



Key Messages

Pedagogy and practice

Key Stage 3 National Strategy

Key Messages: Pedagogy and practice

The Key Stage 3 National Strategy is about classrooms and what goes on in them. It puts learners at its heart. Each aspect of the Strategy is only of value if it benefits the learners. They need the best teaching and learning practice available if they are to acquire the high level of skills they need in the 21st century. The Strategy aims to raise expectations by increasing pupils' confidence and levels of engagement and by strengthening the quality of teaching.

The change in emphasis in 2003–04 from separate strands to a whole-school strategy is an opportunity to reaffirm the principles of teaching and learning which underpin all the Strategy's work. The aim is to encourage debate about teaching and learning and to enhance professional dialogue by developing common terminology.

The design of effective lessons is fundamental to the pursuit of high quality teaching and learning. The Strategy intends to strengthen its emphasis on pedagogy by promoting discussion about the key factors in lesson design.

Principles of teaching and learning

The principles of teaching and learning which guide the work of the Strategy are:

- including all pupils in a culture of high expectations (no child left behind);
- establishing the centrality of literacy and numeracy across the curriculum (reinforcing the basics);
- infusing learning skills across the curriculum (enriching the learning experience);
- promoting assessment for learning (making every child special);
- expanding the teacher's range of teaching strategies and techniques (making learning worthwhile and enjoyable).

Good teaching fosters good learning. It stems from effective lesson design whatever the age of the learner, their level of ability, or the subject or skill being learned. Good teaching results when teachers:

- **focus and structure** their teaching so that pupils are clear about what is to be learned and how, and how it fits with what they know already;
- actively **engage** pupils in their learning so that they make their own meaning from it;
- develop systematically **pupils' learning skills** so that their learning becomes increasingly independent;
- use **assessment for learning** to help pupils to reflect on what they already know, reinforce the learning being developed, and set targets for the future;
- have **high expectations** of the effort that pupils should make and what they can achieve;

- make the learning motivating by **well-paced teaching** using stimulating activities matched to a range of learning styles;
- create an environment that promotes learning in a settled and **purposeful atmosphere**.

Lesson design

Each subject strand and whole-school aspect of the Strategy will reaffirm the Strategy's advice on effective lesson design. Effective lesson design involves careful consideration of a number of factors, as shown in Chart 1 below. It starts from learning objectives, encompasses a 'climate for learning', then focuses on pedagogic approaches, teaching and learning strategies and techniques, and classroom organisation.

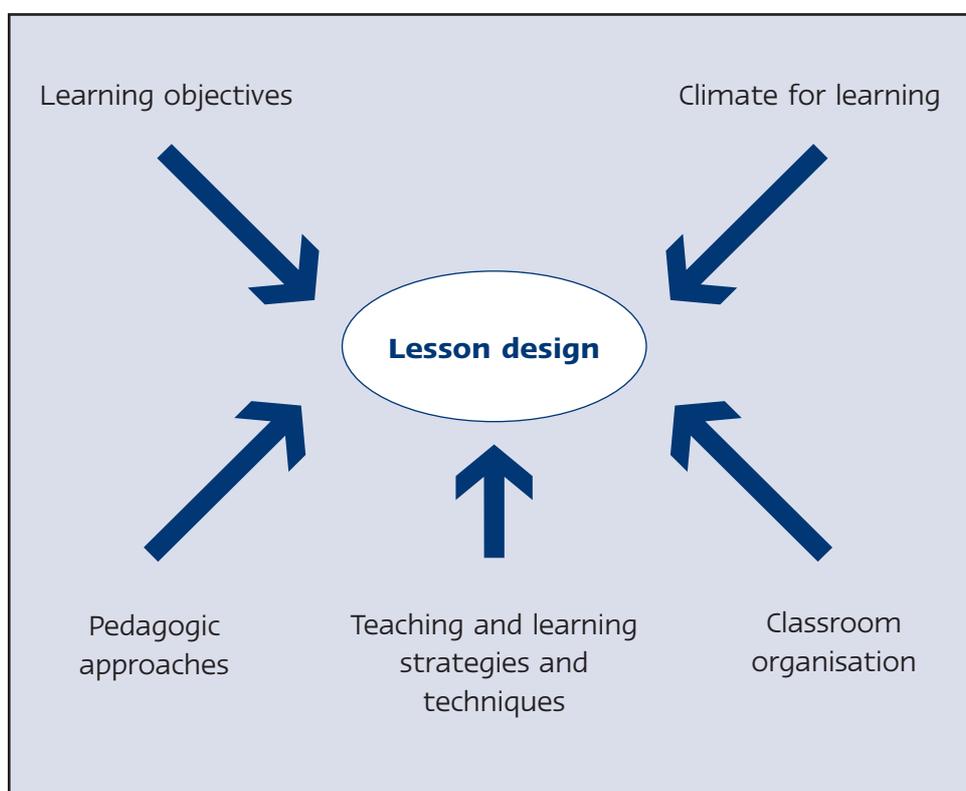


Chart 1: Factors affecting lesson design

In these factors, two things are fundamental: the Strategy's commitment to interactive teaching and learning and to developing the independence of the learner.

Learning objectives

The nature of a learning objective will influence a teacher's choice of pedagogic approach and of teaching and learning strategies. Categorising a learning objective should guide this choice. For example, an objective that involves the development of a concept may be best suited to an inductive approach, while appreciation of an aesthetic or a moral issue might suit an exploratory approach. The Strategy will provide further guidance on this aspect of lesson design.

