

Examinations and Evaluation as a Learning Process

CHAPTER 9

TESTS AND EXAMS

The purpose of tests and exams needs to be carefully reconsidered.

In the typical school, exams provide a way for the teacher to judge (to 'pass' or 'fail') the students. Yet students are given little opportunity to criticize the teacher. The teacher is on top, the students on the bottom—especially at exam time!

Also, the use of number or letter grades for exams encourages competition rather than cooperation. Students who get high marks are usually praised and moved ahead. Those who fail are punished or left behind.

In 'education for change', tests and exams serve a different purpose: to find out how effectively the instructors are teaching. The exams let everyone know what subjects have been covered well and which need more review, or a different approach.

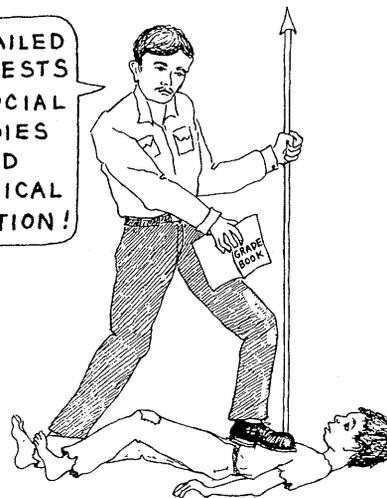
I SEE FROM THE TEST THAT SEVERAL OF YOU SEEM TO HAVE HAD DIFFICULTY UNDERSTANDING WHY THE GREEN REVOLUTION MADE THE RICH RICHER AND THE POOR POORER. I'LL HAVE TO EXPLAIN IT MORE CLEARLY.



MAYBE YOU COULD GIVE EXAMPLES THAT RELATE TO OUR OWN EXPERIENCE. KEEP TRYING. WE WANT TO UNDERSTAND IT!

In education for change, tests are a way of finding out how well both teachers and students are doing. They help teacher and student feel more equal.

YOU FAILED THE TESTS IN SOCIAL STUDIES AND PHYSICAL EDUCATION!



In education that resists change, tests and exams make it clearer than ever that the teacher has power over the student.

Also, in education for change it is the responsibility of the entire group—instructors and students—to make sure that those who learn slowly get the help they need. The quicker students become teaching assistants, helping to explain things to those who are slower. Then, if a slow learner does not do well on a test, the quick learner and the teacher share in the 'failure'. Praise is given when everybody does well.

This approach helps keep quick learners from getting bored, and slow learners from falling behind. The quick students learn not only the material studied, but how to teach it.



The Function of Tests and Exams in Two Different Approaches to Teaching Health Workers

Conventional Schooling

(Education that resists change)

- Tests and exams serve mainly to help teachers judge students.
- Tests may motivate students to study harder, but for faulty reasons—fear of failing exams rather than eagerness to understand and use what they are learning.
- A grading or pass-fail system is used that compares 'good students' with 'bad students'.
- Tests encourage **competition** between students (some come out on top, others on the bottom).
- Atmosphere of distrust. Teacher watches or 'polices' students during tests. Cooperation between students during tests is called 'cheating'.
- Strong emphasis on **memorizing**. Students usually are forbidden to use notes or open books during exams.
- Tests reward those students who learn to **repeat** like parrots.
- Strict time limit for tests. Slower students fail questions they do not have time to answer.
- Tests review only material and ideas already covered in class. **Nothing new**. So tests are usually boring.
- All test questions have a right or wrong answer, not open to question by the students.
- Teacher usually corrects the tests.



People-centered Learning

(Education for change)

- Tests and exams serve to let both instructor and students know how well the instructor is teaching.
- Tests motivate students by helping them find out what they need to learn in order to serve their people better.
- No grades. No pass or fail. If any student who wants to learn falls behind, this reflects the failure of the group, not the individual, because quick learners are expected to help teach slow learners.
- Tests encourage **cooperation and sharing** (everyone helps each other come through together).
- Atmosphere of trust. Teacher may leave room during tests. 'Cheating' makes little sense because the main purpose of tests is to help the instructor teach better and be sure that everyone understands the material. The teacher or other students may assist those who have trouble understanding the questions.
- Strong emphasis on **understanding**. Notes or books may be used during most exams. Since exams test how well students can apply their learning in real-life situations, the use of books and other available resources is encouraged.
- Test questions are designed to help the students **think**—not simply repeat.
- No strict time limit. Extra time is allowed after the test so slower readers can finish. Or they can take tests home to complete.
- Tests try to introduce **new ideas** and understanding, building on material covered in class and the experiences of the students. Focus is on lifelike problem solving. This can make tests fun!
- Some questions do not have clear right or wrong answers, but ask for students' opinions. These help them to recognize unsolved problems, or to examine their own attitudes.
- Students often correct each others' tests during a group discussion.

THE IMPORTANCE OF OPEN-BOOK EXAMS

There are good reasons to **encourage students to use their books and notes during exams:**

Open-book tests place value on looking things up when in doubt, rather than trying to rely purely on memory. In this way, classroom tests can help health workers develop a careful approach to looking for answers to problems in their communities.

When a health worker is attending a sick person, he may think he remembers all the signs and symptoms and the correct medication. But if he has the slightest doubt, it is safer to look things up. During training programs, we have often seen slower students answer test questions more correctly than quicker students. Why? Because they did not try to rely on their memories. They looked things up!



The best student and health worker is not the one who has the best memory. He is the one who takes the time to look things up.

Encouraging students to use their books during exams will help them to use their books openly with sick persons and their families. They will be less tempted to pretend they know it all. This results in fewer mistakes and better health education, and helps take some of the magic out of modern medicine.

TEST QUESTIONS THAT PREPARE STUDENTS FOR PROBLEM SOLVING IN THE COMMUNITY:

Yet another advantage to open-book exams is that they encourage teachers to think of more creative, problem-oriented questions. Questions that call for a good memory, but no thinking, become pointless if students can simply copy the answers from their books. So instructors have to think of questions that **test the students' ability to use what they have learned.**

TWO SORTS OF EXAM QUESTIONS

LESS APPROPRIATE:

What are the common signs of anemia?

