



EFFECTIVE TEACHING

Richard Dunne &
Ted Wragg



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EFFECTIVE TEACHING

What is effective teaching?

In the nineteenth century, teacher training institutions were called 'normal schools' because it was assumed there was only one way to teach—the 'norm'. Today there is no single style of teaching endorsed by everyone. How teachers teach depends on factors like the age and ability of the children, their background and needs, the nature of the subject or topic being studied and the resources available.

The authors draw on their considerable experience of teacher training and research into classrooms, to explore several dimensions of teaching. These include planning and preparation, direct instruction, the management of materials and of behaviour, conversation with children, monitoring, and evaluating learning. They show how teachers can improve their competence and meet their aspirations, both individually and with their colleagues. The book will be very useful to trainee and experienced teachers, heads, teacher trainers and inspectors.

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LEVERHULME PRIMARY PROJECT

The Leverhulme Project, based at Exeter University, directed by Ted Wragg and Neville Bennett and coordinated by Clive Carré, was a major survey of primary teacher education since 1988. Its bank of valuable information about what actually happens in classrooms and how teachers are reacting to current changes in education will be used for a variety of publications including the *Classroom Skills* series.

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Leverhulme Primary Project Classroom Skills Series
Series editor
Clive Carré

EFFECTIVE TEACHING

Richard Dunne and Ted Wragg



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PREFACE

Improving the quality of what happens in primary school and preparing children for life in the twenty-first century requires the highest quality of professional training. The Leverhulme Primary Project *Classroom Skills* series and its companion series *Curriculum in Primary Practice* are designed to assist in this training.

The Leverhulme Primary Project *Classroom Skills* focuses on the essential classroom competences. It explores the classroom strategies available to teachers and the patterns of classroom organisation which best assist pupil learning. Throughout, it demonstrates that at the very heart of teacher education is the ability to make sense of what is going on in the classroom. This series of books is based on the research of the Leverhulme Primary Project, a three-year programme of research into various aspects of primary teacher education, funded by the Leverhulme Trust and carried out at the University of Exeter. The companion series, *Curriculum in Primary Practice*, helps teachers to make judgements and devise strategies for teaching particular subjects.

Both series are designed to assist teachers at all stages of their professional development. They will be useful for:

- practising teachers
- student teachers
- college and university tutors
- school-based in-service coordinators
- advisory teachers
- school mentors and headteachers

This book can be used as part of initial training or in in-service programmes in school. The text can also be read by individuals as a source of ideas and it will be helpful in teacher appraisal as an aid to developing professional awareness both for those being appraised and for the appraisers. Like all the books in both series, *Effective Teaching* contains suggested activities which have been tried out by teachers and those in pre-service training and revised in the light of their comments.

We hope that both series will provoke discussion, help you to reflect on your current practice and encourage you to ask questions about everyday classroom events.

Clive Carré
University of Exeter

Introduction

AIMS AND CONTENTS

Effective teaching lies at the very heart of the effective school. What it is and how to nurture it is something we try to explore in this book, but whatever one's notions of what constitutes 'effective' teaching, few would doubt that it is essential if schools are to flourish. What is more important, however, is that time spent not only improving the quality of what each individual teacher does, but also the effectiveness of the whole school, is a wise investment.

The major aim of this book, therefore, is to help both newcomers and experienced professionals gain further insights into their own teaching and that of others. Teaching is a set of craft skills, values, beliefs and practices that can be added to and improved at all stages even of a long career. There are teachers close to retirement who are still willing to innovate, to look closely at what they do in the classroom, at what their pupils learn, and to reflect alone or with others on how to improve their practice.

The intention is that, by reading the text and trying out some of the practical activities, teachers will be able to improve their own classroom practice. If people work together as a group, whether they are experienced teachers in the same school, tutors and student trainees on an initial training programme, or some combination of these, then this will be even better. The emphasis is on both activity and reflection, for one without the other would be less effective. All the activities can be done by individuals or by groups of students or experienced teachers, either in discussion or with children on their own or in someone else's classroom. The use of jargon is minimised, though not omitted entirely, as from time to time it can help to have a specific term that covers some key concept.

The book is organised in the following six units:

In **Unit 1** there is consideration of what constitutes effective teaching.

Unit 2 describes an approach to teaching based on nine dimensions of classroom practice at different levels of competence, as well as a framework for discussing teaching.

Unit 3 explores how children learn and how teachers can plan teaching strategies to meet their needs.

Unit 4 deals with classroom organisation and management.

Unit 5 concentrates on instructional design and how teachers' subject knowledge, understanding of children, beliefs and statutory obligations affect it.

