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# The impact of generic teaching strategies from a professional development programme on discipline-specific Faculty

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#### **Abstract**

Today more than ever, and on an international scale, faculty (academic staff) are seeking improved modes of professional development in support of their subject teaching strategies. Up until now, the literature has discussed the competing conceptions of teaching in higher education which has been defined as a generic professional practice versus an activity that can only be understood in the context of discipline-specific issues (Young, 2010). Generic teacher professional development programmes in higher education are increasingly present in many countries and positive benefits have been reported for participants. Research in academic development has also acknowledged a need to augment such programmes with discipline-based courses as individual disciplines have their particular concerns which cannot be fully addressed from a generic perspective.

The interest in this area developed from previous research conducted on a professional development programme in Irish higher education (Donnelly, 2006); this laid the foundations for this current study which examines perceived impact on individual teaching practice by Faculty from a range of higher education subject disciplines recently graduated from a generic teaching programme.

#### **Keywords**

Active learning; Communities of Practice; Faculty development; Pedagogic research; Teaching strategies

#### Introduction

For decades, there has been debate over disciplinary research (i.e. into the discipline's models, methodology and knowledge), and pedagogical research (into ways of teaching). Parker (2002) has argued that the attention paid to subject teaching should have bridged the old divide between pedagogical and disciplinary research. Acknowledging the difference between a subject and a discipline is important; a subject can be defined, has a knowledge base which can be constructed into a programme of knowledge acquisition and quantitative assessment; the discipline is practised and engaged with.

At the essence of this study is an exploration of a variety of teaching strategies, and an implementation of which strategies are best for particular students; with the aim of helping teachers to know which teaching methods will be most effective for their class. This is what Boyer (1990) called developing the ability to teach the subject effectively. A central premise is that teachers need to use different teaching methods in order to reach all students effectively.

This research study by two faculty developers reports then on a Postgraduate Programme in Learning and Teaching in higher education for faculty over a three year period [2007-2010]. Freeman & Johnston (2008) in an Australian higher education context, argue that there is a dissonance between the language of the faculty developer and that of the disciplines in which they are trying to achieve change. However, Clark et al. (2000) believe the best test of the effectiveness of any academic development (generic or subject specific) is the impact it has on an individual's teaching and the students' learning.

To date there have been over 100 graduates of this programme, from a wide variety of subject disciplines. The aim of this research is to explore the faculty participant experience of generic teaching strategies on this professional development programme and the subsequent actual impact on their discipline-specific contexts. Overall, the intention is to develop discipline-specific pedagogies for faculty on the programme, specifically wanting to develop a better synergy between the generic teaching content of the programme and the disciplinary knowledge that the faculty participants are accessing. However, it is acknowledged that what constitutes effective pedagogy from one discipline to another may not necessarily work for all. There can be unique disciplinary issues to consider. Ultimately it is about cross-curricular scholarship and teaching strategies and exploration of discipline-specific contexts for both.

Within the field of faculty development, the main aim of the study was to conduct an investigation into academic staff's pedagogical understanding of teaching strategies and to delve into their beliefs on this within the confines of discipline-based teaching. Ultimately it was our intention as faculty developers to explore how this translates into discipline-specific discourse and contemporary practice.

There were two objectives for this study:

1. to explicate the faculty participant experience on the programme in relation to generic teaching pedagogies;

2. to understand faculty challenges in making the link between the generic teaching pedagogies and strategies explored on the programme and actual discipline-based practice.

#### **Context and Rationale**

The postgraduate programme in Learning and Teaching in higher education has been in operation since 2000.<sup>1</sup> It has operated as the threshold qualification for all new Academic staff. All such staff appointed to the DIT who do not currently have a teaching qualification or equivalent are required to undertake the programme. Many of those who have successfully completed programme have done so on a voluntary basis.

One of the strengths of this Postgraduate programme has always been the practitioner focus. The programme has been specifically designed to equip participants with the requisite knowledge and skills to be effective and competent lecturers/trainers, using 'experiential learning as its pedagogic approach. As Buckridge (2008) states, there are ways of thinking about good teaching that can be invoked that both generate energy, and also hugely extend the horizon for improvement. These include a focus on the discipline and on making explicit its ways of knowing. An evolving critical reflection on this process, whilst engaged in critical debate with peers, offers a strong platform for the development of considered and innovative philosophies of learning and teaching.