MORE APPROPRIATE:

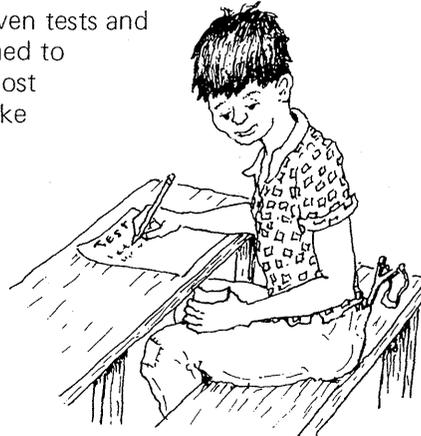
*A pregnant woman complains of weakness.
She breathes very hard when she walks uphill.
What might be her problem?
What other signs would you look for?
What questions would you ask?*

The second question tests the students' abilities both to apply their knowledge and to use their books. It takes them one step closer to being able to solve real problems they will meet as health workers.

HELPING STUDENTS UNDERSTAND THE NEW APPROACH TO TESTS AND EXAMS

From their previous school experience, most student health workers have very fixed ideas about tests and exams. Those who are most clever often insist on being given tests and grades. Those who are slower may be ashamed to admit their fear of exams. Those who are most honest or independent may even learn to take pride in 'beating the system'—by cheating!

At first, some students may object to the new approach to exams: open books, no policing, no strict time limit, no grades. The strongest objections are usually raised by the quicker students, who also are often the student opinion leaders. They are used to getting top grades and being praised and rewarded. It may take many 'consciousness-raising' discussions to help them realize that a new approach is needed—one that does not always favor the strong.



In an attempt to 'beat the system', those who are most honest often learn to cheat!

Some students, out of habit, may still try to cheat, even though cheating no longer serves an obvious purpose. Help them discover that, **instead of trying to 'beat the system' by cheating within it, it makes more sense to work together to change it!**

WHO PREPARES THE EXAMS—AND WHEN?

In some training programs, each instructor gives exams on the material he or she has covered. In others, joint or coordinated exams are given.

Project Piactla in Mexico gives a test each week, usually on Friday morning. The test combines and tries to interrelate the different subjects taught during the week. The test is designed to take about one hour, but a second hour of free time is allowed for those who need it.

Each week an instructor is chosen to organize and mimeograph the test. The other instructors prepare questions and give them to him by Thursday afternoon.

The instructors are asked not to wait until the last minute (or day) to prepare their test questions. They are encouraged to write them down **right after class**, when details and points needing reinforcing are fresh in their minds. To help ensure that this gets done, the students are involved in helping prepare their own tests. At the end of each class, **each student is asked to write one question to possibly appear on the Friday test.**

By helping to prepare their own test questions, the students feel more on an equal level with their instructors. They also get a good exercise in thinking about the importance and usefulness of what they study.

From the test questions written by the students, the instructors pick the best ones for the Friday test. They may improve the wording, or add questions of their own.

The instructor coordinating the exam tries to include some problem-solving questions that combine ideas from different classes. For example, if during the week the group has studied eye problems, skin problems, and child nutrition, a test question might be:



A mother brings a 3-year-old boy whose eyes look dull and dry, with little wrinkles. He also has dry, cracking skin on his cheeks, arms, and legs. What problems would you suspect? What advice would you give?

GUIDELINES FOR PREPARING APPROPRIATE TEST QUESTIONS

Try to ask questions that . . .

- **make people think**
- **present a problem-solving situation** similar to ones health workers may encounter in their villages
- **deal with priority needs**
- **are stated clearly and simply** (not confusingly)
- can be answered in relatively few words (especially important when some students are slow writers)
- **test and strengthen skills** rather than just testing memory
- cannot be answered by simply copying from the book
- do not simply review information already covered, but help health workers form new ideas or gain practical experience

WHAT STYLE OF TEST QUESTIONS TO USE

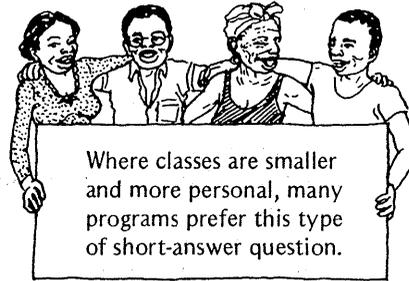
Test questions can be asked and answered in a number of ways:

<u>Type of question</u>	<u>Type of answer</u>	<u>Examples</u>
1 Open-ended Student writes the answer in his or her own words.	A Long written answer , or essay—in which the student may analyze or describe a problem, situation, or method.	<i>Describe in detail what you would do if a mother brought you her 2-year-old child, hot with fever, all wrapped up in a blanket?</i>
	B Brief written answer —one or more words, a sentence, or a short list.	<i>Mention 3 things you would do right away if a mother brought you a feverish child wrapped in a blanket.</i>
2 Closed Student picks the right answer from choices listed on the answer sheet.	A True or false —a statement is given, and the student identifies it as either right or wrong.	<i>A baby with high fever should be wrapped in a blanket so she will sweat.</i> <i>True or False</i>
	B Multiple choice —4 or 5 possible answers are given, and the student is asked to mark one of them.	<i>A child with high fever should . . .</i> <i>a) be cooled so fast that she shivers.</i> <i>b) be wrapped up so she does not get cold.</i> <i>c) eat nothing until the fever drops.</i> <i>d) be cooled by removing her clothing and placing wet cloths on her body.</i>

Each of these types of question has advantages and disadvantages. Which is most appropriate for your student group?

Open-ended questions (1A and 1B) usually require more thinking and organizing ability than questions that simply have the student pick the right answer. But they may be difficult for students with limited writing skills, especially if they call for longer, essay-type answers. The personal nature of the essay question also makes it more difficult to grade fairly (if grades are given).

Open-ended questions that require short answers (1B) are less difficult for slow or inexperienced writers. Yet they provide students with some practice in writing and expressing themselves. Also, because they take less time to answer, more questions can be asked and the test can cover more subject matter. This kind of question is often easier for students to understand than multiple choice questions, which take time to get used to and may prove confusing.



True or False questions (2A) are usually easy for students to understand. But they invite guessing at answers—which is not the best approach to solving health problems! True or False questions must be very carefully designed if they are to test students' problem-solving abilities, and not just their memories or guessing skills.

Multiple choice questions (2B), if well designed, are better for testing people's problem-solving and thinking skills. They do not allow as much guessing as True or False questions. But because each question lists 4 or 5 choices, they put slow readers at a disadvantage.

For instructors, also, there are both advantages and disadvantages. Multiple choice tests can be corrected easily and quickly by anyone with a 'master sheet', so they are especially useful when you have a large group of students. However, good multiple choice questions take considerable skill and time to prepare. Also, the longer questions require more paper and stencils. (For sample questions and more ideas about preparing multiple choice tests, see *Primary Child Care, Book Two*, by Maurice King, available from TALC.)

