

*Understanding*  
**PEDAGOGY**  
*and its impact on learning*

*edited by*  
**PETER MORTIMORE**

# Pedagogy: What Do We Know?

*Chris Watkins and Peter Mortimore*

The aim of this chapter is to highlight a number of issues in the use of the term pedagogy and to outline some of the ways in which the word is used. We will discuss the research literature on pedagogy and suggest there is a trend amongst writers towards an increased recognition of the complexity of pedagogical activity. We also detect an increasing awareness of the need to take into account the context in which pedagogy occurs. We will compare the views of some of these academic writers with those of practitioners and, finally, consider public and policy-makers' apparent views about pedagogy. In writing this book we are conscious that a large number of issues will be raised and only a few resolved. We hope, however, that we will contribute to an important debate about different approaches to teaching and, ultimately, to ways of improving learning for learners of all ages.

## PEDAGOGY: A CONTESTED TERM

The term pedagogy is seldom used in English writing about education. Where writers have used the term, they have often been criticized for using an ill-defined and poorly developed idea. We do not recognize this criticism as fair. Rather, we recognize that, as with other complex ideas, pedagogy will be difficult to define – even in the formal literature on the subject. The boundaries of the concept may seem unclear, but the ways in which different writers have drawn them may itself be instructive.

'Pedagogy', derived from French and Latin adaptations of the Greek [παις, παιδ (boy) + αγωγοσ (leader)], literally means a man having oversight of a child, or an attendant leading a boy to school. This meaning is now obsolete. Moreover, the gendering, appropriate in ancient Greece – where the formal education of girls was unusual – is inappropriate for modern times. The limitations of the literal meaning of the term have encouraged leading contemporary writers to invent broader terms, such as 'andragogy', for adult education (Knowles, 1980).

Modern day usage of the term 'pedagogy' is more common in other European countries, in particular, in French, German and Russian-speaking academic communities, than in English-speaking ones. In continental Europe,

pedagogical institutes are to be found alongside, and within, university departments. Academic awards in pedagogy are also common. A scan of *Zeitschrift für Pädagogik*, a European journal seemingly addressing this area of work, shows, however, that few articles actually do focus on what to many British readers would be central: classroom teaching. The boundaries of pedagogy in mainland Europe, it appears, are defined very broadly. As one Swedish academic notes: 'Pedagogy as a discipline extends to the consideration of the development of health and bodily fitness, social and moral welfare, ethics and aesthetics, as well as to the institutional forms that serve to facilitate society's and the individual's pedagogic aims' (Marton and Booth, 1997, p. 178). Even in France, a country which has taught pedagogy since 1883, the director of its *Institut National de Recherche Pédagogique* has described how the term is subject to changing connotations and pressures (Best, 1988).

In the context of these cultural differences, there have been accusations of 'neglect of pedagogical studies in England' (Simon, 1994, p. 147). Simon locates the reason for this neglect in the outlook of the dominant public schools and their traditional concern with character formation rather than with intellectual development. A more parsimonious explanation may be that the term has not found a stable working use amongst British educators.

Brief definitions of pedagogy are offered from time to time. A common example is 'the science of teaching'. However, the brevity of this phrase may create its own difficulty, since such a definition depends on the reader's assumptions about 'science' and their conceptions of 'teaching'. In this chapter, we wish to avoid an overly positivist view of science based, as it would be, on an experimental methodology, the formulation of 'laws' and a technical approach which portrays itself as independent of the prevailing social order.<sup>1</sup>

We are anxious not to exclude other forms of understanding simply because of the definition we adopt, for example, inadvertently excluding the arts because we refer directly to the sciences. In order to overcome this problem, we will adopt an inclusive approach more like that which characterized the first appearance of the term 'pedagogics' in 1864: 'the science, art or principles of pedagogy' (*Oxford Shorter English Dictionary*, 1993). We also wish to draw attention to an alternative way of thinking about pedagogy which is neither science nor art: this is seeing pedagogy as a craft, an approach suggested by writers who recognize uncertainty and the limits of predictability (McDonald, 1992; Marland, 1993).

In a similar way we do not wish to define the term pedagogy in a way which stresses only the teacher's role and activity – this would be better described under the more limited term of didactics. We believe that it is help-

<sup>1</sup> We welcome, however, views of science embodying uncertainty, relativity, complexity and chaos and recognizing the role of creativity and social construction in knowledge-creation (Fleck, 1935; Latour and Woolgar, 1986).

ful to our discussion to focus our attention on teaching but we also need to take the learner into account. Thus the basic premise from which we wish to begin our definition of pedagogy is: 'any conscious activity by one person designed to enhance learning in another'.

## RESEARCH LITERATURE ON PEDAGOGY

Conceptions of pedagogy have become more complex over time. By this we mean that our growing knowledge has simultaneously become both more differentiated and more integrated. In other words, we believe that we now know more of the different elements which are needed to compose an adequate model, and can also integrate them into the whole by describing the relations between them.

We suggest four main phases, although it would be misleading to suggest that these phases represent a smooth progression towards greater understanding.

The literature to which we will refer has been generated by academics, working mainly in universities, and is available through our access to formal knowledge codified in libraries and world-wide databases. We recognize that this is not the common knowledge base of an everyday classroom practitioner nor of an educational policy-maker. We consider that teachers and policy-makers are likely to view pedagogy in different ways. We will discuss such differences in perspective in later sections of this chapter.

