1

UNDERSTANDING PRACTITIONER ENQUIRY

Chapter enquiry questions

- What do we mean by enquiry?
- What is the link between promoting student enquiry in the classroom and teacher enquiry?
- What can we learn across the different contexts for practitioner enquiry?

Introduction

Teachers are problem solvers. The capacity to adapt national policy on curriculum and assessment to meet the needs of the individual learner is at the heart of their professional lives. It is the teacher adept at making adjustments who is effective in tackling systemic problems and who gains most satisfaction from their work (Huberman, 2001; Hattie, 2003). However, the intuitive judgement of individual teachers regarding the 'best fit' of practice to a specific situation can be enhanced through exposure to a wider range of alternatives. This book focuses on how a more sustained, explicit process of enquiry can be developed to promote professional knowledge that is shared by teachers across different contexts. We are university-based researchers who for over fifteen years have worked collaboratively with teachers investigating their practice in the classroom. Our approach is to begin with the question, what happens when teachers engage in enquiry and how can we support this process? The framework we provide recognises that a successful enquiry is not simply finding an answer to the original question but one that deepens understanding by throwing up new questions. The case studies included in each chapter illustrate how teachers across all phases of schooling from the foundation stage to higher education have posed questions, articulated their ideas and tested them. We have tried to convey the sense of improvisation and risk that we believe is an integral part of learning together across different institutional contexts. The book is, therefore, both a practical guide to how an enquiry might be conducted and an attempt to develop a better understanding of the processes and relationships involved.
What do we mean by enquiry?

The literature on professional learning uses a variety of terms, including reflection, enquiry and action research, to describe how teachers try to understand and improve their practice. Sometimes the terms are used interchangeably:

Teacher research is a type of action research, is synonymous with teacher enquiry, shares many characteristics with practitioner enquiry and incorporates reflective teaching and critical reflective practice. (Lassonde and Israel, 2008: 7)

Although we focus on what the teachers we work with actually do, imprecision in the use of terms can result in a 'lofty rhetoric' (Zeichner and Liston, 1996) and we want to avoid this and try to understand the processes involved.

The term 'reflection' in the context of professional learning is associated with Donald Schön and the term 'reflective practitioner' became very popular after the publication of his books in the 1980s (Schön, 1983; 1987). Schön described the predominant approach to professional learning as 'technical–rational' in its premise that teaching is an instrumental process requiring the application of learned skills in predictable, clearly defined circumstances. He considered this approach to be inadequate to the task of understanding how practitioners make use of intuitive, tacit knowledge and developed his idea of reflection to describe this process. For Schön, reflection is the means by which what would normally be implicit or assumed is brought to the foreground as teachers become conscious of their practice.

Schön describes two types of reflection: reflection-on-action, which takes place away from the event, and reflection-in-action, which takes place in the moment of the event itself. The concept of reflection coincided with common-sense ideas of how teachers think about classroom situations and so had an immediate appeal. The popularity of the term, however, brought its own problems as people began to use it very loosely and it became '... more a metaphor for representing a process of learning from experience than a term that might be subject to more detailed analysis' (Leitch and Day, 2000: 180). Schön admitted that the inconsistent use of the term in his early writings had caused some of this confusion but that the essential characteristic of reflection had always been the emphasis on the importance of an embodied way of understanding practice. The importance of Schön’s work in highlighting the significance of the knowledge created by working professionals is beyond doubt. The extent to which the process of reflection, as he describes it, enables practitioners to be proactive in posing problems and drawing upon existing research rather than reacting to issues in the thick of the action in busy classrooms has been questioned. We have
found the work of Dewey on enquiry helpful in making these links between reflection, action and learning.

For Dewey, reflective thinking ‘impels to enquiry’ through the search for knowledge beyond immediate, individual experience (Dewey, 1910: 7). Teachers presented with problematic situations in the classroom look for solutions and collaborate with other people to develop an understanding of what they can do. For Dewey, this willingness to test ideas through experimentation as part of a community of enquirers is indicative of a ‘scientific attitude’ and marks the continuity between student learning in the classroom and teachers’ own professional learning. Focusing on enquiry links directly to teachers’ work with their students where the use of questions to stimulate learning is already part of their practice and where it is expected that knowledge will be achieved through dialogue. It is this emphasis on dialogue, with other people and with what is already known, that distinguishes enquiry from reflection.