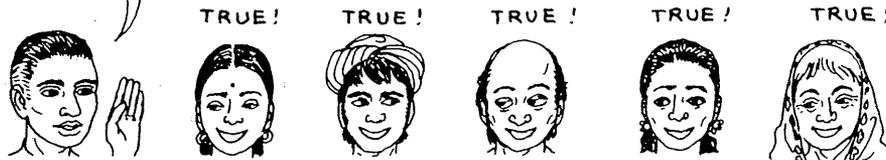
The style of question you choose will depend on several considerations, including the size of the group, who will be correcting the papers, and how much formal education the students have had.

Many small, community-based programs prefer questions requiring brief written answers. Large programs often prefer the closed-type questions that permit easy, objective grading and give a sense of statistical control.

In truth, some types of questions lend themselves to certain subjects more than others. For the sake of variety, you might try using a combination of the different styles. This can make a test more interesting. But take care that switching from one form of question to another does not confuse the students.

Trick questions. Life is full of surprises that make us stop and think. Tests can have surprises, too. Trick questions on tests (or in class) sometimes make students angry—but they are also fun! They trap students into looking at important things in new ways. For example:

YOU SHOULD NEVER GIVE A PERSON MEDICINE UNLESS YOU ARE ABSOLUTELY SURE WHAT HIS ILLNESS IS. TRUE OR FALSE?



NO! THE STATEMENT IS FALSE! TO BE ABSOLUTELY SURE IS TO CLOSE OUR MINDS TO POSSIBLE ERROR. A HEALTH WORKER SHOULD NEVER BE ABSOLUTELY SURE OF HER DIAGNOSIS. SHE SHOULD ALWAYS KEEP A CERTAIN AMOUNT OF DOUBT, AND BE OPEN TO ANY SIGN THAT SHE MIGHT BE MISTAKEN... REMEMBER OUR CLASS ON SCIENTIFIC METHOD?



THINGS THAT CANNOT BE MEASURED IN WRITTEN TESTS

Both instructors and students need to find out how well they are helping prepare each other to do their jobs better. Written tests provide some idea about what knowledge students have mastered.

However, many of the skills and attitudes needed for community work cannot be easily evaluated through written tests. These include:



- **Manual skills (skills using the hands)** such as giving an injection, cleaning a wound, or casting a cement platform for a latrine.
- **Communication skills** such as giving preventive advice in a consultation, leading nutrition classes for mothers, or working with children on CHILD-to-child activities.
- **Leadership and organizational skills** such as planning and getting people to work on a community garden or water system.
- **Thinking and problem-solving skills** needed to deal with unexpected difficulties. (For example, what do you do when a mother refuses to take her gravely ill child to the hospital? What do you do when a person asks you to inject a medicine prescribed by a doctor, and you know the medicine is not needed and may cause harm?)

- **Attitudes toward people in need.** (Does the student feel respect, kindness, and concern for sick persons, old persons, women, children, and very poor persons? Is he eager to share his knowledge, or does he like to make people think he has mysterious healing powers?)
- **Relating to others as equals.**

For evaluating these skills and attitudes, careful observation is more helpful than written tests. Instructors and students can observe one another when attending the sick, explaining things to mothers and children, or carrying out other activities. Then they can discuss their observations in the weekly evaluation meetings (see page 9-15). (When delicate or embarrassing issues arise, it is kinder to speak to the persons concerned in private.)

It is important that each health worker develop an attitude of self-criticism, as well as an ability to accept friendly criticism from others. These can be developed through evaluation sessions, private discussions, and awareness-raising dialogues (see Ch. 26). In the long run, the development of an open, questioning attitude can contribute more to a health worker's success than all his preventive and curative abilities put together.

Written tests may show what a student knows.
But far more important is how well he can use his knowledge.
The best tests of a health worker's learning are his actions in the community.

HE KNOWS BUT CANNOT DO.	HE CAN DO BUT DOES NOT KNOW.	HE KNOWS AND HE CAN DO.
		
<p>A health worker who knows a lot but cannot do much with what he knows, is ineffective.</p>	<p>A health worker who does things without knowing what he is doing, is dangerous.</p>	<p>To be effective, a health worker must be able to turn knowledge into action.</p>

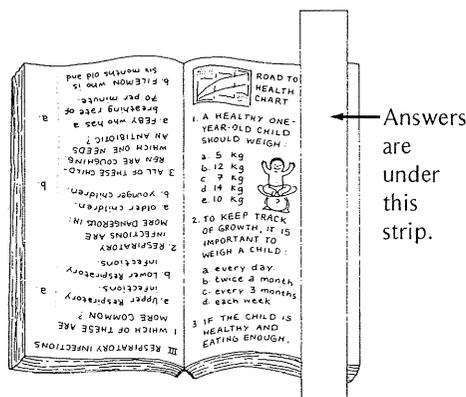
SELF-TESTING BY STUDENTS AND HEALTH WORKERS

Learning is, or should be, a continual process—not just something that begins and ends in a training course. To work effectively, health workers need to keep studying and learning on their own once the course is over. So it helps if they gain experience in **independent study** and **self-testing** during their training. They also need to know **how and where to get the books and tools** for continued independent study.

Programmed learning

One approach to independent study is called programmed learning. Special books take the student step by step through the subject matter. They ask questions to let the student know how well he or she has learned or understood the material. The books are designed so that students can test themselves before looking at the answers.

Answers may be located at the edge of the page. The student can cover them with a strip of cardboard or paper until he has answered the questions (in his mind or in writing). Then he lowers the strip to check the answers. If he has answered right, he goes ahead to a new section. If he answered wrong, he is guided through a review until he can answer correctly. In this way, each person moves ahead at his own pace.



WARNING: Be careful when you select textbooks for programmed learning. Many are poorly prepared or 'talk down' to the student.



Separate learning guides

Some books on health care, although not written for programmed learning, have accompanying 'learning guides' to help students with independent study and self-testing.

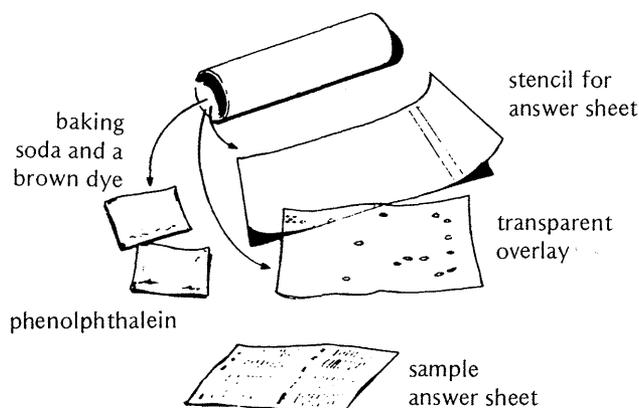
An outstanding example is the learning guide to be used with Maurice King's handbook, *Primary Child Care*.* Carefully designed test questions have been prepared for use with each part of the book. Most of these multiple choice questions present the subject matter in lifelike, problem-solving situations.