### Phase 1: A focus on different types of teachers

Early studies of teaching adopted a focus on the teacher's 'style'. A common way to do so was to construct what are sometimes termed 'polarized typifications' of teachers. Such typifications have often reflected key concerns of their time. During the inter-war and post-war years, for example, concerns about 'authoritarianism' and 'democracy' were reflected in studies of group leadership style. A much-quoted study characterized approaches as being either 'authoritarian' or 'democratic', although the investigator added a third style, '*laissez-faire*' (Lewin *et al.*, 1939). Other studies divided teachers according to whether they were 'integrative' or 'dominative' (Anderson and Brewer, 1946). This conceptualization of pedagogy was simple in its attribution of impact to a teacher's personal style.

Such a polarized categorization, perhaps, reveals that the underlying purpose of these exercises was to identify 'good' and 'bad' approaches. Interestingly, such studies have rarely been accompanied by advice about how any 'bad' pedagogue might be made 'good'! Perhaps the sole focus on the teacher helps to elicit derogatory connotations such as those of 'pedantry, dogmatism and severity' which attach to the noun 'pedagogue' (*Oxford Shorter English Dictionary*, 1993). Polarized conceptions of teachers continued into some studies carried out in the 1960s and 1970s. Bennett, for

example, having argued strongly against 'ill-defined dichotomies' (Bennett and Jordan, 1975) later collapsed twelve separate clusters into one 'informal-formal' dimension (Bennett, 1976).

The move away from attempts to categorize significant features of pedagogy by polarized and over-simplistic descriptions of teachers' approaches coincided with the advent of studies which, with the development of main-frame computers, were able to analyse large data-sets. One such study applied multiple psychometric measures to a sample of over 6,000 teachers (Ryans, 1968). The study found a significant correlation between teachers receiving a uniformly high assessment of their classroom behaviour and the frequency of their involvement in avocational (non-work) activities (p. 393). Such findings illustrate both the potential and the limitations of correlational analysis. They also demonstrate the limitations of a too-personal focus on the teacher.

Later it became clear that prevalent modes of pedagogy depended on much more than the style of the teacher. Contrary to the received wisdom that classrooms had become 'progressive' and 'child-centred', surveys were revealing that 'traditional' practice remained the dominant form of teaching in primary schools in the United Kingdom (Barker Lunn, 1984; Galton, 1987). Similar evidence was presented in the USA (Cuban, 1984), together with an analysis that such constancy of approach could be identified over a number of decades and, perhaps, reflected some basic features of the classroom situation. A productive focus on pedagogy, therefore, should incorporate an additional recognition that teachers are influenced by their context.

### **Phase 2: A focus on the contexts of teaching**

Research studies which adopted a detailed focus on life in the classroom established a more sophisticated approach to understanding the complex interactions of pupils and teachers. Smith and Geoffrey's (1968) research, for example, described the detail of life in urban classrooms. Kounin's work, which also highlighted the complexities of classroom life, has remained influential for twenty years (Kounin, 1977).

Doyle provides an overview of studies which have focused on classroom contexts:

Classrooms are crowded and busy places in which groups of students who vary in interests and abilities must be organized and directed. Moreover these groups assemble regularly for long periods of time to accomplish a wide variety of tasks. Many events occur simultaneously, teachers must react often and immediately to circumstances, and the course of events is frequently unpredictable. Teaching in such settings requires a highly developed ability to manage events.

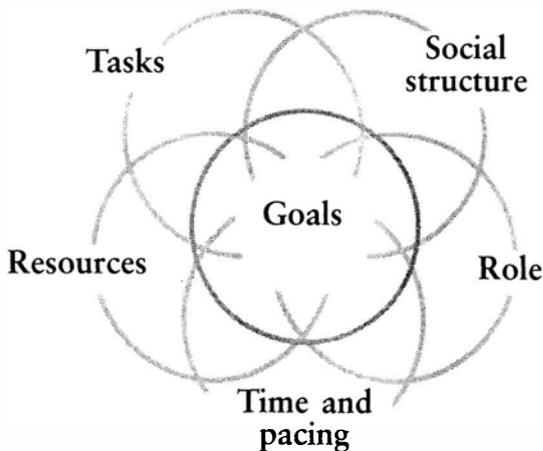
(Doyle, 1990, p. 350)

This phase of research added the managerial and organizational aspect of teachers' classroom work to the view of pedagogy (Arends, 1994). It

highlighted how teachers orchestrate a complex situation, oversee numerous events and manage multiple activities. This broader view of pedagogy enables the classroom to be viewed as an ‘activity system’, which teachers need to establish and manage. Different profiles of classroom activities can be seen, and may relate to what had previously been called different ‘teaching methods’ (for which a convincing categorization has yet to be created). Classroom activities are constructed from the key elements (shown in Figure 1.1). The most important element in determining the coherence of an activity is its goals: successful managers of activities communicate a clear programme of action for participants (Doyle, 1984).

Brophy, an experienced analyst of teachers and teaching, has suggested that the knowledge base of how teachers plan and manage multiple learning tasks and complex activities is still under construction (Brophy, 1992). It appears, from many accounts, that when experienced teachers plan their work they focus on the activity and the content rather than using a rational and linear model of beginning with *goals*, moving through *planned actions* towards anticipated *outcomes*. In the complexity of a live classroom, the direction can be more one of *actions* leading directly to *outcomes* before the *goals* have been considered. In this way the goals become symbols of, and justifications for, what has already been achieved.

Teachers display significant differences in how they cope with this complex environment. They differ in their responses to the simultaneous events, with their multi-faceted nature, and the need for immediate action. Experienced teachers monitor and interpret such events and demands in greater detail – and with more insight and understanding – than do their less experienced colleagues: they respond effortlessly and fluidly (Sabers *et al.*,



**Fig. 1.1** Elements in teaching activities

1991). Experienced teachers' understanding of classroom processes is more connected and complex. For example, they do not separate issues of classroom management from pedagogy in the way that beginner teachers do (Copeland *et al.*, 1994). Teachers who actively accept the complexity of the classroom orchestrate events in their classes more successfully than those who do not (Doyle, 1977). All teachers, however, need to be able to handle uncertainty in the classroom setting (Floden and Buchmann, 1993).