The term ‘action research’ was first used by Kurt Lewin to describe ‘research that will help the practitioner’ by providing clarity about what is to be done in complex situations. The aspiration was to develop an integrated approach to the analysis and evaluation of action through research on particular instances of social problems. Working systematically through a ‘circle of planning, action and fact-finding about the result of the action’ would result in objective standards for achievement and so facilitate agreement as to the conclusions to be drawn (Lewin, 1946: 34). Action research, along with positive research and interpretive research, forms one of three dominant educational research paradigms (Bassey, 1990) where, despite numerous variations, it retains the universally agreed characteristic of being research designed to improve action. The process of action research involves a series of linked enquiries with teachers formulating questions arising directly from their classroom experiences at each stage in the process. Grundy (1982) developed a typology of action research with three categories: technical action research, practical action research and emancipatory action research. Within the educational research community there has been debate about the scale and scope of action research. In some of its variants the action taken may be modest and the research outcomes not synthesised as completely as Lewin originally envisaged. The extent to which it should be an essentially radical, emancipatory activity is also disputed. The promotion of action research as a form of evidence-informed practice by government agencies such as the Teacher Development Agency (TDA, now the Teaching Agency) has been criticised for limiting its scope. Schemes promoted by the TDA, such as Best Practice Scholarships, were influential in raising awareness of the need for teachers to engage in and with research but risked diminishing the potential of action research by
emphasising its technical aspects at the expense of the critique of values intrinsic in practice (Leitch and Day, 2000).

In our work with practitioners across all the phases of formal education, primary school to higher education, we have described the process of investigation as ‘practitioner enquiry’, which we see as occupying the middle ground between reflection and action research.

As the diagram above indicates, we think that this middle position can be understood in two ways: practitioner enquiry can be a step in a process that begins with reflection and leads to sustained action research or it can be understood in terms of Dewey’s conception of enquiry as the trigger to further development through reflection or action research. In either case, a crucial stage is the forming of questions arising directly from practice and it is the fostering of this intention that we promote through our partnership with teachers. Our approach encourages practitioners to take more account of any existing research that is pertinent to the problem than is the case in most representations of ‘reflection’. At the same time, unlike some ideological versions of action research, we are content with a relatively modest focus for an enquiry provided it has arisen directly from practice.

Drawing on our experiences of working with teachers we have constructed an understanding of enquiry that reflects the variety of practice and takes account of the interrelations between three key aspects:

- the intention of the enquiry;
- the process by which the enquiry is pursued;
- the audience with which the enquiry is shared.
Intention

Agency: This refers to the extent to which the individual Teacher-researcher has control of the focus of the enquiry, the methods used to pursue the project, the analysis and interpretation of data and the way in which the project is made public. In some projects other agents such as a senior manager or a university-based research team may control one or more of these elements.

Impetus: The problem posed that stimulates the enquiry and provides the focus for the action research can come from a number of different sources: it can be an issue of concern at an individual teacher level, amongst a group of colleagues, across the whole institution or sector. It can come from an experience in the classroom, from a question posed by an in-service professional development course session, a professional journal or from discussion with colleagues and managers. The impetus for the enquiry will have implications for the processes followed and the primary audience and have an effect on the dynamics of the practitioner research.

Process

Tools: This refers not simply to the research methods employed – the observations, questionnaires, interviews or test scores – but to the extent to which each method provides data which operates on more than one level. A pragmatic research tool simultaneously contributes to answering the research question and gives feedback information that enriches the learning and teaching in progress.
Analysis: The analytic process is one in which, broadly speaking, there is either a progressive narrowing of focus to assemble evidence to either prove or disprove a hypothesis or a broad mapping of the data collected in order to generate a rich description and a new hypothesis.