These principles are actualised in practice on the programme through the creation and maintenance of a supportive learning environment, engaging in critical praxis and researching at the forefront of knowledge production. Consideration has always been given to the enhancement of the disciplinary dimension of teaching and learning. This is operationalised in a number of ways e.g. through the drawing together of a range of disciplinary expertise in the Associate Panel of staff, specific inputs have been designed and the following topics are integrated into modules: tutorials and laboratories in the sciences and humanities, curriculum models in use in business, art and design and engineering and e-learning case studies from a variety of subject areas. Secondly, through a curriculum and assessment project (involving a module redesign exercise), the exploration of the disciplinary dimension for each participant has been actively encouraged and supported

The key to programme design was to establish a discipline-specific context within which content was delivered. The pedagogical approach in the programme has been tailored to meet the needs of any discipline if the following conditions are met: assignments are connected to subject matter; a dialogic environment is provided; and the nature of assignments allows participants to build on their learning experiences on the programme.

#### **Literature Review**

A key conceptual framework to acknowledge in this area is that of pedagogical content knowledge; Shulman (1987) advanced thinking about teacher knowledge by introducing this idea. He claimed that the emphases on teachers' subject knowledge

<sup>&</sup>lt;sup>1</sup> The programme originally operated as a Postgraduate Certificate in Third Level Learning & Teaching. In February 2010, it was revalidated as a Postgraduate Diploma in Third Level Learning & Teaching.

and pedagogy were being treated as mutually exclusive domains in research concerned with these domains (1987, p.6). The practical consequence of such exclusion was production of teacher education programmes in which a focus on either subject matter or pedagogy dominated.

This teacher knowledge includes knowing what teaching approaches fit the content, and likewise, knowing how elements of the content can be arranged for better teaching. This knowledge is different from the knowledge of a disciplinary expert and also from the general pedagogical knowledge shared by teachers across disciplines. It is concerned with a number of key issues for the teacher of today: the representation and formulation of concepts, pedagogical techniques, knowledge of what makes concepts difficult or easy to learn, and knowledge of students' prior knowledge. It also involves knowledge of teaching strategies that incorporate appropriate conceptual representations, to address learner difficulties and misconceptions and foster meaningful understanding. Ultimately it represents the blending of content and pedagogy into an understanding of how particular aspects of subject matter are organized, adapted, and represented for instruction. At the heart of this theory is the manner in which subject matter is transformed for teaching. This occurs when the teacher interprets the subject matter, finding different ways to represent it and make it accessible to learners.

Young (2010) suggests that the significance of individual disciplines in pedagogical development has been over-stated, and argues for a more sophisticated mapping of teaching and learning issues across the disciplines. Such exploration of the relationship of pedagogy on the disciplines is not new. Fifteen years previously, Fernandez-Balboa & Stiehl (1995) conducted a phenomenological study to better understand the generic nature of pedagogical content knowledge for university teachers.

However over the past number of years, the body of research into how Faculty conceive of and approach their teaching has grown considerably. Prosser et al. (2005) explored how academic staff experience the understanding of their subject matter and the relationship of this understanding to their experience of teaching.

Aspects of the debate have also crossed over into professional development field, which is relevant to the context of this present study. Cliff & Woodward (2004) have explored the perceptions of academics about discipline-specific knowledge in their fields and although it was a small-scale study, it does have implications for both the content and methodology of teaching. Dall'Alba & Barnacle (2007) discuss the transfer and acquisition of either generic or discipline-specific knowledge and skills. They argue that the epistemology underpinning this process is flawed in that knowledge and skills are seen as attributes that can be decontextualised from the practices to which they relate. This raises the question of how such knowledge and skills are to be integrated into skilful practice or more broadly contribute to the transformation of the learner.

At the heart of the debate, Clark et al. (2002) explored an academic development issue common to all disciplines, how to combine generic development of staff as teachers with appropriate engagement with the specificities of teaching individual subjects.

Yeomans & Atrens (2001) considered discipline-specific curriculum development. In terms of investigating academic professional development programmes, Gunn (2003) looked at the interface between teaching and learning theories and subject-specific knowledge. She argues for it to be a success, requires the breaking down of intellectual hierarchies within a discipline.

Disciplinary influences have also been explored from the perspective of motivation on students; Breen & Lindsay (2002) study looked at the role of disciplinary-specific factors on student motivation to learn within the context of an undergraduate course. So too has it been considered from whether student learning styles vary as a function of discipline. A study by Jones, Reichard & Mokhari (2003) reported that there were significant differences in students' learning styles preferences across disciplines.