Unit 6 looks at whole-school issues and how teachers in a school can plan and secure minor or radical changes.

There is no favouring of a single approach to teaching, therefore, even though we often put forward models we have ourselves developed. The emphasis is on teachers exploring the issues, considering alternatives, trying out ideas and then finding their own best way forward in the light of their own experience and that of others.

How to use this book

The six units constitute substantial course material in the field of effective teaching. The activities and text are suitable for in-service and professional studies courses as well as for individual use.

The *text* may be read as a book in its own right; all the *activities* can be undertaken either by individual teachers or by members of a group working together on the topic. The *discussion activities* are intended to be worked on individually but also lend themselves to group discussion when completed. The *practical activities* are designed to be done in the teacher's own classroom or by student teachers on teaching practice or when they are teaching children brought into the training institution for professional work.

The book can either be used alone or in conjunction with other books in the Classroom Skills series. For example, the management of small groups is not covered in great detail because the book by Elisabeth Dunne and Neville Bennett, *Talking and Learning in Groups*, in the Classroom Skills series covers the topic much more fully. Class management, questioning and explaining are all covered in separate volumes in this same series.

Those responsible for courses, therefore, may well wish to put together exercises and activities from several of the books in this series to make up their own course as part of a general professional skills development programme, either in initial training or of whole-school professional development.

Usually the discussion and written activities described will occupy between 1 and 1½ hours and classroom activities may be completed in about half an hour, though this may vary, depending on the context.

The following symbols are used throughout the book to denote:



quotations from published materials



activities



transcripts of children or teachers talking during lessons

Unit 1

WHAT IS EFFECTIVE TEACHING?

Although it is not always easy to define exactly what different people might mean by the term ‘effective’, teachers have always needed a wide range of subject knowledge and a large repertoire of professional skills. Teaching young children to read and write, to understand the world around them, to grasp and be able to apply fundamental mathematical and scientific principles, to use their developing intelligence and imagination, to live and work harmoniously with others, all require an effective teacher to possess knowledge and understanding of the content of the subjects and topics being taught, as well as the ability to manage a class, explain clearly, ask intelligent and appropriate questions, and monitor and assess learning.

There are many factors which combine to demand from teachers ever higher levels of professional competence. These include the rapid growth in the acquisition of knowledge, the changing nature not only of adult employment, but also of recreation and leisure, the increased public pressure for accountability, the development of new forms of educational and information technology, and the broadening role of the primary teacher. In combination they represent an overwhelming pressure for improvement by all practitioners, even the many who already manifest a high degree of skill in the classroom.

In the nineteenth century, teacher training institutions were known as ‘normal schools’, on the grounds that there was some single ‘norm’ endorsed by society. Today the factors mentioned above require levels of skill, understanding, imagination, and resilience from teachers which go infinitely beyond the rudimentary common sense and mechanical competence fostered by the normal schools of the last century.

The implications for teachers are clear. There is so much to know and understand, so if you cannot know everything, you must know something. Hence the many efforts made either at regional or national level to determine the *content* of education—what children of a particular age or level of ability ought to learn—or by teachers themselves at local level to shape and implement a coherent curriculum. Secondly, if you cannot know or learn everything, you must be able to find out for yourself, and this is why the *process* of learning has become important, as well as, though not instead of, the content. Thirdly, since their pupils can acquire only a tiny fraction of the knowledge and skills currently available to humanity, teachers must develop teaching strategies which not only transmit information, but also encourage children to learn independently and as a member of a group.

Citizens in the twenty-first century are more likely to be willing to learn throughout their lives if they have been fired and enthused, rather than rebuffed and demoralised in school. The quality of personal relationships between teacher and taught, therefore, is a direct result of the interpersonal skills of the teacher, who usually sets the tone in a class, or has to take the initiative to improve relationships should they go awry. A notion of effective teaching that embraced only the transmission of knowledge would be a poor one in such a context.

Furthermore in the twenty-first century many people will work in service industries, and others will run small businesses. This shift out of the factory and into closer contact with people, rather than machinery, requires a high degree of imagination, inventiveness, drive and interpersonal skills. Again a sound basis for those qualities can be established in good primary schools, and teachers who nurture them should be greatly valued.

The teacher attempting to teach the topic ‘Insects’ to a primary class fifty years ago would not have been compared with anyone other than another teacher. Today she will be compared with the finest television presenters in the world, whose programmes on insects enjoy multi-million pound budgets and access to the very best of wildlife film available. Even if the quality of teaching improves, it may not improve far or fast enough to match the escalating demands on teachers.

