Section 3 Checking your students have learnt

chapter 9 General issues in assessment

One of the most important parts of any teacher's job is to find out how much students have learnt. This can be done by setting exams or watching students at work. Whichever method you use, the process is called assessment. This chapter covers the general issues and problems of specific assessment methods.

The general issues in the chapter are:

- the reasons for assessing students (9.1)
- what makes a satisfactory assessment (9.2)
- making sure that assessment tests really important skills and abilities. (Validity) (9.3)
- making assessment reliable (9.4)
- using assessment to help learning (9.5)
- continuous assessment (9.6)
- self-assessment (9.7)
- using students to assess each others performance (9.8)

9.1 Why must students be assessed?

Most teachers would agree that their students should take some kind of examination or that the students' ability should be measured in some way. In other words, students should be assessed.

The reasons commonly given for this assessing of students are:

- There must be a check that the students will be able to do the job reasonably well. This of course is specially important in all the health professions.
- Exams and tests encourage the students to work harder.
- The assessment can be used to guide the students about which topics or skills they need to learn more.
- The assessment can also guide the teacher about which parts of the course have been successful and which parts need to be improved.

Naturally no single assessment during a course can achieve all the purposes. For example a final exam may be good for seeing whether the students are able to do the job. But it will not be of much use in guiding the students about what they should learn. So it is important to think about the reason *why* you are assessing students in any test or exam. Then you can design the test to do the job that you feel is most important. You can decide *who* will do the assessing. *When* it will be done and *what* kinds of questions you will use.

9.2 What makes a good assessment?

When you design the assessment methods for a course or for a lesson there are five questions that you should ask

- A Does the assessment fit the regulations for the course?
- B Is the assessment reasonably economical in materials and time?
- C Does the assessment test really important skills and abilities? (Is it *valid*?)
- D Are you sure that the marks gained by each student are accurate? (Is it *reliable*?)
- E Does the assessment give information which will help students to learn better and help teachers to improve their teaching?

The first two points are fairly straightforward. Sometimes there are regulations about the kinds of exams which must be used and these regulations must be observed. But often the regulations only concern the final exams and leave a lot of freedom for teachers during a course. If you feel that the regulations prevent you assessing the students in a satisfactory way, you should perhaps talk to other teachers and the people on the committee which makes the regulations so that changes could be considered.

Assessments must not take too much time and effort. So methods like oral exams and essays have a serious disadvantage because they take up so much of the teachers' and examiners' time.

The following three sub-chapters deal with the remaining three questions in turn.

9.3 Making sure that assessment tests really important skills and abilities

After some recent Anatomy and Physiology exams in a medical school, a senior clinician said, "I couldn't answer the questions, nor could any of the other doctors who saw the questions. I couldn't see why students needed to know these things".

This illustration shows a danger which is very serious in any schools which train health workers – students are often asked about facts which are not important.

This is very serious because students naturally want to do well in examinations and so they learn what they think will be in the examination. The solution is to test only those skills and abilities which you believe are important.

One way of deciding what is important is to think about the job which the students will be doing – what *performance* must they achieve. For example a health educator will probably have to do jobs like explaining about hygiene or persuading mothers to breast feed babies. This explaining and persuading is a *performance*. Ideally the assessment should test whether the student can do the job successfully. If the assessment does do this, it is *valid*.

Unfortunately health educators are sometimes asked in an exam to write essays on the nutritional value of breast milk. This knowledge is only a small part of the skills needed (it does not cover the skills of talking to mothers) and so it is not really valid.

It is easy to advise teachers to make examinations *valid* by testing the *performance* of their students. It is much more difficult for the teachers to plan assessments which will do this'. Some ideas are given in the next chapter.

9.4 Making assessment reliable

In a recent exam the students were asked to write about the treatment of burns. The papers were marked by the teacher who had taught the course. Then another teacher marked the same exam papers. The scores given by the two teachers were very different. For example one student was given 45% by one teacher (a fail) and 70% by the other.

This illustrates that in this exam the marking was not reliable.

