PRIMARY TRAINEES' REFLECTION-IN-ACTION

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This paper explores some of the reflective writing undertaken by trainees on a Primary PGCE course following small-scale classroom-based research as part of their work towards Masters level credits. Types of reflection evident are categorised and the frequency of these categories related to the overall grade achieved for the research undertaken. Questions are raised about the nature of these reflections in relation to what is described by Schön as 'reflection-in-action' by professionals. Some of the writing is examined in the context of the use of the language about reflection on both personal and professional development which is promoted throughout the PGCE course.

SCHÖN'S MODEL OF REFLECTION

Schön's vision of "professional artistry" (Schön, 1983, 1987) is described as the "kinds of competence practitioners sometimes display in unique, uncertain, and conflicted situations of practice" (Schön, 1987). He argues that professionals can act at three levels of reflective activity. The first of these is 'knowing-in-action' which is demonstrated in the skilled physical actions undertaken by teachers in practice in the classroom. Schön's focus on dynamic activity, as a crucial element of professional artistry, is exemplified in his distinction between 'knowing-in-action' and 'knowledge-in-action'. The former represents the active state of doing the individual skilled actions that make up skilful teaching without necessarily knowing that these are being done or being able to verbalise the means by which these are done. "[The] knowing is *in* the action" (Schön, *op cit*). If this 'knowing-in-action' is able to be described, it becomes the passive form of 'knowledge-in-action.

Schön calls the second level of reflective activity 'reflection-in-action'. He describes this as the capacity of professionals to consciously think about what they are doing while they are doing it. As a pre-requisite for reflection-in-action, he envisaged the competence of teachers and the artistry (or creativity) in using this competence to be already embedded in skilled practice. This is necessary to enable the teacher to 'think on their feet' in response to an unusual event and take appropriate action either from the repertoire of skilled 'knowledge-in-action' or by inventing a new solution. As with 'knowing-in-action', teachers may not be aware of their 'reflection-in-action', even if it results in further 'knowing-in-action' but nonetheless, Schön reasons, it still has a critical function. This is to question the assumptions inherent in 'knowing-in-action'.

The third level of Schön's model utilises ongoing iterations of reflection:

Clearly, it is one thing to be able to reflect-in-action and quite another to be able to reflect *on* our reflection-in-action so as to produce a good verbal description of it; and it is still

another thing to be able to reflect on the resulting description. But our reflection on our past reflection-in-action may indirectly shape our future action. (Schön, 1987, p31)

Reflection in Masters Level PGCE Courses

The rationale or justification for institutions offering Masters level credits for accreditation of their Postgraduate Certificate in Education (PGCE) courses at Level 7 of the National Qualifications is often placed with the high degree of professional reflective practice encouraged in established courses (Edwards and Pope, 2006). In so doing, the argument for extending this to research-based activity is premised on the grounds that this reflective activity is a) essential to the development of highly skilled practitioners; b) an ongoing feature of personal and professional development; and c) transferable from professional activity to research activity.

For most trainees on a primary PGCE course, Schön's 'reflection-in-action' is an aim, rather than a reality. In terms of their classroom practice, they are still developing towards Schön's stage of 'knowing-in-action'. Schön acknowledges this and offers a three-stage developmental process which enables training teachers to develop effective 'reflection-in-action' alongside a "coach". This, he terms a reflective practicum (Schön, 1987). During the first stage, trainees are provided with technical training, which he views as an apprenticeship. This is much akin to placing trainees with an experienced mentor practitioner in school who is skilful in both 'knowing-inaction' and 'reflection-in-action' and, ideally, in reflecting on 'reflection-in-action'. Discussion about 'knowledge-in-action' between trainee and mentor forms Schön's second developmental stage. This helps trainees to think like professionals, encouraging a form of 'reflection-in-action', which is not fully 'reflection-in-action' because the 'knowing-in-action' base, upon which 'reflection-in-action' depends, is still itself developing. In the most ideal of situations, Schön argues, the discussions become genuinely mutual dialogue, which can produce reciprocal 'reflection-inaction'. This enables trainees to develop new forms of understanding and action, completing the final stage of the developmental process.