The public debate about teaching effectiveness has too often been over-simplified and caricatured as ‘traditional’ versus ‘progressive’, ‘formal’ versus ‘informal’, ‘phonics’ versus ‘real books’, when the reality of classroom life is that many teachers prefer to use a mixture of methods rather than fill out a single stereotype. In the workbooks on professional skills which we have produced during the Leverhulme Primary Project, such as *Class Management* (Wragg 1993), *Questioning* (Brown and Wragg 1993) and *Explaining* (Wragg and Brown 1993), trainee and experienced teachers are encouraged to analyse and determine their own teaching strategies, rather than merely copy someone else’s preferences.

There is less dissent about what constitutes effective teaching in discussion between people outside the profession than there is in the research and evaluation literature. Good teachers, it is commonly held, are keen and enthusiastic, well

organised, firm but fair, stimulating, know their stuff, and are interested in the welfare of their pupils. Few would attempt to defend the converse: that good teachers are unenthusiastic, boring, unfair, ignorant, and do not care about their pupils.

Once the scrutiny of teaching is translated into the more precise terms demanded by the tenets of rigorous systematic enquiry, the easy agreement of casual conversation evaporates. Biddle and Ellena (1964), reporting the Kansas City role studies, found that there was not even clear agreement amongst teachers, parents and administrators about the role teachers should play. However, it is nonetheless well worth considering what appear to be the *outcomes* of teaching. If a school is effective, then probably most or all the teachers who work in it will be effective also. This raises questions, therefore, like ‘What do children actually learn?’ and ‘What do teachers do that appears to help pupils to learn?’

ACTIVITY 1

- 1 As an individual or member of a group, write down a list of things that you hope children will learn in your class/school.
- 2 Look at your own list and put alongside it a word or two which you feel describes the category of learning involved, e.g. ‘Children enjoy coming to school’ (emotions), ‘Children learn to read a range of books’ (reading/language/knowledge), ‘children learn to wait their turn, share and be a positive member of a group’ (relationships/social behaviour).
- 3 Compare your list with those of others, if possible. Are there common features, or do you disagree amongst yourselves? If so, about what?
- 4 Select one or two areas where there seems to be some agreement about importance and discuss what individual teachers and the staff as a whole can do to improve effectiveness in these fields.

In the 1970s and 1980s some of the attempts to find a consensus in the research literature were criticised. For example, Gage (1978), summarising research studies which had attempted to relate what teachers did to what pupils actually learned, concluded that in the early years of schooling certain kinds of teacher behaviour did show some consistent relationship to children learning reading and arithmetic. From this he derived a set of prescriptive ‘Teacher should’ statements like ‘Teachers should call on a child by name before asking the question’, ‘Teachers should keep to a minimum such activities as giving directions and organising the class for instruction’, or ‘During reading-group instruction, teachers should give a maximal amount of brief feedback and provide fastpaced activities of the “drill” type.’

Among the criticism of prescriptions based on summaries of recent findings are: the proposition that much American work in particular is based on short-term tests of memory; that formal didactic styles of teaching often show up better on short-term measures and could, therefore, easily be perpetuated; that the ‘gains’ of method A compared with method B are often slight. This last argument is skilfully countered by Gage (1985) in his book *Hard Gains in the Soft Sciences*. He shows how significant policy decisions, in fields such as medicine and public health, are often made on a degree of statistical ‘superiority’ that would receive little attention in educational research. He quotes examples of trials of beta blockers and low cholesterol diets to reduce the incidence of heart attacks, which showed only 2.5 and 1.7 per cent differences respectively between experimental and control groups’ mortality rates, but which nonetheless led to significant changes in public health policy and practice.

Doyle (1978) observed that reviewers of research into teacher effectiveness ‘have concluded, with remarkable regularity, that few consistent relationships between teacher variables and effectiveness can be established’. The difficulty of identifying and evaluating teaching skills and their effectiveness is neatly illustrated by an interesting experiment at the University of Michigan. Guetzkow *et al.* (1954) divided first-year students on a general psychology course into three groups. The first group was given a formal lecture course with regular tests, the second and third groups took part in tutorials and discussions. At the end of the course the lecture group out-performed the tutorial discussion groups on the final examination, and the course was also more favourably rated by the students. So far, this represents a victory for lecturing and testing on two commonly used criteria: test performance and student appraisal.

The investigators discovered, however, that the students in the discussion groups scored significantly higher than the lecture groups on a measure of interest in psychology, the subject being studied. They hypothesised that though the lecture-group students gave a favourable rating of the teaching they had received, this may have been because they had less anxiety about grades for the course through their weekly feedback from test scores. It was decided to monitor the subsequent progress of all the groups. Three years later not one student in the lecture group had opted to study the subject further, but fourteen members of the two discussion and tutorial groups had chosen to major in psychology. Thus, on short-term criteria the lecture method was superior, but taking a longer perspective the discussion method appeared to motivate students more powerfully, and ultimately some must have learned a great deal more.