Clearly, the final mark should be *reliable* or it becomes meaningless. But how can you be sure that a mark really is *reliable*? The answer is to try to cut out the errors right through the assessment process. Do this by choosing assessment methods which are less likely to lead to errors. (For example multiple-choice questions are better than essays).

Also use techniques which help the markers work to a uniform standard - check-lists are useful here. The methods are described in more detail in the next chapter.

9.5 Using assessment to help learning

Exams can encourage students to do more work – and so they help learning. But assessment can do much more than this. It can tell the students exactly what they need to spend more time on. In many courses the teachers give frequent tests and then tell each student what parts have been done badly. In this way the students get feedback about the quality of their work and so can improve.

To illustrate this point, look at the result for just 5 students who took a 4 part test in the middle of a course.

	Part 1	Part 2	Part 3	Part 4
Student A.	\checkmark	x	x	\checkmark
В.	\checkmark	\checkmark	x	\checkmark
С.	\checkmark	\checkmark	\checkmark	\checkmark
D.	\checkmark	\checkmark	х	x
E.	\checkmark	\checkmark	x	x

Activity on Using Assessment to Help Learning

Key $\sqrt{}$ means satisfactory standard. Key x means unsatisfactory standard.

What would you do if you were the teacher?

Comments on the Test Results

Probably you would be happy about part 1. For part 2 you should advise student A that his standard was not good enough. You should try to make time to explain *why* his work was not good and also explain how it could be made better. Ideally he should be tested again on this part after he has had a chance to learn.

The results for part 3 show that this is generally poorly learnt. Probably this part needs to be taught again. Here the teacher gets feedback about his own performance – so maybe next year the topic will be taught differently.

Part 4 shows that two students need more guidance – but it would probably be a waste of time to repeat part 4 for the whole class.

If you do everything suggested in the comments, you will find that it will take you a lot of time. This is a problem, but giving students this kind of individual guidance is one of the most valuable things that a teacher can do. You must try to make time. One idea is to spend less time lecturing to the class and letting students learn directly from manuals, handouts and practical experience.

A final point. Notice that this frequent testing and guidance applies equally well to both the knowledge and skills.

9.6 Continuous assessment

In some courses students sit one final exam at the end of the course. In other courses students are watched more or less continuously by a supervisor. Between these two extremes there are courses with tests or assessment every week, or

every month, or every term. Almost anything is possible. Generally 'continuous assessment' is the name used, 'frequent assessment' would be a more accurate name.

What are the advantages of continuous assessment?

- Because there are several assessments an error in any one assessment is less important. So continuous assessment tends to be more reliable.
- The tensions and worries of the single final exam are removed.
- The motivation to pass exams is spread over the whole of the course so students tend to work harder over the whole course instead of making a single desperate effort at the end.
- If students do poorly in one test, they have time to correct their errors before the end of the course. Continuous assessment gives more guidance to both teachers and students.
- Students are shown right through the course what standard is expected.

Of course there are some disadvantages as well. The main one is that continuous assessment will take more time and effort to organise.

Continuous assessment can take many forms. It may be a series of written tests, or it may be observing students whilst they are working on a ward, in the laboratory, or in the field. The marks given may be recorded – to decide whether the student eventually passes or fails. Or the marks may only be used to guide the students. Whatever system is followed, continuous assessment offers important advantages in both helping students to learn and in making more accurate and reliable judgements about how much the students have learnt.

9.7 Self-assessment

Self-assessment is the name given to assessment where the student assesses his own performance.

Some teachers are very worried by this idea because they feel that the students are not responsible enough or do not know enough. This is probably true at the beginning of the course. However, some health workers will be working with very little supervision after they have qualified. So in the job they *must* assess themselves. Therefore it is a good idea to give the students some experience of self-assessment whilst they are still being trained.

