The Student Teacher as Researcher

In this chapter you will explore:

- Deep and shallow learning
- Critical thinking
- Why do research?
- Research as enquiry
- The value of reflection
- What is reflection?
- Questioning and reflection
- Types of reflection
- Reflection in and on action
- Reflexivity
- Classrooms as places of complexity

Introduction

Why should research be important to you as a PGCE student and as a teacher? In this chapter we will develop the notion that research is synonymous with deeper learning and critical engagement, and build upon some issues related to learning that were considered in Chapters 2 and 3. The false dualism of theory and practice (Pring, 2000) is explored, asking what we really mean by theory, by practice, and moving to a position where these two elements are seen to be inexplicably entwined.

You may or may not have undertaken a wide range of different forms of research as part of your undergraduate degree. Either way, research in and around classrooms is likely to be relatively new to you. This chapter will introduce you to why research is important to undertake, and how adopting an enquiry approach associated with reflection will enable you to develop a deeper understanding of your practice and issues about pupil learning. As your approaches to enquiry and critical reflection are honed, so your capacity to enhance teaching and learning will be strengthened, as will your ability to acknowledge your own predispositions and the possible constraints of a school's culture and/or wider policy.

This chapter supports you in developing an understanding of the complexities of learning. Complexity theory will be drawn upon as a means to support you in developing a rich understanding of the nature of learning, teaching and classrooms.
Deep and Shallow Learning

The nature of the learner's engagement with learning has long been of interest. Of course in a culture where the ‘rewards’ of education are often presented as high stakes to learners, there is a natural tendency for learners to adopt strategic approaches whereby they are more concerned with the qualification than being open to the opportunities offered through engagement with the ideas.

The notion of ‘deep’ and ‘shallow’ learning was developed by Marton and Saljo (1976). In learners adopting ‘deep’ approaches, the learner is not content with mastery of the surface features of content but instead seeks deeper meanings.

Example

A pupil reads a poem and looks beyond the surface features of rhyme and the appealing images that the poem invokes to seek to understand the metaphor used, as well as being keen to understand what the impulses for the poem were.

In deeper approaches the learner seeks to relate ideas to previous knowledge and will interrogate the logic of arguments. In shallow approaches the learner tends to be accepting and is happy to memorise facts and routines without seeking to probe any deeper. We would argue that the characteristics of deeper learning might describe a PGCE student learning at M-level!

Table 4.1 summarises the principal characteristics of deep and shallow approaches to learning.

<table>
<thead>
<tr>
<th>Shallow approaches to learning</th>
<th>Deeper approaches to learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Intention simply to reproduce parts of the content</td>
<td>• Intention to understand material for oneself</td>
</tr>
<tr>
<td>• Accepting ideas and information passively</td>
<td>• Looks beyond surface features of content</td>
</tr>
<tr>
<td>• Concentrating only on assessment requirements</td>
<td>• Interacting vigorously and critically on content</td>
</tr>
<tr>
<td>• Not reflecting on purpose or strategies in learning</td>
<td>• Relating ideas to previous knowledge/experience</td>
</tr>
<tr>
<td>• Memorising facts and procedures routinely</td>
<td>• Using organising principles to integrate ideas</td>
</tr>
<tr>
<td>• Failing to recognise guiding principles or patterns.</td>
<td>• Relating evidence to conclusions</td>
</tr>
<tr>
<td></td>
<td>• Examining the logic of the argument.</td>
</tr>
</tbody>
</table>
Critical Thinking

In Chapter 2 we considered the notion of ‘folk theories’ or ‘lay’ theories. Often the personal theories that we hold can become entrenched or fossilised. If knowledge is always provisional, openness or being prepared to be tentative is an essential predisposition to ensure that our knowledge does not become fixed. The notion of being critical is an important cognitive tool which can address the danger of knowledge becoming fixed and synonymous with the easily accessible - your classroom observations, ideas discussed in your University-based seminars or prevailing literature.

it becomes apparent that a primary task for any research activity is to emancipate teachers from their dependence on habit and tradition by providing them with the skills and resources that will enable them to reflect upon and examine critically the inadequacies of different conceptions of educational practice. (Carr and Kemmis, 1986, p. 123)

Of course Carr and Kemmis are referring to experienced teachers but we feel the point stands in that developing the capacity to be critical is an essential aspect of being a PGCE student, especially one engaged in Masters-level learning.

