

Teaching techniques

How you teach a subject is very important. The most highly skilled and knowledgeable person can fail to pass on the necessary information to students by not using the correct teaching skills or methods.

Following is a broad coverage of teaching methods, some of which will be appropriate to your situation and others not.

You should consider how you may perform and what method you will use. Choose a method suited to your subject and what you aim to achieve.

Planning is all-important. Research your topic well.

Overview of teaching methods in common use

Methods of presentation

Lecture

- Stand or sit in front of a class and verbally give the relevant information.
- Suitable for large and small classes.
- Rather inflexible.
- Can be boring.
- Audio visual aids can be used.
- Printed notes can be given out in support of the spoken word.

Tutorial

- More informal than the lecture.
- Suitable for smaller classes.
- Students are encouraged to present material and enter into group discussion.
- The teacher acts more as a facilitator.
- Participants can sit around a table or in a circle.
- Feedback is important.

Practical

- Students carry out a practical exercise under teacher supervision.
- Verbal or written instructions may be made available to the student.
- The practical should be relevant to recently acquired information.

Demonstration

- Given by the teacher to illustrate a particular point.
- May be carried out as a supplement to a lecture or tutorial or an introduction to a practical.

Role Play

- Students act out specific sets of circumstances.

Reading

- Students are given topics or specific references to read up on.
- Often used as a preliminary before a tutorial or instead of a lecture.

Self directed learning

- The student is given the topic and the expected outcome.
- The student does their own research and problem solving.
- Exchange of information and group problem solving is encouraged.
- Usually followed up by a tutorial and a written confirmation of the student's knowledge.

Context based learning

- Problem solving, in groups.

Presentation

- The student researches the topic and gives a talk to other students.
- The teacher acts as facilitator and assessor.

Assignment

- The student researches a set topic and hands up a written presentation to the teacher.

Workbook

- A specialised book that poses questions and/or sets practical tasks.
- Answers are generally recorded in the book.

Book review

- To encourage students to read certain books.
- The student is asked to present a written summary and comment on the book.

Posters

- Can be done in work groups.
- May be used as teaching material at a later stage.
- Could be displayed in department to convey information.

Presentation technique

In any form of presentation by a teacher to a class, the following points should be considered:

- Stand or sit where students can see you.
- Address them clearly.
- Use language they can understand.
- Present your facts logically.
- Speak directly to the class.
- Cast your eyes around the class as you speak.
- Use visual aids where necessary.
- May use flip charts.
- In a tutorial or practical situation the teacher acts largely as a facilitator.

Teaching aids

- 35 mm slides.
- Overhead projection (OHP).
- Video
- White Board / chalk Board
- Butchers paper.
- Models,
- Charts.
- Radiographs.
- Pieces of relevant equipment.
- Printed notes.

Preparation

- Select the topic.
- Research the topic.
- Assess the educational and technical level of the students.
- Decide on the breadth and depth of the material to be covered.
- Select the method of teaching to be used.
- Select the teaching environment.
- Prepare relevant teaching notes.
- Prepare relevant teaching aids.
- The length of the session must match the time slot available.
- The amount of material to be presented must match the length of the time slot.

- In the case of a practical, ensure before hand that it will work.

Running a practical

- Identify each piece of equipment.
- Explain the procedure.
- Outline the aim.
- Demonstrate if necessary.
- Identify likely problems.
- Observe student carrying out the task.
- Comment as necessary.
- Be available to assist or answer questions.

Feedback to the student

Following any learning activity performed by the student, the teacher should give feedback to the student regarding their performance.

- Mark / grade achieved.
- Method.
- Content.
- Technique.
- Performance.
- Presentation.
- Or whatever is appropriate.

Assessment

- Written examination.
 - Multiple choice.
 - Short answer.
 - Essay.
 - Numerical answer.
 - Problem solving.
 - Open book.
 - Fill in a missing word.
 - Tick a box.
- Practical task (written question and answer).
- Practical task (teacher observed—must have a pre-determined mark sheet).
- Assignment.
- Book review.
- Oral examination.

Grading student work

- Written.
- Verbal.
- Practical.

Forms of grading

- Pass / Fail/Referred.
- A B C D E F
 - Where A is the highest and F is the lowest.