Recognition of the influence of the classroom context has enhanced our understanding of classroom change. Although classrooms are very dynamic, they can also be very resistant to change. Simple interventions, such as adding a specific teacher skill or changing the content of the curriculum, often show little lasting impact. It even remains an open question whether major interventions, such as the introduction of new technology, will significantly change classroom practice (Cuban, 1993).

We have also come to understand two additional ways in which context has influence. First, research into school differences and the analysis of how school learning differs from learning in other contexts (Resnick, 1987) have led to a recognition that the school context can influence pedagogy (Talbert *et al.*, 1993). We now understand more about how, for example, the secondary school setting – with its age-graded, subject-centred, self-contained classrooms – has a powerful and seemingly enduring effect on the nature of its pedagogy. The generation of different metaphors of schooling; as 'gardens in which children grow'; 'factories in which children are made' and 'hospitals in which children are cured of their ignorance' illustrates the different conceptions of schooling and hence the different contexts for learning that can be created.

Second, recognition that the content of what is taught influences *how* it is taught has led to a greater focus on teachers' knowledge of subject-matter. Since, however, the subject-matter of schools will change in various ways, such knowledge must be dynamic and context-dependent rather than static. According to Carlsen (1991), teachers hold multiple representations of subject concepts and, in their teaching, select those based on their understanding of the context of instruction and their prior knowledge of what is likely to be effective for particular learners. So researchers into pedagogy not only endeavour to investigate how teachers organize subject-matter in their own minds, but are also interested in the teachers' ability to understand and apply the subject-matter in different ways, according to the context of their classes, the sequence of lessons, and their knowledge of the learning groups and individuals.

This phase of research, despite the influence of the most recent studies, is still focused on a limited view of pedagogy and on only one of its forms: instruction. The learner and the process of learning remain relatively unexamined.

### Phase 3: A focus on teaching and learning

Recent developments in our understanding of cognition and meta-cognition have influenced the conceptualization of pedagogy. In part, this reflects our increased awareness of the need to think of learners as active constructors of meaning. Bruner (1996) has identified dominant models of learners which have held sway in our times, and has spelled out the implications of each model for pedagogy. He puts forward two models which reflect recent research into cognition:

1. Seeing children as thinkers, constructing a model of the world to help them construe their own experience. The model considers what children think and how they arrive at what they believe. Pedagogy is to help the child understand better, more powerfully: this is fostered through discussion and collaboration, the process of sharing knowledge in an unthreatening community. Truths are the product of evidence, argument and construction rather than of authority.
2. Seeing children as knowledgeable, testing whether hypotheses stand up in the face of evidence, interpretation and existing knowledge. Teaching helps children grasp the distinction between personal knowledge, on the one side, and 'objective' knowledge (what is taken to be known within the culture) on the other. 'This perspective holds that there is something special about "talking" to authors, now dead but alive in their ancient texts – so long as the objective of the encounter is not worship but discourse and "going meta" on thoughts about the past.' (Bruner, 1996, p. 62).

The implications for pedagogy of these two models are that they shift the focus from simply trying to transmit information to a group of individual learners to the process of building a community of learners engaged in the generation and evaluation of knowledge and in which the teacher makes explicit her knowledge at the same time as promoting access to other sources.

The first model noted above, which identifies children as thinkers, focuses on sharing knowledge within the discourse of a particular community. It links us to another understanding in cognition, that *what* is learned relates strongly to the situation in which it is learned. 'Situations might be said to co-produce knowledge through activity' (Brown *et al.*, 1989, p. 32). This view has led to an approach – sometimes called 'cognitive apprenticeship' – which makes deliberate use of the social context in which knowledge can become an authentic tool. It sees learning as being embedded in the activity of particular environments. This argument challenges the idea that abstract or procedural knowledge can be taught for later application in another situation. Indeed Cox (1997) argues that unless learners are building up their understanding of situations – through understanding the variations between them – knowledge learned in one context is unlikely to pass to any other.

Other studies have demonstrated that effective learners may be proactive in their metacognitions – their thinking about their thinking – and their own process of learning. These effective learners may have a more fluent under-

standing of their own learning than others and may possess the ability to 'talk themselves through' difficulties which arise.

Knowledge about the promotion of such effective learning has been described in relation to four themes: active learning, collaborative learning, learner responsibility, and meta-learning or learning about learning (Watkins *et al.*, 1996). Not all of this is new; the first three of these themes were well represented in a fifty year old publication (Miel and Wiles, 1949). However the fourth theme adds a potentially transforming element to the conceptualization of pedagogy. The intention would be to eliminate the likelihood of hearing from a student 'It's not that I haven't learned much, it's just that I don't really understand what I'm doing' (Rudduck *et al.*, 1995). An explicit pedagogical focus on the learning process advances the learner's conceptions of learning, improves what they learn and increases the likelihood that they will see themselves as active agents in learning, as findings have demonstrated from pre-school onwards (Pramling, 1990).

#### Phase 4: Current views of pedagogy

At this point in the development of the research literature on pedagogy, a suitably complex model is in sight. On the one hand it offers an increasingly integrated conceptualization which specifies relations between its elements: the teacher, the classroom or other context, content, the view of learning and learning about learning. Such a model draws attention to the creation of learning communities in which knowledge is actively co-constructed, and in which the focus of learning is sometimes learning itself. This model of pedagogy would also be increasingly differentiated by details of context, content, age and stage of learner, purposes, and so on.