Defining effectiveness in such a way that all would agree, therefore, is not a simple matter. If we were to say that ‘being effective’ is, in practice, whatever teachers do to enable children to learn, then most people would rule out intimidation, humiliation, the use of corporal punishment or other forms of teacher behaviour of which they personally happen to



Teachers are compared with the finest television presentation disapprove. It is perhaps easier when seeking a definition to describe some of the characteristics of effective teaching which might win some degree of consensus, though not universal agreement.



The excitement of learning

The first might be that the behaviour concerned ‘facilitates pupils’ learning of something worthwhile’, such as facts, skills, values, concepts, how to live harmoniously with one’s fellows, or some other outcome thought to be desirable. The notion of something being ‘worthwhile’ brings together both content and values in teaching. Skill is not a unidimensional concept. Teaching someone to steal might in one sense be skilfully done but it would attract professional odium rather than admiration. A second feature of effective teaching, therefore, is that the skill concerned is acknowledged to be a skill by those competent to judge, and this might include teachers, teacher trainers, inspectors, advisers and learners themselves.

For them to be a recognised part of a teacher’s professional effectiveness, skills should also be capable of being repeated, not perhaps in exactly the same form, but as a fairly frequent rather than a single chance occurrence. A chimpanzee might randomly produce an attractive colourful shape once in a while, given a brush and some paint, but an artist would produce a skilfully conceived painting on a more regular basis. Teachers who possess professional skills, therefore, should be capable of manifesting these consistently, not on a hit-or-miss basis.

Uncertainty about the proper standing of the notion of effectiveness when applied to teaching is partly explained by the varied nature of the teacher’s job. Pressing the right button on a tape recorder, or writing legibly on the blackboard, require but modest competence, and are things most people could learn with only a little practice. Responding to a disruptive 10-year old, or knowing how to explain a difficult concept to children of different ages and abilities by choosing the right language register, appropriate examples and analogies, and reading the many cues which signal understanding or bewilderment, require years of practice as well as considerable intelligence and insight.

When children learn something, there is often a magical quality about the excitement of discovery, the warmth of regard between teacher and taught, or the novelty to the learner of what is taking place, and the romanticism seems to be destroyed if teaching is seen as too deliberate, calculated, manipulated or over-analysed. However, it is possible for teachers, both individually and as a group of colleagues, to analyse what they are doing in a systematic way, and in the rest of this workbook we explore some of the ways of doing that.

Unit 2

IMPROVING PERSONAL COMPETENCE

The effective teacher needs a wide range of subject knowledge and a large repertoire of professional skills. When we made this statement in [Unit 1](#) it served as a useful reminder of how complicated teaching is, but it still begs many questions. What does it mean, for example, for a primary teacher to 'know' a subject? There are difficult problems in specifying this. What a primary teacher can be expected to know about history must be very different from what a historian knows, and probably very different from what a secondary teacher knows. But what does a primary teacher *need* to know?

What constitutes professional skills? There have been many attempts to define these, but they are usually inadequate to describe what teachers actually do. In any case, if we were able to describe what knowledge and skills teachers require, we still need to work out how to help novices acquire them and how teachers make the most effective use of them. In every area of human activity it is the very skilled performance that makes things look simple. When we watch a skilled sportsperson make a mistake it is very easy to be critical about something we could not even begin to achieve. This is often the case when people see the work, or the results of the work, of a teacher.

It is also the case that skills need a lot of practice. This is accepted in most skilled activities, particularly sport and acting, but is less accepted in the case of teaching. Yet it is equally true of teaching. The problem is that while we are practising we are dealing with people, the children and parents, who care very much that teachers should already be effective.

The sort of complaint we might make about, say, an entertainer who does not quite succeed in an otherwise wonderfully skilled performance, is often made about teaching, perhaps about teaching children to read. There are sometimes complaints that teachers need to be more effective in this area and that they need to be taught this in initial training. Of course they should, and they usually are. The problem is that teaching a particular child to read means taking decisions that are sensitive and appropriate to the context. It is not just a case of selecting a set of materials for each 'type' of child: careful selections have continually to be made for individual children throughout their learning. It is precisely because effective teaching requires *interactive* decision making that it must be developed in real teaching situations.

