

## My experiences as an International Teaching Assistant

### My background

I came to Case to start my PhD in 2003, and while I had visited the USA several times before, and have relatives living on the East coast, this was my first time actually living and working here. I grew up in South-Eastern England and all of my education, up to a Master's degree, was in that region. This means that I am in an unusual situation, being an International Teaching Assistant (ITA), but speaking English as my first language. Even so, the education systems (at least from age 14 onwards) are radically different between the UK and the US, and I have had a lot to learn about the system itself.

I have also given myself an additional adjustment to make, because I have changed subjects as well as universities. My prior degrees are both from the University of Sussex, and both from a very distinctive (and now sadly dismantled) cognitive science department. I hold a BA in Psychology, and an MSc (what US universities call an MS) in "Evolutionary and Adaptive Systems", which is essentially a very specialised subset of Artificial Intelligence. Now I am in the Computer Science section of an Engineering department, and sometimes it is hard for me to tell whether differences between things here and my previous university experience are because I've moved country, moved subject or just because each university is different.

I had some teaching experience before I came here, but this too was in a different context from the TA assignments I've had at Case. For one term as an undergrad I worked as a "Supplemental Instruction" provider, giving one-to-one tuition to first-year students who were struggling with their introductory computer programming course. For several years I worked in the private sector, teaching adults how to use common software and how to design websites. However, until I started working as a TA at Case I had never been involved in setting or grading homework, or generally in assessing students in any way, so that has been an entirely new experience to me.

### What I expected before arriving

I made a mistake that a lot of people who move from Britain to the US make: I assumed that because both countries speak [mostly] the same language and have a lot of cultural common ground, it wouldn't seem very foreign. It's fair to say that I had underestimated how much of a culture shock I would experience.

There were some things, however, that I knew would be different. The British education system encourages specialisation from the beginning of high school onwards. For the last two years of high school there is no general education at all, but instead students choose a small number (it was 3 or 4 in my day but I think it has now increased to 5 or 6) of subjects to study exclusively, and their final school grades are based on in-depth exams in those narrow subjects. Students in Britain have to choose their major when *applying to* university, so many have already decided what they will study by age 17, and they study only that one subject. I knew

that the US system was quite different from this, and one of the reasons I chose to come here was the knowledge that instead of being pressured to specialise early, students are not allowed to specialise too much until they have been at university for a year or two.

There were two other significant things that I knew would be different: US students who came to Britain for a year abroad had made me realise that the workload at a US university is considerably heavier than at a typical British one, and that the facilities at US universities are far superior to their British counterparts, because the university sector is much better funded here. Just as one example of why the funding difference matters, back home I used to have to queue for a computer if a popular course had a homework deadline approaching, and here at Case I have *never* had to wait for a computer to be free.

### **The differences between systems**

It didn't take very long for me to realise that there are many more major differences between the two systems than those I knew about before arriving, though it is hard to tell which of these are country differences and which are department- or subject-related. One of the biggest is one I had expected, though: that students here have a much wider choice of courses to take, whereas in most British universities one's choice of major dictates the vast majority of one's course choices. This has some interesting consequences, such as the considerably variety of majors (from every flavour of Engineering to Art History and Spanish) represented among the students on the 100-level computer programming course for which I am currently a TA. It is undoubtedly a very good thing that the system here allows students such breadth and such opportunities to learn useful skills not immediately related to their major, but it also presents teachers with a challenge. We have to deal with a much wider range of abilities and levels of prior knowledge than seems to be the case where I came from.

The most significant thing that I had not anticipated is that there is a huge difference in the rhythm of work. At Sussex all of my courses were assessed by a single exam after the 9 or 10 week long course finished and/or one or two large coursework assignments. This gave students a lot of freedom to read around subjects and explore whichever areas they were most interested in, but also the freedom to shoot themselves in the foot by coasting for a term and suddenly realising they had a large project to finish in a few days. By contrast, Case (or at least the department I am in) assesses students continuously. The courses I have been a TA for have all had homework assignments either weekly or fortnightly, and 3 exams through the term. A system which bases students' grades on a large number of data points is probably a good deal fairer and less affected by luck, but on the other hand it puts students under considerable pressure. I personally experienced an effect on this when housing problems forced me to move house at short notice in the middle of a semester—it took me months to catch up what I had missed from a couple of weeks of being distracted—and I think I see various effects of this on the students I teach; more on that below.