Such a model does not offer simple prescriptions for action but it does provide guidelines for desired outcomes. Rather than suggest a simple linear causal chain, which is unlikely to explain the links between teaching and learning, it recognizes that influences are often partial and can be reciprocal. Different versions of pedagogy may be best understood as different clusters of relations between the elements of the model.

Given that such a model reflects mainly the views of researchers and academics, it is now important to ask how other people's knowledge of pedagogy compares with this picture. In what ways might the perspective of teachers be similar to, and different from, this model and how might this be explained?

#### PRACTITIONERS' VIEWS OF PEDAGOGY

What is the view of the teacher – the everyday pedagogue? McNamara (1991) calls this view 'vernacular pedagogy'. It would be reasonable to expect to find some differences from and some similarities to the formal models that we have discussed, since researchers and teachers – although seeing pedagogy

from different standpoints – are both influenced by the same public modes of thinking about teaching and learning.

Teachers sometimes talk about ‘teacher styles’ in much the same way as researchers did. In their everyday work, many teachers perceive their style as very personal. Without an agreed framework in which teaching can be discussed, teachers may simply describe their approach in terms of a contrast with the style which they attribute to others. So the simplified bi-polar concepts such as formal-informal are likely to be found in their conversations. Jackson (1977) has described this as teachers ‘thinking in twos’, and has suggested that the phenomenon reflects teachers’ response to the complex but fragmented context in which they work. (This certainly seems a valid observation of occasions when a school staff discusses ideas for change when the speed of creating coalitions for and against a proposal can be breathtaking.)

When asked about the qualities of a good teacher, teachers have used up to thirty important and distinct categories. However, the relative frequencies in their choice is illuminating: beginner teachers’ views seem to reflect ‘unrealistic optimism’ (Weinstein, 1989), with high priority given to the teacher-pupil relationship and to pupil self-esteem, in contrast to the views of experienced teachers which are more likely to emphasize organization and creativity rather than personal qualities such as patience or effort. Here the experienced teacher’s perspective resonates with the trend noted in our earlier discussion of the research literature – bringing the classroom context and its demands into the picture.

Johnston (1990) found that when he interviewed teachers about their work, his respondents cited the following elements: grouping of pupils; physical and social climate; learning centres and activities; classroom management; pupil evaluation; teacher morale; pupil achievement; instructional practices; teacher planning; and the teacher/student relationship. This list conveys well teachers’ awareness of the multidimensional nature of classroom life.

Concern about time is a dominant theme in teachers’ talk about management of the classroom, even for those teaching pre-school and primary classes. The amount and pace of lesson content is the most pervasive time-related issue. Here, again, the influence of the context can be seen. A common response by teachers is to orchestrate a situation in which teacher-led activities play the dominant role and student-centred activities the minor role (Langer and Applebee, 1988). Concern about time translates to a concern about ‘covering the curriculum’, in which teachers focus on their own teaching activity rather than on the learning activity of their students.

Teachers’ conceptions of teaching have more recently been elicited. Samuelowicz and Bain (1992) have located these conceptions on an ordered continuum:

1. Imparting information
2. Transmitting knowledge

3. Facilitating understanding
4. Changing students' conceptions
5. Supporting student learning.

These conceptions represent different profiles on five dimensions: the learning outcome, the view of knowledge, the role of students' knowledge, the degree of reciprocation, and the control of content. There is a similar continuum to be found in a study of teachers' views of science learning (Roth, 1987). Here, approaches to pedagogy were grouped within three categories of teachers: fact acquisition teachers; content understanding teachers; and conceptual development teachers.

Teachers' conceptions of teaching are an important focus. There is some evidence that they relate significantly to the teaching strategies which a teacher operates in the classroom (Trigwell and Prosser, 1996). This relation should not be taken for granted, however, since there are many occasions when human rhetoric does not match human action in a particular context.

Experienced teachers view their educational purpose as increasing the quality of students' thinking, engaging them in the processes of learning, and improving their disposition towards learning (Copeland *et al.*, 1994). Schools which focus predominantly on learning are more successful (Rosenholtz, 1991). Indeed, this is one of the lessons from the set of case studies undertaken by the National Commission on Education (NCE, 1996) as well as from the literature on school effectiveness and school improvement (Mortimore, 1998).

The central question in understanding vernacular views of pedagogy might be: 'How do teachers' views of learning relate to their views of teaching?'

In seeking to answer such a question, we cannot take for granted what is meant by 'learning'; a variety of views exists. Two decades of studies have consistently identified five broad categories of what people generally assume 'learning' to mean (Säljö, 1979; Marton *et al.*, 1993):

- A. Getting more knowledge
- B. Memorizing and reproducing
- C. Acquiring and applying procedures
- D. Making sense or meaning
- E. Personal change.

Before tracing the use of these categories further, we need to recognize that such everyday conceptions are open to critical analysis in the light of what is known in the formal literature about learning. For example, a distinction between knowledge and meaning may be illusory. The learning of 'simple factual knowledge' requires learners actively to construct meaning, even when those around them may view such meanings as perfectly obvious. Similarly in areas which, for the great majority, are unproblematic (such as learning to read), children who experience difficulty illustrate that learning may require significant personal change in their view of themselves and their relations

with parents, siblings or peers. Aspects of self, social relations and purpose all influence the learning in hand, and may need to be given attention for the best results.

If the distinctions between these five different views of learning do not stand up to critical scrutiny, it would be inappropriate to adopt the idea that they indicate distinct learning goals which each match distinct pedagogies. The common idea that we can teach facts first by one method (usually 'telling') and then promote understanding by another method has been challenged. Facts cannot exist without understanding so any pedagogy based on the principle that it is helpful to 'learn the basics first' may be wrong. It may be better to regard the conceptions of learning which are first in the list as more incomplete, and the latter as more complete. This way of conceptualizing can be paralleled by also identifying more incomplete or more complete approaches to pedagogy. Incomplete methods of teaching may sometimes achieve the lower order goals, but they do so on the assumption that the higher order processes of making meaning and handling personal change are irrelevant. This is an unsafe assumption on many occasions and can disadvantage particular groups of learners. It is only a safe assumption when the higher order processes have already been established with learners.