Audience

Professional Voice: Dissemination is a key part of every project, but the extent to which it is prioritised reveals something important about the purpose of the enquiry as identified by the individual researcher. Is the intention to set in motion specific changes in pedagogy and practice, necessitating active dissemination well beyond the immediate environment, or to set up a ripple effect, whereby the impact of the research is most keenly felt in the immediate vicinity but may spread out through recommendation and colleagues’ reports?

Critical Community: This refers not just to the final presentation of results from an enquiry, but how the researcher is placed in relation to others, from the initial idea, through the process of data collection, re-framing questions and analysing findings. In terms of extremes on the continuum, there is at one end the ‘lone’ researcher, at the other a formal team with clearly defined roles. However, the points of contact are important less for the number or the length of time, than for the extent to which they both support and challenge the researcher. The standards used to judge the outcomes of research are by no means unproblematic and this is one of the main anxieties of teachers new to research. There are key elements such as clarity, appropriate application of methods selected and ethical considerations, which would be expected in any investigation. The role of the community is dynamic, providing an arena in which teacher-researchers feel confident to share their experiences and findings but also one in which they can expect to be asked tough questions. In this way, the quality of research and the learning of individuals and communities are promoted.

In the model in Figure 1.2 we have put intention as the top of the triangle as this emphasises the importance of accessing strategic, reflective thinking in order to consider the meaning of their activity in holistic as well as analytic ways:

This kind of thinking is important when embarking on activities which make considerable demands on a person, such as an academic or vocational course or project. It can also be extremely valuable in dealing with ... a challenge to an assumption, belief or a communication problem. Most significantly, it is what changes what could be a routine process into a learning experience. (Moseley et al., 2005: 315)

It is by focusing on the intention of the practitioner research that the impetus of the enquiry and the agency of the teacher are made explicit so that strategic, reflective thinking can be accessed.
What is the link between promoting student enquiry in the classroom and teacher enquiry?

I've learned a lot from just listening to some of these kids. I'm thinking, WOW, I never figured it out that way.

Sharing ideas with primary school teachers has had a big impact on how I teach my undergraduate students – that was a surprise for me!

I learned more from watching the video of one lesson than I did from 25 years in the classroom.

In our work with teachers enquiring into their own practice we have been aware of what has been called the ‘mirror effect’ (Wikeley, 2000). The mirror effect describes how interventions designed to have a particular impact on student learning have a similar effect on the teachers involved. Our experience of the changes that occur in teachers is corroborated by a systematic review of the impact of thinking skills interventions on teachers (Baumfield and Butterworth, 2005). The review took evidence from 13 empirical, classroom-focused studies covering all phases of compulsory education and across a range of curriculum subjects. All of the studies included used more than one measure of teacher impact as well as data on impact on student achievement so that links could be made between improvements in students’ learning and changes in teachers’ practice. The studies involved teachers working with their usual classes in normal school settings and so had ‘mundane realism’ (Coolican, 1996). Focusing on the importance of collaborative enquiry for learning with their students created an appetite for enquiry in the teachers that was marked by a shift in their attention to consider different aspects of the teaching and learning process. The key to this shift was the experience of ‘positive dissonance’ (Baumfield, 2006) created by the enthusiastic but unexpected responses of their students, which surpassed expectations. It is, therefore, the access to student feedback that triggers teacher interest, stimulates collaborative enquiry and is the basis for growth. The link between student enquiry and teacher enquiry is the enhanced access to student feedback through more sustained, considered dialogue.

Our approach is, therefore, consistent with what is already known from the extensive literature on the importance of feedback for professional learning, which emphasises how teachers themselves can learn from student feedback in the process of bringing about change in classrooms and schools.
(Reed and Stoll, 2000; Hargreaves, 2000; Watkins, 2000). Improving access to student feedback may be necessary for teacher enquiry but it may not be sufficient, as researchers in the US have demonstrated. The Cognitively Guided Instruction project (Franke et al., 1998) identified the components needed to facilitate pedagogical enquiry once normal practice has been interrupted by the experience of positive dissonance:

- practical tools
- support for teachers in extending and deepening reflections on experience
- grounding in an emergent pedagogy by having access to a wider critical community
- close collaboration between teachers and researchers.