Magic answer sheets: To help health workers with self-testing, Maurice has designed an answer sheet that corrects itself! A simple kit contains the equipment needed for preparing these sheets. It includes a stencil for mimeographing answer sheets, a plastic overlay with holes that line up with the right answers, and 2 packets of chemicals.

*The *Handbook (Book One)*, the *Teaching Guide (Book Two)*, and an answer sheet kit are available through TALC (see p. **Back-3**).

One chemical (phenolphthalein) is dissolved in alcohol and applied to the answer sheet through the holes in the plastic overlay. The other chemical is baking soda (sodium bicarbonate) with brown dye. It is used by the student, who dips a damp swab into it and marks the treated answer sheet. Right answers turn red. Wrong answers stay brown.

MATERIALS FOR MAKING SELF-CORRECTING MULTIPLE CHOICE QUESTIONS



This way, the student knows at once if he has answered correctly. It turns self-testing into a game!

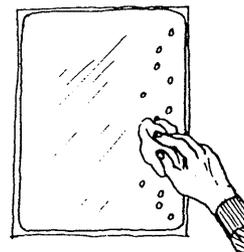
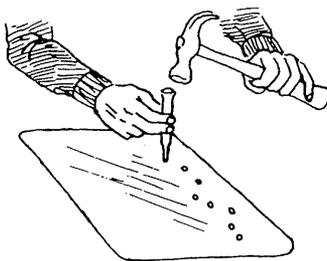
You and your students can make your own self-correcting answer sheets. Phenolphthalein is usually available at laboratory supply centers, and is low in cost.

Small numbers of answer sheets can be individually treated in advance, although this takes time. If you want to prepare a large number of multiple choice answer sheets in a short time, prepare a plastic master sheet. It can be made from an old X-ray film. First soak the film for a day in water with lye, caustic soda, or wood ashes. Then wipe off the dark coating. Next . . .

Place the plastic master sheet over an answer sheet that has the right answers marked. Put a dot of ink over each right answer.

Punch out the ink dots with a leather or paper punch. Now you are ready to mark the right answers with the 'magic' ink.

Put the plastic master sheet over each answer sheet. Moisten a cloth with phenolphthalein dissolved in alcohol, and dab it over the punched holes to mark the sheet underneath.



Your 'magic answer sheets' are now ready for students to use. They will help make self-testing fun!

EVALUATION:

Finding out how effective your program is

Evaluation is the process of finding out how well things are being done. It tries to answer the questions:



Evaluation of training programs has been approached in many ways, and for many purposes. Some approaches help to increase the understanding, sense of equality, and shared respect of all concerned. Other approaches tend to reduce groups of persons to being the 'objects' of studies largely outside their control—studies through which they are judged, but may not openly judge in return.

EVALUATION—FOR WHOM AND BY WHOM?

Evaluations run by outsiders: Sometimes an evaluation of a training program is requested by a funding agency or by program administrators in a distant city. The design for such an evaluation usually comes from the outside. Or an 'expert' is sent in to conduct it. Too often, both the process and results serve the needs of those requesting the evaluation more than the needs of those actually involved in the program. This kind of top-down evaluation is not our concern in this book.

Evaluations run by participants: Some community-based programs are recognizing the importance of having **all** those involved with the program take part in a continual evaluation process. In this way, evaluation becomes a cooperative effort of self-criticism and reflection. It not only considers the results of community-based education and action, it is a part of the process.

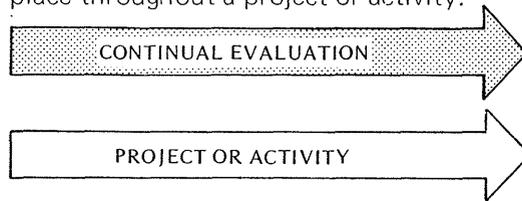
Note: Sometimes help with evaluations from persons outside the program is beneficial—as long as they understand the local situation, assist only where asked, and do not take charge.

The rest of this chapter is about this second kind of evaluation.

EVALUATION AS AN INFORMAL, ONGOING GROUP PROCESS

Many people think of evaluation as a complicated study conducted during a limited time. But the most important evaluation is simple, friendly, and continuous. It happens whenever persons involved in an activity discuss how things are going. However, periodic and more structured evaluation also has a place. In terms of timing, we can consider 4 types of evaluation, all of which are parts of an ongoing process:

1. **CONTINUAL EVALUATION** takes place throughout a project or activity.



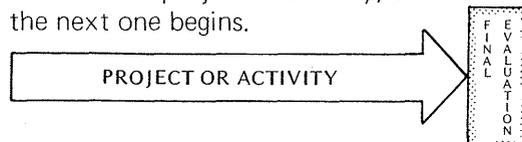
For example, throughout a training course, instructors and students can ask themselves or each other: "How effective is this class?" "How well does this activity prepare us to solve an urgent problem in our communities?"

2. **PERIODIC EVALUATION** takes place at certain times during a project or activity (once a week, once a month, once a year).



Instructors, students, and concerned members of the community can get together every so often to look at the overall progress of the course and of particular activities. In a one-month course this could be done once a week.

3. **FINAL EVALUATION** takes place at the end of a project or activity, before the next one begins.



At the end of a course, everyone involved can join together to evaluate the course as a whole. They can discuss strengths and weaknesses, and how it might be improved the next time.

4. **FOLLOW-UP EVALUATION** is based on the results or effect of an activity after it has been completed.



The true effectiveness of a training course is determined by how successful the health workers are at helping people meet their needs in the community. The effect or 'impact' on the community is not easy to evaluate.

