

WORKING AT MASTERS LEVEL IN PGCE COURSES

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This paper is a report from the ITeMaths working group on Masters level work in PGCE courses. This BSRLM working group arose as a result of a session on Masters level work at the AMET conference in September, 2006, during which some issues arose which were left unresolved due to a lack of discussion time. The paper examines a) the reasons why Masters level PGCE courses have, more recently, become a priority for some institutions; b) some models which have resulted from the changes; and c) some of the positive outcomes already experienced and some of the issues raised.

INTRODUCTION

The reorganisation of the National Qualifications Framework from 6 levels to 9 levels was effective from 1st September 2004. The purpose of this reorganisation was to “provide more precise levels against which learners can compare qualifications and identify progression routes. These more precise levels can now be broadly compared to the Framework for Higher Education Qualifications (FHEQ), which covers qualifications awarded by universities and other higher education institutes” (QCA website). The reorganisation of the National Qualifications Framework was seen by some Higher Education Institutions to place PGCE courses in the difficult position of being postgraduate in timing but not necessarily postgraduate in nature. In a competitive market for seemingly fewer prospective secondary mathematics PGCE trainees, some institutions pre-empted the reorganisation of the National Qualifications Framework by revalidating their PGCE courses at Masters level (level 7) from September 2003 in line with the FHEQ. These revalidations allowed PGCE trainees the opportunity of gaining transferable Masters level credits for a varying percentage of the taught element of a Masters degree. This percentage covers the range from 12.5% to 100%. Other institutions are now offering PGCE courses at Masters level and still more are in the process of change.

The changes to PGCE courses, resulting from increased differentiation in the NQF, have produced a proliferation of a number of varying models, most of the reasons for each being specific to the institution involved. Our working group discussion identified that a common factor in the alterations to courses involved some form of whole tutor team meetings, ranging from a day to three days. One of the overarching decisions involved in the move to offer Masters level accreditation is whether trainees opt in to (or out of) a Masters level course or whether the course is offered with two exit points. Such decisions appear to be tied very firmly to the regulations for individual universities. A similar common feature, but distinctive to particular universities, was the allowance, or otherwise, of 15 – 30 credits at H level (level 6) within the Masters level course.

The PGCE criteria and modes of teaching and learning in some institutions which were already delivering PGCE courses to meet the FHEQ level 7 expectations, involved some restructuring of the assessment procedures to meet internal university regulations and an agreement about the number of credits allowable. Other institutions have made, or are making, substantial changes to their courses. The following section describes some of the models for PGCE Masters level courses which currently exist.

MODELS FOR MASTERS LEVEL PGCE

The varying depths of descriptions of models presented here merely represent the extent of the information gleaned at the working group, or from prior knowledge, and are not intended to reflect any judgement of quality. They are presented here as a point of contact for those undertaking a revalidation process which may be similar to any of the models described.

With a maximum of 100% of the transferable M level credits on offer, the University of Birmingham developed a model four years ago which reflects the practitioner model used in Nursing and Midwifery courses, in which the periods of professional practice are assessed at Masters level. This assessment is undertaken through reflective writing about *Professional Values and Practice* during the periods of teaching practice. Five assignments, with a total word count of 14000, are undertaken alongside other course tasks such as reflective writing, web discussions, and the production of a resources file. The five assignments are on topics which include equal opportunities, using technology, and reflections on a topic of mathematics. Trainees must also undertake a case study piece of research. All trainees are enrolled on the PGCE course at M level but this model allows a trainee to exit with any multiple of 15 transferable credits.

The University of Durham has recently moved from awarding 60 M level credits to awarding up to 100 transferable credits for the PGCE followed by a single Masters unit for 20 credits and the dissertation which completes a M(Teach) degree. The University of Cambridge is introducing a 90 credit PGCE course.

Since 1995, the University of Wales, Swansea, has offered an extended PGCE (EPGCE) for suitable trainees who opt into the programme. This requires work additional to the PGCE, involving classroom-based research in schools, a conference presentation of work in the summer, and an additional assignment written during the summer. Trainees can gain 60 M level credits towards a Masters degree, or 40 credits towards a M(Research methodology). About a quarter of trainees each year take up the M level route.