Taken together, the literature is showing that the value of teaching generic skills in context within disciplines is widely recognised. Healey (2000) points to the fact that institution-based generic teaching and learning programmes for new teachers in higher education are a common occurrence in many countries and acknowledge the need for them. However, they also argue that there is a need to supplement such courses by discipline-based courses and point to the fact that individual disciplines have their particular concerns which cannot be addressed from a generic perspective.

#### Methodology

This interpretivist, qualitative study involved interviewing a selection of discipline-specific faculty participants from Law, Architecture, Chemistry and Languages to explore the impact that a number of key components of the programme had on individual's practice. The interviews focused on three areas: firstly, it was important to discover if the development of generic programme-based curriculum projects into larger discipline-based projects was successful; secondly participants were asked to articulate any difficulties they encountered in making the link between the generic strategies explored on the programme to their actual discipline-based practice; finally a measurement was taken of perceptions of impact on the disciplines of programme.

#### **Discussion of Findings**

There were three main themes emerging from an analysis of the interview data: underpinning successes for participants on the programme, the impact of generic teaching strategies and the stimulus of the disciplines and the indicators of change. Figure 1 illustrates an overview of the themes and sub themes from the study.

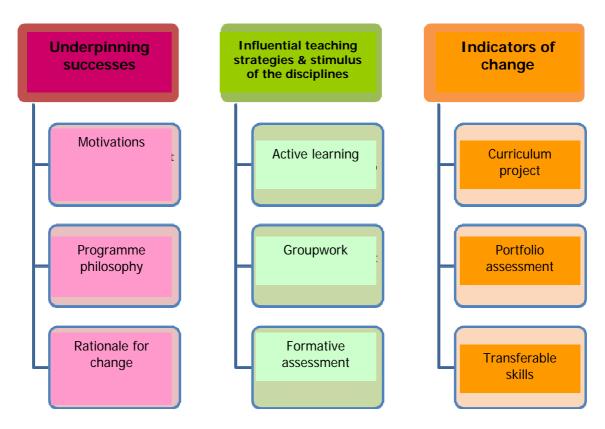


Figure 1 Themes and sub themes emerging from the study

#### **Underpinning Successes**

Driving participants success on the programme was their initial motivations for undertaking such professional development and their perceptions of the programme philosophy and how this was actualised for each of them.

#### Motivations for embarking on the programme

The participants were asked to discuss their motivations for embarking on the programme. As highlighted previously, the institution requires all new teaching staff to complete the programme within their first two years of service. The members of our participant group had all embarked on the programme as a result of this contractual obligation. Much debate exists in the literature on the reactions of teaching staff to such a requirement. Hubball & Poole (2003) cite concerns for the amount of time and effort required for such a programme, whilst Dearn, Fraser & Ryan (2002), in a study of professional development programmes in Australian higher education, reported that most new faculty do not view such training as an imposition. Rather, they view it as an enabling opportunity. This debate is mirrored in the comments of participants

I was a year into the job when I started the programme. I felt so overwhelmed. I thought it might help ... also in trying to get some sense of desire to improve self. However, I may not have done it so quickly if it was not required" [Law Lecturer]

The need for such a programme was appreciated, particularly by those who had entered the realm of higher education from an industry or professional background:

I came from industry and fond it alien that there you should have training, and we're purveying education and it's a bit ironic that we don't practice what we're preaching. I did it 2 years in, and that worked well. I think that first year is a blur. If people had talked about curriculum design, I wouldn't have known why or what they were talking about [Chemistry Lecturer]

As lecturers progress through the early years of teaching, professional development needs may change and evolve in tandem with their more complex and developing experience of practice. As Gossman (2008) points out, the question therefore arises as to the best way of facilitating the development of individuals at varying stages of experience in order to allow them to become more competent and proficient in their work.

#### Programme philosophy

When discussing their perceptions of a philosophy underpinning the programme, participants tended to focus on their growing awareness of a new approach to, and way of conceptualising teaching and learning:

I changed my lectures the next day or two days after whatever I picked up in class. I picked up all sorts of things...came from a very traditional subject and now tried to make delivery lively so that for each class I was being influenced by what others in my course had been doing ... [Architecture Lecturer]

Many studies e.g. Cranton & Carusetta (2002) focus on how the process of reflecting on changes in teaching contexts serve to challenge and redevelop conceptions of and approaches to teaching. For our participants, the concept of active learning and "learning by doing" provided a strong contrast to their previous experiences of more traditional education and pedagogies. The development of a new knowledge of theoretical constructs and concepts, even prior to opportunities to put such concepts into practice, was also key. The Chemistry Faculty member cites "aligning the curriculum" as a seminal learning experience. The importance of developing the language with which to communicate about conceptions and approaches to teaching has been examined in previous research on professional development programmes (e.g. Quinn, 2003).