You can base it on:

- response of the community
- follow-up visits by the instructors
- health indicators (see p. 6-10)
- reports or 'feedback' from the health workers about their accomplishments and difficulties

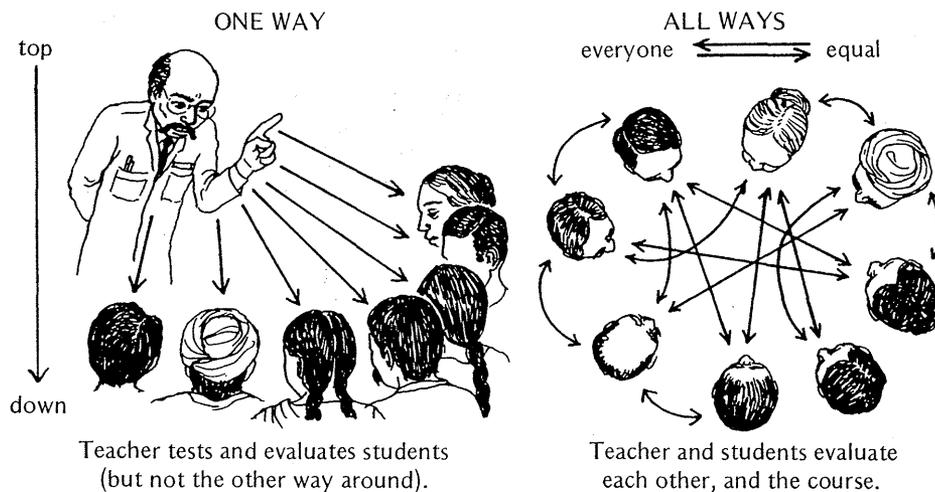
EVALUATION DURING TRAINING AS A TWO-WAY PROCESS

As we mentioned in the section on tests and exams, in the typical school evaluation is usually a one-way process. The teacher judges; the students are judged—the weakest most severely. This top-down approach is based on the convention that the strong may pass judgement on the weak, but that the weak have no right to criticize the strong.

Top-down evaluation favors the strong and resists change.

Another kind of evaluation is one that goes both ways. Instructors and students all take part in evaluating each other and the program. This helps prepare health workers to work with people, not as bosses or authorities, but as equals.

If health workers are to help people work toward social change, evaluation during training needs to be encouraged in all directions, not just one.



Which of these approaches does your training program take? Which one better prepares health workers to help the poor meet their needs? Why is it important to discuss these questions with health workers during training?

ADVANTAGES TO INVOLVING STUDENTS IN THE EVALUATION PROCESS:

- Evaluation by students helps instructors learn how effective and appropriate their teaching is.
- Two-way evaluation helps instructors relate to student health workers as equals. Then the health workers will be likely to show the same respect for others when they teach people in their communities.
- Two-way evaluation helps everyone to question the accepted social norms or 'rules of the game' that keep the poor on the bottom. It helps people gain the confidence and courage to criticize authority and defend the interests of the weak.
- Taking part in evaluation during the course gives student health workers the practice and skill they will need for evaluating their work in their communities.

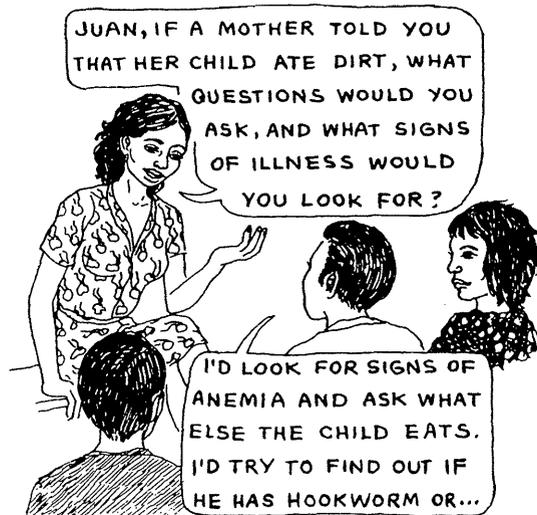
WAYS TO INCLUDE STUDENTS IN EVALUATION DURING TRAINING

(based on evaluation and self-testing methods used in Project Piaxtla, Mexico and in the Women's Health Promoter program in Olancho, Honduras)

1. **Short evaluation discussions at the end of each class.** These can happen in both of the following ways:

Instructor asks students to comment on how they liked the class, what they learned, and how it might have been better.

At first it may be hard for students to speak up and criticize the instructor. But if the instructor makes it very clear that she welcomes friendly criticism, students can become good evaluators by the end of the course.



Students test themselves by asking each other about what they have learned. They try to ask questions that relate their learning to real situations, questions that make each other think.

The main purpose of this kind of questioning is to see how well everyone can understand and apply what was covered in class. In this way the students help the instructor learn how effective her teaching was. She finds out where she needs to make things clearer, or to teach the material differently.

At first students may find it difficult to think of good questions, but with helpful suggestions, many will become quite skillful at this by the end of the course.

2. **A rotating evaluation committee.** Students can take turns forming an evaluation committee to help make known the ideas and reactions of both students and instructors. A new committee can be formed every week or two, so that everyone gets some experience in evaluating.

The responsibilities of the committee can be decided by the group. They might include:

- Observe classes and comment on their strengths, weaknesses, and ways they might be improved. (See list of questions, page 9-17.)
- Consider how well course content prepares students for their future work.
- Observe attitudes and actions, both helpful and harmful, of the students and teachers; recommend possible ways to improve.
- Plan and lead weekly all-group evaluation sessions.

3. **Weekly evaluation sessions.** These are attended by all students and staff, and, if possible, by members of the local community or health committee. The sessions can be coordinated by the student evaluation committee. This gives students a chance to learn organizing and leadership skills.

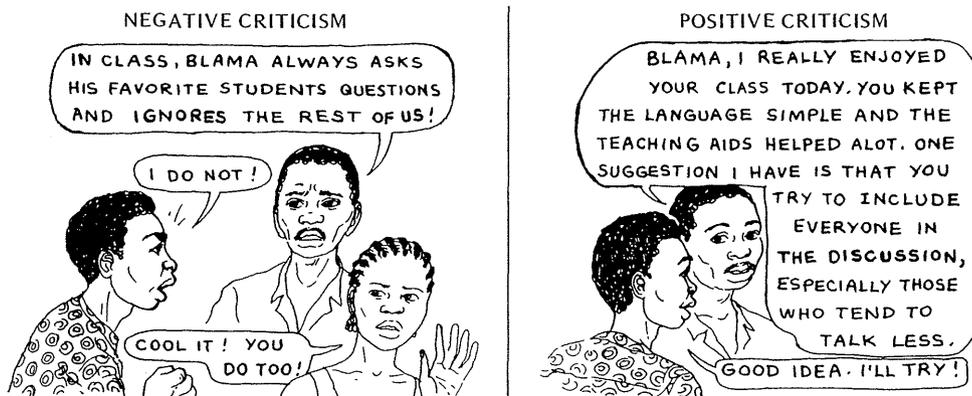
The sessions can cover evaluation of classes and activities, plus any concerns, complaints, problems, and outstanding events that come to mind.

