Constructing and Critiquing Reflective Practice
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ABSTRACT This article explores two key aspects of the process of making use of research and evidence to inform teaching and help to raise standards of attainment: the need for knowledge and skills derived from research and evidence to be internalised for effective use in classroom settings; the influence of academic traditions of research upon the use of research and evidence in reflective practice. It also considers the question of whether teachers need to engage in action research or, indeed, any form of research, to learn from it in sufficient depth to use it to improve teaching and learning.

What is Meant by Reflective (Research- and Evidence-based) Practice?

This article takes as its starting point the notion that reflective practice amongst teachers is sustained activity, which uses research, evidence and some research-related processes as the basis for continuing professional development, and for identifying, understanding and tackling teaching and learning problems in classrooms. This notion sits somewhere in the middle of the terrain which Schön (1987) describes as a high hard ground overlooking a swamp. Schön suggests that practitioners may choose to remain on the high hard ground where we can solve relatively unimportant problems according to prevailing standards of rigour, or they can descend to the swamp of important problems of non-rigorous inquiry. This article proposes that reflective practitioners are those who seek out the high hard ground of reliable and replicable knowledge, where it exists in the full knowledge that they will face a challenging and rather messier job in interpreting its significance for their own specific stage of development, their own group of pupils, the lessons or subject areas they seek to improve and the communities in which they work. The position assumes that reflective practitioners are hard pressed for time, interested in practical outcomes, and seek out tried and tested strategies as a first port of call, rather than trying to re-invent the wheel. They are certainly interested in hard evidence about the relationship between teaching strategies and pupil outcomes, especially learning gain which they embrace with rigour where they can find it. However, they understand too the complexity of teaching and learning in classrooms with multiple, complex, dynamically interacting variables and the need for reflection; for scrutiny of current practice that digs below the surface to make what may have become routine and implicit sufficiently explicit to allow re-evaluation in the light of new knowledge, strategies and ideas. Their desire for rigour extends to the processes they use for such
scrutiny and interpretation. Reflective practitioners may be found collecting, using and interpreting evidence about their own, and their pupils knowledge and beliefs, and their actions as a core part of a continuing development process and professional planning. Thus, in the Teacher Training Agency (TTA) funded North East Critical Thinking Skills Research Consortium, quite a number of teachers use video clips to evaluate and develop their use of specific pedagogic strategies, such as open questioning skills. Some approach this as a formal research project aiming at generating knowledge and insights through rigorous case studies. Others participate systematically and professionally, but without necessarily having a desire to record and analyse their experiences for a wider audience. Of course, they evaluate what has been done as a routine part of reflective professional practice. These teachers are using the research of others, for example, in identifying possible teaching strategies. They are working with what Schön refers to as the messier world of artistry in implementing and interpreting the strategies that, at least at first sight, seem most likely to meet their particular requirements. They return to Schön’s technical rationality in evaluating their approach to implementation, by choosing videoing as a tool for digging below the surface of their own recollections of implementation. Some go on to occupy both types of terrain in researching the next stage of implementation in ways that can be communicated rigorously to the outside world. I suggest that just as teachers move between Schöns high hard ground and the swamp in terms of research methods and focus, they also move between the high hard ground of knowledge and the messier business of interpreting its usefulness for specific contexts, a model which is woven into all of TTA’s work in promoting teaching as a research- and evidence-based profession including, for example, the professional standards for teachers.

The article explores both forms of reflective practice and both types of terrain. It considers the introverted model focused on the personal and professional development of the individual, and the more extrovert form, focused on translating lessons from research and from individual experience to material capable of informing the practice of others. It does so through considering the ways in which teachers work with new and existing knowledge and ideas.

