VQLI Recording Form and writing tool for each participant. Chalkboard or other suitable means of displaying the group result.

Process

- Divide the village into small groups and distribute the individual blank VQLI recording forms.
- Explain each part of the VQLI point-by-point and have every individual give a score on each point. The notes which accompany the VQLI recording form explain the meaning of each section.

An individual should give a high score when he/she feels that the item is available when required. For example, a rich villager who has access to a tractor might rank the availability of transportation high. An unemployed labourer who does not have access to any kind of transportation would rank the item low.

- Collect the scores on each item. Add the scores on each item together and divide by the number of participants.
- When all groups are finished, the items scores from each group are put together and divided by the number of groups. This final result is the village score. Once again, the score means nothing by itself. It should be used to help to the village people to understand how they can have a better life.
- Discussion of the items and the results can be done at any step in the process. It should be emphasized however, that the score is a compilation of all the scores given by all the villagers. Every villager should be able to score each item as he/she personally feels about the item. Do not let any member of the village intimidate other members about their scores. If necessary, collect the scores and compile the results without revealing any individual's score.

Possible Learnings

- The VQLI can be seen as a tool for working on development projects. One village might set one priority based on information from

the index. Another village with different problems might set another priority based upon its problems.

- A community is a group of people living and working together as one to achieve some common goal(s).

The VQLI does not prove that one village is better than another. It directs village people to study their village through a new set of glasses (values). It suggests that a clean, well-kept village is not only a sign of a healthy (developed) village, but more importantly it shows that the village is a community.

Variations

The VQLI is merely a beginning. Villagers could take this beginning and add their own sections, ending up with completely different scores.

The VQLI could be used regularly, say every six months, as an evaluation tool to see how well the community is doing.

The score by itself is a useless number. What would be important is the process that the community uses when it conducts a regular evaluation, and the changes resulting from the regular evaluation.

A village that was working well together could use a very simple modification of the process for gathering information. The process above calls for a blank VQLI Recording Form for every individual. These individual forms could be replaced by a group leader who obtains scores from every group member orally.

The VQLI Recording Form Notes

These notes explain the meaning of each section of the VQLI form.

An individual should give a high score when he/she feels that the item is available when required. For example, a rich villager who has access to a tractor might rank the availability of transportation high. An unemployed labourer who does not have access to any kind of transportation would rank the item low.

It should be emphasized that the final VQLI is a pooling of the scores of every member of the village.

Individuals, or groups within the village, might have very different VQLIs.

Adult Well-Being: Village Level

- **Drains:** [Maximum Score = 10]
A system of drains (not just one drain, but a number of drains coming together and serving the whole village) to keep a dry area around village homes. These must be regularly cleaned and repaired.
- **Rubbish Removal:** [Maximum Score = 10]
Piles of rubbish such as food peelings, coconut husks, house dirt and food scraps are places where flies, roaches, rats and other pests live. To cut down on these pests, rubbish must be burned, buried or thrown away far from the village.
- **Sanitation:** [Maximum Score = 15]
Human waste, if not taken care of carefully, is a way of spreading disease. Diseases such as diarrhea and dysentery are all spread in a village by poor sanitation. This waste can be taken care of by burying it in deep pits, by sea latrines, septic tanks and similar solutions. Unplanned and casual use of fields, bushes or water edges is a poor way of getting rid of human waste.
- **Water Supply:** [Maximum Score = 15]
Abundant good quality water is an essential part of staying healthy. Piped water seems to be the best way.
- **Trees and Bush Line:** [Maximum Score = 10]
A village should have a few shade trees. The jungle or bush line (trees and bushes) should

be cleared far enough away from the village to prevent mosquitoes and rats from easily entering the village.

- **Animals:** [Maximum Score = 05]

Certain animals are useful in the village. Cats catch rats and dogs are useful for hunting and guarding the village. The numbers of animals, especially dogs, must be controlled. Other animals such as pigs should be penned up always; chickens and ducks should be penned up during the night and prevented from entering gardens and crops where they would cause damage.

Adult Well-Being: Family Level

- **Housing:** [Maximum Score = 15]

Homes built off the ground and comfortable during rainy and cool weather are necessary to good health. Ground level homes are more difficult to keep clean. Homes big enough for the whole family, strong and in good repair (no leaks or holes) should be scored near 15.

- **Kitchen:** [Maximum Score = 10]

Open fires lose most of their heat. Open fires also hurt the eyes when they smoke. A simple stove with a flue (stove pipe to take away the smoke) should be in every kitchen. Food should be stored away safe from roaches, flies and other bugs. Each kitchen should have three to four different sized cook pots. There should be eating utensils (plates, cups and spoons) for most adults in the family.

- **Personal Goods:** [Maximum Score = 10]

Each adult should have at least the following clothing: 2 sets for garden work, 2 sets for ordinary village work, and 1 set for special times.⁷¹

Each one should have their own sleeping mat, pillow and covering. Soap, a bucket and clothes line should be available for cleaning the clothes. A box or case should be

⁷¹ This section provides a good example of where to make changes to suit your own conditions. Many villages would want to modify this to suit local laundry customs. Standards for older children (not yet adults) might also be desired. Small children are included in the next section.

available to keep clothes clean and free from bugs.