Naturally self-assessment is a method which is used for only part of the time. Teachers or external examiners will be used to decide whether students should pass or fail at the end of a course. But during a course self-assessment *can* be used. It will help to save time and will give students a greater sense of responsibility. In self-assessment, the students need clear guidance about what standards are required. They must also be given a very clear idea of the task. For example you might ask students to:

- 1. Inspect 50 microscope slides of blood samples to decide whether the patient has malaria.
- 2. Fill in standard forms for stock control in a pharmacy.
- 3. Plot a patient's temperature on a chart.
- 4. Weigh a baby and record the weight approximately.

In all these examples the student can compare his own work with a *"correct answer"* and so learn whether his work is satisfactory.

Notice that cheating is not a problem, because the purpose of self-assessment is to learn – not to score points in an exam.

9.8 Peer-assessment

An alternative to self-assessment is peer-assessment. This is the name given to assessment where students assess each other.

Again it is not suitable for deciding whether students pass or fail. But it is a very good method for helping students to learn.

Many students will ask a friend to test them when they are revising for an exam. This simple idea can be encouraged and guided by the teacher. For example students can be given written instructions for doing a job. Then one of the students attempts to do the job while the other one watches and comments. At the end the students change over and the second student does the job watched by the first one.



"Then one of the students attempts to do the job" The teacher must of course provide the written instructions or check-lists. These can be prepared either from the teacher's own experience or from a manual.

Peer-assessment can help to make field experience much more meaningful and purposeful. Instead of vaguely trying to do a job as well as possible, each student will be supervised by a fellow student who is there to watch and advise.

9.9 Summary

As an exercise of this chapter, look at the three examples of assessment methods given below. Then comment on them using the last four of the five points made in sub-chapter 9.2. That is:

- is the assessment economical in materials and in time?
- does the assessment test really important skills and abilities? (is it *valid*?)
- are the marks accurate (*reliable*)?
- does the assessment help learning?

Now look at the examples below:

- A At the end of the course, a written exam is given in which students write 4 essays in 3 hours. Then an external examiner meets each student individually for 15 minutes to give them an oral exam on what they have learnt.
- B Every two weeks during the course, students have to answer 20 multiple choice questions on signs and symptoms of diseases, methods of treatment prevention of the disease etc. etc. The students mark the papers themselves by comparing the answers with the *'correct'* answers supplied by the teacher.
- C Trainee community health nurses spend 1 month working with an experienced CHN (2 students work with each CHN). The students do most of the work themselves under supervision. At the end of the month the supervisor writes a report on the students.

Write your own comments on each assessment method.

	Economy of time	Validity	Reliability	Helping learning
Λ.	Poor	Poor	Poor	Poor
в	Good - after 1st year	Misses many important skills	Very good	Good
С	Poor	Very good	Moderate	Good

Comments

- A This method is bad in almost every way. It will take a long time to mark the essays and to conduct the oral exams. Students won't have to write essays or talk to external examiners after the course so the skills tested are not important. Essay marking and the marks given in oral exams are frequently *not* reliable. The exam comes too late for students to learn much from it.
- B Setting the MCQs will take a lot of time. But they can be used year after year (with a little modification) and the marking is very quick. The assessment may test important skills it will depend on the exact questions asked and what work the students are being trained to do. However multiple choice questions usually only test factual knowledge, so they cannot test many of the important skills which should be tested. The reliability is excellent there should be very few marking errors. Students should learn from both marking other students' work and from seeing exactly what errors they have made. But note that it will only help learning of factual knowledge.
- C This method will take quite a lot of time because the supervisor writes individual reports. However the important skills are tested. The reliability may only be low because different supervisors may have different standards. The assessment should help learning very effectively.

Overall these examples illustrate that each assessment method has some disadvantages. The teacher should be aware of these problems and try to reduce them as far as possible. Specific guidance on different assessment methods is given in the next chapter.

chapter 10 Assessment methods

In the previous chapter general issues were discussed. It was explained that a good assessment should be economical, valid, reliable and helpful to the student and teacher. This chapter goes on to describe specific methods which will help to improve the way you assess your students. Examples of each method will be given and comments about the value of the method will be made.

10.1 Oral exams

In an oral exam one student is interviewed by one or two examiners. Usually the students are asked to tell the examiners what they know about some topic or what they would do in some situation which might happen in the job.