Another factor that puts undergraduates under more pressure is that the US system gives grades that are much more finely divided. In the UK, degrees are simply split up into 5 broad classes, so by their final year most students already know what they

will graduate with if their performance on their last few courses is mediocre. It may well not matter if a student scores 60% or 100% on the last exam that they take. Here, students get a GPA that distinguishes between 4.0 (equivalent to “First Class” in the UK) and 3.9. I had the equivalent of 3.9 on my BA, but my degree certificate says “Upper Second Class”, which is also what it would have said if I had the equivalent of 3.0. This seems to make undergraduates here much more concerned about small percentage differences in grades, and much more willing to go to their teachers to argue about the exact grade a particular piece of homework received.

Finally, there is a difference in teaching style that I strongly suspect has more to do with the type of department I am in than the country, but seems worth mentioning nonetheless. The education I had in Britain was largely focussed on writing discursive essays, describing things and arguing points. Here I am seeing a strong focus on skills—be they software-development skills or logical proof skills—and factual knowledge. The skills side of this affects how courses have to be taught, because it does demand much more regular practice through homework assignments.

### **Contrasts between students**

There are many differences between the undergraduate student body as a whole here and where I was before. Demographically, the students here seem to be somewhat less diverse. Roughly a quarter of undergraduates at Sussex were from non-Anglophone countries, and while the majority of these spoke English rather well, operating out of their mother tongues did seem to make them more hesitant to ask questions, and more eager to learn from books rather than lectures. Sussex also had a particularly large proportion of “mature students”, who are students who started undergraduate education after the age of 21. We also had a significant number of students who worked full-time and studied part-time, who bring a whole different set of challenges with them.

I have found students here to be considerably less self-directed than those I used to teach. To some extent this must be because my main teaching experience was teaching people older than myself, who had come for training either because they were out of work or seeking to change jobs; both groups of people who are likely to be particularly self-motivated and have a clear idea of what they want from the course. However, I think it does also reflect the system to some extent, in that students have to be self-directed in a system which has relatively long intervals between assessments, whereas on a course that has weekly homework they need only follow instructions.

A general trait I have noticed about the British is that we have a tendency to grumble among ourselves about things, without ever raising the complaint with a person who might be able to do something about it. Americans tend to do this somewhat less, and are more willing instead to actually talk to the right person. As a TA I have found this very helpful, because it gives me a source of feedback that I can use to improve the way I run classes, though I wish people were still more willing to tell me what they want from the class.

A probably related thing I have found is that my students are much more likely to come up and say hello if they see me out of class, whereas when I was an

undergraduate I and most of my peers would never speak to an instructor outside the work setting. I think this is part of a more general cultural difference—in my experience Americans are more generally likely to strike up a conversation with people whose paths they happen to cross, while many British people seem to have elaborate ways of avoiding eye contact—and it has other positive effects. When I was an undergraduate in Britain, only the “mature students” would ever ask questions in a lecture, and everybody else made fun of them for doing so. Here, students in general show a greater willingness to ask for things to be clarified, and question things that seem wrong. It can be unsettling for a teacher, because teaching in such an environment demands more comprehensive knowledge of the subject at hand, but it also means that students get much more out of a class.