The development of a community of practice, and a shared learning experience has also been identified as influential components of such programmes (Warhorst, 2006). Similarly, Stigmar (2010) advocates the importance of arranging teacher training classes with representatives from different subjects. This was echoed by our cohort:

What came through for me all the time was the sharing of practice; not only engaging with tutors and the literature, but you're bouncing ideas between your colleagues...almost like the spreading of an ethos [Law Lecturer]

Microteaching was mind-blowing to me....to realise that everyone else had the exact same fears and uncertainties...it was incredibly valuable [Architecture Lecturer]

#### Rationale for change in teaching strategy

The participants were asked to consider whether the programme changed the teaching strategies that they used, and how the timing of their participation on the programme impacted on that change. Two of the participants entered the programme as their

departments were undergoing a programmatic review process. The timing of programme participation had significant meaning for them:

It came at the right time for our school review....it also helped me see the bigger picture, and made me realise that you can relate it directly back to your teaching practice [Optometry Lecturer]

Expressing their thoughts on their perceived rationale for changes in teaching strategy, the participants reported a growing awareness of the needs of their students:

I put myself in the shoes of my students and there was one subject in particular was terribly boring...and I said to myself My God, I don't know how you are staying awake and I was very aware that the students are probably power-pointed out by the time they saw me on that day after 5 or 6 lectures in a row. [Architecture Lecturer]

For this lecturer, a link began to be formed between theoretical concepts experienced on the programme and the application of these concepts in practice by means of a reflection on the lived experience for both teacher and learner, as argued by Prosser and Trigwell 1998. In contrast to Eley's (2006) study indicating that exposure to the language and concepts of Higher Education may not actually do much to improve the practice; particularly from the student's point of view, this was instead key for our participants.

The change in teaching strategy made it very enjoyable for me which was also important. [Architecture Lecturer]

The key thing for me was trying to get energy into the classroom and that was an immediate feedback for me that people were talking and were not switching off.

[Law Lecturer]

Individual and personal experience of teaching was also influential in the adoption of teaching approaches and strategies:

I think people will always say to you their only frame of reference was how they were taught.... and that for me was a pretty traditional situation and was not particularly useful for what we do today [Chemistry Lecturer]

Therefore whilst the inclination to teach as one was taught may be a significant obstacle to change and development (Borko & Putnam, 1996), it may also act as a strong catalyst and rationale for change.

#### **Influential Teaching Strategies**

Woolfolk (2004) has argued that a foremost characteristic of good teaching is expert knowledge of the subject matter, and of teaching methodologies. Combining the preparation to teach with a dedication to acquiring the necessary subject matter knowledge is essential to be on the cutting edge of one's selected field. As teachers in this new millennium have a complex mix of issues to attend to in their practice, fortunately, their acquisition of this knowledge and these skills can occur relatively simultaneously. For instance, teachers may be learning new teaching strategies while they are deepening their understanding of content knowledge. On academic development programmes such as the one detailed in this paper, teachers who are

learning research-based instructional skills may find that their progress is limited by a lack of subject-area knowledge in a particular area and request an explanation of a particular concept; one strengthens and informs the other. A finding from this study indicates that there is a correlation between good teaching by someone with strong knowledge of their subject matter knowledge:

And it is also about raising awareness that there is another way to deliver content in Law; the programme had the most opening effect whereby I could directly translate to my practice...what I found was at the time I moved away from obsessing over content to actually getting to do stuff. [Law Lecturer]

This programme was designed to deepen participants' content knowledge, provide them with research-based instructional strategies to assist their own students in meeting rigorous academic standards, and prepares them to use various types of assessments appropriately. This study found that the most successful teachers have a deep understanding of the subjects they teach, and use appropriate instructional methods. It is generally accepted that having a largely generic focus on programmes such as this is helpful to participants, especially to new staff who face common issues such as how to lecture effectively and understanding how students learn (Gibbs, 2000). Having a subject-specific strand as argued by Healey (2000) and Rust (2000) ensures that participants know not only about generic pedagogical issues, but also about the discipline-specific issues connected with their own students. Marrying generic teaching strategies with subject content and context is important. Active learning was one particular strategy that inspired participants to make their practice more student centred:

Active learning is the big thing I took away from the course and it's such a relief to think about what the students are doing and not obsessing over what you are doing. [Chemistry Lecturer]

Allowing peers to share their subject expertise in the group, and discuss the distinctiveness of their discipline in terms of its traditions in what and how they teach and assess is important:

Demystifying the assessment was another thing - there was an ethos that I was used to from my own education where it was all going into a big black hole and you weren't told anything and you weren't supposed to ask and even things like being able to say to students 'I found this hard when I tried to learn it first' even having that freedom to say that this is how I tired to remember it...to be open and honest about it.

[Chemistry Lecturer]

The small group microteaching sessions on the programme were especially helpful to participants. Having the opportunity to learn from other disciplines in which the problems may be similar cannot be underestimated. Encouraging staff to adopt a culture of discussing teaching strategies with their colleagues presents the opportunity to departments to review their strategies and consider innovations. Clark et al. (2000) have suggested that the best way to teach has to be debated, grounded in the area where it will be used, tested against alternatives and disciplinary norms, and reviewed for improvement. The extend that we learn from discussions with our peers and by their examples (Blackler, 1995), collegial, discipline-based experiences of teaching

are likely to have more impact than those less embedded, encultured and embodied in practice, context and departments.

For me it was the groupwork and the process of working in a group and being able to experience learning from the students' perspective. [Optometry Lecturer]

Different subjects have their own traditions in terms of what and how one teaches, and distinctive vocabularies for describing and justifying their teaching (Healey, 2000). However, the key principles of any general developmental or learning theory will have implications for teaching in any discipline:

In law solving problems ensuring that is part of every lecture is a big thing and the notion of constructivism, where all the time you are trying to get a variety of viewpoints; groupwork was important too but for me had the most power is the sense of how you can maybe change your discipline a little bit; my discipline is quite traditional in that you consider what is the law and trying to use the new strategies to get the students to think about what the law can achieve or what good lawyers should look like; so not only are doing stuff that will directly help them within the discipline, you are trying to get them to change it a little bit. [Law Lecturer]

Expert teaching can be through acquired skills and expertise in areas such as, knowledge of general teaching strategies, proper use of curriculum material, knowledge of characteristics and cultural background of their students, the most appropriate settings in which students best learn, and overall knowledge of the general goals of education. This process, of course takes a blend of time and experience.

#### Stimulus of the disciplines

It is fair to say that teachers may acquire deeper understanding of their subjects through various means. For example, they may undertake an expert role in appropriate organizations, take traditional university or eLearning short courses, perform the activities of individuals involved in that field (for instance, conduct scientific or historical research), or participate in face-to-face or online subject-area networks. Whenever possible, however, it is important that teachers experience firsthand as learners the instructional strategies they in turn will be using with their own students. Within this programme, they may also attend extra workshops and short courses with online follow up, participate in study groups, watch videotapes of from their microteaching groups, observe the lessons of peers from this same group, or receive classroom coaching by tutors from the programme. As it is natural that teachers will teach as they themselves are taught, it is imperative that the teaching strategies used with participants on the programme be congruent as much as possible with those they are expected to use in their own classroom.

Each year on the programme, there are a number of participants from scientific disciplines. Science has considerable emphasis on linking theory and practice, with strong applied elements, and traditions of active teaching methods in the scientific laboratories. New lecturers in these disciplines need to engage with aspects of teaching such as field work, and like all new staff, they need to apply the generalities of teaching to their specialist area:

There were a number of people in the group from a science background and again in the disciplines that is where a lot of work has been done and that is the driving force is coming from in the disciplines and again that is the area where you have a lot more 1:1 contact and an opportunity for more contextual learning and a more problembased or project-based learning and that does happen a lot in the science disciplines.

