Introduction to Academic Practice Reflective Account

My main teaching responsibilities are as a laboratory demonstrator to first, second and third year biological sciences undergraduates. Whilst the course content I teach is variable, the aim of each session is to engage all students with the task, relating to lecture material, and ensuring students leave the room with the same core understanding of why they just spent three hours in a lab coat. Subject material preparation is key here (K1), and I am most informative (and comfortable) as a demonstrator when time has allowed me to read through all the appropriate lecture notes, not just the session protocol and literature, and prepare explanatory examples using my own or other current research, giving context. Now in my second year of demonstrating on the same courses, this is something I endeavour to do for each session as it allows me to be more relaxed, know what the students should have learned, and tailor my approach in response (K2). Laboratory sessions often have polar appreciation. For many they are university highlights, for others, simply a barrier to passing the course. Our role is to encourage student engagement (V2) whilst developing the correct practical and analytical skills, as life sciences graduates often say they are unprepared for the practical requirements of employment (V4)(Brown et al., 2005; Hughes & Overton, 2008).

I am usually responsible for the same 8-20 students per session throughout the course, allowing me to get to know their style of learning and build up a rapport. I give this latter point high priority as, from experience, a strict tutor/student divide is not helpful when you need students open up, enabling you to assess their knowledge and needs much better. A clear appreciation of V1 is important here as half my students may be foreign students (with associated language and school background differences) and there is huge variability in practical laboratory experience, background subject knowledge and how up-to-date that student is with current course and lecture material. As stated above, preparation is key again. Before every session I identify potential problems and prepare at least three different ways to explain them: a verbal explanation, an analogy and models/diagrams. Student background and learning preferences may differ drastically within a small group, but preparing for different scenarios means I can teach in the most appropriate manner for that individual. Furthermore, whilst my general approach to all students is friendly and open, I adapt to ensure all students are comfortable, whether this is talking slower/clearer to a group containing foreign students, or appreciating the varying work ethic and approaches of different ethnicities. As the aim of all sessions is to advance the students past the same basic level, it is on the demonstrator to be able to facilitate that no matter the individual (V2).

Generally, I think that my teaching style promotes V2, whilst taking into account the many facets of the group (V1). But, as I want teaching to be a major component of my future employment, I am constantly trying to improve my confidence and ability (V3). In his review of methods to become critically reflective,

Brookfield (1995) highlights four "lenses" for measuring improvement: students, colleagues, autobiographical and theory. Courses such as this "Introduction to Academic Practice" has allowed me to develop my autobiographical reflection (what works for me, how I can improve next time) and, for the first time, properly use the available literature to develop my approaches. When tackling some of the challenges outlined in the paragraph above, I found the teaching models/systems of Fox (1983) and Morss & Murray (2005) very helpful for confirming the way I already approached a heterogeneous group of students, whilst also providing ideas for how to consolidate and build on group learning from week to week: 'constructivism' is key.

Following an IAD course on marking and feedback in the sciences, I have been much more proactive to also seek student feedback on my teaching. However, without a system for anonymous feedback (time and room constraints - it is certainly something I would try with a regular tutorial group in future) any responses felt superficial. When a student responds, "that was really helpful, thanks", is it sincere or just politeness given a face to face question? I therefore really enjoyed the opportunity for peer observation as part of this course, especially as session preparation was a great autobiographical exercise. I asked my observer to focus on two areas I feel like I have to work really hard on in my teaching: my time management between groups, and how I check for individual understanding following explanation (V1, V2, K2). Reassuringly my observer felt I performed well on both of these points, particularly noting how I made eye contact with each student following an explanation to affirm whether they had understood. My observer also noted that my manner with the students was good, informal and yet clearly 'in charge', and that I was able to keep the students moving through the required tasks. I was also glad the observer picked up on my knowledge of the course assessment criteria as I was able to support the students beyond the scope of the practical. Despite a good observation, I still feel I need to improve on my division of time between students. I find it easy to spend too much time with students that are struggling, to the detriment of those who could achieve a higher level of understanding with an extra push. I find this a difficult line, as all students need to reach the same base level, but the brighter students should still have room to expand their understanding.

Focusing my teaching style and attitude through courses, feedback and consulting the literature has made a marked difference to my teaching in the last few months. Teaching is just the same as learning in many respects and is, therefore, a continual process. I would like to take part in more directed courses in the future and take on more teaching responsibility, perhaps with my own tutorial group, to develop further.

References

- Brookfield S (1995), 'Becoming Critically Reflective a process of learning and change', in *Becoming a Critically Reflective Teacher*, p28-48.
- Brown A, Calvert J, Charman P, Newton C, Wiles K & Hughes I (2005), Skills and Knowledge Needs Among Recent Bioscience Graduates How Do Our Courses Measure Up?, *Bioscience Education e-Journal*, **6(2)**.
- Fox D (2006), Personal Theories of Teaching, Studies in Higher Education, 8(2): p151-163.
- Hughes I & Overton T (2008), 'Key aspects of learning and teaching in experimental sciences, in H Fry, S Ketteridge & S Marshall (eds), A Handbook for Teaching & Learning, 3rd Ed., Routledge, p226-245.
- Morss K & Murray R (2005), 'Theory and Practice', in *Teaching at University: a guide for postgraduates and researchers*, Sage Publishing, p8-27.