So what of the relations between teachers' conceptions of teaching and their conceptions of learning? Trigwell and Prosser (1996) offer two interesting findings. First, those teachers who saw a strong connection between pedagogy and learning were those who viewed teaching as mainly transmitting the syllabus and learning as accumulating knowledge in order to satisfy external demands. The adoption of simple conceptions allowed a high degree of agreement. However, in another sense, the connection is weak since teachers with these views had distinct difficulty in focusing on learning. Second, those teachers with more sophisticated conceptions saw teaching and learning as different but inextricably linked processes. Although such teachers held more sophisticated conceptions of learning, they sometimes adopted lower level approaches to teaching – whereas the teachers with simpler conceptions of learning rarely adopted higher level approaches.

Both these findings can be interpreted as teachers' simplifying the relationship between pedagogy and learning. In the first case, many teachers adopt lower-order views of teaching in response to, for example, examination pressures and organizational constraints. They simplify the goals in order to cope with the demands. In the second case, teachers simplify practice in order to cope with the complexity of the classroom. Teachers are aware of this tendency to simplification for, although some describe their ideal as using pupil-centred methods, they cite the everyday constraints of the classroom as being the reasons for their actual choice of methods (Chandra, 1987). Sometimes teachers will offer the rationale that students prefer directive teaching although there is little or no direct evidence of such a preference (Larsson, 1983). Pupils may indeed have their own strategies for simplifying classroom demands and, especially, may work to reduce any ambiguity in

tasks in which they will be assessed (Doyle, 1983). Recent research, however, suggests that pupils' general preferences are for active and collaborative work which, although it is less frequently used in classrooms, is seen as more likely to lead to learning (Hughes, 1997).

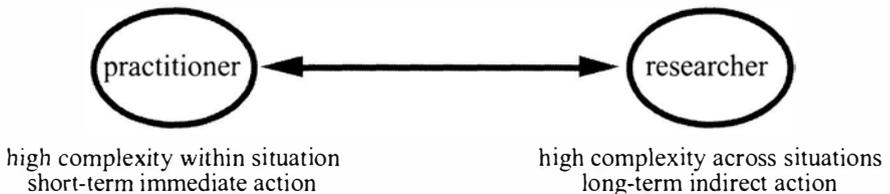
So, at the end of this section, we have identified some possible tensions between the formal and the vernacular views of pedagogy. While the trend amongst writers has been moving towards a model which supports the active construction of meaning and endeavours to help learners learn about learning, we have also seen that teachers may adopt a simplified model of practice in the face of contextual constraints.

### DIFFERENT VIEWS, DIFFERENT COMPLEXITY

Roland Barth (1997) has suggested that the researcher's knowledge base is perhaps a mile wide and an inch deep in contrast to that of the classroom practitioner's which is an inch wide and a mile deep. This comment helps identify a key difference between an academic considering pedagogy and a practitioner doing likewise. The former strives to gain a multi-contextual view so as to construct an overall model. In contrast, the practitioner is concerned with the particular features of his or her context and in its daily rhythms. The cross-situation complexity which the researcher aims to create in explanatory models is of a different nature to the within-situation complexity which the practitioner creates. The implications for action may also differ in important ways with the researcher seeking a long-term indirect impact, while the practitioner is faced with the need for short-term immediate action. These points may be illustrated diagrammatically in Figure 1.2.

Thus the relationship between these two parties is not a direct exchange of similar forms of knowledge about pedagogy. When engaged in work together they are not trading in exactly the same currency: research and practice simply do not stand on the same logical footing. Researchers try to use theories to generate insight into problems, not as solution banks. They offer frameworks and models to the practitioner in the hope of helping them – in the light of the broader picture they can provide – to frame a problem, review their current practice and challenge themselves to extend their repertoire.

Practitioners will always have a role to play in the selection and translation



**Fig. 1.2** Practitioner and researcher knowledge

of frameworks and models to specific contexts. They need to challenge researchers on the validity of their models. Seen in this light the relationship between researchers and practitioners should be productive and able to move beyond some of the archetypal misunderstandings, such as teachers criticizing academics for not being 'practical' (or its inverse 'teaching me to suck eggs') and academics becoming disappointed that their proposals were either rejected or varied beyond their recognition.

In our experience, teachers welcome collaboration with people who will work as hard to understand classroom events as the teachers do to conduct them. This demands recognition that teachers possess important expertise and that professional learning is an adaptive process. This process is long-term and is critically influenced by contextual factors in the school and local area. At its best, professional development helps teachers to understand their school and to contribute to school-based improvement efforts. In such undertakings the researcher can help the professional to enhance their own knowledge-generation capacities. This style of relationship has sometimes been characterized as one of 'critical friend' though this term is not always clearly understood: some seem only to read the word 'critical' while others seem only to comprehend the word 'friend'.

Having compared the formal and the vernacular views of pedagogy and discussed the criteria for profitable exchange, we turn to recognize other players in the story.

## POLICY AND PEDAGOGY

Recent decades have seen politicians and policy-makers develop an increased interest in the details of pedagogy. This trend began some thirty years ago with the publication of the Plowden Report (Central Advisory Council, 1967), nowadays regarded as the report which gave birth to the traditional-progressive distinction in policy and public debate. However, current perceptions that a romantic view of social relations in small groups informed the recommendations is not accurate. Rather, the Report's suggested increase in group work was actually a measure designed to help teachers trying to reach all their children:

Sharing out the teacher's time is a major problem. Only seven or eight minutes a day would be available for each child if all teaching were individual. Teachers therefore have to economise by teaching together a small group of children at the same stage (paras. 754–5)

A polarized view of teaching styles can still be detected in policy debates and media reports but a 1986 House of Commons Select Committee noted:

we hope the simple argument between styles, whether formal or informal, individual or class teaching, child-centred or subject-centred, can be left behind: none is sufficient by itself.