[Chemistry Lecturer]

The impact of learning theories on individual's practice was also significant, and cognitivism was highlighted as having a fundamental role in Science; reducing cognitive load for students lies at the heart of this:

The other thing about my subject and it would be something in common with other disciplines, is that there is a big cognitive load in my discipline; there is lot for students to take on board when they start learning about the subject and there is not much you can do about that – the basics are quite complex but once you get them, you have a solid foundation but its not as if you can take a bit here and a bit there, you have to have this foundation that covers everything. It is covered to some extent in the cert but it is a particular challenge for us and it does turn students off a lot to start with. The whole scaffolding approach is something we would have come across but specifically things like the number of new terms that are introduced and the cognitive load is required is more difficult. [Chemistry Lecturer]

It is important to present a balanced argument when it comes to the relationship between generic and subject specific teaching strategies. Concentrating time and resources on the programme too much on the role of the disciplines could lead to a narrow perspective, and what Weimer (1993) calls an ignorance of more general educational issues. Keeping a strong emphasis on how students learn is key to striking the right balance.

#### Influence of change on student learning and colleagues' delivery

Rust (2000) and Kreger & Brook (2001) cite literature reviews and studies that show evaluations of educational development programs generally focus on programme aims and processes and participant evaluation, rather than on the impact of participation in the programs on the improvement of teaching and learning. Our participants reflected on the influence of change on their teaching practice and experience, the learner experience, and their wider community of practice:

And it is also about raising awareness that there is another way to deliver content; the programme had the most opening effect whereby you could directly translate to your practice...what I found was at the time I moved away from obsessing over content to actually getting to do stuff. [Law Lecturer]

As some of the participants were simultaneously involved in programme design and review, the influence was immediate and relevant:

We were designing a new programme.... We were very lucky that our programme chair understood exactly what had to be done, and was very keen to have it as an exemplar....some staff were resistant and saw it as a paper exercise and a drain on time, so it was fantastic to be knowledgable about curriculum design issues....it was absolutely relevant [Architecture Lecturer]

Support from ones own disciplinary community of practice is thus impactful. As Palmer states "Our willingness to try, and fail, as individuals is severely limited when we are not supported by a community that encourages such risks" (Palmer, 1998, p. 144). Specific concepts also had an immediate influence and application:

I wrote three module descriptors that year in tandem with what I had learned. I tried to think of assessment in an aligned way....that changed my thinking and helped me to see the bigger picture [Law Lecturer]

Blackie at al. (2010) suggest that student-centered teaching is/should be a threshold concept of any academic staff development programme. Meyer & Land (2005, p.372) define a threshold concept as a 'new way of understanding, interpreting, or viewing something'. In describing the impact of changes in teaching strategy on student learning, a student-centered transformation appears to have been actively implemented:

There was a greater number of students who passed [the exam] and I put this down to being able to ask questions in the class...there were definitely more and more things I introduced where I would get them to work in threes on what they thought about a statement I had put on powerpoint before we started the lecture and that immediately made them much more confident to ask questions...I don't have any hard data...just a sense of what worked. [Architecture Lecturer]

I now have a proper sense of if they have learnt something because I am discussing and getting them to be involved in activities whereas before you go in and leave and feel I have done my job... the students who are there regularly now come expecting to be active...which I think is good...they know they are going to be made do something in class. [Chemistry Lecturer]

We have pretty much eliminated exams...and increased the use of formative assessment; [we find] it helps support students' employability [Architecture Lecturer]

The emergence of new models of learning, focusing on connecting student learning and reflection to the wider community and society was also viewed as a positive outcome of participation on the programme:

What I did notice was tangible yet subjective things like the energy and people would say to you 'that was interesting'...some people said that they got to meet each other through the activities and some of them were in class two years and hadn't actually spoken...that was something tangible I could see and then another major outcome was community based learning... it had changed the nature of the programme as you were trying to get students to think beyond their studies about how the community impacts and it changed my colleagues approach also. [Law Lecturer]

We are thinking a lot more about transferable skills and making everything more transparent and the use of groupwork etc - a lot of the focus is on context as well and a lot of those things combined lead to the students recognising more what life would be like working in the real world. [Chemistry Lecturer]

Trowler's work on teaching and learning regimes in universities (Trowler & Cooper, 2002) suggests that local departmental and workgroup cultures, in terms of their discourse, practice and ways of thinking, can hinder the transfer of lecturers' learning

back into their departments. The potential for reflection on practice may also be impacted.