It is when teachers are able to access support with these components that the meaning-making that enables self-sustaining generative change happens.

This book is about teachers as learners, who by finding out more about what is happening in their classrooms contribute to our understanding of the processes of teaching and learning in schools, further education colleges and universities. It is about developing partnerships in which distinctions between theory and practice are challenged and expertise is distributed as teachers as researchers and researchers as teachers learn together. The relationship between research, policy and practice in the production and deployment of knowledge about teaching and learning is complex and subject to critique (Hammersley, 2005). Nevertheless, conceptions of teaching as a profession assume that a productive relationship between these aspects is both possible and desirable. Our principal concern is to advocate the importance of the research engaged professional; teachers who advance our understanding of the interaction of theory and practice and make a difference to the lives of the students they teach.

What can we learn across the different contexts for practitioner enquiry?

Underlying our approach is the principle of systematic enquiry made public (Stenhouse 1981). The teachers whose case studies inform this book identified questions and initiated changes in their classrooms that were of interest to them and designed an enquiry that was meaningful in their context. The intended audience for this enquiry was characterised as a sceptical colleague who needs to be convinced of the value of the investigation and its outcomes. The enquiries were usually conducted by pairs of teachers situated within a supported network of teachers and university researchers, who operate as co-learners; crucially, the results of the enquiry have to be related meaningfully both within and beyond their immediate context.

Practitioner enquiry has been criticised for the difficulties of generalising results from projects beyond their specific context. While it has high validity
for the teacher and the context within which the research was completed, its reliability and transferability can be questioned. This means that the role of partnerships in supporting the teacher-researchers can be crucial. The collaborative nature of enquiry into teaching and learning is important as this helps teachers to develop a professional discourse about learning and provides opportunities for the sharing of ideas across different institutional contexts. Collaboration is a significant aspect of professional development in schools (Cordingley et al., 2003) and this book represents the outcomes from partnerships with teachers in a range of different contexts and over a number of years in which sharing experiences across the different phases of education has stimulated reflection and enquiry into the processes of teaching and learning (Baumfield and Butterworth, 2007). One of the most dramatic examples of this sharing of ideas came about after a residential conference attended by practitioner enquirers from primary schools, secondary schools, FE colleges and a university. During the conference, teachers presented posters illustrating the enquiries that they had been engaged in over the past year and the interest of a Senior Lecturer in Dentistry from the university was captured by a presentation by a primary school teacher about how she had used an enquiry tool called a ‘Fortune Line’ with her class. He began to wonder if this technique for eliciting the learners’ understanding of their own emotions and how other people might feel about a particular event or set of circumstances could help him with a problem he was encountering in his own teaching context. His case study shows how learning was translated across contexts.

---

Emotional Intelligence in the Learning Environment for Oral Surgery Skills: is managing it a large part of clinical competence?

Undrell Moore
School of Dental Science, Newcastle University

OBJECTIVES

The emotional impact of learning has been recognised as an important element in the design of learning experiences. We have long observed that the act of first removing a tooth has a profound effect on the student dentist as well as the patient. This project sought to explore this in more detail.

(Continued)
HYPOTHESIS

Does reflecting on the experience in ‘real time’ have an effect on the quality of the reflection and on the students’ insight into their learning processes?

RESEARCH PROCESS

In the first pilot study in 2010, 47 students completed an ‘exit questionnaire’ with standard Likert scales and statements about challenge, emotional experience and new learning. The results from these questionnaires were suggestive but also somewhat ‘flat’. They did not represent the intensity of emotional engagement in removing teeth that had been observed during the placement.

We made the decision in 2011 to use a ‘fortune line graph’ (above) so that students could record their reactions as each aspect of the extraction process unfolded. All students undertaking the clinical placement were invited to take part.

