**Final Report Guidelines**

**Education development: the views of academics**

**Dr Kym Fraser, The University of Warwick.**

**Introductory** **Summary**:

In the last ten years, education development in universities has focussed development efforts towards those who are new to university teaching. Many universities in the UK, Netherlands, Norway, South Africa, Australia, and New Zealand, to name a few, have developed introductory teaching programmes (Schreurs et al, 1999; Quinn, 2003; Dearn et al, 2002; Fraser, 2005) some of which are compulsory. While the focus on teaching development for those new to university teaching is extremely important, what we learn about teaching in the first few years of an appointment is not enough to sustain a ten to forty year career. Equally important is the continuing professional development (CPD) for the teaching role of university teachers[[1]](#footnote-1). Anecdotally it appears that the vast majority of university teachers do not engage with centrally or faculty provided teaching CPD (Dearn et al, 2002), and such provision doesn’t always fit with the needs of established university teachers.

This pilot research sought to determine what teaching development (formal or informal) professors and readers in two disciplines in one research intensive university had experienced and their conceptions, and perceptions of teaching development. In so doing, the research sought to determine if this particular group of academics was open to teaching CPD and if so, in what ways they would find it most useful to engage with teaching CPD.

**Main Body:**

I commenced this pilot research project with a colleague from another university and we planned to interview professors in the same discipline in two different, research intensive universities. This project was always conceived of as a small pilot project and therefore we limited the sample to one discipline and two universities. The discipline chosen (engineering) was not chosen for any particular reason. Unfortunately my colleague was unable to continue with the research shortly after we commenced the interviews. It was not feasible for me to carry out the research in the second university and so at that stage, I chose a second discipline (medicine) in the one university. Because of the small potential sample sizes, I chose a discipline that was similar to engineering. Like engineering, medicine is science based and students graduate into a profession.

As part of the validation process, feedback was sought on the design of the research questions, interview schedule and the letter to academics. Four peers provided this feedback, two of whom were external to the Universities that employed us at that stage. Their feedback was used to develop an additional question, modify several existing questions, and re-sequence some of the questions. While the title of the project proposal used the term ‘education development’, my colleague and I chose to use the term ‘teaching development’ in the interview questions because we thought that it would be more easily understood than the term ‘education development’. (Research and Interview questions can be found in Appendix 1).

I followed the same process for contacting and interviewing people in both disciplines although I commenced with the engineering discipline (at the time my colleague was going through the same process in another university). Fourteen engineering professors were identified from the University’s website (I subsequently learnt that two professors were retired and one was on sabbatical). They were each sent a letter asking them to participate in the research. This letter was followed by a phone call. Six professors agreed to be interviewed. At this stage, because of the very small numbers agreeing to be interviewed, I expanded the sample to include readers. Of the four readers in the Engineering School, two agreed to be interviewed.

The medical website listed 19 professors and six readers. Eight professors and three readers agreed to be interviewed. All of the engineering interviewees were male while five of the eleven medical interviewees were female. Everyone who agreed to be interviewed was sent a copy of the interview questions and was informed that they did not need to read the questions before the interview.

All of the interviews were taped and the tapes were transcribed. In 1 engineering interview and one medical interview all but the response to the first question was inaudible. Not all of those interviewed answered all questions posed.

**Results**

While I chose interviewees from the medical discipline because of certain similarities with the engineering discipline, the interviews revealed a marked difference between their experiences and perceptions of teaching development. I therefore have separated the responses of the two groups for research questions A and B.

The research sought to answer the following three research questions.

###### What experiences do professor/readers have of teaching development?

##### What perceptions do professor/readers hold about teaching development?

C. What conceptions do professor/readers hold about teaching development?

At this point it is worth noting that professors in the engineering generally taught in both early and later years in the undergraduate curriculum and were involved in undergraduate curriculum design and development.

Each of the research questions is reported on in turn.

**A) Experiences of teaching development.**

*Course attendance etc*

Of the eight engineering interviewees, three reported having been to nothing ‘formal’, four had been to one or two centrally run, short workshops which three of the four had been found to be too generic and not useful, and one had been to a week long course which had been useful. One of the professors also referred to the experience of developing curricula with colleagues as a particularly useful experience and another also reported seeking student feedback and engaging in significant self reflection.

In contrast with the engineering interviewees, only one of the eleven medical interviewees had not attended a formal teaching development programme and she had tried to enrol in a programme and was refused because she wasn’t doing enough teaching. The other ten interviewees had engaged in a range of induction courses, a residential course in the teaching of a specific discipline, post graduate award courses, an education masters module as well as short courses and workshops. These programmes had been provided by the NHS, a vocational college, universities, the Royal College of Surgeons, and various other professional groups. The medical interviewees also reported learning from experiences of peer review, team teaching, and student feedback. Experiences of the programmes attended varied with two of the ten interviewees reporting being ‘put off’ by the first (and only) course that they attended. One reported attending one introductory programme that he did not perceive to be particularly useful while the other seven reported attending several different sorts of programmes some of which were very useful and well done and some of which were not as useful.