How Teachers Make Use of Knowledge in Reflective Practice

I suggest that in order for teachers to make use of knowledge or skills derived from research or, indeed, from any other source, a process of internalisation is necessary. The need to attend simultaneously to a large number of pupils, their different intellectual, emotional and social starting points, and the requirements of a systematic, sustained curriculum all require teachers to be able to deploy knowledge and skills extraordinarily quickly and flexibly, whilst working within a systematic framework. The
knowledge upon which teachers draw must therefore be fully assimilated and integrated if it is to be effectively deployed. When working effectively, teachers, like athletes competing in an Olympic race, are in a state of flow and often have very little recall of the detail of what takes place in lessons; a phenomenon that results in a substantial gap between out of context teacher reports and observations of classroom practice (Medwell et al, 1998).

The tendency for frameworks that shape the majority of teachers actions in the classroom to be implicit, rather than explicit, may be one explanation for the popularity of well-developed schemes of work and classroom materials over research treatises. The former provide new knowledge prepared by others in the school, by the LEA, by national agencies, by private publishers or by teacher trainers expressed and exemplified in forms, which can be readily put to work. The latter may well provide important new knowledge with the potential to transform teaching and learning, but all too often they stop short of providing examples of such insights at work in lessons with sufficient detail to enable teachers to make a connection with their own, largely implicit, knowledge and skills.

The importance of the number of variables faced by classroom teachers and the impact this has upon how teachers approach new knowledge and ideas is explored by Desforges (1995) who observes a pronounced tendency amongst teachers to adhere to tried and trusted broad teaching strategies and, wherever possible, to revert to such norms. In effect, he is suggesting that teachers try consistently to reduce the number of classroom variables. This phenomenon may be understood as a problem in integrating existing and new knowledge which, as has been remarked, needs to be internalised. However, it can also be seen, as a failure on the part of those seeking to influence teachers practice to understand how much elapsed time is needed for new and old knowledge and skills to be integrated (Brown et al, 1997). Alternatively, there may be a failure to appreciate the importance of a mix of experiences inside and outside the classroom and school setting (Rudduck, 1981) or to take into account the number of inter-related process involved (see, for example, Joyce & Showers, 1988). Hargreaves (1991) in his essay, A common-sense model of the professional development of teachers, approaches the phenomenon of potential teacher resistance to theoretical knowledge from a different angle, describing effective teachers as developing an increasingly expanded definition of their role in the early stages of their practice. Such a pattern of development highlights particular challenges when teachers make a transition between roles because such transitions will challenge previous knowledge and beliefs; they require teachers to make explicit previous strategies and to unlearn them, as well as to acquire new skills. The literature on continuing professional development shows quite clearly how difficult a process this can be (Corrigan et al, 1979).
Within this model of the teacher as a developing professional, the role of research and evidence is particularly important. The disciplines of systematic enquiry; the identification of clear questions, the collection and triangulation of relevant evidence and the rigorous interpretation of evidence on a systematic basis have a special contribution to make at two levels. First, many of these skills related to specific aspects of teaching. Secondly, the disciplines of research have the potential to reveal implicit practice and distil into bite size pieces, those aspects which may be critical to effectiveness. In other words, studies carried out by teachers and others that make explicit the different aspects of the detail of teachers internalised pedagogic knowledge and practice have the capacity to support teachers through the difficult business of matching reality and rhetoric, and of revealing and reassessing previous understanding. This should enable teachers rapidly to become discerning users and interpreters of research findings, provided that research reports are accessible, and make it possible for teachers to see the connections between what is being studied and the realities of classroom life.

The Relationship between Research Traditions and the Process of Reflective Practice

There is a vast literature about reflective practice. Since this article is a contribution from the perspective of a policy making organisation, rather than an academic one I shall not attempt a thorough critique of the literature. However, I do believe that whilst pursuing specific issues more particularly than is usual, my arguments are largely consistent with many aspects of the work of Stenhouse and those who have followed him in exploring the role of the reflective practitioner. In the following section of this article, therefore, I describe some of the aspects of the research tradition, which are supportive to reflective research- and evidence-based practice amongst teachers, and some which create barriers to such practice.