(House of Commons Science and Arts Committee, 1986, p. 115)

Since 1986, the attitudes of politicians have changed. Using the rhetoric of ‘secret gardens’ and the call for increased financial accountability in public services, governments have promoted new forms of monitoring and control. In the context of reducing levels of trust in Britain (Inglehart, 1990, pp. 35 and 438), an additional fear has been added to the occupational hazards of teaching – the fear of public censure and shame. So although as recently as 1991 a Secretary of State could state that ‘questions about how to teach are not for government to determine’ (Clarke, 1991) the State’s influence on classroom practice has been pursued through a variety of routes. Without direct legislation, impact on pedagogy has come through government agencies, their formal inspection frameworks and models of teacher competence. These have been supported by less formal modes of opinion-forming through direct and indirectly attributable media coverage.

Recent policy-makers have focused on actions which, they claim, achieve results. Policy-makers thus need to simplify pedagogy if they are to take such a role. In so doing they appear to have reverted to a nineteenth-century model which centred on the ‘object lesson’ – a set piece deemed to have universal application. This stance has created an interesting set of relations between teachers, academics and policy-makers themselves (see Figure 1.3).

The dynamics in this triangle are sometimes characterized by critical friendship, with acceptance of different perspectives, open communication and equal respect. On other occasions, practitioners feel treated as functionaries and the stance of policy-makers towards teachers is one of a ‘hostile witness’. At the same time, researchers have been accused of acting like ‘collusive lovers’ towards the teaching force.

Ministers have only engaged in proffering pedagogical advice in recent times but local advisers, trainers and writers have done so for many years. Their roles and careers elicit and encourage such behaviour. However, the

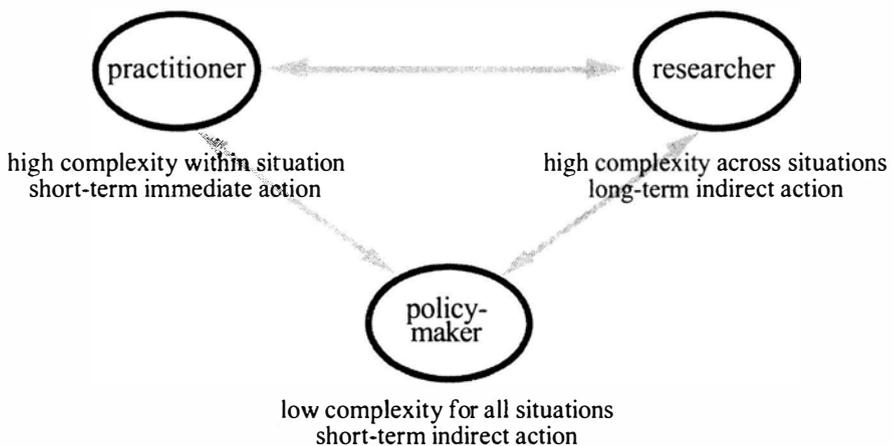


Fig. 1.3 Practitioner, researcher and policy-maker knowledge

impact of simple advice for all situations is often short-lived since it encounters powerful features of the school and classroom system:

- prescriptions which are significantly less complex than the prevailing practice have decreasing effects, since they do not embed into the continuing practice of the context;
- prescriptions are always modified and interpreted to fit the local conditions and culture, thus maintaining local effects. For example when we asked twenty science teachers to exchange their ‘Schemes of Work’ their major realization was that they were not all teaching the same National Curriculum;
- prescriptions often neglect teachers’ roles as professionals able to select and adapt methods according to their reading of the needs: instead they cast teachers in the role of functionaries, with consequent damage to professional morale;
- the imposition of prescriptions on human systems has some predictably negative effects: causing teachers to become more prescriptive or controlling and this can lead to increasing inequalities in the system’s performance;
- prescriptions do not carry a message of, or invitation to, continued learning in the future.

Since prescriptions are a simplification, it is no surprise that they generally embody a partial, mechanical, view of learning. They risk the adoption of a particular view, a ‘folk pedagogy’, which Bruner (1996) identifies as probably the most common practice today. This is the view that children learn only from didactic exposure. It incorporates the belief that pupils should be presented with facts, principles and rules of action. These are to be learned, remembered and then applied. Pupils are assumed not to ‘know’ about the topic; knowing can be conveyed by telling; and the learner’s mind is passive.

Its principal appeal is that it purports to offer a clear specification of just what it is that is to be learned and, equally questionable, that it suggests standards for assessing its achievement. More than any other folk theory it has spawned objective testing in its myriad guises. (Bruner, 1996, p. 55)

It remains to be seen what long-term effects such a pedagogical approach will have.

## CONCLUDING COMMENTS

In this opening chapter, we have discussed some of the general issues which influence our current conceptions of pedagogy. We have noted how pedagogy has been understood at different periods of history in increasingly complex ways. We have recognized that ‘expert’ teachers display great complexity in their handling of classroom processes, although we have also drawn attention to the tendency to simplify approaches to teaching in response to the constraints and demands of the situation.

We hope that readers will be interested to follow these and other issues through the chapters of this volume, and that the importance of complexity

and context will be kept in mind. We believe that they are necessary antidotes to over-simple orthodoxies.

