

Teaching for better learning

A guide for
teachers of
primary health
care staff

SECOND EDITION

F. R. Abbatt



**World Health Organization
Geneva**



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Foreword

The teachers of community health workers in developing countries have the important task of training staff to deliver primary health care. They work in difficult conditions, often without sources of reference materials and with little or no experience of teaching methods. This manual is intended to help them in their work.

It is the result of a long process of development and testing, beginning in 1979, when WHO established a project to review the educational needs of teachers of middle-level health staff in a number of countries. As a result, a library of some 45 selected books was assembled, and distributed to about 1000 training schools for health workers in the English-speaking developing world, to serve as a source of reference material for teachers. In particular, this library was to include a simply written, comprehensive manual on teaching methods which would help to ensure that teachers could make the best use of this new resource. A draft manual was prepared by Dr Abbatt and was extensively field-tested before the first edition of *Teaching for better learning* was issued in 1980. Funds for the project were generously provided by the Government of the United Kingdom through its Overseas Development Administration.

Since the libraries were distributed, WHO has intensified its assistance to countries through the interregional Health Learning Materials (HLM) Programme. Its aims are to work with individual countries to help them to design, test and produce their own teaching, learning and promotional materials to meet priority needs, and to promote the sharing of resources through intercountry networking. By the end of 1991, more than 30 developing countries had established their own national HLM projects, and four intercountry networks had been set up to ensure the exchange of information, materials, expertise and training facilities between individual countries.

During the past ten years, this manual has been widely used by teachers all over the world. It has been translated into many languages. The first edition had a tear-out questionnaire, inviting comments and suggestions from readers, and all those received have been taken into account in preparing this second edition.

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CHAPTER 1

Introduction

Before I started to write this manual I talked to teachers about the problems they faced. They told me about the large numbers of students in each class, the problems of crowding in schools, the poor facilities, and the difficulties of providing food, writing materials and textbooks for students. They also discussed the difficulties caused by lack of time to prepare lessons and examinations. All these difficulties are real and serious. This book cannot put right the cause of these problems by giving the teachers more time or money to spend on supplies, but it will try to show how teachers can use the available resources most effectively.

The teachers also told me about other problems they faced:

“The curriculum we are given is very difficult to interpret. We don’t know how much detail to teach.”

“The examinations encourage the students to learn facts rather than how to apply the facts.”

“The students are good at book learning, but they are weak when they face practical situations.”

“The courses are at too high a level.”

“The teaching doesn’t really train the students how to do the job.”

The main aims of this manual are to help teachers to solve these problems. In particular, it will explain how to do four things which are very important in teaching. These are:

- Deciding exactly what the students should learn.
- Choosing and using suitable teaching methods.
- Testing whether students can do the work for which they are being trained.
- Preparing teaching materials and manuals.

1.1 Who is this manual written for?

This manual is written for teachers of primary health care staff. It may be helpful to health care staff who have recently been appointed as teachers. It may also help teachers who have more experience of working with students but who want to learn more about their profession.

The manual will also help people who are involved in planning curricula for health workers or in planning systems of health care. It may also be used by teachers or agencies who are preparing manuals for health workers.

A fourth group who might find the book helpful are students in medical schools and training centres who may later be responsible for training members of the health care team.

1.2 Why has this manual been written?

Teaching is a very skilled job. Yet many teachers have little or no training in how to teach. As a result, they tend to copy the teaching methods which they experienced during their own training. In many cases, they have little opportunity to learn newer, more effective teaching methods.

This book has been written to explain some of the basic points about teaching. It is designed to give teachers information about the variety of teaching methods available to them. Teaching is not simply a question of telling students what they need to learn to do a job. It also includes deciding what students should learn, how they should learn it, and finding out how well they have learned it.

This book has been written in non-technical language as far as possible so that it can be readily understood. It aims to solve some of the problems which teachers face when working with trainee health workers. It is also intended to help those people who are involved in planning courses and manuals for health workers.

1.3 How to use this manual

This manual can be used in either of two ways. It can be used for reference and additional reading—for example, during an educa-

tional workshop. Participants may also be asked to do some of the exercises in the book and to discuss the work with other people at the workshop.

The other way of using the manual is to read through it. If you do this, please work on the exercises when you come to them. Write down your answers, either in the space provided or on a separate piece of paper. Try to write down your own ideas **before** you look at the comments in the manual. In this way you will get much more benefit from the manual, although it will take more time and will need more effort.