Reflective teachers think back over their day-to-day situations in an attempt to analyze their teaching skills, the subject matter, motivation of the students, and how they might improve upon the overall learning process. Schön (1983) has argued that if new lecturers themselves are to become reflective learners in the sense of reflecting as a matter of course on their teaching strategies for future improvements, then this can most meaningfully take place in the departmental context; if reflection is to lead to change, then locally observable alternatives may be especially effective. Participants reported a growing awareness of changes at this departmental culture level, as more of their colleagues began to participate in the programme:

The more pragmatic staff would tend to come to me knowing I had completed the programme - have you something about grading essays and I was delighted that they wanted to know... It definitely made a difference in my school as you know, more staff did the programme and there is a truth in it if you can convert someone, this would be a good thing to do that's great and you can see the change. It is amazing because I remember in particular one colleague who for the first time said the word 'reflection' and I nearly fell off my chair. And she has gone from strength to strength and really enjoyed it. [Chemistry Lecturer]

This appears to contrast with the work of Goody (2003) which found that few if any graduates of such programs indicated that they had in any way been able to influence the quality of teaching in their schools.

#### **Conclusion**

The creation of a community of practice, both within the programme peer group, and through networks of graduates in the institution is recognised by our participants as an important aspect of the development of a new teaching and learning ethos. Teachers discussed issues relevant to their discipline and higher education within the formal structures of the programme. The power of the discursive and reflective elements of the programme allowed participants to connect their generic learning to discipline specific contexts. The climate of the programme was also fundamental to this - it helped to create a supportive group structure where issues that might have been difficult to raise in more formal settings of the individual's Faculty could be raised in a non-threatening environment. It would appear that the work required in the programme on module design was an important catalyst, particularly for those who were concomitantly involved in course review or design in their own faculties. Aligned to this, as the programme assessment strategy was based on participants' own teaching, many of the project and portfolio work were either fully incorporated or partially tried out in their teaching situations, immediately bringing benefits to their students in a relatively brief timeframe.

It is important to also consider the benefits for the academic developers of this programme; it has provided a meaningful continuing relationship with individual staff on which to build teaching expertise. The satisfaction of this longer-term bond and the benefits of the structured programme seem more efficient and has greater impact than a collection of generic workshops conducted in half days or short timeframes.

This study has highlighted the growing acknowledgement of the significance of a discipline-based focus in teacher professional development. Provision of a generic teaching programme such as discussed here recognises the supplemental need for discipline-based approaches to teaching in higher education; but equally, it is argued that there is a need to co-operate across disciplines in the development of such courses, something that the development team will take on board for future iterations of the programme.

#### References

Blackie, M.A., Case, J.M., & Jawitz, J. (2010). Student-centredness: the link between transforming students and transforming ourselves. *Teaching in Higher Education*, 15(6), 637-646.

Blackler, F. (1995). Knowledge, Knowledge Work and Organisations: An Overview and Interpretation. *Organisation Studies*, 16(6), 1021-46.

Borko, H., & Putnam, R. T. (1996). Learning to Teach. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 673-708). New York: Macmillan.

Boyer, E. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. San Francisco: Jossey-Bass. The Carnegie Foundation for the Advancement of Teaching.

Breen, R., & Lindsay, R. (2002). Different disciplines require different motivations for student success. *Research in Higher Education*, 43(6), 693-725.

Clark, G., Blumhof, J., Gravestock, P., Healey, M., Jenkins, A., Honeybone, A., Wareham, T., King, H., Chalkley, B., & Thomas, N. (2000). Developing New Lecturers: The Case of a Discipline-Based Workshop. *Active Learning in Higher Education*, 3(2), 128-144.

Cliff, A., & Woodward, R. (2004). How do academics come to know? The structure and contestation of discipline-specific knowledge in a Design school. *Higher Education*, 48, 269-290.

Cranton, P., & Carusetta, E. (2002). Reflecting on teaching: The influence of context. *International Journal for Academic Development*, 7(2), 167-176

Dall'Alba, G., & Barnacle, R. (2007). An ontological turn for higher education. *Studies in Higher Education*, 32(6), 679-691.

Dearn, J., Fraser, K., & Ryan, Y. (2002). *Investigation into the provision of professional development for university teaching in Australia: A discussion paper*. Canberra: Commonwealth Printing Service:

Donnelly, R. (2006). Exploring Lecturers' Self Perception of Change in Teaching Practice. *Teaching in Higher Education*, 11(2), 203-217.

Eley, M. (2006). Teachers' conceptions of teaching, and the making of specific decisions in planning to teach. *Higher Education*, 51.

Fernandez-Balboa, J.M., & Stiehl, J. (1995). The Generic Nature of Pedagogical Content Knowledge among College Professors. *Teaching and Teacher Education*, 11(3), 293-306.