Life continues to change at an increasingly fast pace. The global knowledge base is growing exponentially and the social fabric of our societies is being altered by the massive expansion of communications. Pedagogy must change to keep up with these developments. It must seek to engage those who would otherwise be excluded. It must also support all learners to generate knowledge and to learn what to do when faced with uncertainty.

The nature of work is also changing. There are now fewer of the manual and unskilled jobs which had previously been taken by many males. Individuals in employment need to possess the skills to work well with others and to go on learning, as well as having high levels of literacy and numeracy. An increasing proportion of employees will need to be skilled in the use of information technology. Since multi-national companies can easily locate in areas where skilled work forces are available more cheaply, part of the response in this post-industrial era is to move from high-volume to high-value production, and to develop the requisite skills. Educators, just as they had to respond to the demands of industrial revolution, are now being required to respond to all the implications of modern life. Their learning curve is increasingly *steep* – social, technological, economic, environmental and political changes are all underway (Watkins, 1997).

Arguments are frequently made that if educational standards in a country are perceived to be low, industries may move elsewhere thus causing a detrimental effect on the country's economy. In the richer nations there is currently much political pressure on educational systems to 'raise academic standards'. If maintaining employment requires high educational standards, then governments will try to ensure that those standards are attained and subsequently maintained. International league tables of educational performance make it relatively easy for crude comparisons to be made – especially by those unaware of their methodological difficulties (Bracey, 1998).

In the landscape of future learning, we believe that formal organizations for learning – such as schools – will increasingly be seen as but one element. Such bodies may be called on to justify their special position, which may be an advance on them being treated as scapegoat or saviour in turns. This greater expectation may be met if the major contribution of schools is to enhancing quality and not just quantity. In such a fast-moving scenario, schools and colleges need to help citizens learn about their learning in all contexts of their lives so as to enhance a state of self-efficacy.

For this to happen, schools and colleges have to function more like learning organizations than like learning factories. Information and communications technology will need to play its part in accessing information, promoting dialogue and creating new communities for co-constructing knowledge. Teachers will be expected to possess a full repertoire of pedagogic options in order to create high-achieving environments for the maximum number of diverse learners. Only in such a fashion will our definition

of pedagogy – ‘any conscious activity by one person designed to enhance learning in another’ – remain suitably vibrant and become suitably distributed for a post-industrial context.

The following chapters will explore, at a more detailed level, a number of issues to do with the pedagogy currently employed in different phases of education. Our focus on pedagogy in different educational settings – what it has been, is and might be – is surely long overdue.

## REFERENCES

- Anderson, H.H. and Brewer, J.E. (1946) *Studies of Teachers' Classroom Personalities. – 2: Effects of Teachers' Dominative and Integrative Contacts on Children's Classroom Behavior*, Stanford CA: Stanford University Press.
- Arends, R.I. (1994) *Learning to Teach*, New York: McGraw-Hill.
- Barker Lunn, J. (1984), Junior school teachers: their methods and practices, *Educational Research*, 26(3): 178–188.
- Barth, R. (1997) Presentation at launch of the London Leadership Centre, Institute of Education, 30 January 1997.
- Bennett, N. (1976) *Teaching Styles and Pupil Progress*, London: Open Books.
- Bennett, N. and Jordan, J. (1975) A typology of teaching styles in primary schools, *British Journal of Educational Psychology*, 45: 20–28.
- Best, F. (1988) The metamorphoses of the term ‘pedagogy’, *Prospects*, XVIII(2): 157–166.
- Bracey, G.W. (1996) TIMSS: The Message and the Myths, *Principal*, 77(3): 18–22.
- Brophy, J. (ed.) (1992) *Advances in Research on Teaching – Vol. 3: Planning and Managing Learning Tasks and Activities*, London: JAI Press.
- Brown, J., Collins, A. and Duguid, P. (1989) Situated cognition and the culture of learning, *Educational Researcher*, 18(1): 32–42.
- Bruner, J.S. (1996) Folk pedagogy, in *The Culture of Education*, Cambridge MA: Harvard University Press.
- Carlsen, W.S. (1991) Subject-matter knowledge and science teaching: a pragmatic perspective in Brophy, J. (ed.) *Advances in Research on Teaching – Vol. 2: Teachers' Knowledge of Subject Matter as it Relates to Their Teaching Practice*, London: JAI Press.
- Central Advisory Council (The Plowden Report) (1967) *Children and their Primary Schools*, London: HMSO
- Chandra, P. (1987) How do teachers view their teaching and use of teaching resources?, *British Journal of Educational Technology*, 18(2): 102–111.
- Clarke, K. (1991) *Letter to schools regarding the enquiry on primary teaching*, London: DFE.
- Copeland, W.D., Birmingham, C., Demeulle, L., Demidiocaston, M. and Natal, D. (1994) Making meaning in classrooms: an investigation of cognitive processes in aspiring teachers, experienced teachers, and their peers, *American Educational Research Journal*, 31(1): 166–196.
- Cox, B.D. (1997) The rediscovery of the active learner in adaptive contexts: a developmental-historical analysis of transfer of training, *Educational Psychologist*, 32(1): 41–55.
- Cuban, L. (1984) *How Teachers Taught – Constancy and Change in American*