*Solving teaching challenges*

When the engineering interviewees talked about how they solve teaching challenges, three described solving the problems by themselves while three reported talking with colleagues (the tape for one interview wasn’t audible and one interviewee didn’t answer the question). Of the medical interviewees, one reported solving teaching challenges by himself and six did so through talking with colleagues. The medical interviewees also recalled referring to text books and course handbooks and talking with students, for example, to determine how best they thought they would learn.

*Significant changes in teaching*

Engineering interviewees reported changes in teaching technology and student groups (larger classes and many students not intending to be engineers) as being the key changes that had influenced their teaching:

* increased class sizes – assessment adapted, change in mathematics load to accomodate students with a range of mathematical backgrounds;
* use of powerpoint and the web in classes;
* breaking concepts down into smaller parts;
* reducing the quantity taught in lectures as a result of student feedback; and
* teaching through smaller classes.

The majority of the medical interviewees reported changing the student experience as the key change to their teaching. These changes included increasing interactivity, making the learning environment safe for students and the teacher being a resource for student learning. Interviewees reported that these changes came about from student feedback, teaching development experiences, maturity, an undergraduate project, and experience of small group teaching. The remaining interviewees reported the following changes (one tape was inaudible for this question):

* “being obliged to do it [teach] with less care”;
* no changes as she is happy with the style that she has;
* not using subtle ‘put downs’ in lecturing; and
* doesn’t go through all of the questions with students now.

**B) Perceptions of teaching development**

Five of the eight engineering interviewees reported that teaching development was a good idea with one of those interviewees stating that it should not finish after a couple of years. Another interviewee was not against it and was glad that he didn’t have to do the university’s Graduate Teaching Certificate while one interviewee reported that it was very useful to work with colleagues on the design of curricula.

To a person the medical interviewees supported teaching development. They mentioned that teaching development had to be done correctly, it needed not to be ‘one size fits all’, it was important to have ‘refresher courses’, and that with everyone having to do it, no one person was singled out [as not being a good teacher].

Almost all of the engineering interviewees weren’t aware of university provided teaching development opportunities while most but not all of the medical interviewees knew that there were formal teaching professional development opportunities offered by the University. One interviewee from the medical school regularly attends conferences on the teaching of her discipline.

In both groups the vast majority of interviewees perceived that the key barrier to teaching development was the time required for other areas of their work, in particular the need to conduct research and publish. Interviewees referred specifically to the upcoming RAE. In comparison with the research drivers, teaching development was very low on their priorities. One medical interviewee had negotiated for teaching not to be part of her role and hence she perceived that teaching development wasn’t necessary and one engineering interviewee felt that his teaching was ‘fine’ and hence he didn’t perceive the need to engage in teaching development. Another engineering interviewee reported that not being in the habit of engaging with teaching development was a barrier to doing so.

When asked “How useful is the term ‘teaching development?”, responses were mixed. Some thought that the term wouldn’t be understood or wasn’t useful (one person suggested that ‘teacher development’ might have a clearer meaning), some reported understanding the term, one found it more useful than some other terminology such as ‘teaching the teacher’, and one thought that the term was imposed by government.

**Conceptions of teaching development**

Engineering interviewees responded to the question “What teaching development would you find helpful?” in the following ways: one wouldn’t find any useful; one didn’t have the time; two thought that they would like to understand more about how to use power-point; and one suggested a mentoring system in which people who struggled with their teaching could be helped.

Medical interviewees primarily reported two ways in which they would like teaching development to fit in with their current workload: 1) mentoring and peer observation of their teaching; and 2) working with someone on the development of new curricula. Two interviewees suggested short seminars on specific topics while one person said that she would find it useful to have a teaching ‘orientation’ system for junior staff in her research team.

Nine interviewees conceived of ‘teaching development’ as the development of curricula (6 engineering and 3 medical interviewees) or the development of their teaching skills (4 medical interviewees) or both (1 engineering and 3 medical interviewees) and one medical interviewee said that the term didn’t mean anything to her.

**Discussion and Implications**

The small sample size of this study which was limited to two disciplines in one university, precludes the possibility of generalising from this data to either other professors/readers in the same disciplines in other research intensive universities, or to professors/readers in other disciplines. The following are some of the findings of the research: 1) teaching CPD does not feature in the priority list of professors and readers in this research intensive university; 2) some professors and readers had a limited view of what teaching CPD opportunities were available to them; and 3) teaching development was generally seen as valuable.

It is clear from these findings that at least in the run up to the 2007 UK Research Assessment Exercise (RAE), and arguably beyond then, the academics in this study would not engage in teaching CPD which is not within the work that they already do. The implications of these findings for Education Developers in the University, either centrally or faculty based, is that teaching CPD needs to be embedded in the context of the every day work of the academic (Daley, 2000, Ferman, 2002).