DEVELOPING THE SKILL OF CONSTRUCTIVE CRITICISM:

In the evaluation sessions just described, both students and instructors will quickly discover how difficult it is for most people to accept criticism. But with a few suggestions, everyone can begin to learn ways of criticizing that are less likely to offend.

When offering criticism, be sure to comment on the good as well as the bad. And mention the good things first.

Try to praise 3 things a person does well each time you point out 1 thing he does wrong.



What 4 important differences can you find in these 2 examples?

INSTRUCTORS' SELF-EVALUATION AND GROUP EVALUATION

In addition to evaluation sessions with students, it is wise for instructors to do their own evaluation of classes and activities. Here are some possibilities:

Self-evaluation of classes. This is easier if you make a fairly complete class plan in advance, listing points to emphasize and the teaching methods you intend to use (see p. 5-3). When the class is over, you can then see how well you covered each of these.

It helps to make a **checklist** (like the one on the next page) to be sure your evaluation covers each important aspect of teaching, such as:

- coverage of what was planned
- participation by all students
- use of teaching aids and appropriate methods
- relating material covered to students' experiences
- fairness and friendliness
- communicating clearly and simply
- review of important points
- final evaluation to find out what students learned and how they feel about the class

To make the evaluations more useful for you or anyone who may teach a similar class, **write down your suggestions for improving the class.** File them with the class plan. This takes extra time, but it helps the class to become better each time it is taught.

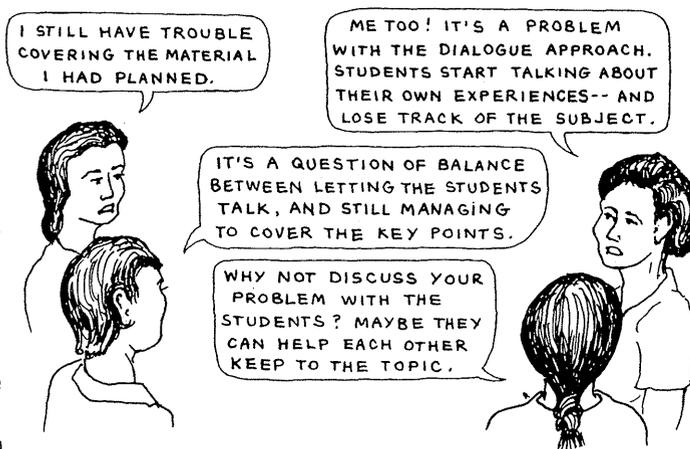
The silent observer. A 'training adviser' or another instructor sits at the back of the class, observes, and takes notes. If possible, the observer should have a copy of the class plan to see how much of the planned material is covered. She also may want to use a checklist such as the one on the next page.



After the class, she and the instructor discuss the strengths and weaknesses of the class, and how it might be improved.

Daily evaluation sessions to discuss classes.

These are especially helpful when the teaching team is not very experienced. Instead of discussing each class privately, the silent observers and instructors all meet for half an hour or so each day to discuss the classes. This way everyone benefits from the suggestions and criticisms.



CHECKLIST FOR EVALUATING TEACHING*

Does the teacher:

1. Show enthusiasm?
2. Relate the subject to everyday life and the students' experience?
3. Encourage participation by asking questions and presenting problems?
4. Use imaginative teaching aids?
5. Speak and write clearly?
6. Use the vocabulary of the local people and avoid big words?
7. Match the teaching methods to the learning traditions of the local people?
8. Give examples or tell stories to illustrate ideas and new ways?
9. Encourage active learning?
10. Treat the students as friends and as equals?
11. Make sure the shyer students are given a chance to speak?
12. Make himself or herself available to students for discussion after class?
13. Provide enough time for study and review?
14. Avoid embarrassing the students?
15. Encourage quicker students to help those who have more difficulty?
16. Prepare teaching plans and materials in advance?
17. Know the subject adequately?
18. Encourage and respond positively to ideas and criticism from students?
19. Show honesty and openness?
20. Openly admit mistakes or lack of knowledge?
21. Respond to student errors with positive criticism and patience?
22. Provide plenty of opportunities for practical experience?
23. Emphasize how what they learn can be used in the students' future work?
24. Cover the material that was planned?
25. Emphasize and repeat the most important points?
26. Leave out what is not important or too detailed?
27. Evaluate whether students will be able to use their learning in real-life situations?
28. Show loyalty to students?
29. Show loyalty and respect for those whose needs are greatest?



**HOW WELL DOES THE WAY
I TRAIN HEALTH WORKERS
PREPARE THEM TO WORK
WITH PERSONS IN A
COMMUNITY-STRENGTHENING
PEOPLE-CENTERED WAY ?**

*Adapted from a list developed during a training program for students of community health led by Fred Abbatt, author of *Teaching for Better Learning*. It is not a complete list. You may add to it or change it to suit the needs of your own situation. The list can be used for you to evaluate yourself, for your students to evaluate your teaching, or for you to evaluate the teaching of others.

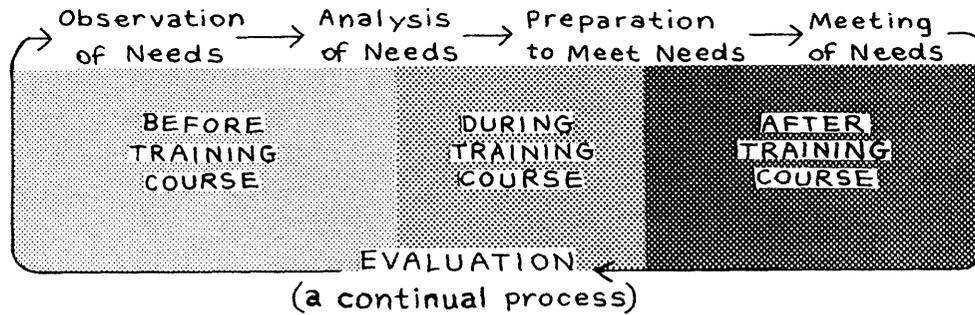
OVERALL EVALUATION OF A TRAINING PROGRAM