Differing however from Carr and Kemmis, and to an extent Brookfield, we see criticality as an attitude underpinned by curiosity - the desire to seek the truth or the motivation to understand at deeper levels. This makes it more than a ‘skill set’. The place or appropriateness of criticality in student teachers is not unchallenged. McIntyre (1993) suggests that it is not appropriate for student teachers and that the best they can achieve is a kind of induction into a critical way of being. We encourage a more situated approach - being critical is in effect being interested in learning and in order to be critical we have to have something to be critical of. There is a tendency that student teachers often see being critical as being negative. This is not necessarily the case. Poulson and Wallace (2004) suggest the following as characteristics of being critical in an academic enquiry:

- Adopting an attitude of scepticism
- Habitually questioning the quality of your own and others’ specific claims to knowledge
- Scrutinising claims to see how convincing they are
- Respecting others as people
- Being open-minded to other perspectives
- Being constructive by using your scepticism to find better ways or interpretations.

Wallace and Poulson (2004) also say that in their experience as teacher educators, they have found that many students are unsure of what is involved and are reluctant to speak out as they feel they should know. Scott (2000) proposes four dimensions to critical thinking - see Table 4.2.

**TABLE 4.2 Dimensions of critical thinking (based on Scott, 2000)**

<table>
<thead>
<tr>
<th>Dimensions of critical thinkingIdentifying and challenging assumptions</th>
<th>DefinitionsThose assumptions may be taken-for-granted notions about education, accepted ways of understanding educational matters or habitual patterns of behaviour.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenging the</td>
<td>Being aware of these contexts allows the reader or practitioner to</td>
</tr>
</tbody>
</table>

importance of context

Transcend them. It allows the practitioner to develop alternative ways of understanding and alternative modes of practice.

Imagining and exploring alternatives

The thinking of the practitioner goes beyond the merely conventional or accepted way of thinking and behaving. Thinking about practice becomes rooted in the actual context of teaching and learning and it allows the practitioner to experiment within their own practice.

Developing reflective scepticism

This involves being sceptical to all claims of knowledge unless the claims for that knowledge have been evaluated. (Brookfield, 1987, pp. 7–9)

Over the years we have found that student teachers often separate the academic and teaching. So from time to time they will say things like 'my teaching is fine, it is the academic side I find hard'. In their mind there is some kind of separation between the ‘doing’ of teaching and the reading or they see them as existing in parallel dimensions. However, a central feature of Master's-level engagement will be your capacity to integrate literature as a means to inform practice. Pring (2000) refers to the theory-practice divide as a false dualism: ‘Making this distinction is epistemologically and practically untenable. Like it or not, we are all theorists and all practitioners. Our practice is informed by our implicit and informal theories about the processes and relationships of teaching’.

Vignette

Consider ways in which you have developed your own understanding of your practice and how you have helped yourself to develop as a teacher.

Now read the following vignette about Sally.

Sally is a Primary PGCE student teacher undertaking a Key Stage 2 placement. She has just taught a Geography lesson to a Year 4 class where she used ideas that she had seen modelled in a PGCE session which focused on using children’s own stories to develop pupils’ connections to, and understanding of local weather conditions. Theories of socially constructed learning seemed to make good sense to Sally and she was also keen to include aspects of social and emotional learning that she had discussed in Professional Studies.

She planned for her pupils to write their own stories following group discussions and a common stimulus from a series of photographs of people experiencing extreme weather conditions including Monsoon rain, hurricane-force winds and hot desert sun. She had a writing frame prepared to support the pupils’ story-writing.

Her lesson, however, did not go to plan. Sally’s mentor asked her to reflect on the lesson. The discussion between Sally and her mentor identified that the lesson did not engage the pupils as expected and the pupils’ thinking and resulting work was limited in depth. The mentor suggested that the planned objectives for learning were fine but that in the lesson she seemed muddled in terms of what she wanted the pupils to achieve - her instructions were much more about what tasks the pupils should be undertaking. Sally had noticed that the pupils’ responses to the weather photographs
had caused some hilarity about the difficulties which the people were facing. The pupils did not empathise well with the people in the photographs. The pupil discussions about extreme local weather produced some good stories, often about the last time it snowed heavily, however, Sally found it very hard to enable the pupils to say how they felt about the weather apart from how playing in the snow was fun and the resulting stories reflected this and the writing frame was not fully used. The mentor suggested that to unlock the pupils’ feelings about weather there needed to be more support for this and perhaps different photographs of weather might help.

- What has Sally learnt?
- How did asking questions and reflecting on practice help in this situation?
- How did the use of theory help in developing the thinking about the lesson?

Why do Research?

What is the value of undertaking your own research into learning, teaching and issues related to schools and young people? David Hopkins notes that by asking this question, ‘one is raising a whole series of issues around topics of professionalism, classroom practice, the social control of teachers and the usefulness of educational research’ (Hopkins, 2002, p. 31). We have seen in Chapter 1 that to be a professional is to build your autonomy as a teacher. This is not to say you declare unilateral separation from the rest of your school but it does mean that you know:

- why you approach pupils’ learning in particular ways
- how and why you apply particular policies
- how you develop your understanding of pedagogy by observing and reflecting on practice, and reading and talking to colleagues about these matters.