If the teacher's job only involved teaching reading it would be demanding enough. It becomes even more so when we consider the full range of subjects that must be covered and the huge number of topics and skills and concepts within each one. If one sat down and worked out what this involves just to teach one single child, it would be formidable. Yet there is a further complication. Faced with a class of thirty children, teachers cannot replicate exactly what they would do when teaching just one child, nor can they just do it louder or do it thirty times. A class of children is sometimes best thought of as thirty individuals, but when teachers concentrate on an individual there are major problems of class management to be solved. In other contexts the class must be taught in quite different ways, raising problems of how most effectively to capitalise on the social nature of learning.

Improving personal competence in teaching involves thinking about how individual children might learn on their own, and how differently from this they learn in real classrooms. It also involves paying specific attention to the way the teacher works in the classroom, paying attention to the 'performance' of the teacher. We want to look at both of these aspects but begin in this unit with the question of performance. The word 'performance' has several meanings and connotations, and can arouse hostility if it is thought to suggest either an industrial model of maximising output, or playing to the gallery, or behaving in a mechanical, unthinking, uncritical manner. The term is used here simply as a shorthand for what teachers do in the classroom.

Focusing on classroom performance

The days have gone when teaching was seen as an individual and private process; it is now acknowledged that teachers benefit from working together, sharing ideas and discussing methods. A great deal of work of this type goes on in schools. It is quite usual to have team meetings and staff meetings as a normal part of professional life to improve the experience for the pupils. More and more work is being jointly planned and there is often some sort of team teaching going on. Governors and parents are also involved in the teaching in a variety of ways. These are welcome and important changes but may not be as beneficial as they might be.

One of the problems about collaborating with others to improve classroom work is that there is not a shared language about teaching. The introduction of the National Curriculum has provided some sort of shared language about curriculum (although we find this inadequate; see [Unit 3](#)) but this is different from the vocabulary that relates to classroom performance.

It is possible in teaching, as in all activities, to improve our own performance by carefully thinking about what we have done and how this might be improved. In teaching, it is often assumed that reflection is the most important way of increasing competence. It is quite common to talk about the need for teachers to be ‘reflective’ as if this is both easy and guaranteed to change how they act with children. We believe that in order to improve personal competence there is a need to work with one’s colleagues. This process of a group of teachers stepping beyond reflection and into individual and collaborative action has been described by Wragg (1994) as being indicative of the ‘dynamic school’.

It may sound obvious, and it is easy to claim that dynamic change is already common in schools. The telling question is what people need to do together as colleagues in order to improve significantly how they work in the classroom. It may be, of course, that talking about their work with others enhances their ability to think about what they are doing, and this is enough. We do not think that this is sufficient. We believe that learning from each other needs to include some sort of mentor relationship.

This does not mean merely teaming up with somebody who is better than oneself in order to extract tips from the expert. When two fellow teachers work together each may well act as a mentor on different occasions, even within the same conversation. We make this point to emphasise our view that learning about teaching requires some sort of ‘assisted performance’. When Bruner (1977: Preface) wrote about assisted performance for young people, he emphasised that it will ‘depend massively upon participation in a dialogue carefully stabilised by the adult partner. So much of learning depends on the need to achieve joint attention, to conduct enterprises jointly, to honour the social relationship between learner and tutor.’

This reference to the ‘adult partner’ is equally applicable to any teaching relationship. The important point for us here is how the ‘carefully stabilised’ dialogue can be achieved when the relationship is between colleagues who are not only busy and have a wide range of other commitments, but are also acting on equal terms as both learner and mentor. This emphasises the need for a shared commitment to giving a high priority to improving classroom practice, as well as a shared language to help translate good intentions into positive action. It is for this reason that we have constructed a description of teaching, and a vocabulary for teaching, that we describe below. The next section outlines this description of teaching and how it can be put to use in developing personal competence.

The nine dimensions of teaching

We want to put our ideas in context by looking at an extract from a classroom in which a teacher is working with a class of 6-year olds.



Transcript 2.1

Mrs P: The first thing I wanted to show you... was to remind you about the chart we looked at. We did this one before term.

[Mrs P points in turn to each of the fabrics tested]

Mrs P: We tested the flowery fabric...the...

Child: Check.

Mrs P: Check fabric...

Child: Brown.

Mrs P: The brown...the striped...

Child: Pattern.

Mrs P: The pattern—we call it the patterned... and lastly...

Child: Yellow.

Mrs P: The yellow fabric. That’s right. Can anyone remember the tests we gave them?

[Silence]

Mrs P: We did fair tests...do you remember we did fair tests...do you remember we had to do a fair test?

Children: Yes.

Mrs P: What did we do?

[Silence]

Mrs P: Read what it says. [Points to title] What did we mean when we wrote it?

Jean: When we did water...

Mrs P: The water test, yes...