There were distinct differences in the awareness and conceptions of teaching CPD between interviewees in the two schools. It was clear from the study that interviewees in neither school thought to invite education developers to work with them in their ongoing curriculum developments. This suggests that there may be a role for education developers to actively pursue opportunities to work with university teachers in departments. This may be accomplished in a number of ways, including developing working relationships with Heads of Departments/Schools, being members of Teaching and Learning Committees in Schools, being members of departmental teams that are developing or renewing curricula or dealing with issues such as the support and retention of students. They can work with departments on the development of internal mentoring and peer observation of teaching sessions.

It is important that university teachers and their Heads of Department become aware that education developers can provide resources, usually in terms of staff time, to assist the department to do the work that the department is already committed to doing. It is essential to establish that teaching CPD can be embedded into the work of the department. It does not have to be extra to the work of the department.

A striking difference between the engineering interviewees and the medical interviewees was the degree to which they had participated in more formal teaching development programmes during their career[[2]](#footnote-2). In large part this can be attributed to the requirement of the NHS for particular clinicians to have enrolled in ‘how to teach’ programmes. It was interesting to note that the majority of the medical interviewees, having experienced introductory teaching courses, had continued to enrol in further teaching programmes as part of their continuing professional development. The model of introductory programmes for inexperienced university teachers coupled with targeted, embedded CPD for established university teachers provides a cohesive education development strategy. When education developers work in departmental teams, committees and working groups, there is the opportunity to facilitate the cross fertilisation of ideas and experience; less experienced team members who have enrolled in University award bearing teaching programmes will have an understanding of theoretical underpinnings on which to base the teaching work of the department while team members who may not have enrolled in formal programmes, will have a wealth of experience to offer to the process.

**Evaluation**

The research project has been evaluated through peer review of the research and interview questions at the development stage of the project. The research will be evaluated further when a paper is submitted to a peer reviewed journal for publication.

**Dissemination**

When a paper has been written from this work, as well as being submitted for consideration by a peer reviewed journal, it will be forwarded to the teaching and learning committees of both the engineering and medical schools and to the university’s central academic development group. Further to this the paper will be submitted to the Higher Education Development Group which is a UK based group with a membership of approximately 100 universities.

* **Further work**

In the first instance this research needs to be carried out on a larger scale, with more levels of academics and with more disciplines to determine to what extent the findings of this research can be generalised. Accredited university teaching programmes have been available in some UK universities for seven to ten years. It is increasingly possible now to determine if there is any difference in the uptake of teaching CPD between those who have those academics who have a teaching certificate and those who do not.

**References**

Daley, B. (2000). Learning in professional practice in V. W. Mott and BJ Daley, (eds.) “Charting a course for continuing professional education: Reframing professional practice. New directions for adult and continuing education”, 86. San Francisco: Jossey- Bass.

Dearn, J., Fraser, K. and Ryan, Y. 2002. *Investigation into the Provision of Professional Development for University Teaching in Australia: A Discussion Paper,* a Report to the Higher Education Innovations Program, Department of Education, Science and Training, Canberra: Department of Education, Science and Training.

Ferman, T. (2002). , ‘Academic professional development practice: What lecturers find valuable’. *International Journal for Academic Development,* 7, 2:146 – 158.

.

Fraser, K. (2005). Graduate programmes on teaching and learning in Higher Education in “Teaching development in K. Fraser (ed) “Education Development in Higher Education: Developing an effective institutional strategy”, London: Taylor & Francis.

Quinn, L. ‘Reflections on a theoretical framework for a professional development course for lecturers at a South African university’, a paper given at the SEDA/SRHE Conference, Bristol, 2003.

Schreurs, M., Roebertsen, H and Bouhuijs, P. (1999) ‘Leading the horse to water: Teacher training for all teachers in a faculty of Health Sciences’, *International Journal for Academic Development,* 4, 2:115 – 123.

# Appendix 1

## Research questions

###### What experiences do Professor/Readers have of teaching development?

##### What perceptions do Professor/Readers hold about teaching development?

1. What conceptions do Professor/Readers hold about teaching development?

## Interview questions

1. From your perspective, what is teaching development?
2. What experiences do you have of teaching development?
3. What was that/were they like?
4. What if any university supported teaching development initiatives have you engaged in?
5. If you had a teaching challenge, how would you solve it?
6. What was one of the most significant changes in your teaching?

###### What is your opinion of teaching development?

###### What are the opportunities for engaging with teaching development? (in the department/university)

###### What are the barriers to engaging with teaching development?

###### How useful is the term ‘teaching development’?

###### What teaching development would you find helpful in your current position?

Do you have any further comments or questions?

1. I use the term ‘university teacher’ rather than academic to acknowledge that many university staff as well as academics have a student teaching role, for example, librarians, computing staff, laboratory technicians etc. [↑](#footnote-ref-1)
2. It’s important to note that while as a group there were marked differences, individuals in the medical group had similar responses to those in the engineering group and vice versa. [↑](#footnote-ref-2)