This position assumes that education research is educational in that it has an application as part of the findings of the work and that there is some relationship between the research and future policy and practice. However, it should be noted that there are many forms of research which do not have these.

It’s easy, during the hustle and bustle of the school day, to focus purely on the operational business of teaching. Often experienced colleagues will know intuitively that for them, there is a right way to approach an aspect of teaching. Without unpacking the reasons for this action it is harder to critique it and to learn from it, whether you have 20 years or 20 days of teaching experience, but it is this ‘unpacking’ and development of your understanding that all PGCE students are asked to undertake in order to develop their professional and pedagogical knowledge and to develop as a teacher.

It is often through post-lesson or post-seminar reflections that your thoughts are shared and developed through discussion of the reasons for the way an aspect of a lesson went or what a theory means to you. This suggests that pedagogical knowledge of practice is not a fixed commodity (such as say the name of a capital city or a mathematical equation) that may be transmitted to others in order that they too can possess this knowledge. This information-transmission form of knowledge presupposes it is objective and absolute (Brew, 2006) and that power lies with those who hold the knowledge. However the knowledge about your
practice is constructed by you, your peers, tutors and mentors, as well as by published authors in the field. In other words, the epistemological landscape is flat (Wenger, 2008). Sense of this is made only in the context of, and enquiry into your own practice - it is ‘situated’. As such, ‘theoretical knowledge which is the traditional preserve of universities, has been subject to attack in favour of knowledge which can be of practical use’ (Brew, 2006, pp. 22–3).

No practical activity is approached without some underpinning theory (Carr and Kemmis, 1986). This may relate to a published theory from a journal or it may be a personal theory, and, of course, the more you involve others (peers and/or published works) in the discussion about an issue the more interpretations of that issue will be suggested.

This is exemplified by Powell et al. (2004) through their systematic review of research into managing pupil behaviour in classrooms (see Table 4.3). A common occurrence is described as ‘off task behaviour’. We can consider the reasons for this, and therefore the different appropriate actions, through a wide range of theoretical lenses:

**TABLE 4.3 How off-task behaviour might be explained and addressed (from Powell et al., 2004)**

<table>
<thead>
<tr>
<th>Frequent behaviour</th>
<th>Theory</th>
<th>Explanation examples</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-task</td>
<td>Behavioural</td>
<td>Child is getting more attention by being off-task</td>
<td>Reward on-task behaviour</td>
</tr>
<tr>
<td>Off-task</td>
<td>Cognitive</td>
<td>Child thinks he is unable to do the task</td>
<td>Encourage child to reappraise task, identify what parts of the task he can do, etc.</td>
</tr>
<tr>
<td>Off-task</td>
<td>Affective</td>
<td>Child fears failure</td>
<td>Circle time to build self-esteem; offer increased adult or peer support</td>
</tr>
<tr>
<td>Off-task Social/envir.</td>
<td>‘He has a brother who is just the same’</td>
<td>Possibly nurture group or work with parents</td>
<td></td>
</tr>
<tr>
<td>Off-task Biological</td>
<td>Perhaps the child has ADHD?</td>
<td>Refer for medical assessment</td>
<td></td>
</tr>
<tr>
<td>Off-task Developmental</td>
<td>Child is not ready to work independently</td>
<td>Allocate learning support and set more suitable learning challenge</td>
<td></td>
</tr>
</tbody>
</table>

Although it is tempting to try and provide a ‘one size fits all’ theory to answer all your questions or to solve all your problems, it's clear from this example that an appropriate action for one pupil in one particular context is unlikely to work with another pupil in a different one.

Additionally, you will find that different teachers see the ‘problem’ and the ‘solution’ quite differently (this is further developed in Chapter 5). You might see this as frustrating, or acknowledge this as one reason why teaching is a profession and not merely a technical pursuit. You will hopefully see the complexity of these issues as something into which you can immerse yourself. Whatever your stance, this is one of the reasons why as teachers we should always be enquiring and reflecting about practice and related policy, and by doing this we develop our professional knowledge.
Reflection

Consider a situation where you have discussed an element of a lesson that you have taught or observed.

- What theories about learning or teaching were suggested?
- Did the discussion help you make some meaning of what happened in the lesson? If so, in what ways did it help?
- In what ways did this reflective process change your professional knowledge?

There is clearly room for many forms of research, however, the research you will undertake during your PGCE is most likely designed to enable you to understand pedagogy further and therefore to help improve your pupils’ learning in the classroom, i.e. it is applied educational research undertaken by classroom practitioners with an outcome designed to enhance understanding and inform future practice.

There have been various debates about the nature and quality of education research over the years. Quite often the timescale between the undertaking and publication of research does not match the preferred pace of policy change. In some cases criticisms have been made that research does not relate to, and therefore help, practice at all. In the case of learning to teach at Masters-level, we will focus on the possibilities for your research to make visible the underlying principles that underpin practice, within the policy landscape.