- Classrooms, 1890–1980*, New York: Longman.
- Cuban, L. (1993) Computers meet classroom – classroom wins, *Teachers College Record*, 95(2): 185–210.
- Doyle, W. (1977) Learning the classroom environment: an ecological analysis, *Journal of Teacher Education*, 28(6): 51–55.
- Doyle, W. (1983) Academic work, *Review of Educational Research*, 53(2): 159–199.
- Doyle, W. (1984) How order is achieved in classrooms: an interim report, *Journal of Curriculum Studies*, 16(3): 259–77.
- Doyle, W. (1990) Classroom knowledge as a foundation for teaching, *Teachers College Record*, 91(3): 347–60.
- Fleck, L. (1935) *The Social Construction of Scientific Thought*, Chicago: University of Chicago Press.
- Floden, R. and Buchmann, M. (1993) Between routines and anarchy – preparing teachers for uncertainty, *Oxford Review of Education*, 19(3): 373–382.
- Galton, M. (1987) Change and continuity in the primary-school – the research evidence, *Oxford Review of Education*, 13(1): 81–93.
- House of Commons Science and Arts Committee (1986) *Achievement in Primary Schools*, London: HMSO.
- Hughes, M. (1997) *Lessons are For Learning*, Stafford: Network Educational Press.
- Inglehart, R. (1990) *Culture Shift in Advanced Industrial Society*, Princeton NJ: Princeton University Press.
- Jackson, P.W. (1977) The way teachers think, in Glidewell, J. (ed.), *The Social Context of Learning and Development*, New York: Gardner Press.
- Johnston, J.M. (1990) *What Are Teachers' Perceptions of Teaching in Different Classroom Contexts?*, paper given to Annual Meeting of the American Educational Research Association: Boston MA.
- Knowles, M.S. (1980) *The Modern Practice of Adult Education: From Pedagogy to Andragogy*, Wilton CN: Association Press.
- Kounin, J.S. (1977) *Discipline and Group Management in Classrooms*, Huntington NY: Krieger.
- Langer, J.A. and Applebee, A.N. (1988) *Speaking of Knowing: Conceptions of Learning in Academic Subjects. Academic Learning in High School Subjects*, Washington DC: Office of Educational Research and Improvement.
- Larsson, S. (1983) Paradoxes in teaching, *Instructional Science*, 12(4): 355–365.
- Latour, B. and Woolgar, S. (1986) *Laboratory Life: The Social Construction of Scientific Facts*, Princeton NJ: Princeton University Press.
- Lewin, K., Lippitt, R. and White, R. (1939) Patterns of aggressive behavior in experimentally created social climates, *Journal of Social Psychology*, 10: 271–299.
- Marland, M. (1993) *The Craft of the Classroom*, Oxford, Heinemann Educational.
- Marton, F. and Booth, S. (1997) *Learning and Awareness*, Mahwah NJ: Lawrence Erlbaum.
- Marton, F., Dall'Alba, G. and Beaty, E. (1993) Conceptions of learning, *International Journal of Educational Research*, 19(3): 277–300.
- McDonald, J.P. (1992) *Teaching: making sense of an uncertain craft*, New York: Teachers College Press.
- McNamara, D. (1991) Vernacular pedagogy, *British Journal of Educational Studies*, 39(3): 297–310.
- Miel, A. and Wiles, K. (1949) *Toward Better Teaching*, Washington DC: Association for Supervision and Curriculum Development of the National Education

- Association.
- Mortimore, P. (1998) *The Road to Improvement: Reflections on School Effectiveness*, Lisse: Swets & Zeitlinger.
- National Commission on Education (1996) *Success Against the Odds: Effective Schools in Disadvantaged Areas*, London: Routledge.
- Oxford Shorter English Dictionary (1993) Oxford: Clarendon Press.
- Pramling, I. (1990) *Learning to Learn: A Study of Swedish Preschool Children*, New York: Springer-Verlag.
- Resnick, L.B. (1987) Learning in school and out, *Educational Researcher*, 16(9): 13–40.
- Rosenholtz, S.J. (1991) *Teachers' Workplace: The Social Organization of Schools*, New York: Teachers College Press.
- Roth, K. (1987) *Helping science teachers change: the critical role of teachers' knowledge about science and science learning*, paper given to Annual meeting of AERA, Washington DC.
- Rudduck, J., Harris, S. and Wallace, G. (1995) 'It's not that I haven't learnt much. It's just that I don't understand what I'm doing': metacognition and secondary-school students, *Research Papers in Education*, 10(2): 253–271.
- Ryans, D.G. (1968) *Characteristics of Teachers: Their Description, Comparison and Approval; A Research Study*, Washington DC: American Council on Education.
- Sabers, D.S., Cushing, K.S. and Berliner, D. (1991) Differences among teachers in a task characterised by simultaneity, multidimensionality and immediacy, *American Educational Research Journal*, 28(1): 63–88.
- Säljö, R. (1979) *Learning in the Learner's Perspective I – Some Common Sense Perceptions*, University of Göteborg.
- Samuelowicz, K. and Bain, J.D. (1992) Conceptions of teaching held by academic teachers, *Higher Education*, 24(1): 93–111.
- Simon, B. (1994) 'Some problems of pedagogy revisited' in, *The State and Educational Change: Essays in the History of Education and Pedagogy*, London: Lawrence & Wishart.
- Smith, L. and Geoffrey, W. (1968) *The Complexities of the Urban Classroom*, New York: Holt Rinehart & Winston.
- Talbert, J.E., McLaughlin, M.W. and Rowan, B. (1993) Understanding context effects on secondary school teaching, *Teachers College Record*, 95(1): 45–68.
- Trigwell, K. and Prosser, M. (1996) Changing approaches to teaching: a relational perspective, *Studies in Higher Education*, 21(3): 275–84.
- Watkins, C. (1997) *Schools of the Future and How to Get There From Here*, presentation at Hampstead School Conference, September.
- Watkins, C., Carnell, E., Lodge, C. and Whalley, C. (1996) *Effective Learning*, London: Institute of Education School Improvement Network (Research Matters series) (download free from <http://www.ioe.ac.uk/iseic/research.pdf>)
- Weinstein, C.S. (1989) Teacher education students' preconceptions of teaching, *Journal of Teacher Education*, 40(2): 53–60.