RELATING EVALUATION TO NEEDS

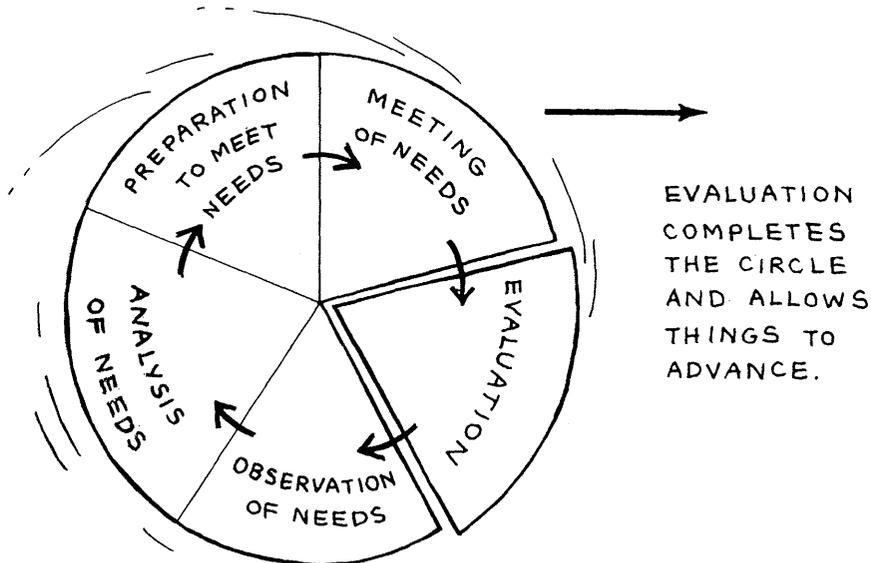
To be useful, evaluation must be kept simple. It cannot cover every aspect of training in depth. On what, then, should evaluation focus?

In several places in this book we have discussed the problem of faulty training. Students may study hard and get good marks on tests. Yet, on return to their communities, they may find themselves at a loss when faced with real needs. To be meaningful, then, **evaluation of training must focus on how well health workers are prepared to help people meet their needs.**

From before a training course begins until after it is over, the planning and evaluation process should be based on recognizing and meeting people's needs.



Evaluation of a training program—before, during, and after—is like a key section that completes a wheel.



Evaluation is needed if we are to move forward, because it allows us to learn from our successes and mistakes.

SUGGESTED STAGES FOR OVERALL EVALUATION OF A TRAINING PROGRAM



OBSERVATION OF NEEDS & RESOURCES

Gather information about:

Needs and Problems

- Environment (physical and biological)
- Social (economic, cultural, political)
- Frequency of diseases, death, injustices
 - At local level
 - At national or regional level

Resources and Strengths

Within the community
Outside the community

Including:

- People
- Skills
- Traditions
- Education (formal and practical)
- Materials (animal vegetable, mineral)
- Leaders
- Possible instructors, advisers, health workers, etc.

Conflicts of interest

Between different groups, strong and weak

- Within the community
- Between the community and outside agents or institutions

ANALYSIS OF NEEDS & RESOURCES

Which needs are of greatest importance?

To whom? (local people, ministry, government, international agency)

Whose needs are greatest?

Why? (age, sex, income, race, location)
In what way do the environment and social order affect people's needs and health?

What are the biggest obstacles to resolving people's needs:

- within the community?
- within the country?
- within the government and health ministry?
- around the world?

In what ways might some of the resources (money, MD's, health authorities) be obstacles to the health and well-being of those in greatest need?

How can the resources best be used to increase the self-reliance, health, and well-being of those whose needs are greatest?

PREPARATION TO MEET NEEDS

What is the long-range social or human vision of the program? Does it include fairer distribution of resources, decision making and power? Is community organization considered necessary, or dangerous? Are there differences of opinion or hidden motives among the planners? (These issues are of great importance, as they help determine whose needs the training program is designed to meet.)

Goals and specific learning objectives:

- How well do they fit the real and felt needs of people in the health workers' communities?
- How realistic are they in terms of the students' abilities and limitations?

How appropriate are the following:

- Selection of instructors and health workers.
- Extent and nature of community and student participation in planning different aspects of the program.
- Attitudes and actions of instructors.
- Time, length, location, etc.
- Content of the course and teaching methods used.
- Flexibility of content and plans.
- Teaching methods.
- Balance of power and decision making during course.
- Balance between practical and classroom learning.
- Balance between curative, preventive, teaching, and organizing skills.
- Student and community participation during the course.
- Use of alternative and local resources.
- Emphasis on memorization or on problem solving.

How well does the training program prepare health workers to help people meet their needs in terms of:

- Specific health-related knowledge and skills?
- Motivation, organization, and leadership?
- Teaching skills?
- Social awareness, problem solving, and thinking skills (observation → analysis → action → evaluation)?

MEETING OF NEEDS

How well are community needs being met with the health workers' help?

(Where appropriate, compare with information gathered before or when the health workers began work.)

Measurable indicators:

- How many deaths? births?
- How much illness?
- How many latrines, etc.?

Non-measurable indicators:

- People's response to program?
- More self-reliance and sharing?
- Greater awareness of problems and possible solutions?
- Poor people better organized?
- More resistance to abuses by those in power?
- More justice? (often preceded by greater repression or abuse)
- More hope and dignity?

Program function after training:

- Support system (back-up and supplies).
- Formation and role of health committee.
- Involvement of mothers, school children, and others.
- Health-related activities (family gardens, co-ops, water system, health theater, etc.).
- Health workers' suggestions for improving training.
- Follow-up training

For more ideas on evaluating the health worker's role in the community, see the next page.

FOLLOW-UP EVALUATION

The final measure of a training course is how effectively the health workers serve their communities. In an article called "Evaluation—A Tool or a Burden?"* Mary Annel discusses this issue. Mary works with the Huehuetenango Health Promoter Program, which has trained over 400 village health workers in Guatemala.

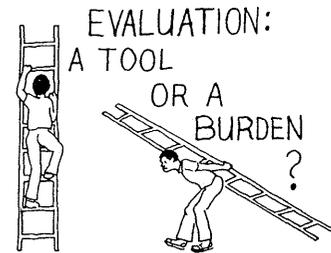
Mary points out that most of the volunteer workers have limited reading skill, and many find long evaluation questionnaires terrifying. They complain, "We were trained in health care, not statistics." Evaluation is far more practical if it "fits into the daily running of the program and makes sense to people in the village." Instead of trying to gather mountains of facts, Mary suggests that an easier way to evaluate is to observe "the change in the way people act."

"For example . . . families used to bring undernourished children into the health center when the children had been ill for a month or more. The children were dying, and the center was considered the last resort. In areas covered by health promoters, families now bring children to the promoter much earlier, long before hospitalization is necessary. We use such criteria to measure the success of our program."