By far the greatest number of universities offer 60 M level transferable credits. At St Martins, Lancaster, the M level course will begin in September 2007. Two units have been developed at M level, each of 20 credits value. One of these relates to curriculum development in mathematics and the other relates to classroom research for the beginning teacher. The final 20 credits relating to *Professional Values and*

Practice is assessed at H level through presentations in schools. This model has been developed concurrently with the primary PGCE course.

The University of Bedfordshire also offers 60 M level credits. These are assessed in three ways. Similar to the University of Birmingham, *Professional Values and Practice* is assessed approximately every 3 - 4 weeks through a reflective journal, incorporating reflections on academic reading in relation to classroom practice. At Easter, following monitoring of progress, suitable trainees are offered the opportunity to gain the M level credits. These trainees subsequently undertake classroom-based research which is presented within school and assessed by teachers. This research is also assessed by University tutors through a written assignment.

However, Sheffield Hallam University, which begins their M level PGCE course in September 2007, offers two exit points for the same taught course, as does the University of Southampton. The secondary mathematics PGCE at the University of Southampton was developed concurrently with the primary PGCE course four years ago, to offer two 30 credit units each assessed by a 6000 word assignment. These units are based on *Principles of Pedagogy* and *Professional Values* and were devised for the revalidation to link closely to the prior 4000-word assignments. For secondary mathematics trainees, the curriculum based assignment is selected from a choice of 12 topic areas which reflect the research interests of the three tutors involved. These research areas are supported by an established bibliography on the Virtual Learning Environment and trainees undertake classroom-based research within the chosen area. For the assignment on *Professional Values*, a similar piece of classroom-based research is undertaken, supported by seminars led by School of Education tutors from both within and beyond the PGCE team. The 14 topics might include examples such as Outdoor education, the Dyslexic learner, Emotional literacy and Transition. This unit is further assessed by a conference at the end of the PGCE course.

Each of these models bring their own issues to the debate about the value and structure of incorporating M level work within PGCE courses. For those already working at M level for some time, both the advantages as well as the issues are evident. We will outline some of these advantages before addressing the issues.

ADVANTAGES OF MASTERS LEVEL WORK IN PGCE COURSES

Underpinning the work in Masters level PGCE courses is effective reflective practice and the notion that an inquiry-based approach to developing teaching and learning is an important aspect for developing teachers. There is an increased rigour in undertaking research activity in PGCE courses at M level, including an ethical dimension. Where this is firmly established as part of the university structure, and therefore as part of the PGCE course, the transition to developing formal ways of assessing research and its consequent ethical dimensions has been smooth. There is anecdotal evidence that such increased rigour in critical and reflective thinking promotes improved development for a training teacher who is a weak trainee, and this evidence is certainly more prevalent amongst the strongest trainees. This is partly

demonstrated in the need to interact with lesson observation beyond mere observation and enter into an engagement with a lesson.

The supportive academic structures allow trainees to reflect upon and challenge existing educational arguments, based on the status quo, and enable trainees to question what is currently happening in schools on a number of levels. The increase in research activity generates an increase in ‘deeper thinking’ in most, but not necessarily all, trainees. This increases recognition of teaching as a complex and necessarily analysable activity. The production of written work in relation to academic reading and classroom practice generates a need for active clarification of ideas for others to read.

There is evidence that, in a more competitive market for primary PGCE trainees, the effect of having in-depth curriculum knowledge of a particular area and the potential to develop this further through their knowledge of research methodologies, is enabling them to compete successfully against more experienced teachers when applying for jobs. The impact of increasing levels of confidence in these trainees is evident in their continuing participation in the PGCE course. This is also increasingly so for secondary mathematics PGCE trainees who are in a less competitive market.