Child Well-Being: Village Level

- **Health Committee/Group:** [Maximum Score = 15]

Some women, organized into a committee, should be responsible for health in a village. Infant sickness are deadly serious for small children. These sicknesses include diarrhoea, malaria and dysentery. They spread very easily within the village. A village health committee could help the families prevent these diseases.

- **Health Education:** [Maximum Score = 15]

The village health committee might hold two to three health courses or classes each year to help train the mothers. Some sicknesses need immediate help. Diarrhoea, for example, makes a child lose much liquid. The mother must help the child quickly to regain the lost liquids. Often the mother does not know what to do. A village health committee could help the families know what to do to treat these sicknesses.

- **Transportation:** [Maximum Score = 15]

The community should have some type of transportation (bicycle, outboards, canoe, truck or tractor) available to use when medical attention is needed immediately.

- **Medical Box:** [Maximum Score = 05]

First aid materials should be available for families that run out of their own. These materials might include oral rehydration (ORT) salts, bandages, antiseptics and aspirin. The health committee could be responsible for these first aid materials.

- **Health Aide:** [Maximum Score = 10]

One person from the village can be given special training in preventive methods. This would include early recognition and treatment of common ailments. The aide would work under the direction of the Health Committee.

Child Well-Being: Family Level

- **Infants:** The first twelve months of a child's life are very difficult. There are many dangers of serious sickness and accidents.

Parents must make an extra effort to guard the infants. They must often also buy new things for the infant.

The following items should be scored individually:

- Mosquito net for infants [Maximum Score = 05]
- First aid box with bandages, antiseptics, ORT salts, etc. [Maximum Score = 05]
- beds off the ground, sheet or other cover [Maximum Score = 05]
- Clothing sufficient for any type of weather [Maximum Score = 05]
- Plate, cup and spoon for each small child [Maximum Score = 05]
- Torch and/or kerosene lantern for use in case of accidents or emergencies at night [Maximum Score = 05]
- Class/Study: [Maximum Score = 05]

Nursing mothers and newly-married women should go to one or two health classes every year. Many of the most serious children's sicknesses, if treated quickly, will go away quickly.

The health classes should teach these women to become aware of the early signs of serious sickness. The classes should teach the ways of curing a child quickly. The health committee could run these health classes.

Political and Economic Well-Being: Village Level

Organization: Starting public works such as building drains and removing rubbish usually requires some kind of group. This group may be called a Village Committee, a council or an organization. This group is needed to start the work and to see that the work is completed. The group can also check to see how well or how poorly the work has been done.

- Meeting Place: [Maximum Score = 15]
A sign that the village is growing towards community is having a special meeting place for all adults in the village. This meeting place is where the Village Committee meets to plan and evaluate its work. Women's groups, youth clubs and the Health

Committee can also meet here for their work. The Meeting Place is often a special building or room constructed by the village.

- Budget: [Maximum Score = 10]
An important sign of a good Village Committee is the availability of MONEY for the Committee to use. For example, a Village Committee should have enough money to pay for the expenses of people who help the Committee.
Village labour is often donated, however a person who comes from outside to teach adult classes might need travel costs paid.
- Education: [Maximum Score = 15]
The Village Committee should help the villagers to understand the world and how it affects their lives. The Committee might organize literacy classes, development conferences and other special courses.
- Tools: [Maximum Score = 10]
Building drains and similar village-level activities often need special tools. These tools may be too expensive for village families to buy. Village Committees often purchase tools such as picks, shovels and digging bars. The village might also build a special house for visitors to use when they come to visit, teach or work with village people.

Political and Economic Well-Being: Family Level

- Personal Tools: [Maximum Score = 15]
The village people should be as self-reliant in food and housing as possible. Each family should have personal garden tools (bush knife, axes), home building tools (hammer, saw, plane, chisel) and fishing and hunting gear.⁷²

⁷² This is another good example of the need to change exercises to fit local conditions. The list here is for a fairly prosperous rural village. The tools required for an urban family would be very different. The tools required in other rural villages would be similar but different. For example, a wheat growing area would have family grinding stones but no fishing or hunting gear.

- Family Garden: [Maximum Score = 20]
A village should be self-reliant in food. Score high if most food comes from one's own garden rather than a market.
- Chickens/Pigs/Ducks: [Maximum Score = 15]
Each family should have a kitchen pig in a pen behind the house. Feed the pig with foods scraps. There should be many chickens and ducks in the village. These chickens and ducks should be used by the villagers for eggs and meat.⁷³



Revising this list would be a good community development activity in itself. Villagers might learn as much from making their own VQLI index as they would in completing the VQLI form. The exercise is never an end in itself. The purpose is to get village people to learn more about their community and to make improvements to community life.

⁷³ This item and the previous one on the family garden should only be scored high if the produce, eggs and meat are used by the village families who own the garden or animals.

Score these two items lower if the family garden and animals are used for earning cash income.

VQLI Recording Form

Village:.....Date:.....