Jean: We did the same with each one...the same amount

[Alex is looking at the person behind him]

Figure 2.1 The nine dimensions of teaching

• Dimension 0:	ethos
• Dimension 1:	direct instruction
• Dimension 2:	management of materials
• Dimension 3:	guided practice
• Dimension 4:	structured conversation
• Dimension 5:	monitoring
• Dimension 6:	management of order
• Dimension 7:	planning and preparation
• Dimension 8:	written evaluation

Mrs P: Can you tell us about the burn test, Alex?
[Discussion of 'fair tests' of other sorts]

...

Mrs P: Now when we look at the fabric...when we did the test we took out
[demonstrates] [waits]...begins with an 'f' but it's not the word 'fabric'

Child: Oh. Fibre.

Mrs P: A fibre. Now, today, our test is going to be something different. We haven't got a lot of fabrics...
[Shows a range of different items made from paper to give children a chance to deduce what today's test is about]

Mrs P: Now. What is the subject of today's science?

Child: Testing paper with water.

Mrs P: It looks like testing paper with water. Certainly I've got a lot of paper. I've got different kinds of paper.

...

Mrs P: How is paper made...what fibres are used for making paper? Jenny...Jenny's got something to tell us...Jenny

Jenny: I saw people making paper.

Mrs P: Where?

Jenny: um...Wookey Hole.

Mrs P: In a sort of factory? What were they using?

Jenny: Can't remember.

Mrs P: You can't remember what they were using. Now that's the most important thing I think you've forgotten.

Alicia: I know Wookey Hole.

Mrs P: You know Wookey Hole. [Turns to a boy at the other side of the group] Tell me again about the poster, Brendan.

Reading this transcript shows that it is typical of a great deal of teaching: teachers tell children things; they hold conversations with them; they monitor what is happening while they are teaching and while children are working; they ask questions and evaluate children's responses, both spoken and written; they develop an appropriate classroom ethos; they organise materials; and so on. What is not so obvious from observing classrooms, but becomes clear during interviews with teachers, is that they are constantly making decisions based on uncertain and incomplete information. They have to play hunches.

The vast amount of decision making that takes place makes it tempting to say that teaching is decision making. However, this is unhelpful in two ways. Firstly, it undervalues the enormous amount of knowledge which makes it possible to take those decisions; secondly, it suggests that it is 'decision making' that needs to be practised, again undervaluing how it is that the practice of decision making must relate to real teaching.

There are many ways of describing teaching and Wragg (1994) has summarised both qualitative and quantitative approaches. Teachers can, if they wish, work out their own set of dimensions, criteria, competences or precepts. One such set has been developed by Dunne and Harvard (1992). It is worth looking at this in some detail, not because it is the only way of conceptualising teaching, but rather because it allows one to consider some important aspects of classroom processes. Dunne and Harvard put forward *nine dimensions of teaching* (Figure 2.1):

The nine dimensions of teaching summarise what teachers do in their observable classroom work. It will not be clear simply from reading the list what is meant by each of 'direct instruction', 'guided practice' and so on: we will attend to this later. What might be surprising is that although we have already emphasised how much of the classroom work of teachers involves taking decisions, this does not appear as one of the nine dimensions. There is good reason for this. When teachers take decisions they take them *about something*. They decide whether to pursue a conversation or to end it; they decide whether to intervene by providing an answer or asking a question; and so on. The nine dimensions are the things that teachers take

decisions about; taking decisions is the way in which these dimensions are used. We will refer to this again later, after we have expanded further on the dimensions themselves.

Teachers we have worked with have found these nine dimensions a useful, formal way of thinking about classroom work. They are useful when they are thought of, not as a particular lesson consisting of ‘direct instruction’ or ‘structured conversation’, but as being the many things that teachers are taking decisions about in every lesson. We can best illustrate this by looking again at Mrs Palmer.

The first part of this transcript shows the teacher rehearsing the names of the various fabrics that were tested. This is an example of dimension 1, direct instruction, since the intention is to instruct the children in the names that were adopted to describe each piece of fabric. This section is shown below:



Transcript 2.2

Mrs P: The first thing I wanted to show you... was to remind you about the chart we looked at. We did this one before half term. [Mrs P points in turn to each of the fabrics tested]

Mrs P: We tested the flowery fabric...the...

Child: Check.

Mrs P: Check fabric...

Child: Brown.

Mrs P: The brown...the striped...

Child: Pattern.

Mrs P: The pattern—we call it the patterned... and lastly...

Child: Yellow.

Mrs P: The yellow fabric. That’s right.