Classroom-based research that digs deep into learning and teaching in a small but significant way has much to contribute to our understanding of these complex pedagogical processes. As we have seen in Chapter 1 the political landscape of teacher education and education more generally can be described by a series of nationally based policies. More recently policies have suggested ways that teachers in different phases and subjects should teach. Stronach et al. (2002) highlight the trade-off that teachers make in their professional practice between the ‘ecologies of practice’ and the ‘economies of performance’. The economies of performance are indicated by a ‘language of indicators’ such as Ofsted inspection data, SATs and performance tables, or by nationally driven policies that are adopted in school. The ecologies of practice however, lie in what teachers take to be their ‘personal/professional orientation’ such as ‘my preferred style of teaching; pupils’ preferred style of learning; my approach to teaching’. It is in considering these issues that you can utilise small-scale research to its advantage. You are not trying to find answers that will give general insight into the world of education but by focusing on a small issue you will be able to understand issues related to learning and teaching more deeply and so adapt your practice and possibly influence policy in the future.

It is quite possible that your responses to Reflection 4.1 would not be considered as an account of research, but however small the matter into which you have enquired, you have used ideas or theories to scrutinise the issue (or vice versa) and ventured some tentative explanations. As such it is a piece of small-scale, albeit informal, research.
Reflection

Consider times when you have used small-scale research (either formally or informally) in order to investigate a matter:

- What was the focus of your questioning?
- What provoked you to ask these questions?
- How did you find out about these matters?
- What were your findings?
- How did this change you or your practice?

Some academics would argue that small-scale, highly focused research is more appropriate to the complexity of the real world than the sweeping findings (e.g. the grand narrative cited by Lyotard, 1984) used by research with an extensive scope and which aims to provide general themes to be applied over a large scale. Small-scale research is most useful in this Postmodern approach.

It is likely that you are asked to reflect on your own learning as a teacher as well as consider the learning of your pupils. In order to do this you will be drawing on at least two important methods of research - observation and reflection. Hopkins (2002) suggests there are two key research methodologies that teachers may use to undertake classroom-based research. The first is associated with sociological and anthropological research (e.g. ethnography). The second is associated with action research. These are linked to research in the social sciences and include action research. This is a ‘form of self-reflective enquiry undertaken by participants in social (including educational) situations in order to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations in which the practices are carried out’ (Kemmis, 1983 cited in Hopkins, 2002, p. 43). As such action research and other such methodologies have links to critical theory through their emancipatory potential or in other words to liberate the learner.

David Hopkins (2002, pp. 53–4) develops six criteria for classroom research by teachers. These are:

1. The research methods that are chosen should not impinge on the classroom teaching.
2. Data collection should not be too time demanding but teachers need to be clear about data collection techniques to be used.
3. The chosen methods must be reliable enough to allow teachers to formulate hypotheses.
4. The teacher must be committed to the research focus in order for it to be given sufficient priority to succeed.
5. The approach to the research must meet high ethical standards.
6. The research should be ‘classroom exceeding’ and relate to wider educational
discussions and priorities in the school and beyond.

In later chapters you will explore a range of approaches that will enable you to meet the criteria regarding data collection, ethical considerations and setting the research question in a wider setting. The key aspect which will drive this research forward, however, is going to be your desire to find out about the focus of the research, and to help keep your focus we will consider the research process as an enquiry, just in the way that you might approach your pupils' learning.

Research as Enquiry

We can approach research in a multitude of ways and you will read about some of them in Chapter 5. The wider we define research the more it is not seen as a hierarchical, elitist activity undertaken by university professors, but rather as something that we can all engage in at various scales and levels. Whatever form of research is decided upon they all have something in common - making meaning by learning through enquiry.

Some of you may be familiar with enquiry-based approaches to learning. Enquiry is not just about a way of teaching, or a framework for developing your pupils’ thinking about issues. It can be a common approach to research whether you are planning a Year 3 lesson on mapping the different spaces used in the classroom or researching in relation to your teaching practice. The power of this approach brings teaching and research potentially together through a common approach to learning.

Approaches that use enquiry as a common approach to teaching and research illustrate the success of such ways of thinking in higher education (Healey 2005). Asking questions about teaching and learning and reflecting on practice, policy and theory in the consideration of these questions all relate to good enquiry processes. Figure 4.1 illustrates the cyclical approach to classroom enquiry where reflection based on analysis of data from enquiry enables learning from this research to inform future thinking and practice. This model for approaches to classroom practice can also provide a framework for our research. As you can see from this approach, research is not an unfamiliar activity and perhaps forms the basis of what you expect your pupils to undertake regularly as enquiring learners.

This cyclical approach also forms the basis for action research which has itself formed the basis for a lot of small-scale research undertaken by teachers (see Chapter 7).