Freeman, M., & Johnston, C. (2008). Improving teaching and learning through discipline-specific support models. *International Journal of Management Education*, 7(1). Retrieved 5 May 2010 from

http://www.heacademy.ac.uk/assets/bmaf/documents/publications/IJME/Vol7no1/IJME71FreemanJohnston.pdf

Gibbs, G. (2000). Are the Pedagogies of the Disciplines really Different? In C. Rust (Ed.), *Improving Student Learning through the Disciplines*. Proceedings of the 7<sup>th</sup> International Symposium, Oxford Centre for Staff and Learning Development, Oxford.5: 87.

Goody, A. (2003). Findings of evaluation studies on the impact of initial preparation programmes, Presentation at the *Foundations of Teaching Colloquium*, Flinders University, 10-11 April, 2003.

Gossmann, P. (2008). Teaching Development – Experience and Philosophy (Using the Three Rs). *Teacher Education Quarterly*, 35(2), 155-169.

Gunn, V. (2003). Transforming Subject Boundaries: The Interface between Higher Education Teaching and Learning Theories and Subject-Specific Knowledge. *Arts & Humanities in Higher Education*, 2(3), 265-279.

Healey, M. (2000). Developing the Scholarship of Teaching in Higher Education: a Discipline-Based Approach. *Higher Education Research and Development*, 19(2), 167-87.

Hubball, H., & Poole, G. (2003). A learning-centred faculty certificate programme on university teaching. *International Journal for Academic Development*, 8(12), 11-24.

Jones, C., Reichard, C., & Mokhari, K. (2003). Are students' learning styles discipline specific? *Community College Journal of Research and Practice*, 27, 363-375.

Kreber, C. & Brook, P. (2001). Impact evaluation of educational development programmes. *The International Journal for Academic Development*, 6(2), 96-108.

Meyer, J., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49(3), 373-388.

Palmer, P.J. (1998). The courage to teach: Exploring the inner landscape of a teacher's life. San Francisco: Jossey-Bass.

Parker, J. (2002). A New Disciplinarity: communities of knowledge, learning and practice. *Teaching in Higher Education*, 7(4), 373-386.

Prosser, M., & Trigwell, K. (1998). *Teaching for Learning in Higher Education*. Buckingham: SRHE/Open University Press.

Prosser, M., Martin, E., Trigwell, K., Ramsden, P., & Lueckenhausen, G. (2005). Academics' experiences of understanding of their subject matter and the relationship of this to their experiences of teaching and learning. *Instructional Science*, 33, 137-157.

Quinn, L. (2003). A Theoretical Framework for Professional Development in a South African University. *International Journal for Academic Development*, 8(1), 61-75.

Rust, C. (2000). (Ed.) *Improving Student Learning through the Disciplines*. Proceedings of the 7<sup>th</sup> International Symposium, Oxford Centre for Staff and Learning Development, Oxford.

Rust, C. (2000). Do initial training courses have an impact on university teaching? The evidence from two evaluative studies of one course. *Innovations in Education and Training International*, 37(3), 254-262.

Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Shulman, L. (1987). Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57(1).

Stigmar, M. (2010). Scholarship of Teaching and Learning When Bridging Theory and Practice in Higher Education. *International Journal for the Scholarship of Teaching and Learning*, 4(2).

Trowler, P., & Cooper, A. (2002). Teaching and learning regimes: implicit theories and recurrent practices in the enhancement of teaching and learning through educational development programmes. *Higher Education Research and Development*, 21(3), 221-240.

Warhurst, R. P. (2006). "We Really Felt Part of Something": Participatory learning among peers within a university teaching-development community of practice. *International Journal for Academic Development*, 11(2), 111-122.

Weimer, M. (1993). The Disciplinary Journals on Pedagogy. Change, 25(6), 44-51.

Woolfolk, A. (2004). Educational Psychology. 9th Ed. Boston: Allyn and Bacon.

Yeomans, S., & Atrens, A. (2001). A Methodology for Discipline-Specific Curriculum Development. International Journal of Engineering Education, 17(6), 518-528. Retrieved 5 May 2010 from <a href="http://www.ijee.dit.ie/articles/Vol17-6/Ijee1196.pdf">http://www.ijee.dit.ie/articles/Vol17-6/Ijee1196.pdf</a>

Young, P. (2010). Generic or discipline-specific? An exploration of the significance of discipline-specific issues in researching and developing teaching and learning in higher education. *Innovations in Education and Teaching International*, 47(1), 115-124.