The way in which this instructional purpose is achieved, however, is through dimension 3, guided practice: the child already has some knowledge of the vocabulary that was used previously, but is not likely to provide this in a single utterance unaided, so the teacher provides practice, referring by name to each one in turn.

This same portion of the lesson can be categorised as both direct instruction and guided practice. It will be seen later when each of these dimensions is described in more detail that each focus will add different insights into what is possible in classroom work of this type. For the moment, our purpose is to illustrate roughly what some of the dimensions look like in practice and to confirm that the possibility of more than one interpretation is important in this way of analysing classroom work.

There are other examples of this:



Transcript 2.3

Mrs P: We did fair tests...do you remember we did fair tests...do you remember we had to do a fair test?

Children: Yes.

Mrs P: What did we do?

[Silence]

Mrs P: Read what it says. [Points to title] What did we mean when we wrote it?

Jean: When we did water...

Mrs P: The water test, yes...

Jean: We did the same with each one...the same amount.

[Alex is looking at the person behind him]

Mrs P: Can you tell us about the burn test, Alex?

In this extract the teacher is using dimension 4, structured conversation. In general terms, this is a conversation because it involves some sort of dialogue between people (in this case, the teacher and more than one child). It is ‘structured’ in the sense of being given shape by and having some intention on the part of at least one participant. This is sufficient for us to make the initial categorisation, although the detail of this dimension is more complex. The point here is not the different levels of complexity of the dimension ‘structured conversation’ but the fact that the last line

Mrs P: Can you tell us about the burn test, Alex?

can be interpreted as dimension 5, monitoring, because it indicates alertness to what Alex is doing and what he might know, and even to dimension 6, management of order, because it concerns behaviour.

What we have now illustrated is how thinking in the categories of the nine dimensions of teaching can provide a ‘handle’ for getting to grips with what happens in classrooms. This is useful in itself but we want to go further. At the moment the list of the nine dimensions is only a set of *labels* for aspects of classroom work: we will all have different versions of what they really mean.

Figure 2.2 The criteria for direct instruction**DIMENSION 1: DIRECT INSTRUCTION**

- 1 Attract children's initial interest; maintain appropriate sequence using supplied material for demonstrations and descriptions.
- 2 For demonstrations and descriptions, organise suitable seating arrangements, introduce material well, use appropriate visual aids, sustain children's interest.
- 3 Check clarity of explanation by appropriate questions; convey enthusiasm with appropriate verbal and non-verbal behaviour.
- 4 Choose appropriate examples, analogies and metaphors; explain as well as describe and demonstrate.
- 5 Choose concepts with both subject matter and children's interests in mind; ensure children's engagement and participation; use a range of examples and aids to meet diversity of children's attainments; summarise key issues.
- 6 Pace explanation in light of children's responses with regard to interest and comprehension; show grasp of possible content options and justify particular choices.
- 7 Make explanations efficient and concise; choose examples for their power in the subject.

We want to establish a clearer definition for each dimension. Although it is possible to do this with a paragraph about each one we have adopted a different approach. We want to use the nine dimensions to aid decision making in classrooms and to provide a route for improving personal competence. For this reason we have described each dimension at a number of levels (seven or eight) ranging from relatively simple levels of performance to more complex expressions of competence. [Figure 2.2](#) shows this for dimension 1, direct instruction, and descriptions of the levels for the full set of nine dimensions is provided in the Appendix.

If we look again at the short episode of Mrs P's teaching it is clear that she is not only using aspects of direct instruction, structured conversation, management of materials and management of order, but is probably also evaluating children's responses. In order to know whether she is evaluating, and to know how she is making decisions related to the other dimensions, we need to ask her. A short section of a rather lengthy interview with Mrs P is helpful in seeing a teacher make use of the nine dimensions of teaching. Both the interviewer and Mrs P have the written set of dimensions in front of them during the conversation, so they are able to make reference to them.

**Transcript 2.4**

I: We've had a look at a long piece, a section, of your lesson and talked about several dimensions. Can we, can we look especially, specifically at direct instruction...

P: Mm.

I: And look at when Jenny and Alicia mentioned Wookey Hole...

P: We've said about Jenny and structured conversation...I wasn't able to challenge any points because she did not know...

I: Yes. We may return to,...have another look at, maybe later. Can we really focus on direct instruction and see how this bit does do that, does some...

P: I wanted to give a lesson...instruction...I was instructing overall in how to make paper...so, [reading level 1] 'attract children's initial interest'...I used the poster of last term's work, when they did various experiments on materials...I used what they knew from that ...

I: But you did more than use what they know... look at this bit where you said 'Read what it says...what did we mean when we wrote that?'