The Value of Reflection

‘Throughout the 1990s the overwhelming majority of those leading teacher education programmes ... claimed that their courses were explicitly informed by a notion of reflection’ (Furlong and Smith, 1996, p. 22). Stephen Rowland notes that the ‘importance that reflection
is currently held to play in learning relates to the Platonic idea that knowledge and understanding are to be gained by questioning and thinking in depth about what we know, rather than being presented with new facts' (Rowland, 2005, p. 93).

The need for questioning to uncover the truth or seek new meaning is a critical aspect of learning, particularly when, in the context of learning to teach, the answers are seldom easy to find and are often heavily situated in the context. Perhaps early on in your PGCE you, or your peers, may well have asked your tutor questions expecting responses that would universally guide you in your practice. It can be frustrating when responses are framed by a series of questions, but it is this way that reflection is stimulated and as we have seen in learning through enquiry, this reflection is integral to learning.

The model below illustrates a four-phase model of reflection showing how reflection is at the heart of the professional development process.

<table>
<thead>
<tr>
<th>Phase 1: Develop awareness of the nature of current practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your current work practice with reference to this subject matter or these skills? For example, how do you currently promote or educate for health?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2: Clarify the new learning and how it relates to current understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is it that you have learned here/on this course that can improve your practice? For example, what have you learned that is useful to you for the promotion of health?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3: Integrate new learning and current practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does this new learning relate to what you knew and did before? For example, what are the general implications of the new knowledge/skills for your practice?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4: Anticipate or imagine the nature of improved practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will you act in such a way that your practice is improved (as a result of the learning)? For example, what will you do that represents improvement in your promotion of and education for health - what will you do differently?</td>
</tr>
</tbody>
</table>

(Schema to guide reflective activity in professional development towards improvement of professional practice from Moon, 1999, p. 180.)

What is Reflection?

‘Reflective practice’ is probably a well-known term to you and emanates from Donald Schön's work on reflection as a way to developing as a professional in the 1980s (Schön, 1983), however ideas of reflection in professional learning have been debated much earlier than this (e.g. Dewey 1933; Habermas, 1971).

Reflection is a commonly used term and has an ambiguity of meaning. With relation to educational reflection three elements of reflection are suggested by Moon (1999). Firstly
reflection is associated with the learning process and the representation of that learning. Secondly in relation to study reflection needs to have an implied purpose to be significant. And thirdly reflection about learning is about complexity and it involves complex cognitive processes that consider complex issues for which there is no obvious conclusion (Moon, 1999, p. 4).

Written reflection can serve a number of purposes, such as: facilitating learning from experience; developing critical thinking or the development of a questioning attitude; encouraging meta-cognition; increasing active involvement in and ownership of learning; and increasing ability in reflection and thinking and enhancing reflective practice (Moon, 1999).

We see the role of reflection in learning as a means by which your personal theories can be made visible and reconstructed. As we saw in Chapter 2, the process of reforming personal theories is viewed by Claxton (1984) as representing learning. We believe all practical activity is approached with some underpinning theory (Carr and Kemmis, 1986) and that the relationship between theory and practice is dialectical rather than merely applicative (Usher and Bryant, 1987). This is not to suggest that the knowledge developed through reflection replaces bodies of theoretical knowledge, but rather it is used as a guide to develop deeper insights into personal situated theories to support your practice.

The ‘panoramic view from the high ground of education’ (Schön, 1987, p. 3) is uncomplicated by detail, and although it is possible to solve more simple problems through research-based theory and technique, it is when the practitioner is in the more emotive ‘swampy lowland [that] messy, confusing problems defy technical solution’ (Schön, 1987, p. 3). This concurs with the complexity of practice faced by you with the multiple variables at play in your classrooms and is the area you are often asked to consider cognitively and emotionally through reflection.

Reflection in the ‘swampy classroom’ is not as Dewey suggested, a ‘chain of linked ideas that aim at a conclusion’ (Dewey, 1933 cited in Moon, 1999, p. 12) but is more a case of considering an issue without trying to come to fixed conclusions about it (Claxton, 1999). Your consideration of the issue will be influenced by the professional context you find yourself in and your personal theories which in turn are influenced by cognitive and affective responses to this learning situation.

The lack of conclusive outcomes within reflection is, at times, hard to contemplate when you might feel bound to come to hard conclusions in your work in order to prove your competence as a teacher and/or a researcher. This can cause anxiety in developing your reflective skills. It is, however, through questioning of practice, policy and theory and the problematising of issues, that reflection enables some sense to be made of the complexity of these links, their cognitive and affective situation within this, and thus where and how their identity and practice can be developed.

Morrison (1996) suggests that the term reflection includes action research, professional development, personal development and teacher empowerment, and this links well to the ideas explored in Chapter 1 and later in Chapter 5. Whichever form of reflection you wish to consider they all stem from the need to ask suitable questions about practice in order to consider and learn from these questions.