A final point. If you read the manual, try to read through it from start to finish rather than looking at the chapters in any other order. This is because many of the ideas in Parts 2, 3 and 4 depend on the explanations given in Part 1. If you prefer to read the book in a different order, the contents page will guide you. If you find that any of the more technical words are unfamiliar, there is a section at the end which defines some of the educational terms.

1.4 How the manual has been written

The manual has been developed rather than written. Early drafts were reviewed at a workshop attended by consultants and representatives of four WHO regions and WHO headquarters. Further draft versions were prepared and field-tested in Kenya and Papua New Guinea. Copies were circulated to many countries and over 100 teachers gave advice on ways of improving these early versions. As a result of this process of development and testing, the first edition was prepared. It included a questionnaire to readers, asking them for their comments on ways in which the book could be improved.

Many comments were received by the author, and were all taken into account during the preparation of the second edition. The advice of readers was extremely important in the re-writing process. It is clearly recognized that this edition is still far from perfect and so continuing advice from teachers and other readers would be most welcome. The author and WHO welcome any comments. Suggestions for specific ways in which this book could be made more helpful to teachers would be especially appreciated.

1.5 A summary of the manual

The manual is arranged in four parts.

Part 1 deals with the general problem of what students should learn. This is an important issue because complaints are often made that students may know the facts but are not good at applying them. The equipment or drugs which they are trained to use may not be available. In the same way, the skills which they learn may not be related to the real problems of the rural areas.

In Chapter 2 it is suggested that students should be trained to do a specific job rather than to learn a number of academic disciplines. To do this, the job must be defined and related to the health needs of the community. This process is explained in Chapter 3. Chapter 4 looks at the job in more detail so that the teachers can decide exactly what needs to be learned. The technique described for looking at the job is called *task analysis*.

Part 2 will help you to choose the most suitable teaching methods. Chapter 6 gives a summary of the general ways in which the teacher can help students to learn. Chapters 7, 8 and 9 concentrate on the specific problems of teaching attitudes, skills, and knowledge.

Part 3 will help you to test your students. This section explains the value of testing in helping students to learn and in helping teachers to improve their work. Various assessment methods are explained in Chapter 12, with examples which can be adapted and used with a wide range of students.

Part 4 describes the ways in which teachers can prepare teaching materials and manuals which will help their students to learn. The manuals may also be used for reference by the health workers after they have completed their courses. It is important that teachers can help their students in this way because there are very few manuals available for health workers, and many of those which are available are not appropriate for local conditions.

PART **1**

What should your students learn?

CHAPTER 2

An overview of the problem

- The purpose of a training programme is to teach students to do a job.
- Teachers should concentrate on the essential facts, skills and attitudes. It is neither possible nor desirable to teach everything.
- Teachers should base their teaching on the health problems of the community and on the work their students will be expected to do.
- Teachers should plan courses and lessons using situation analysis and task analysis.

A story

A community nurse completed her training and passed all the exams at the end of the course. She was given two weeks leave before starting work, so she went back to her village to spend some time with her family. It was a long journey because the family lived in a remote village, but everybody was pleased to see her again. Her mother was specially pleased and very proud that her daughter had done so well.

After the first greetings, the mother said *"It is good that you are back because your baby cousin is ill. The baby has diarrhoea and doesn't look well to me. Do you think that you could help?"* The nurse went to see the baby and realized that it was very dehydrated. She thought the baby should go to a health centre, but the journey was too far. So she thought about what she had been taught. She could remember details about the anatomy of the gastrointestinal tract and the balance of electrolytes. She also remembered that a mixture of salt and sugar in water would help to rehydrate the baby, but she couldn't remember what amounts to use.

She was very worried that the amounts would be wrong. She didn't know whether to send for help or to guess the amounts. By this time, the baby was very ill. She made up the solution and gave it to the baby. The solution contained the wrong proportions of salt and sugar. The baby died.

Moral

Some courses for health workers may be ineffective or even harmful because they spend a lot of time teaching facts that are not important. The courses may fail to spend enough time teaching the skills that are really needed.

2.1 Some basic principles

The story shows what can happen when a course for training health care staff is unsuccessful. But what makes a course successful? The following are basic principles.

Basic principles

1. The main aim of a course should be to train students to do a job.
2. The job determines what the students should learn.
3. Only those facts, skills and attitudes that are relevant to the job should be taught and learned. Those that are not essential should not be taught.

These may seem very obvious points, but they do have important consequences, which are briefly explained in the next few paragraphs.