To evaluate their program, they try to answer these questions:

THE COMMUNITY

- **Does the community work with the promoter in common projects?** For example, does the community build its own health clinic, or help pay for the promoter's expenses for training courses? All of the promoters may have been elected by their communities; but voluntary labor and/or monetary contributions imply a strong commitment to the health program.
- **Do neighboring villages without promoters ask for their own health workers?** In the last five years, over 225 villages have requested promoters and our program has more than doubled in size.
- **Do the sick follow the health promoter's advice?** Do they complete a prescribed series of injections, or do they stop after the first or second of the series? (The Indians see illness as caused by God's will and they accept illness fatalistically. If members of the community follow the promoter's advice, they are more actively controlling their own health and lives.)
- **Do sick people referred to medical centers actually show up at the centers?**
- **Do the mothers of the village bring their children to be weighed in the under-fives clinic each month?** Preventive medicine is always one of the most difficult concepts to communicate. If the health promoter can convince the mother that a relatively healthy-looking baby is showing early signs of malnutrition when the baby's weight gain falls off, great strides have been made toward eliminating malnutrition in the village.



THE PROMOTERS (village health workers)

- **Do the promoters come up with new ideas and initiate projects?** Or do they simply accept what they learn in training sessions?
- **Do the promoters have more responsibility** for administration, supervision, and continuing education within the program than they did six months or a year ago?
- **Do health promoters want to learn more?** Do they regularly attend continuing education courses? Do they spend free time during the training sessions doing optional reading? Do they stay after class to ask questions? Do they bring patients to the course for advice on difficult cases? Do they bring lists of patients with their symptoms for consultation?

To be used by other programs, the questions asked will need to be different. But the advantages of this approach to evaluation are clear:

- It can be used in a community-based program administered by health workers who have had little schooling.
- It considers changes in ways people act in a community rather than charts and graphics based on often inaccurate statistics.
- It makes evaluation a tool, not a burden. The findings can be understood and used by those involved in the program.
- It is inexpensive. In fact, in many programs the information is already available or can be put together easily from existing records.

*From *Salubritas*, American Public Health Association, July, 1980.

OTHER ORIGINAL IDEAS FOR EVALUATION

The first two ideas come from the Community-Based Health Program newsletter, *Tambalan*, from the Philippines (November, 1979).

USING DRAWINGS

"In Bukidnon, instructors once grappled with the task of evaluating their first training session with a group of farmers who had reached only the lower grades in elementary school.

"**Solution:** they had the farmers put into drawings what they had learned during the session. The drawings weren't any more sophisticated than what most non-artists would produce, but in terms of content, the drawings conveyed a lot more than would have been expected from a written report."



USING DRAMATICS (ROLE PLAYING)

"Instructors had used two different training processes in two *barrios*. Curious about the consequences of their use of different approaches, the staff asked the *barrios* to present skits centering on how they looked at their situation.

"The differences in training methods, the instructors found out, were very strongly reflected in the plays presented by the *barrios*. In the *barrio* where health skills were emphasized, the people's perception of their situation was passive, almost fatalistic.

"But in the other *barrio*, where organization skills were emphasized, the people depicted their situation the same way as the neighboring *barrio* did, with one important difference. Instead of showing passive acceptance, they portrayed themselves as people aware of their own potential to change their situation.



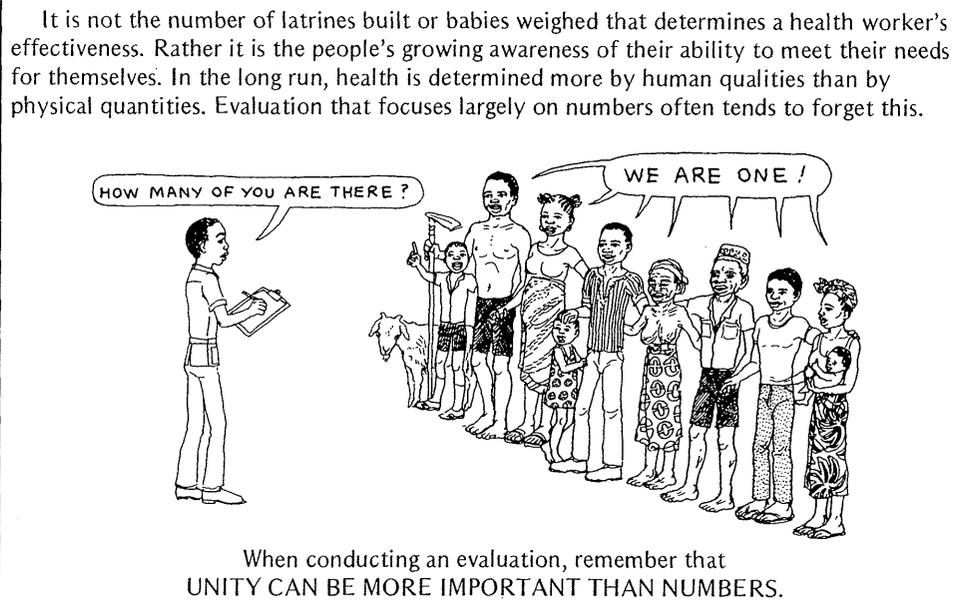
"That experience set the instructors to thinking about the program as a whole and impressed them with the need to change their own orientation and methods."

USING VISITORS

In Ajoaya, Mexico, the village health team asks all visitors to write down their observations and opinions of the program. The team uses these outside viewpoints to help evaluate and improve their program.

THE LIMITATIONS OF EVALUATION

The long-range impact of a training course can never be fully measured or known. The human factors in a health worker's training and work may, in the long run, be what influence the people's well-being most. But these human factors may only affect health statistics years later. The seeds the health worker plants deepest may not produce fruit until after he or she is dead and gone. Humanity moves forward slowly!



EVALUATING EVALUATION

We need to ask of the evaluation process the same searching questions that we continually ask about each aspect of our training or health program:

- Does it strengthen the voice of the powerless? Does it help lead to greater decision making, control, and self-reliance on the part of those who have less? (whether students, villagers, workers, etc.)
- Does it encourage trust, responsibility, and greater equality among all concerned? (teachers, students, health workers, mothers, advisers, etc.)
- Does it help equip people with the knowledge, skills, attitudes, and examples they need to understand and work together to solve their biggest needs?
- Does it consider the group's long-term goals, or vision, as well as short-term objectives?

Evaluation should not only measure whether we have achieved our goals. It should help us judge whether our goals were appropriate in the first place.