13. Been there; Got the T-shirt: The perspective of a recent survivor of the tutorial system...

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I started Oxford as an undergraduate (Jesus College, 1992) and have been through the whole of the tutorial system. Having received the benefits of such tuition, to now being on the giving side as a tutor, I hope to be able to lend my experience of the system, with the aim of giving some insight into what leads to a successful partnership between tutor and undergraduate.

As a first year undergraduate I can recollect being given my first tutorial piece in a brisk meeting at the start of 0th week. After a brief welcome from my tutors, it was straight down to business, with a complete breakdown of the planned year's work leading up to prelims in the summer. The differences between a 'tutorial' and a 'class' were described and tutorial pairings distributed. It was made clear that the emphasis of the work would be directed through problem solving to developing the skills required to think as a chemist, with the initiative and emphasis placed squarely on my shoulders. My tutors would be there to advise and probe, not to simply deliver information as I had previously been used to. Like most of the other undergraduates in the room I had worked hard toward the 'A' levels I had needed to gain my place at Oxford, but had the knowledge and confidence that my grades were always going to be under control. This was now a very different environment. In a room full of talented people I no longer knew what was expected, would no longer be told exactly what to do. It seemed that I would have to develop my own feeling for the subject, my own understanding as opposed to relying upon facts for comfort.

I remember being worried, and rightly so as my first tutorial piece was a disaster – I felt hopelessly out of my depth. In my first group class I remember feeling naïve as my fellow tutees were quickly discussing topics they had covered at school that I had not encountered. I was too embarrassed, felt too uncomfortable to ask the questions that I needed answering so that I could find my own starting point for the work. I didn't want to be behind the rest of the group. I felt out of place and, more importantly, out of my depth.

Luckily, I was given a fantastic piece of advice: "Who cares?"... Who cares if you ask what to others may seem an obvious question? Who cares what your fellow tutees think about what you find difficult? Who cares if you attempt a question and get it wrong? I had to realise that tutorials were there for my benefit and in this way soon learnt the most valuable tool of the tutorial system. As an undergraduate you need to be able to acquire the information that you need to proceed; this process is most efficient if a two-way understanding between tutor and tutee is reached. Firstly, participation from the tutee is a prerequisite. You need to cover the work that you are set, you need to give feedback to the tutor as to which topics you find most difficult, and you must be able to contribute in class discussions. The tutor will try and encourage

you to think for yourself, and be able to readily define the boundaries between telling you the answer and giving you just enough information so that you can figure out the answers, and a way of tackling various problems for yourself.

So don't be afraid to get things wrong... I think that I managed to make what some people would call a 'fool' of myself in many tutorials, when I decided to attempt something that I thought I knew the answer to but my logic was flawed. Yet in doing so, I was readily able to learn and I felt part of the system, as opposed to being alienated from it, and so gained in confidence. Once the fear of being incorrect has vanished, tutorials will become more probing, more interesting, even enjoyable... From my own undergraduate perspective, that is the most important lesson that I picked up at an early stage. Do not be put off or over-awed; you need to find what you want from the tutorial system. It will be there and the tutors are there to help you find what you are looking for.

Having completed my undergraduate degree, I began teaching as a first year D.Phil student. I asked myself "What makes a good tutor?" As an undergraduate I had several fantastic tutors who managed to readily pass on their enthusiasm and knowledge for chemistry. They were able to give their own interpretation to the subject, their own perspective, with their own particular character. You cannot, therefore, expect your various tutors to approach tutorials in the same way. That would take the variety from the tuition system here in Oxford, and detract from the learning experience. They will each impress something of their own character upon you, their own methods, their own way of thinking, gently trying to mould you, trying to introduce you to the tools, the questions that you need to be able to ask yourself to be able to succeed. That is what the whole of the Oxford tutorial system relies upon and what makes it distinct and special. From my own experience, I believe that the best way to teach is to be able to break the most complicated problems down into small, manageable chunks of information, which, when put together, make sense. Others may disagree; but by seeing a range of approaches you can start to think for yourself which is a necessity for success. Your tutors are there only as guides; they cannot tell you the answers to every single question you will need for Prelims or Finals, although they can encourage you along the right lines.

What immediately struck me about tutorials from a teaching perspective is how quickly you can tell those students who have fully attempted the work and those that have copied the work. How readily you can distinguish between those struggling with the workload but trying hard, and those that are coasting and trying to bluff their way through. Those that are enthusiastic, and those going through the motions. You have to give your tutors some credit as most of them have been through the same or similar systems, and seen (even done?) most of the tricks themselves. So don't kid yourself into thinking that you managed to get away with it, because you are only letting yourself down. It is far too easy to blame your tutors for any of your own downfalls; the tutorial system is there to encourage you to find your own goals and decide for yourself where you want to go – and then to give you the opportunity to achieve them

and to get there. Coming to Oxford gives you an opportunity to do so many different things, but if you miss out on the full benefit of the tutorial system you will not fulfil your potential and have only yourself to blame.

So what can you expect in a tutorial? Speaking as a chemist, tutorials for sciencebased subjects will typically be centred around problem-solving as opposed to essaywriting, although that is not to say that you will never have to write essays! Do not be surprised if you find yourself in a class for which you have prepared and handed in written work only to find yourself then hauled up to a white board to answer questions without your notes. One of the best ways of actually understanding your subject is to be forced to attempt to tackle problems from first principles when you don't immediately know the answer. There is no simple substitute for getting up to the board in front of your friends, forgetting what you've worked on for the last week, and still managing to work your way through the problem to the answer. In that way you are tested upon not only your knowledge, but you will simultaneously be encouraged to develop your own rules and strategies. As tutorials are broadly problem-based, you cannot rely upon a tutorial partner to give all the answers, nor to read out their essay for that particular week while you relax a little. Science problems allow each person in a class to be readily tested, as the tutorial is easily broken down into distinct sections. Never forget that tutorials are designed not only to cover the basic, core knowledge necessary for the subject, but also to stretch even the best students to the limit. Tutorials cannot, however, teach you everything that you need to know. They are an aid to your degree studies and are meant to compliment, rather than replace lectures. All you have to do is make the most of them!