P: Yes, they wouldn't remember it all, but I was making them really use the notes we made last term. Do you see that as a part of creating initial interest?

I: I do. It seems a really important example. Do you?

P: I hadn't...but I will use it again...another bit of work.

I: If we use that as an example of attracting...if we see this as a good example...we'll need to work out why this is, to justify... but keep that for later. Let's trace that bit...initial interest... let's look at level 2: sustain children's interest. We may find this in all sorts of places...what is really interesting is when we find it in unusual places. We're looking at Jenny and Alicia... and Wookey Hole...tell me about that again, this time quite specifically in this level 2, direct instruction.

P: So we've said this bit with Jenny is structured conversation and now...

I: Yes. We could look at the detail of structured conversation, but for the moment let's reinterpret it as direct instruction, let's see what ...

P: OK. So by pausing to ask Jenny about her trip I thought she could tell us about paper-making ...

I: And?

P: And she couldn't, so I moved on.

I: You could have persisted with the conversation.

P: Should I have done?

I: I'm not saying that. We're looking for how we can interpret what you did.

P: The conversation could have been very much about Jenny herself. I might do that, I might do that sometimes. I wanted to talk about making paper...the others wouldn't have been so involved.

I: And direct instruction?

P: And direct instruction...sustaining the children's interest—that was more important. I like it.

I: [Laughs] I like it too. But what about Alicia?

P: What about Alicia. I've forgotten.

I: [Points to notes; reads] 'I've been to Wookey Hole', Miss.

P: [Laughs] Alicia's been everywhere. Instinctively I...what did I say? Instinctively [reads] I said 'Alicia's been to Wookey Hole' and then...what does this say? Oh yes [reads] ...yes...I turned back to the poster.

I: Direct instruction?

P: Yes. I could easily have lost the initial interest in the poster...I knew where I wanted to go. I knew that Alicia's story would be personal—I didn't want that then.

What we see here is how an initial discussion about the fairly obvious occurrence of structured conversation, direct instruction, management of materials and so on is developed by persistent attention to one dimension (and later, but not shown here, equal attention to another dimension). Very detailed discussions like this are especially important for student teachers learning how to teach, as they enable beginners to become clear in their minds about the nature of teaching and how they might progress. Time constraints mean that intensive analysis is generally only possible in those circumstances, that is, when teachers do not have full responsibility for a class and a full teaching timetable. However, aspects of what is described here are also possible for full-time experienced teachers (and this is particularly the case as part of a programmed approach to appraisal). The following activities suggest a way forward.



ACTIVITY 2

Tape record a small part of your classroom work (about 15 minutes). Transcribe the tape and work out where each of the nine dimensions can be identified (or as many as possible). Select one dimension and work out the relevance of each of the levels to this bit of your classroom work. Do some of the levels suggest alternative courses of action?



ACTIVITY 3

Observe a colleague for about 15 minutes. Concentrate on just one of the nine dimensions and see how the colleague's work relates to the various levels in that dimension.

If we look again at the transcript of Mrs P's interview, we can see that both she and the interviewer refer to things that were actually said in the classroom. In our own work with teachers and students we do not usually collect this evidence from audio or video recordings, because they are usually time consuming to do properly, and full transcripts of lessons can run to twenty or thirty pages, which is too detailed to be really useful.

We find it more useful to work from an observer's notes. The usual difficulty with this is that the observer is inevitably biased towards a particular view of classrooms, and such a partial view is not what is needed. A completely impartial view of teaching is simply not possible, as all observers carry their own precepts and perceptions with them. What we want is a version of classroom events that is sensitive to the teacher's intentions, not merely to the observer's bias. One way of doing this is for the teacher and observer to negotiate an agenda, a notion so apparently simple that, until they try it, many people reject it out of hand. We suggest you try it and see for yourself whether it works.

Annotating an agenda during classroom observation

Teachers develop their own ways of writing their plans for a term's work, a week's work and for each lesson. Increasingly, schools are establishing a common format for teachers working in the school. Our approach to preparing a document specifically for use during observation does not interfere with any established or preferred way of recording planning. It is possible to record very valuable information about a colleague's classroom performance in a short episode (15 to 20 minutes) and it is for this sort of episode that we find negotiating and agreeing an *agenda* beforehand is useful.

An agenda is confined to one page of A4 paper, so that people do not become too ambitious; is written on the left-hand side of that page, leaving the right-hand side for the observer's notes; and is a detailed indication of the content and sequence of that short episode, including a note of the dimension to which the observer is asked to attend. For example, an agenda might refer to the introductory remarks at the beginning of a lesson; or a time when the children are working under guidance from the teacher; or the concluding remarks or report-back session; or record a transition between activities.