In promoting teaching as a research- and evidence-based profession TTA has proposed that all teachers should be involved in the continuing cycle of review of practice. It believes that evidence based on high quality research has much to contribute to teachers reflective practice as have other forms of evidence such as that produced via OFSTED inspection. Just as good teachers use evidence from both summative and formative assessment to shape their teaching strategies, and to provide feedback to students, they also use it to review their own practice. In addition, good teachers seek out the most up-to-date and reliable thinking about their subjects, the needs of their particular pupils and about teaching strategies to inform this reflective process. This is good continuing professional development. Some call it research and others critique such work against the same criteria they apply to research carried out by full-time researchers. I think this risks marginalising highly systematic and professionally challenging aspects of
teaching. This is a description of good teaching and teacher development and we should be pleased to describe it as such. There is no need to call it research with all that this implies including the exposure to teachers as being judged as very junior members of an elaborate hierarchy. However, this is not the same thing as research capable of promoting teaching as a research- and evidence-based profession in a wider context. The missing ingredient is a focus upon outcomes. To be sure, much teacher action research has followed the cycle described above and much of this will have brought benefits to the teacher involved. However, a goal beyond informing and improving the practice of the teacher involved adds to the power of the model, creating an extrovert, rather than introvert capacity for teacher development. Research with this capacity must focus hard upon achieving outcomes which are accessible to other teachers and credible enough to motivate other teachers to engage in the inform, review and development cycle of reflective practice, and so to interpret the research and examine its implications for practice.

The traditions of action research and reflective practice clearly sit astride these issues. Some forms of action research fall within the spectrum that I have described above as continuing professional development, others fit squarely within my definition of research with the capacity to inform the practice of other teachers and to promote the profession.

What TTA’s policy of promoting teaching as a research based profession calls into question is whether or not action research is the only or even the best vehicle for such a cycle of development. We post the question Do teachers need to do research in order to make use of it? Can teachers be reflective practitioners basing their practice in research without undertaking it? The work of the TTA pilot teachers with their colleagues certainly suggests that this may be the case (see, for example, Romey Tacon’s account [1997] of how other teachers in her school and in the neighbourhood came to make use of evidence from her and other peoples research or Jim Hines’s account [1997] of how he involved other teachers in making use of research through a teacher study group).

However, the TTA is not suggesting that the majority of research projects can or do make it easy for other teachers to make use of research findings. The recipients of TTA research grants were, from the outset, encouraged and funded to experiment with ways of interesting their colleagues in evidence from their own and other peoples research. Many, but not all, of the teachers involved achieved this. All received considerable support from HEIs, and/or LEAs and TTA also provided support in communicating research evidence including advice from professional communicators; resources and challenges, which by no means always characterise the world of education research.
The more usual emphasis in reporting research is upon articles and papers prepared for learned journals. The original goal of such writing was no doubt to facilitate the testing and validation of methods and findings through peer review. This is, of course, a legitimate goal provided that it is seen as one of several goals rather than an end itself. However, exposing the process and outcome of disciplined enquiry to academic peers for the purposes of critique does not amount to dissemination.

A process of disseminating research to teachers requires, I suggest, several other components. First, dissemination calls for highly expert communication. Most researchers recognise that initial research reports are more an exercise in analysis than in communication. In the first report, researchers are exposing their logic to the disciplines of written prose. Translating such reports into publications for an audience not initially involved in the study calls for different skills and perhaps greater distance from the conduct of the research to lend perspective, and to make it easier to see which details and qualifications are essential to the integrity of the work, and which are matters of more technical interest. Similarly, the communication component of dissemination would call for clarity about audience. A report written to inform the reflective practice of teachers would emphasise those aspects likely to help them interpret the implications of findings over the detail of how a study was carried out, whilst one written for an academic audience would emphasise the process of the research and its initial logic as much as its findings. Both have a contribution to make to promoting teaching as a research based profession if written accessibly.