In the longer term, there is a much greater uptake of participation in both short term and longitudinal curriculum development projects in schools, both for HEI and TDA led initiatives. In some institutions, there is an increase in uptake of Masters level accredited mentoring courses by teacher mentors because of their need to further understand expectations in school of the process of undertaking M level work in classrooms. Allied to this is the increase in uptake of classroom-based research activity by recent trainees, as a next step on their route to established educational research practitioners, perhaps en-route to an EdD or PhD in mathematics education. Access to an established bibliography in a research area stimulates further enquiry and the resulting further set of references from any trainee’s enquiry establishes an extended bibliography for the tutor concerned with the research area.

In relation to schools during the past three years, there is anecdotal evidence that the presentations of research findings in either whole school or departmental staff situations are having an increasingly significant effect on the ways schools receive and actively handle the research situations presented to them. In the most proactive of schools, senior staff are availing themselves of this additional research strength to target specific situations by encouraging trainees to engage with a particular area of need or to present trainees with established data which needs analysing.

ISSUES RELATING TO MASTERS LEVEL WORK IN PGCE COURSES

One of the most prevalent concerns in the working group was that of the nature of the M level PGCE course in relation to the pressured time constraints of an already overburdened one-year PGCE course. Given the pressures on PGCE trainees to understand the essentials of effective mathematics pedagogical activity, how is research activity effectively intertwined with this activity? What happens if the

secondary mathematics PGCE course embraces M level, but tutors in other curriculum areas do not? Some solutions were identified, some of which are outlined above in the advantages but, for some, these advantages seem a long way distant.

Even for the most experienced tutors of PGCE courses at M level, one of the indeterminable issues for assessing PGCE trainees at M level was the amount of time necessary to moderate such work and agree the quality which represents Masters level attainment, despite the agreed assessment identifiers within established Masters level courses in each institution. The issue of whether to use exemplar material with trainees, and risking limiting the possibilities, remains a perennial problem. Much of the difficulty about implementing M level work in PGCE courses lies with the respective time allocated to tutors to do additional work in relation to M level. Within most institutions, this PGCE M level work is being undertaken by tutors in addition to the role they would normally be expected to do, without recognition of the additional burden in relation to the nature of tutorials as they change from a pedagogical focus to an academic focus, nor in the additional marking time utilised but not allocated.

For some HEI institutions, classroom teachers are assessing M level work when they are not necessarily qualified at Masters level themselves. Indeed, this is true for some university tutors. The implication for external examiners of PGCE courses, is that they should be well qualified to moderate across M level PGCE courses.

Many traditional Masters level courses utilise and promote a wide range of research methodologies. The M level PGCE courses, whether 120 credits or 60 credits, focus on classroom-based research or action research models. It is a concern that the PGCE M level fails to give trainees the breadth of research methodologies that a student might encounter on a more traditional Masters degree, particularly where a significant number of transferable credits are obtained within the PGCE course. Additionally, the level of engagement with academic and research literature traditionally required of Masters level students may not be replicated by those pursuing an M level PGCE course. The question of how tutors ensure that their trainees engage at a high level with academic and research literature as well as the necessary professional literature remains problematic.

For some institutions, the comparable transference of M level credits from those institutions which carry H level credits to an institution which does not allow such H level credits may become problematic. The consistency of credit transfer itself is called into question. It is generally agreed, in the working group, that uptake of the courses tailored to meet the needs of trainees exiting the PGCE course with transferable M level credits is low.

SUMMARY

This paper has not answered some of the fundamental questions which might be asked about the implementation of a PGCE course at Masters level. Indeed, we close this paper by raising further questions for future discussion. Why, for example, do

institutions need to engage with the change in qualifications framework if the aims of their courses are already clearly established and can be identified against level 6 (H) or level 7 (M)? What purpose does working at M level serve the PGCE trainee at this stage of their career? Is it timed for the optimum professional development of an early career teacher? Do two-year PGCE trainees prove to engage better with the M level component of the course? If so, what implications does this have for the M level work of one-year PGCE courses? And, given the march of M level on most of our PGCE courses, what are we offering to early career teachers to complete their Masters degree? Where is the breadth of methodological experience in such a degree? Is the content of these courses sufficient to develop future researchers in *mathematics* education?

Finally, we offer a short bibliography which has proved invaluable for developing trainees' critical reading and understanding of mathematics academic and research literature and for developing skills for effective classroom-based research.

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