With the implementation of the Standards for Qualified Teacher Status as a set of competencies, the danger of some trainees treating PGCE courses as simply competency-based is ever-present. Schön's view of the provision of technical training for a trainee was far from the technicist approach to teaching in which trainees develop a set of skills with the relevant subject knowledge which are somehow put together within the classroom. His model is much more aligned towards developing in trainees the capacity to 'think on their feet' which he would claim is using 'reflection-in-action'. This is at the heart of effective curriculum decision-making on the spot in the classroom but it requires a strong basis of reflective thinking on a range of experiences and action.

Trainees Writing Reflectively

The PGCE courses at the University of Southampton have been Postgraduate, offering Masters level credits, since 2003-4. Trainees are expected to write two 6000

word assignments as the assessed element of the course contributing directly to Masters level work. Those on the Primary PGCE are able to focus on one area of research throughout both assignments, thus developing some in-depth knowledge and understanding about a particular pedagogical aspect. Primary trainees are particularly highly qualified with 96% entering their PGCE year with a 2.1 or 1st in their first degree. Unsurprisingly, 98% gain the Postgraduate qualification with 60 Masters level credits.

The first of the two assignments comprises the theoretical background and research evidence within a particular pedagogical principle chosen by the trainee. Trainees are expected to "Identify a pedagogical principle and investigate, critically analyse and discuss its application to a core curriculum area" (Edwards, 2004).

Trainees are strongly encouraged to follow this theme through into the second assignment in which they are required to "Plan and carry out a small-scale classroom-based research project on an aspect of classroom practice that interests you". Expectations about writing about this research include:

An evaluation of how the research has influenced your own practice and the practice of others with whom you have shared your findings; a reflection on the experience of undertaking classroom-based research within the context you chose, describing how this has affected your personal development as a teacher and if it has altered how you view professional values associated with teaching and learning; (Edwards, 2004, p19)

As part of an ongoing review and evaluation of our Masters level provision on the Primary PGCE course, data was collected from the second assignments, during May, in the years 2004-5 and 2005-6. Any writing that trainees had submitted relating to the section described above was copied with the intention of reviewing the writing at a global level to see if there was evidence of an improved quality of reflection associated with the changes across the three years that had been made to the research training programme offered to primary trainees. Data was collected from between 138 and 146 trainees in each year.

Over the two years examined, there appeared to be little difference in the quality or quantity of reflective writing undertaken by the trainees. There was, however, a general positive correlation between the quality of written reflection and the grade awarded for the assignment (and, by implication, for the research). In considering Schön's model of 'professional artistry' and the part that 'reflection-in-action' plays in this, questions were raised by this analysis. What understanding and experience of 'reflection-in-action' in relation to classroom-based research are we offering trainees? Should the outcomes of 'reflection-in-action' and reflecting *on* 'reflection-in-action' in the form of small-scale interventionist strategies which are reflected upon or evaluated be considered research or professional artistry?

Additionally, questions were raised from the data about how genuinely the reflective writing represented 'reflection-in-action', given Schön's claims that training professionals are unlikely to have the capacity to reflect skilfully on actions because

their 'knowledge-in-action' is not sufficiently strong. Are the 'best' trainees, therefore, learning the language of reflective practice which is promoted so widely and frequently throughout their PGCE course?

In relating the quality of reflection to the overall grade for the assignment, five categories of reflection were identified. Those trainees achieving grades A or B (postgraduate) addressed the fourth and fifth categories much more frequently than those achieving grades C (postgraduate) or P (professional graduate), though the overall frequency of these two categories was low. The categories identified were:

- 1. Reflection on outcomes of the classroom-based research undertaken and how this directly impacts on the trainee's views of teaching and learning;
- 2. Reflection on professional development more generally;
- 3. Reflection on personal development;
- 4. Evaluation of the impact of the research outcomes on the class teacher or wider school context;
- 5. Confirmation of beliefs or understandings about theoretical perspectives.

The following section offers some evidence of each of these categories. The selection of these quotes is random but despite this selection process, they remain reasonably representative of the cohort as a whole. The overall grade for the assignment is indicated in parentheses after the quote.