The oral exam does have some advantages. Because the exam is '*live*' the examiner can ask for more detailed information and can probe to find out how much the student knows.

However this is not a very satisfactory method of assessment. Students are often made extremely anxious by the examiners – even though the examiners try to be friendly. This is an unfair stress on the students and quite different from the stresses they will face in their career. As a result many students get worse marks than they deserve. Orals also take a lot of time and have frequently been criticised because the marks given are unreliable. Further, the oral rarely tests important skills and does not usually help learning.

Therefore you should not use orals unless you have some specific and powerful reason for choosing this method.

10.2 Essays

Essays have been widely used in assessing students in the health professions. But again this method has very serious disadvantages.

In one course students were asked to write an essay on *"Polio Immunisation"*. This is a very poor test even though the topic was vaguely relevant to the students. (The students would be responsible for polio immunisation as part of their jobs).

The test is poor because:

• the students can not know what is expected by the examiner. Should they describe the administration of an immunisation programme? Should they outline how the immunisation prevents polio? Should they describe the side effects? And so on.

- the marking is likely to be unreliable. The reason is that because the topic is not clearly defined, different teachers will think different points are the most important and give different marks as a result. Whether a student passes will depend very much on who marks the paper.
- the test is not valid. Students are not going to write essays in their job. They are going to immunise people. Therefore it would be much better to test the really important skills.
- the essays will take a long time to mark if the teachers do this job thoroughly.
- the students are unlikely to learn very much from the test.

How could the essay be improved?

The first point must be that a quite different assessment method would probably be better – these are described in the following paragraphs. However if an essay must be used you should

1. Make the title much more specific – for example:

"Describe how you would explain to mothers why their children should be immunised against polio". or:

"Explain how polio vaccine should be transported and given to children."

These essay titles are fairer because it is more clear to students what they should write. Secondly they are more valid because they ask the students to describe important skills.

- 2. Prepare a marking scheme and follow it. This scheme will include a list of the major points which should be covered in the essay and may say how many marks should be given for accurate spelling, general clarity of explanation etc. All teachers marking the essay should use this scheme. This improves reliability.
- 3. After the exam, show the marking scheme to the students and discuss it with them. This will improve learning.

10.3 Short answer questions

Short answer questions allow the teacher to ask questions about a larger proportion of the course and to mark more accurately and quickly.

Example of short answer questions

The following questions were part of an examination for health inspector trainees.

1. List 4 advantages to a household of proper rubbish disposal.

- (i)
- (ii)
- (iii)
- (iv)

2. Draw a diagram showing the construction of a simple incinerator suitable for use in a small village.

3. Give two circumstances when tipping and burying rubbish is better then composting.

(i) (ii)

Short answer questions often ask students to make lists or state 2 advantages or draw a diagram. Because they are so much more specific they are quicker to mark and more reliable. They are also very much quicker to answer so in the time allowed for the exam many more topics can be answered than in an essay exam.

There is still a great danger that this kind of question will only ask students to remember facts rather than apply knowledge or perform skills.

10.4 Multiple-choice questions

Multiple choice questions are often called MCQs. They are a stage beyond the short answer question, because the students do not write any words. They just choose which of the answers is best.

Example – an MCQ of the one-from-five type

A patient tells you that he has noticed one of his eyes is red and he is worried. You can find no foreign body, but notice that the pupil is bigger in the red eye and the pupil does not respond to light. What is the most likely diagnosis?

- A. Trachoma
- B. Conjunctivitis
- C. Iritis
- D. Corneal ulcer
- E. Glaucoma

In this example the student has to choose between the possible answers and select the one answer which is best – in this case 'E'. In this type of question there is a *stem* and *five choices*.

The stem is:

The *five* choices are:

- "A. Trachoma
- B. Conjunctivitis
- C. Iritis
- D. Corneal ulcer
- E. Glaucoma"

Although it is possible to use 4 or 6 choices, five is the moist suitable number. So this type of question is sometimes called the **one from five** type of multiple choice question (MCQ).

