Department of Electrical Engineering
University of Cape Town

Tutoring Workshop

Guidelines Handout

As a tutor, you have chosen to assists other students in learning. It is important to note that the intention is not to do the work for the other student; but rather to act as a 'coach' where you help to direct a student in accomplishing assigned work. In order to be effective at this task, you need to establish some priorities and a plan of action.

An obvious suggestion is to read up on ways to tutor effectively, and readings on the topic of 'coaching' are relevant. Coaching is about helping another person to improve his or her awareness and ability in achieving goals and to improving performance. You can remember this by considering that a good soccer coach usually doesn't play in the match, but encourages his team to win the match.

In order to be a good tutor, you need to know the *subject* you are tutoring – sitting in on lectures, and definitely doing assignments before the tutorial, all help in achieving this understanding. It also helps to ensure that your student knows what is expected of them, and also what they should expect of you as a tutor. Consequently, during tutorials it may benefit you to establish mutually agreed rules, such as first-asked first-answered and limiting consultation times (e.g., max five minutes if others are waiting).

Know *what* you should and should not teach another person – for example, in terms of writing programs, there may be many quick but abstruse solutions to a problem, however since the intention is on building understanding, it is probably best to take the longer but clearer route in such situations.

Patience is a personality trait that engineers often achieve, considering the complexity of their work. Accordingly, an engineering tutor needs to be ultra patient: not only do these tutors need the persistence in coming up with elaborate solution techniques for a problem, but they also need to maintain a sense of composure while helping umpteen other students solve the same problem – each one possibly undergoing the same lengthy and cumbersome learning curve.

Do not be worried about saying that you don't know the answer to a student's question. Indeed, knowing all the answers to student questions, especially if it's the first time you're doing the prac, probably means the assignment was too easy. Rather offer to help the student find the answer.

If many students seem to be getting stuck on the same issue, it can help to do a presentation to the whole class on the issue, which may require the need for a whiteboard or a laptop and data projector (however, I have found that only the Digital Lab, Blue Lab and Red Lab extension are suited to such a technique; the other labs are either too big or awkwardly arranged for such interaction). Alternatively, you could use a VULA announcement, forum posting or resource to share a remedy that can be transcribed or recorded as a screen capture.

It helps to know the students in order to develop effective collaboration and a less formal atmosphere in the labs; such as knowing their preferred learning styles, for example if they are more visual and prefer you to draw diagrams to assist in explanations. For bigger classes, it may help to match tutors and student with similar learning styles, but avoiding the chatter of friends and promoting intelligible

assistance. Sometimes you might not be a good match for a particular student – in such a situation it may be helpful to encourage an alternate tutor to assist the student (this could be more fairly accomplished by discussing a student swap with a fellow tutor).

When tutoring, listen attentively to the students. Make sure that you understand what the students are asking you, so that you can better assist them, without making assumptions and possibly leaving them in a more confused state then before. Similarly, make sure that you understand what the assignment involves beforehand, so that you are providing them appropriate assistance. It may help to talk with the lecturer or lab convener if you find the assignment is unclear.

A tutor does not have to diagnose learning disabilities, and it is probably best not to. However, if you are feeling sympathetic and suspect that a student has a learning disability, you could discuss the issue with the student, or alternatively with the lecturer, in a discrete manner.

Make sure that you give *good feedback* to the student. Avoid being overly critical or negative. Rather praise students' successes, than reprimanding their mistakes. For the tutorial, why not choose a positive frame of mind: try putting a smile on your face, greet the friendly students, and you'll probably find it less an ordeal and more a pleasure.

In terms of tutoring engineering subjects, some paper and pencil can be useful as a means to aid explanations using rough sketches and notes. Another way to improve your tutoring is by keeping your own journal or log book, in which you make notes to yourself about solutions techniques and possibly general insights on your efforts – such notes and reflections may be useful in solving similar problems in the future or in reviewing your own experiences.

As a tutor you should also consider yourself as setting an example to others. Accordingly, you should maintain good manners, no shouting or chattering with friends (on a cellphone or in person), and be punctual during the sessions. Similarly, you should dress appropriately for the occasion (I don't mean something as formal as a jacket and tie, which accounting tutors might wear, but rather appropriate engineering garb for meeting fellow professionals on a work day).

Remember you are not alone. If you are having difficulties with tutoring tasks, it helps to discuss it with others, such as your parents, friends, fellow tutors, extraterrestrials or even the lecture.

Five affirmations for a good tutor

1. Coach but don't do (i.e., assist students in finding a solution, but don't just give the answer)
2. Prepared and punctual (e.g., take along a pen and paper, and be on time)
3. Patient listener (i.e., listen to the students, allow them to discover things you're seen before)
4. Good advice and positive feedback
5. Smile – try a positive attitude and you're more likely to have a good experience

If, after the workshop, you have comments or issues regarding tutoring that you would like to bring up with the presenters, you are welcome to contact them, Simon Winberg (Simon.Winberg@uct.ac.za) or Renee Smit (Renee.Smit@uct.ac.za).