2.2 The main aim of a course should be to train students to do a job

This is the basic principle on which this book is based. It means that if students can do their job competently at the end of a course then it has been successful. If they cannot do the work they have been trained for, then the course has failed.

This means that the teachers must know a lot about the work which the students will be doing. The teachers should watch experienced health staff doing their work. They should ask them about the problems of providing health care. The whole course should be closely linked to the way in which health care is provided. Chapter 3 explains how this may be done.

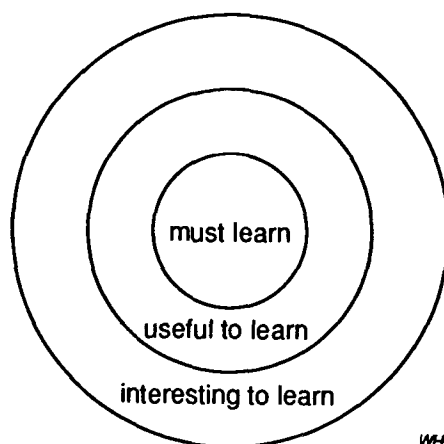
If this principle is followed, students will be able to do a job at the end of the course, rather than just know about it.

Some people feel that this aim of “*training to do a job*” is too limited. They feel that there should be much more to education than this. While there is some truth in this point of view, the wider goals should be secondary. The first and most important goal is that the students should be able to do their work in an intelligent, understanding and competent way. This is the whole emphasis of this book.

For example, a broadly educated health worker who infects patients because he or she does not follow aseptic techniques is a danger to the community. So it is important that students get the basic competence first. When this has been achieved, other aspects may be added to the training if time permits.

2.3 The job determines what the students should learn

In all courses, choices have to be made about what facts, skills and attitudes students should learn. Choices also have to be made about what details should be left out of the course. It is simply not possible to learn everything that is known about medical sciences and health care. So some selection is essential.



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“*Must learn*” is the target. These are the facts and skills that all students need to learn in order to be competent in their work. Teachers should stress the importance of these facts and skills when

they are helping students to learn. These facts and skills should be tested in examinations.

There are very many other facts and skills that are “*useful to learn*”, but they do not need the same emphasis. Nor should they be tested as thoroughly in examinations.

There are also very many other facts and skills that are “*interesting to learn*”. Of course, teachers should not prevent students learning anything. In fact they should show students how to learn from books, conversations and their own and other people’s experience of the world. However, **the teacher’s main responsibility is to decide what students must learn and to make sure that they learn it.**

Facts and skills that must be taught are those that are needed to do the job competently and thoughtfully. These are discussed in Chapters 3 and 4.

2.4 Learning objectives

An important idea which should be introduced now is the concept of “*learning objectives*”.

A learning objective is a statement that describes what the student should know, feel or be able to do at the end of the course.

This definition includes some important points. First of all, the learning objectives concern the student and not the teacher. Second, the learning objectives describe the state of the student at the end of the course. The learning objectives therefore do not describe what the teacher will teach or the experiences the student will have during the course. **The learning objectives are therefore a statement of the targets which the course is trying to achieve.**

Some writers also use the phrases “*learning goals*” or “*aims*”. Some writers make distinctions between “*specific*” and “*general*” objectives. The distinctions between these terms are not very clear and are probably not important.

2.5 Making use of learning objectives

The crucial importance of learning objectives is that they define what the students must learn.

They can do this at a very general level, e.g. “*the learning objective*

of this course is that the students should be able to do the work of a maternal and child health (MCH) assistant”.

Or at a very specific level, e.g. *“the students should know the quantities of each ingredient in home-made oral rehydration solution”.*

So the learning objectives can refer to a whole course or to just a few minutes of a lesson—or anything in between.

In all these situations, the learning objectives are **vital** because they control (or should control) the whole process of teaching and learning. The learning objectives determine:

- **what** is included in a lesson or course,
- **how** the teaching is done, and
- **how** the students are tested.

For example, if the learning objective is that *“the students will be able to diagnose anaemia from clinical signs”*, then:

- the students must be taught about the clinical signs of anaemia, how to observe them, and how to distinguish between people who are anaemic and those who are not. For this objective there would be no point in teaching students about the structure of haemoglobin or how to test for anaemia using laboratory methods.
- the students must be able to practise their skills of clinical diagnosis on some patients with anaemia and some who are not anaemic. There will be little need for lecturing.
- each student should examine some patients and decide whether they are anaemic or not. The teacher will then be able to assess whether the students have achieved the learning objective. The students should not be asked to write essays on anaemia, because this is not related to the learning objective.