Evidence of Trainees' Reflective Writing

Category 1: Reflection on research findings

I was surprised by the lack of directive scaffolding the children required in the discussion group to remain on task and develop their thinking. I had previously regarded [my] scaffolding as an extensive and dominant element of the discussion. I now realise that in a collaborative setting in which talk 'rules' and understandings are firmly established, scaffolding is more subtle than this, guiding and being responsive in a child-focused way. (B)

For my part, I found the research task difficult at first to integrate into the busy school timetable. Nevertheless, incorporating it into the lessons appeared to be successful ... More precisely, I am now much more conscious of the possible benefits of using practical tasks within the framework of the lesson, whatever subject this may touch on. (P)

Category 2: Reflection on professional development

Carrying out this piece of research has made me much more aware of my professional responsibility to try to solve problems that I may face in the classroom. I also have a professional responsibility to communicate my findings. ... This demonstrates the benefits of research over teachers simply relying on their own opinion. Although teachers' opinions should be by no means undervalued, research forces the practitioner to examine the true nature of cause and effect in the classroom. (A)

To effectively enable professional development, certain values about teaching and learning must be realised which I had not previously considered. It is necessary to create a culture of critical openness to examine myself and others and be at ease with criticism by colleagues for further development. Exposing problematic areas within a school or specific classroom carries a risk of creating tension and conflict. Trust for the inside researcher and shared responsibility for research with close collaborators must develop. I have come to regard professional development as working with others as a community of researchers for mutual benefit. (B)

I appreciate better now than before the value of carrying out such tasks relating to research, so as to improve my own teaching methods and eventually the learning of the children I teach. ... I have now become more mindful of the benefits of such research on a regular basis, to 'refocus' one's teaching, and to gain a better understanding of the approaches that work best in one's own practice and those which should be reconsidered or 'reworked'. I consider myself to be more alert to issues related to ethics. (P)

Category 3: Reflection on personal development

My initial impression of teaching was that it was quite a lonely profession in which the teacher had to work alone to teach his or her class. [The research] has shown me that teaching is a collaborative process. ... Collaborating with fellow professionals is something I will rely on in the future. During my research, I was able to develop a support network within my school and this had a very positive impact on my professional development. (C)

Category 4: Evaluation of impact of outcomes on the wider school context

On reflection, the class teacher thought she had gained awareness that the children needed to be taught how to talk together. Due to the positive attitude and learning development the children had displayed in the sessions, she has decided to use the talk rules. She had not previously realised the percentage of teacher talk that naturally occurred in the classroom and recognised the need for the children to be more proactive and be given the opportunity to assume the responsibility they had so successfully adopted. (B)

Category 5: Beliefs about theoretical perspectives

The research has reaffirmed my belief in the social-constructivist's claim that language is *used* in the process of thought and is not merely a product of it. (B)

Although it is beneficial to read about theories, putting these theories into practice gave me a real understanding of these issues. (C)

CONCLUSION

Over the years, much has been written about the means by which training teachers can be encouraged to reflect effectively on their teaching (see, for example, Ghaye and Ghaye 1998, Pollard 2005, Wildman, Niles, Magliaro, and McLaughlin 1990).

The efficacy of undertaking research as a means of encouraging Schon's 'reflection-in-action' amongst trainees is yet to be demonstrated over time but these early indications are positive. The categories of reflection exemplified in this study represent reflection at an epistemological level of "Reflection as reconstructing experience" (see table below).

Summary of Epistemological Commitments for Three Perspectives on Reflection in ITE

	Perspectives on Reflection	Source of knowledge of Reflection	Mode of Reflection	Purpose of Reflection
1.	Reflection as instrumental mediation of action	External authority (mediated in action)	Technical	Directs
3.	Reflection as reconstructing experience	Context (mediated by colleagues/self)	Dialectical	Transforms

(after Grimmett, Erickson, Mackinnon and Reicken, 1990, p35)

At this early stage of their teaching careers, trainees appear to be able to write reflectively at this level, but the question remains as to whether this is genuine 'reflection-in-action' or a product of being able to utilise the language associated with reflective activity learned within the PGCE course and from the literature.

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