Questioning and Reflection

Questioning as a means to coming to a deeper understanding has a great heritage in
approaching learning. The Socratic method, explained by Plato was based on ‘posing only critical questions, rather than solutions and in this fashion leading the student towards a better understanding of the subject in question’ (Rowland, 2005, p. 93). This ‘better understanding’ may be influenced by a variety of matters. In an enquiry-based approach to learning the teacher will pose questions to provoke the student to consider the matter in question at a deeper level without directing them to what they consider as the ‘correct answer’. The openness of this reflective discussion will clearly depend on the power relationship between teacher and student and how they construe the development of knowledge.

So, in an open, enquiry-based approach the teacher will not provide answers to their student, which can appear frustrating when seen at a superficial level, however, the discussion which follows will develop the reflective powers and understanding of the student. As Angela Brew notes, ‘the scholarship of teaching and learning requires a dialogic, constructivist view of practice as socially and historically constructed as reconstituted by human agency and social action’(2006, p. 114).

Reflection

Review a recent lesson you taught:

- What went well/not so well in the lesson?
- Why was this so?
- Did you teach the lesson just as the plan indicated?
- If not, what did you change and why?
- What questions do you need to ask of yourself and your practice in order to consider these points?

In the light of this lesson, think about a relevant piece of school or government-level policy:

- What does this policy mean to you as a professional?
- How does it help or hinder your teaching?

There are many questions that may be asked in order to reflect on issues of practice. Table 4.4, adapted from Johns (1994), illustrates such a series of questions to develop practice through reflection. Using these guiding questions can enable the practitioner to identify an issue, describe it and consider aims, feelings and influences on the situation before considering how the issue could be improved, and to identify learning from this. The criticism of this model is that it tends to focus the learning in the situation, without consideration of how
the reflection has been undertaken, how it could be developed, and the personal assumptions and beliefs that underpin the reflection (Moon, 1999). We will now consider differing levels of reflection and introduce the idea of reflexivity.

**TABLE 4.4 Questions to develop practice through reflection (based on Johns, 1994)**

<table>
<thead>
<tr>
<th>Core question</th>
</tr>
</thead>
<tbody>
<tr>
<td>What information do I need access to in order to learn through this experience?</td>
</tr>
</tbody>
</table>

**1.0 Cue questions**

**Description of experience**

- 1.1 Phenomenon: Describe the experience
- 1.2 Causal: What essential factors contributed to this experience?
- 1.3 Context: What are the significant background factors to this experience?

**2.0 Reflection**

- 2.1 What was I trying to achieve?
- 2.2 Why did I intervene as I did?
- 2.3 What were the consequences of my action for myself, the pupil(s) and colleagues?
- 2.4 How did I feel about the experience when it was happening?
- 2.5 How did the pupil(s) feel about it?
- 2.6 How do I know what the pupil(s) felt about it?

**3.0 Influencing factors**

- 3.1 What internal factors influenced my decision making?
- 3.2 What external factors influenced my decision making?
- 3.3 What sources of knowledge did/should have influenced my decision making?

**4.0 Could I have dealt better with the situation?**

- 4.1 What other choices did I have?
- 4.2 What could be the consequences of these choices?

**5.0 Learning**

- 5.1 How do I feel about learning?
- 5.2 How have I made sense of this experience in the light of past experiences and future practice?
- 5.3 Has this experience changed my way of knowing these matters?

(Adaptation of Johns' model for structured reflection taken from Moon, 1999, p. 71)

**Types of Reflection**

If the need for questioning is paramount in initiating reflection about our practice then the nature of the questions is going to be important in helping determine the resulting reflection. There are a range of ways of recognising the different levels of reflection related to the nature and scope of the reflection (see Table 4.5). This relates to the depth of reflection and also to its scope depending on whether it regards your own practice or considers wider matters that
have the potential to empower or emancipate you (see Kreber and Cranton, 2000).

See Table 4.5 for levels of reflection and their focus.

### TABLE 4.5 Types of reflection (adapted from Brew, 2006, *Research and Teaching - Beyond the Divide*, Palgrave Macmillan. Reproduced with permission of Palgrave Macmillan)

<table>
<thead>
<tr>
<th>Level of reflection</th>
<th>Focus</th>
<th>Types of questions asked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental or technical</td>
<td>Orientation to understand the facts in order to control the situation. Learning occurs through solving problems related to specific tasks</td>
<td>How can I improve pupil behaviour? What is the best way to support my pupils' writing?</td>
</tr>
<tr>
<td>Communicative</td>
<td>Learning about and sharing others’ ideas and perceptions, including negotiating meaning with them</td>
<td>How does my mentor’s views of differentiation relate to my own - what can I learn from critiquing these?</td>
</tr>
<tr>
<td>Emancipatory</td>
<td>Intention to go beyond the existing situation through a process of critical reflection and reasoning. The goal is to overcome the limitations of self-knowledge and the social constraints on one's thought and actions</td>
<td>What does critical reflection theory mean to me and how does it support my classroom reflection? How can I interpret Every ChildMatters to improve inclusion in my classroom?</td>
</tr>
</tbody>
</table>

Asking the most appropriate questions, in our experience, is not always an easy practice to learn and can cause a certain resistance as it can expose your perceived lack of knowledge to others. We see in Table 4.6 that knowledge should always be viewed as provisional (see Chapter 2) and not seen as a given fact, but negotiated depending on the context and situation within which you are operating.