- A to E are graded passes.
- E to F are graded fails.
- Distinction / Credit / Pass / Fail.
- Marks out of 100.
- Marks out of 10.
- Combined project(s)/exam(s) e.g. 50%/50% or 25%/25%/50%
- Satisfactory/Unsatisfactory.
- No grading, the student simply attends classes and completes all work set.
- Outcome based
- Can the student perform a task satisfactorily.
- The student must be made aware of the grading system.
- The student must be made aware of the results of any assessment.
- The teacher must allocate marks to the various parts of the material before marking Takes place.

Teacher performance

- Start and finish on time.
- Plan content to fit the time frame.
- Encourage questions.
- Speak clearly.
- Maintain a friendly discipline.
- Be well prepared:
 - Knowledge.
 - Notes.
 - Teaching aids.
- Mark all work fairly and accurately.
- Return all marked work as soon as possible.
- Give feedback.
- Regularly look around your audience.
- Humour is a useful tool if used properly.
- Don't be sexist, superior, aggressive or condescending.

How good are you at teaching?

Some ways of understanding how you perform as a teacher:

- Evaluation questionnaire filled in by the student at the end of a class or series of classes.
- Ask someone to watch you teach and give you feedback.
- Watch student reaction during a class.
- Videotape a lecture, view it and then evaluate yourself.

Sample evaluation questionnaire of teacher performance

- Were you able to hear? YES / NO
- Did the teacher start and finish on time? YES / NO
- Was the material presented in a logical way? YES / NO
- Was the material covered adequately? YES / NO
- Was the presentation carried out satisfactorily? YES / NO
- Was the attitude of the teacher satisfactory? YES / NO
- Were the aim and objectives of the course achieved? YES / NO
- Further comment:

- Instead of YES / NO the student could be asked to choose from the following:
 - Excellent.
 - Good.
 - Acceptable
 - Needs improvement

Conclusion

- This section has set out to give you an overall insight into teaching.
- Much of the material given will not directly apply to your situation.
- You must choose what you feel is relevant to you and carry out your teaching to suit your own needs and those of the student.

Suggested method of teaching with this workbook

This book sets out to give the relevant information on the topics listed in the contents, regarding quality assurance, then sets simple tasks that students are expected to carry out, responding to any questions asked. The teaching method used should therefore be practically oriented.

The tutor

A tutor using this book must:

- Become thoroughly familiar with the book.
- Understand its contents and know how to perform all tasks set.

- Know the answers to all questions asked.
- Understand and be able to run practical exercises and carry out any other form of teaching considered appropriate.
- Be able to select and use the most appropriate method of teaching.
- Make sure that all equipment needed is available.
- Make sure the student understands what is required of them.
- Be available to advice while the student is carrying out the exercises.
- Assess student's work fairly and accurately.
- Give useful feedback.
- Be sympathetic to student needs.

Method

It is suggested that a tutor use the following basic teaching format:

- Understand the **student's needs**.
- Devise an appropriate **teaching program** (lecture, tutorial, practical etc.).
- Ensure that you have all the **equipment and teaching aids** that you require.
- You should carry out a practical exercises yourself first to ensure it works.
- Ensure that you have the correct **answers/results**.
- Issue the workbook to the student, at least two weeks **before** they start the course, for pre reading discussion with colleagues and completion of the information about their department.
- Read the completed questionnaire, **Student's own department**, and discuss with the student in order to determine their needs.
- Before starting the course the student *must* complete the **Pre test**.
- Outline the **teaching format** to the student.
- Identify the **topics** to be covered.
- Give a copy of the **teaching program** to the student.
- Cover one topic at a time.
- With each topic, first give formal instructions covering all the **relevant information**.
- Answer any **questions**.
- Allow the students to carry out **the exercises**.
- The tutor should be available in an **advisory capacity**.
- Give the student **time to complete the exercise** and any necessary written work.
- **Assess** the practical component.
- **Assess** the answers on the task sheet and make written comment.
- **Grade** the answers and practical performance **Satisfactory/Unsatisfactory**.
- Give **feedback** to the student.
- If the student's performance is **unsatisfactory** the task must be repeated.
- Continue with the next topic when a **satisfactory** grade has been achieved.

Notes