One final difference that I feel exists between the two groups is that students here are much more competitive than I am accustomed to. I think this is a result of several systemic factors: the constant assessment, the finer demarcation of grades, and perhaps also the enormous cost of a private US university making people more determined to make sure their education pays for itself in improved job prospects. As with all the other issues, this has its pros and its cons. As a TA, it is nice to see the majority of my students trying hard to learn the material and do well on each assignment, which I didn't feel my peers did as when I was an undergraduate. However, it does also lead to students being prepared to argue about tiny increments in grade, and try almost comically desperate gambits to get marks they haven't earned. The worst instance of this I have encountered was one who claimed that while he only submitted the solution to the last of 6 or 7 things asked for in the homework instructions, he had written each one, and simply replaced each answer with the next, as if somehow I could be expected to give him points for work I hadn't seen. This is a minor problem, however, in contrast with the extent of cheating. In 5 years as a student in the UK, I heard of only one specific incident of cheating, and it was understood that if anybody was caught cheating they would be summarily thrown out of the university; not a problematic policy if the offence is that rare. In 1½ years of grading papers here, I have caught 3 incidents of people handing in identical homework, and 2 of people handing in fake results (these are only the incidents about which I was certain enough to cry foul). Though it does upset me to see people trying to cheat like that, I can also understand how the long hours and relentless pressure here drives people to it.

### **Similarities between students**

Having said all of the above, people are people and there are of course plenty of ways in which the student bodies are similar in both countries where I have taught and studied, and I imagine they would be in most other countries. Perhaps the most obvious point is that there is a wide range of abilities, from students who can coast because they already know the material in a given course, through those who came with no prior knowledge but pick it up quickly, to those who really do struggle with what they are asked to do.

Having said above that students here are more communicative than back home, I still wish they would be more so. While this problem is less severe here, in both countries it can be hard to know whether the whole class understands what I have just explained, because I know that some people just won't speak up. At times, in

both countries, small-group classes can reduce to a dialogue between the instructor and one interested student, at least at the undergraduate level.

While students here do seem more strongly motivated to do well, and the majority do not cheat, students in both countries seem eager to take 'legitimate' easy ways out. I get the impression that a significant proportion of students in both countries just want to learn the precise subset of a given subject that they will need to score highly in the exams, and would like to be spoon-fed this particular set of information with as little effort on their part as possible. It can be rather frustrating as a TA when students expect to be taught all they need to know passively in a few hours per week of class time, and groan audibly if told to read the course textbook. Fortunately, in both countries there is another subset of students who clearly are interested in learning more about the subject, and are willing to do a little extra work to that end, and they are the ones who make teaching rewarding.

### **My particular experiences as a TA**

Prior to coming to Case, I had several years' experience as a teacher, but my responsibilities and activities were quite different from those I have had here. My first assignment consisted of 2 successive semesters of grading homework for a course with an enrolment of around 50 students. Having been accustomed to running courses myself, and meeting small groups of (3-6) students face-to-face, this was deeply frustrating. Instead of a job involving a great deal of human interaction, considerable variety and almost total control of what to teach and how, I found myself never meeting students, doing incredibly repetitive work, and being totally constrained by a professor's homework assignments and grading schemes. The exercise was not entirely without value though, as I did gain experience with working to someone else's plan, and crucially with the process of assessment, which is something I had never been involved with before.

This semester I have a much more rewarding assignment, as a "recitation leader" for an elementary computer programming course. I still have to fit my lessons and assignments within the lecturer's overall plan for the course, but I do set the homework myself, grade it according to my own ideas, and most importantly I have regular face-to-face contact with the students. My group currently consists of 19 undergraduates, so it is a less personal experience than the teaching I used to do, but it is possible to know each student as an individual, and follow their progress on a much more personal level. Although I still have less freedom with the curriculum than I used to have, this is probably the most responsibility I've had, because I am in charge of a large proportion of the students' assessment.

### **What I have learned**

Probably the most important thing I have learned as an ITA is that even with the same native tongue as the people I am teaching, and even with a reasonable level of prior knowledge about where I was going, throwing myself into a system I wasn't used to was a challenge. Peoples' expectations and ways of working are dramatically different even between two relatively similar countries. Exactly where the differences will lie must depend a lot on which countries are being compared, but I imagine every International TA would encounter a large set of things that must be adjusted to.