Another type of MCQ is the True/false type.

Example – of a true/false MCQ

In glaucoma,

A.	there are usually white or grey spots on the cornea	Τ.	F.	
B.	the pupils are irregular	Τ.	F.	
C.	only one eye may be red	Τ.	F.	
D.	the patient should be referred to a health centre	Τ.	F.	
E.	a foreign body is the most likely cause	Τ.	F.	

Again there is a stem -- in this example it is very short: "In glaucoma,".

But this time the stem is followed by several statements. For each statement the student has to decide whether the statement is true or false. In this case 'A' is false, so the student will draw a circle round 'F'. 'B' is also false, but 'C' and 'D' are true while 'E' is false, so the student should draw circles round the F,F,T,T and F respectively. In this case the student has to answer all five parts of the question.

Both these types of question are fairly commonly used although there are reasons for preferring the True/False type.

How good are MCQs?

They can certainly be marked very quickly and accurately. They can also be answered quickly so a lot of questions can be set in an exam – therefore a lot of the course can be covered.

On the other hand there are serious disadvantages. It is quite difficult to write clear questions – so writing the questions takes a lot of time. There is also the very serious problem that MCQs usually only test knowledge. Only rarely do they test decision making ability and they cannot test abilities to communicate or to perform procedures. So MCQs are unlikely to be valid for your course.

Despite these problems MCQs will probably be useful as one of the assessment methods used in your course. They can be used to check factual knowledge, especially during the course. They are also very helpful when used for self assessment or peer-assessment.

If you decide to use MCQs the following practical points may be helpful

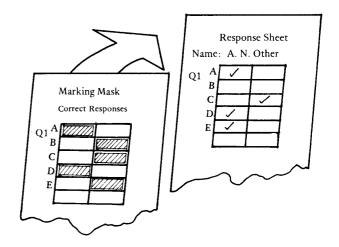
- You should allow roughly 2 minutes for each 5-part true/false question in an exam. So in an hour students can be expected to answer about 30 questions. If you find that students are not finishing the exam cut down the number of questions. It is not a race.
- For true/false questions it is probably best to give 1 mark for each correct choice, zero for no answer and take away one mark for each wrong choice.

In one-from-five questions use the same scheme except that there is no need to take away the mark for wrong answers.

- The 'pass' mark for MCQs should be quite high. This is because the MCQ should be testing basic knowledge which all students should know. Therefore a pass mark as high as 80% or 90% can be used successfully. It is better to use easy questions with a high pass mark rather than harder questions with a pass mark of 50 or 60.
- Marking is made much faster if a separate response sheet is used for the student answers. Then a mask can be laid over the response sheet with holes cut out for the correct answers.

In the example shown here, 3 correct answers will show through the holes – so give 3 marks. There are 4 ticks altogether, so 1 must be wrong – so take away one mark.

This leaves a score of 2 (3 minus 1) for question 1.



10.5 Patient management problems

Patient management problems are a development of short-answer questions. The main feature is that a series of questions are asked about a real case. Although they are called patient management problems they can be used in a wide range of subjects. In fact they can be used wherever students are being trained to make decisions. So they are also very useful for assessing students who are training to be health educators, community health workers, community nurses, health inspectors etc.

Example of a patient management problem

Mrs. A. comes to the health centre and tells you that she is tired all the time. She asks you for a tonic. You find out that she is 30 years old and about 5 months pregnant.

- 1. List 3 things which you think might cause the tiredness.
- 2. List 2 other questions which you would ask Mrs. A.
- 3. As a result of Mrs. A.'s answers, you suspect Mrs. A. is anaemic. What physical signs would you look for.
- 4. Your examination confirms your diagnosis of anaemia. What treatment (if any) would you prescribe and what other advice would you give.

This example has the advantages of a short-answer question. It is clear to the student and it will be quick and reliable to mark (providing that all teachers involved agree what the possible causes of tiredness are.) It is also more valid as a test because it is based on the kind of work the students were trained to do. (It would be much better if each student met Mrs. A. and actually took a history and examined her). If students are given the marking scheme after the exam they will also be able to learn from this.