Your situation is unique but by asking questions and helping you to delve deeper into the situation, your tutor and peers can help you to understand it in a richer way. To reach this deeper understanding the need to resist coming to easy conclusions can be a hard thing to master as a student teacher, however, the understanding of complexity that is gained from this is a feature of Masters-level engagement (critical reading and writing are explored in detail in Chapter 8).

It is not just the depth of your reflection that will affect your ability to consider theory, policy and practice in different lights but also the nature of the questions that are asked. Table 4.6 illustrates the orientations to reflective practice.

### TABLE 4.6 Reflective orientations (adapted from Wellington and Austin, 1996)

<table>
<thead>
<tr>
<th>Reflective orientation</th>
<th>Defining the orientation</th>
</tr>
</thead>
</table>
We understand that the immediacy of developing classroom practice will most probably be uppermost in your mind on the PGCE. Being a technically competent teacher is an important aspect of becoming a professional practitioner. In Chapter 1, we argued that being a professional is much more than this. Reflection that is dominated by technical or immediate orientations does not readily invite a consideration of the wider social, economic, political or environmental factors that influence the situation you find yourself in or are reading about. Consider the following reflection.

**Reflection**

Review a series of your reflections in a learning journal (or similar document). Consider the nature of your reflections in relation to Wellington and Austin’s ‘Reflective Orientations’ (Table 4.6).

- How have your reflections changed over the course of your PGCE?
- What is your dominant orientation? Does this differ depending on the issue upon which you are reflecting?
- If your reflections currently dominate immediate or technical orientations, what other approaches might you take in order to develop a wider range of reflection?
- Are there any barriers to this happening? Consider how they can be overcome.
- How can your reflections become part of your research data?

**Reflection in and on Action**

Schön (1983) refers to two key types of reflection: that which is ‘in action’ and that which is ‘on
Reflection in action occurs while still engaged with an activity and reflection on action is a retrospective activity. But as Moon (1999) points out there is some ambiguity in their relationship to each other. For example, is reflection that is overtly undertaken as part of a lesson planning process reflection in action or on action?

Bolton (2010) notes that ‘Reflection in action is the hawk in your mind constantly circling, watching and advising on practice. Reflection upon action is considering events afterwards’. It is the latter with which we feel you - as a PGCE student engaging at M-level - should be primarily concerned. Overt reflection, conducted because of the need to reconsider an element of practice (a problem-solving or problematising approach) has direct links to forms of action research and other methodological approaches to research.

Reflexivity

Reflexivity and reflection are strongly related. However, it is the acknowledgement of one’s own predispositions that distinguishes reflexity from reflection. The term ‘reflexivity’ comes from ‘reflecteur’ meaning to bend back on oneself. As Bolton notes, ‘reflexivity’ is considering: ‘what are the mental, emotional and value structures which allowed me to lose attention and make that error?’ She adds that reflexivity provides a deep questioning approach that can be missed (or avoided) ‘if the practitioner merely undertakes reflection as practical problem-solving: what happened, why, what did I think and feel about it, how can I do it better next time?’ (Bolton, 2010).

Being reflexive in learning to teach is to open oneself up to much deeper questioning with the potential to understand one’s values and beliefs in relation to the situation. A reflexive approach will require you to avoid general assumptions that influence your practice as a teacher or researcher: ‘The reflexive thinker has to stand back from belief and value systems, habitual ways of thinking and relating to others, structures of understanding themselves and their relationship to the world, and their assumptions about the way that the world impinges upon them’ (Bolton, 2010). It is only then that we are able to see ourselves and the situation in a new, unfamiliar way, enabling us to question ‘one’s own actions, thoughts, feelings, values, identity, and their effect upon others, situations, and professional and social structures’ (Bolton, 2010).

Vignette

Review the following vignette of a lesson noting examples of Tom’s reflection in and on action. How could you provoke Tom to be reflexive about his teaching? What questions would you ask him to support this process?