Village Level		ADULT Well-Being Family Level		Total
Drains	(10)...	Housing	(15)...	
Rubbish Removal	(10)...	Off Ground Cleaned Daily No Holes		
Sanitation	(15)...	Kitchen	(10)...	
Water Supply	(15)...	Stove, Food Safe Cook Pots Eating Things		
Bush Line	(10)...	Personal Goods	(10)...	
Animals	(5)...	Clothing, Bed Cleaning Material Box/Case		
Sub-Totals	(65)...	+ >>> >>> >>>	(35)...	=

Village Level		CHILD Well-Being Family Level		Total
Health Committee	(15)...	Mosquito Net	(5)...	
Health Education	(15)...	First Aid Box	(5)...	
Transportation	(15)...	Bedding	(5)...	
Medical Box	(5)...	Clothing	(5)...	
Health Aide	(10)	Plates	(5)...	
		Torch/Lamp Class/Study	(5)...	
Sub-Totals	(60)...	+ >>> >>> >>>	(40)...	=

Village Level		POLITICAL AND ECONOMIC Well-Being Family Level		Total
Meeting Place	(15)...	Personal Tools	(15)...	
Budget	(10)...	For Garden, House Hunting & Fishing		
Education	(15)...	Garden	(20)...	
Tools	(10)...	Chickens, Pigs or Ducks	(15)...	
Sub-Totals	(50)...	+ >>> >>> >>>	(50)...	=

Divide total (Maximum = 300) by 3 TOTAL (100)

Write any comments or explanations on the back side of this form.

References

This list of references will direct you to several sources of exercises, the theory of using learning exercises, techniques useful for the making of exercises, and experiences with these exercises.⁷⁴

Abbatt, Fred and Rosemary McMahon. **Teaching Health Care Workers: A Practical Guide**. London: Macmillan Education Ltd., 1985.

Ahmed, Manzoor. **Within Human Reach: A Future for Africa's Children**. New York: UNICEF, 1985.

Gray, Cheryl Williamson. **Guidelines for Training Community Health Workers in Nutrition**. Geneva: WHO Offset Publications, 59, 1981.

Harnar, Ruth and Anne Cummins. **Teaching Village Health Workers: A Guide to the Process**. New Delhi: Voluntary Health Association of India, 1978. A kit of materials which includes text, curriculum plans and sample training aids.

Hope, A. and S. Timmel. **Training for Transformation: A Handbook for Community Workers**. Gweru, Zimbabwe: Mambo Press, 3 Vols., 1985.

Kagimba, Jesse. **Continuing Education for Health Workers**. Nairobi: AMREF, 1983.

Klouda, Tony. **Primary Health Care. . . So Who Cares?** Lilongwe, Malawi: Private Hospital Association of Malawi, 1985.

McBean, George, et al. **Illustrations for Development**. Nairobi, Kenya: Afrolit Society, 1980. A compilation of research and practical experiences for preparing illustrations. Can be used as a training manual. Emphasizes techniques which are suitable for low-cost reproduction.

Mill, Cyril R. **Activities for Trainers: 50 Useful Designs**. San Diego, CA: University Associates, 1980. One person's "filing cabinet: a set of exercises selected and refined to meet a variety of training needs".

Morley, David, Jon Rohde and Glen Williams. **Practising Health for All**. Oxford: Oxford Medical Publishers, 1983.

Pfeiffer, J. William and John E. Jones et al (editors). **The Annual Handbook for Group Facilitators (1972-), A Handbook of Structured Experiences for Human Relations Training (Volumes 1-), and Reference Guide to Handbooks and Annuals**. San Diego, CA: University Associates. Over 300 exercises and related theory.

Pfeiffer, J. William and John E. Jones, editors. **Structured Experience Kit**. San Diego, CA: University Associates, 1986. Contains 436 different structured exercises reprinted from University Associates' publications.

Shaffer, Roy. **Beyond the Dispensary**. Nairobi: AMREF, (1984).

Storms, Doris M. **Training and Working with Auxiliary Health Workers: Lessons from Developing Countries**. Washington: American Public Health Association, 1982.

various. **The State of the World's Children (Annual Report of the UNICEF Executive Director)**. New York: UNICEF, annual.

Werner, David and Bill Bower. **Helping Health Workers Learn**. Palo Alto, CA: Hesperian Foundation, 1982. A book of methods, aids, and ideas for instructors at the village level.

World Health Organization. **Appropriate Technology for Health: Mother's and Children's Care**. Geneva: World Health Organization, n.d.

World Health Organization. **Development of Indicators for Monitoring Progress Towards Health For All by the Year 2000**. Geneva: World Health Organization, 1981.

World Health Organization. **Traditional Birth Attendants: A Field Guide to their Training, Evaluation and Articulation with Health Services**. Geneva: WHO Offset Publications, 44, 1979.

World Health Organization (editors). **World Health: The Magazine of the World Health**. Geneva: World Health Organization, periodical 1975-.

⁷⁴ [Please note that this is basically the original 1980s reference list and many of the items may be out-of-print or otherwise no longer available.

On-line book stores can likely supply some of the titles. if more recent materials cannot be found with a simple web search or a visit to your local library. LZ 2008]