FINDINGS

Although we have data for a large number of students, for the purposes of this case study an illustrative group of six students is being used.

- Students are more likely to report positive feelings when doing ‘hands on’ work with the patient.
- Students find preparing for the extraction and receiving feedback on their performance less positive experiences.
Individual students show significant differences in the small variations of emotional state between activities that are also demonstrated in the reflections across the whole placement.

Tracking student performance and in-depth interviews will allow us to explore whether the emotional experience translates to performance in the longer term.

Working across institutional boundaries invigorated the participants as the following comments from a second residential for practitioners engaged in enquiry from primary schools to universities illustrates:

- Knowing about other sectors helps shape your own teaching. It is interesting to learn what is going on in other sectors such as primary and FE when previously there haven’t been that many links.
- An enhanced sense of continuity through our practice and consistency (knowing where the students come from and how they were taught – to better address their needs).
- Shared problems, shared solutions, shared community, breaking down perceived barriers, re-energising enthusiasm for learning. Excellent craic!
- We mostly teach the same people, face the same issues (on a pedagogical level) so collaboration should be the rule, rather than the exception.

This book is about teachers as learners, who by finding out more about what is happening in their classrooms contribute to our understanding of the processes of teaching and learning in schools, FE colleges and universities. It is about developing partnerships in which distinctions between theory and practice are
challenged and expertise is distributed as teachers as researchers and researchers as teachers learn together. The relationship between research, policy and practice in the production and deployment of knowledge about teaching and learning is complex and subject to critique (Hammersley, 2005). Nevertheless, conceptions of teaching as a profession assume that a productive relationship between these aspects is both possible and desirable. For the teachers, practitioner research is made manageable through the interrelated processes of reflecting on an issue in their classroom, identifying a focus for their enquiry and the generation of a question to be investigated in the classroom. The investigation takes the form of activity that complements the ‘plan-do-review’ cycle fundamental to teachers’ everyday practice. As such, there is no requirement for the teachers to ‘bolt on’ or overlay another layer of ‘research practices’; rather they select research tools which fit with their teaching environment and use those to generate the necessary feedback in a systematic way. In this model of working it is only a short step from feedback that informs the next stage in the enquiry to evidence that is open to public scrutiny. Our principal concern is to advocate the importance of the research-engaged professional – teachers who advance our understanding of the interaction of theory and practice and make a difference to the lives of the students they teach.

The structure of the book

In this chapter we have discussed the importance of teacher enquiry through a process of practitioner research for understanding pedagogy and improving learning and teaching across different sectors of education. We have outlined a typology exploring the different elements of practitioner research and how they can be configured in different models of the relationship between intention, audience and process. This book will now go on to look at the practical issues of engaging in research into your own practice from the initial identification of a focus to the sharing of your enquiry with a wider audience. In the next chapter we consider the importance of examining the fundamental ideas and assumptions that form your world view as a teacher and how this shapes any enquiry that you undertake. Chapter Three focuses on crystallising a question and making a commitment to embark on an enquiry and then the following chapters take you through the stages of an enquiry cycle, giving you practical guidelines, issues to consider and practical examples from the case studies of the teachers with whom we have been working. In Chapter Four we guide you through the process of finding an approach that matches your question and is most likely to generate the evidence you will need to convince more sceptical colleagues. In Chapters Five, Six and Seven we look at who needs to be included in your explorations of issues, from the learners themselves to the
wider community. Practical advice is given on how to interest and include other people in your enquiry and how you might consider widening its scope through ongoing enquiry cycles. The final two chapters help you to bring together and make sense of the outcomes of an enquiry and share what you have learned with a wider audience. The book takes you from the forming of an intention to investigate a question to recognising the needs of your audience by showing you what other teachers have done and how they solved problems along the way.

**Key readings and References**

**Key perspectives on enquiry and practitioner research**

There is a huge literature exploring enquiry and practitioner research, so the references that follow are intended to be a useful starting point for readers to engage with the debates and the range of views from different traditions.


**References used in this chapter**