Tom, a Secondary History PGCE student teacher planned a lesson on the Battle of Hastings for his Year 7 Humanities lesson. The lesson started with Tom dressed as King Harold in a hot-seat situation being quizzed by his pupils about why he had lost the Battle of Hastings. There were some good questions initially but he sensed these were drying up quickly. He decided to change plans and get the pupils into small groups to quickly devise some further questions. After re-grouping as a whole class the questions went very well.
Pupils followed the hot-seat by writing an account of the Battle of Hastings or drawing a storyboard explaining why the Battle was lost by Harold. Pupils opted to do either task, thus taking some responsibility for their own learning. Tom liked this but noticed that some were struggling with the written account and asked the Teaching Assistant to focus his attention on these pupils whilst he challenged those drawing the storyboard to ensure they included explanations of why Harold lost the battle in their work. This went well although Tom forgot to ask pupils to critique each others’ work. In order to complete the work Tom decided to abandon the plenary and to work up to the end of the lesson.

After assessing some of the pieces of work he found that some pupils had not been able to develop explanations into their work and they remained descriptive. He thought that perhaps he should have stopped the class and shared some good pupil practice. He noted perhaps it is better for pupils to understand a point of learning and for him to know this rather than complete a task.

Given the nature of this approach, the more scientifically trained student teacher may well be sceptical (or indeed a little frightened) of reflexivity. How on earth can such a process reveal certainty about an issue? Do I really need to be so introspective in order to know how to teach effectively?

Much of what is being discussed in this book is about taking a subjective approach to enquiry - we are aware of this and explicit in our discussions about it. Hunt and Samson note that the central tenet of reflexivity is ‘a particular kind of ‘engagement with an “other” whether another person or oneself as “other”’. Where reflection could be said to involve taking something into oneself - a topic, an event, a relationship - for the purpose of contemplation or examination, reflexivity involves putting something out in order that something new might come into being. It involves creating an internal space, distancing ourselves from ourselves, as it were, so that we are both ‘inside’ and ‘outside’ ourselves simultaneously and able to switch back and forth fluidly and playfully from one position to the other, giving ourselves up to the experience of ‘self as other’ whilst also retaining a grounding in our familiar sense of self (Hunt and Sampson, 2006, p. 4).

It is this notion of viewing ourselves from a distance and keeping a sense of the familiar context (but always questioning it) that enables reflexivity to avoid stumbling into anxiety and makes it a valid research tool when used in interpretative approaches where the researcher is an active participant of the research.

Examples of reflexivity can be found in certain ethnographic and action research methodologies which can include classroom-based research (see Chapter 7).

Classrooms as Places of Complexity
From the first few lessons that you have taught onwards it is easy to be aware of the complex relationship between your intended learning for your pupils and the reality of the multiple outcomes from your lesson for all your pupils - this has been considered in Chapter 2; classrooms are highly complex places and this is where we suggest you site much of your research.

‘Complex systems represent large amounts of information in terms of their organisational structure i.e. the relationships between the elements and therefore do not lend themselves to reductionist analysis’ (Radford, 2006, p. 183). Instead of looking at classroom practice in an ‘atomistic’ way, a ‘connectionist’ perception ‘draws attention to the importance of the interconnectedness of variables’ and only makes sense in the context of connections between them (Radford, 2006, p. 178).

Radford challenges practitioner research as it can lead to simplistic assumptions based on a ‘linear and causal relationship’ between events or situations. He argues that the characteristics of complex systems are easily demonstrated by classroom or school dynamics and as such the use of complexity theory is a means to help understand classrooms. As Radford concludes:

If schools are to be understood as sites of complexity then the certainties which the reductionist paradigm tries to offer, the expectations of teachers in terms of pupils’ learning and control, and the role of research in delivering such certainties, are significantly undermined. Education becomes a much more open enterprise with the emphasis on a more flexible, tentative, imaginative and creative response to the multiple points at which alternative eventualities become possibilities. (Radford, 2006, p. 188)

The implications of this, not just for research but for large-scale, nationally driven policies to ‘drive up’ Standards, are considerable.

Conclusion

This chapter has argued that reflection is synonymous with learning. In order to reflect we must ask questions (either explicitly or implicitly) about issues. These issues are commonly related to improving practice but can be about wider and deeper matters related to the self as a professional, as well as social, economic, political and environmental matters related to theory, research, policy and practice. This involves a consideration of the self and one’s beliefs and values, thus enabling the learner to consider their own influence on matters more deeply.

Recommended Further Reading

This text will enable you to consider the role of written reflection in your learning. As such it will help you to develop your research through journals and field notes and cement your understandings.

This is a concise and up-to-date text written by an acknowledged expert in the field. It takes
the reader through the processes associated with classroom research with great clarity.
This text explores different theories that consider reflection as an integral part of learning and professional development enabling you to consider it as a means to understanding practice and also as an emancipatory action.

- pupils
- reflexivity
- classroom research
- moon
- action research
- classrooms
- student teachers

http://dx.doi.org/10.4135/9781446251607.n5