How can you write patient management problems?

It is usually easiest if you base the problem on a real case that *you* have dealt with: a boy who was brought to you with severe abdominal pain; a shopkeeper who failed to keep his premises clean despite several visits from a health inspector; a mother who rejected any advice on nutrition even though her children were malnourished. Of course you must still work as a health worker yourself to follow this advice. But if you teach full time you can still talk to health workers or, even better, spend half a day with a health worker to write down examples of cases.

The next stage is to divide the case into stages. What happened first? What decisions had to be made? What alternatives were there?

Then you should decide what bits of information you will tell the student and which bits you will ask them to tell you.

At this stage you will have a patient management problem, but you will still need to make a marking scheme. List all the answers that you think students might give – both right and wrong. Then decide how many marks you will give for each of the possible answers.

10.6 Project reports

In a number of courses students are asked to work on a project. This may involve doing a survey of a community, working in a health care team for a few weeks etc. Often the student reports on the project, and this can take a lot of time.

Naturally the students will be more motivated in the project if the reports are assessed and the marks count towards the final examination score.

However project reports are extremely difficult to mark fairly because there are usually no clear standards to follow. Some students may do very good work but present a poor report. Others will present a very clear and full report of poor work. Which is best and what standard will you accept?

Some guidelines may help you.

- 1. Project work should be assessed by at least two people marking independently. The two marks should then be compared and discussed to reach a final mark
- 2. Where possible, explain to students what standards they should aim for. Tell the students what you think a good project would be like. Where possible explain how much data should be collected, how many cases should be seen, what kinds of graphs or tables would be useful. But be careful not to restrict the students too tightly.
- 3. Let the students see some project work done in previous years which you think is good and also some which you think is bad. Explain your reasons. Of course you cannot do this the first time that you use projects so maybe the marks for the first projects should not be counted in the overall assessment.

Clearly the use of projects in assessment causes some problems for the teacher. What is their value? Project reports will take a lot of time to mark and the score may have a low reliability. But they can have high validity if the projects are chosen carefully to involve the students in important skills. Above all projects can be very powerful learning experiences and they should be assessed to encourage students to make the maximum effort.

10.7 Record books

Record books have been used quite widely in nurse training and there are good reasons why they can be used in courses for other groups of primary health care staff.

The record book contains a list of skills or tasks which the student should be able to do. These tasks are the objectives – or at least some of the objectives – for the course. The students are responsible for learning how to do each of the tasks, and when they are ready they can ask a teacher to check their performance. During the course the students must do all of the tasks to a satisfactory standard. Check-lists could be used for this and the completed check-lists included in the Record book bundle. If the teacher thinks that the student's performance is good enough he signs the student's record book. If the performance is not good enough, the faults are explained and the student can try again later.

Example- a page from a student's record book

	Task	Date	Signature
17.	Prepare a flip chart for use with an audience of 30 people		
18.	Give advice to a pregnant woman about ante-natal care.	20/10/99	M. Gum

The record book does use quite a lot of the teachers' time because each student must be seen and their performance must be judged. This method can be difficult to organise because teachers may not be available when the student is ready to be assessed. Also some teachers may be known as easier markers so there are some problems about reliability. However on balance there are powerful advantages. The main one is that the record books help learning. They do this by making clear to the students what needs to be learnt. They also make sure that when students are not up to standard the teacher is there to give advice. The second main advantage is that the method should be highly valid – the students will be assessed on how well they can do the tasks and jobs which they are trained to do.

This is a slightly different type of assessment. Students do not get a mark out of 10 for each performance–they are simply judged to be good enough or not. So at the end of the course a student may have done 23 out of the 29 set tasks to a suitable standard. It is then up to the examiners to decide whether this is a "pass". In some courses students must achieve a satisfactory standard on all the tasks. In other courses it may well be impossible to insist on this high standard.