In addition, dissemination to teachers calls for concise summaries of research to enable them to decide whether they need to find out more about a particular study. Given the pressure on teacher time and the difficulties of integrating new and existing knowledge within the swift, complex demands of a classroom, such summaries are vital. Their purpose is not to encapsulate the full weight of a study, but to enable teachers to decide whether the study addresses teaching and learning problems which they are currently tackling, whether the work is likely to take a form which will help them to identify the specific implications for their own situation and whether there is other research or evidence likely to support their work. This summary is an important component of dissemination, but provides a targeting tool; a pointer to other resources, rather than a self-sufficient resource. For those projects where researchers are very confident that findings do have practical implications for classroom practice, the development of teaching or staff development materials may well also be appropriate elements of dissemination. Unfortunately, dissemination of research in this form is widely considered to lie outside the parameters of the Research Assessment Exercise (RAE) [2] and so does not attract resources and has little status within the academic community. This leaves a gap which needs to be filled urgently. As we move towards an increasingly research- and evidence-based profession, it is essential that reflective classroom teachers
who are potential users of research evidence, have a role in filling this gap through their involvement in preparing such materials as paid consultants to the researchers who undertook the study. The level of guidance in such materials will no doubt vary from the prescriptive to the tentative. However, even the most prescriptive in tone and appearance will, in reality, demand sophisticated interpretation by teachers who must always identify the implications of external stimuli for their particular students and subjects, and integrate new thinking into existing strategies.

Of course, written materials in any form are, on their own, incapable of changing practice. As Huberman points out (1983) research utilisation depends on multiple forms of communication including human contact. The model of the reflective practitioner, which I have explored in this article, depends in part upon developing a thirst for interrogating evidence from research and other activities amongst teachers as a natural part of their efforts to raise standards. It suggests that it is important to work on both the supply and the demand side of pedagogic research to enable reflective teachers to engage with up to date knowledge. In this model, the human contact will be sustained and so will probably not involve the original researchers, but it will draw such teachers into sustained contact with people with expertise in particular subjects who will themselves have a deep appreciation of the research in question and related studies. They may be other teachers, teacher trainers, academic researchers or LEA Inspectors. The challenge which comes from such long-term exposure to expertise, opportunities to experiment with new ideas and to receive feedback is shown in several studies to provide a key to the development of teaching practice (Brown et al, 1997; Medwell et al, 1998; but most explicitly by Joyce & Showers, 1988). I believe that it must also involve teachers in debate with their professional colleagues within the school and in other schools, for it is through such debate that the active nature of the business of interpreting evidence could become evident, and permeate the profession as a whole. It must therefore, in its turn, take multiple forms including work and staff room conversations, curriculum development and design, teacher study groups (Hines, 1997) and, I hope, teachers writing for other teachers and an increased teacher interest in reading.

Summary

In conclusion, I am suggesting that the notion of reflective practice can be constructed in ways which are consistent with TTA's policy of promoting teaching as a research- and evidence-based profession. For this to happen, those engaged in pedagogic research need to focus hard upon revealing and making explicit the largely implicit details of those aspects of teacher knowledge and behaviour, which are effective in classrooms, and upon making evidence that illustrates this accessible and vivid to practising teachers. They need to separate reporting findings for the purposes of
academic peer review from reporting research to teachers and to develop a much wider range of vehicles for communicating with teachers about their work. They also need to see such communication as a high status activity, and they need funding bodies and funding mechanisms to support them in this view. Teachers, in turn, need to expect to seek out and interpret up to date knowledge based upon evidence derived from systematic enquiry throughout their careers. The complex and internalised nature of their knowledge and skills mean that common sense and teacher recollection of what goes on in classrooms fail to do justice to the realities of effective teaching. They need to see the activity of interpreting evidence developed by others as a high status activity which is central to reflective practice. Finally, teachers and researchers need to recognise the connections between the skills of research and those of teaching, and build upon these connections to draw the two together. This is not a zero sum game.

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Notes
[1] This is a revised version of a paper presented at the Educational Action Research 1-day conference, University of Nottingham, May 1998.  
[2] This is a public exercise in accountability, which is conducted in British universities on a 3-yearly basis. It is tied to funding and judgements are made on a 1-5 scale comparing the work of each department with others. The quality of publication output is a key indicator of quality.

References
Corrigan, Haberman & Harvey (1979) An American Point of View, in Adult Learning and its Implications for In-service.  