10.8 Check-lists

Check-lists can be used to standardise assessment through observation. Practical and clinical examinations can often be criticised because the mark is unreliable. Different examiners use different standards. **Check-lists** reduce this problem and they also make sure that the way in which the student does the task is assessed.

		not done	done correctly
1.	Use middle finger or ring finger of left hand		
2.	Cleans the finger using spirit		
3.	Dries finger with a different piece of cotton wool		
4.	Allows blood to flow freely after pricking with Hagedorn needle		
5.	Puts a single drop of blood in the middle of the microscope slide		
6.	Allows the blood to spread along the end of the second slide		
7.	Pushes spreader quickly along the slide		
8.	Draws blood along <i>bebind</i> the spreader		
9.	Does not blow on slide or shake it		

The examiner can watch the student preparing the blood film and put ticks in the right hand column for each part 'done correctly'. At the end of the test the number of ticks in the 'done correctly' column are added up and give a score for the student out of 9. The pass mark for this test must be decided by the examiner, who may feel that 7 out of 9 would be a suitable pass standard for this test. For other tests it may be 50% or 90% – the pass standard will depend on the specific test.

The advantage of the check-list is that it will make the marking fairer. Different examiners watching a student do a test are more likely to give the same score if they have a check-list. The check-list is also very useful for giving feedback to students or teachers because the evidence is clear and it is simple. The examiner might tell the teacher, "Most of your students did the blood film test quite well, but I noticed about half of them pushed the drop of blood instead of drawing it behind

the spreader slide". This would clearly help the teacher realise that this point needed more emphasis during the next course.

In the same way detailed information can be given to each student. For example the student might be allowed to see the actual check-list for his own performance.

This example check-list is for a physical skill. Similar check-lists can be prepared for communication skills and for attitudes. Note that a task analysis will be very valuable in preparing a check-list.

10.9 In-course assessment

During the training course, your students will probably spend time working in hospitals, health centres or dispensaries. There they will be practising the communication skills and the physical skills needed in their job. This time can be used for assessment as well as teaching, Probably the greatest difficulty is that the teacher must rely on assessments made by many different people. So it is difficult to say that all the different people have similar standards. To help in this, checklists can again be used. But in this situation the check-lists should be less detailed.

Example – a checklist for assessing students in a health centre

	completely	just good	not good
	satisfactory	enough	enough
Keeps complete and accurate records			
Observes sterile procedures			
Establishes good relationships with patients			

and so on.

1.

2.

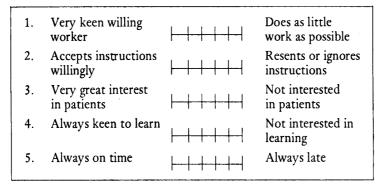
3.

Nurses or health workers supervising students can use forms like this to give a clear picture of what the students can do or cannot do. Using this information the teacher:

- 1. makes decisions on whether students should pass or fail.
- 2. gives specific advice to students about what they need to learn.
- 3. improves the course in areas which are poorly learnt.

This less detailed kind of check-list is again prepared from a task analysis.

Example – a check-list for observing attitudes.



This check-list might be used by a matron on a ward where student nurses spend part of their training. The matron would use one form for each student nurse. At the end of the training period she would think about the way each of the nurses had worked during their time in the ward.

For example, the first nurse might have been quite willing to do what she was asked to do, but never seemed very keen or offered to do extra work. The matron would note this down by putting a cross at about the middle of the line...

1. Very keen willing worker Does as little work as possible

In this way the matron can give a fair and quick summary of the attitudes of the student nurse to the teacher responsible for the course. This check-list can be used to give advice to the student nurse and can form part of the record which is used to decide whether the student nurse passes the course.

10.10 Conclusion

No assessment method is perfect. Each has some advantages, some disadvantages. The teacher should therefore use a variety of methods whenever this is possible.

Ideally the teacher should first decide what skills need to be assessed. These skills are, of course, the objectives of the course.

Then the best method should be chosen for assessing these skills. The method should be chosen on the basis of:

- 1. regulations for the course
- 2. economy of time
- 3. reliability
- 4. validity
- 5. value as a learning tool