Climate for learning

To create an effective climate for learning, two aspects are important:

- **Learning style.** Constantly working outside a pupil's preferred learning style can lead to boredom, frustration and a lack of motivation. This doesn't mean that every lesson should cater for the full spectrum of different learning styles but rather that pupils should have regular opportunities to learn in their preferred learning style.
- **Prior attainment and knowledge.** Pupils need to work in advance of their actual development level but not to a degree where they become stressed by the learning opportunities presented.

In 2003–04 the Strategy will provide specific support for schools facing challenging circumstances on catering for pupils' different learning styles.

Pedagogic approaches

To support effective lesson design, as a minimum, the Strategy promotes the use of direct, inductive and exploratory approaches. All teachers can benefit from proficiency in these teaching styles, varying and adding to their repertoire as they gain confidence and experience. They are not the only approaches, but they are a good foundation. The key elements of these three approaches are summarised in Table 1 below.

Pedagogic approaches			
	Direct	Inductive	Exploratory
Purpose	To acquire new knowledge or skills.	To develop a concept or process.	To use, consolidate or refine skills and understanding.
Key features	A structured sequence, often beginning with whole-class work with modelling, demonstration or illustration. Typically, this is followed by individual or group work. The sequence often ends with whole-class review.	A structured set of directed steps. Pupils collect and sift information, then examine data. They construct categories, and generate and test hypotheses.	Testing a prediction or hypothesis based on the understanding of a concept. Pupils decide what information to collect, obtain the data and analyse it.
Examples	Developing communication skills, such as using different writing text types; listening to argument; constructing sentences orally in French; in mathematics, drawing to scale; using a spreadsheet to model the impact of light intensity on plant growth.	Generating spelling rules. e.g. when to use <i>-sion</i> rather than <i>-tion</i> ; collecting visual and other information in order to understand the use of materials and processes to make a sculpture; assessing the usefulness of portraits as sources of historical information.	Exploring the best method of making a light crispy batter; exploring the likely causes of flooding in a particular area; exploring the best method of removing grease from clothes.
Key questions	<ul style="list-style-type: none"> • How could you ...? • Why am I doing this? 	<ul style="list-style-type: none"> • Can you group these? • Can you see any pattern? 	<ul style="list-style-type: none"> • What might affect ...? • What possible reasons are there for ...?

Table 1: Pedagogic approaches

Teaching and learning strategies and techniques

An effective teacher has a wide-ranging repertoire of different teaching and learning strategies and techniques. The choice is determined by the pedagogic approach. The Strategy will provide guidance on the relationship between pedagogic approaches and teaching and learning strategies to inform and enrich lesson design.

Teaching and learning strategies and techniques, and different types of teacher talk, are vital in:

- presenting key concepts and ideas;
- demonstrating skills and processes;
- engaging and supporting pupils in active learning and higher order thinking;
- establishing an interactive, well-paced dialogue with the class in which both teacher and pupils articulate ideas, express opinions, and build on each other's ideas to develop knowledge and understanding;
- creating the right level of challenge and moving learning forward so that pupils can make good progress and reach high standards.

The Strategy has already provided guidance for teachers on a range of teaching and learning strategies and techniques and will continue to reinforce its key messages about the range. Some examples are given below.

Common teaching skills

1 Questioning

- Questions need to be planned in a sequence that guides pupils towards and reinforces the main objectives of the lesson.
- Certain types of question have inbuilt challenge and require pupils to think deeply:
 - open-ended questions that have no one obvious answer;
 - questions that demand and develop higher-order thinking skills such as analysis, synthesis and evaluation;
 - questions that encourage pupils to speculate and take risks.
- Teachers should build in 'wait time' so that pupils can reflect on a challenging question before answering it.
- Questions can be used to promote active listening and engagement, especially when the 'no hands up' rule is used. Active listening skills can be developed further by building variety into a teacher's questions and expecting pupils to generate their own questions.
- Teachers can encourage pupils to give extended answers using questions and other strategies, such as inviting pupils to elaborate or speculate on a topic.

2 Explaining

- Many things, such as abstract concepts, events outside pupils' experience, principles, rules and important ideas, are difficult or impossible for pupils to understand without explanation.
- Common types of explanation deal with:
 - concepts;
 - similarities and differences;
 - cause and effect;
 - purposes;
 - processes;
 - reasoning and proof.
- Explanations contribute to pupils' learning when they enable pupils to connect new information to what they already know.
- Teachers can improve their explanations through using a range of techniques, such as illustrating or animating their verbal explanations, and the use of props, or voice and body. These can contribute to improved pupil engagement and understanding.
- Asking pupils to explain their thinking and reasoning helps them to crystallise and consolidate their learning.

3 Modelling

- Modelling helps to make explicit the thinking behind, or support important concepts, skills, relationships, decisions and processes.
- Modelling plays a significant role in helping pupils to learn independently. It represents ideas in ways that pupils can understand, change and use again to support their thinking. It can be visual or kinaesthetic.
- Modelling is more than demonstrating a skill or technique. Demonstrating shows pupils how to do something; modelling helps pupils to understand underlying structures and embedded ideas. A good demonstration does not have to be supported by discussion; modelling without discussion is ineffective.
- Modelling is most effective when the teacher:
 - is specific;
 - explains underlying principles;
 - shares thinking;
 - involves pupils increasingly by encouraging them to ask questions;
 - provides opportunities for pupils to practise the new skill or process while it is fresh;
 - supports first attempts with prompts and other support to build pupils' confidence and expertise;
 - builds in time for pupils to reflect on what they have learned.

Each strand will provide further advice and exemplification on these strategies and will increasingly consider their use in the context of the three pedagogic approaches. In addition, the Strategy will exemplify further the use of a wide range of teaching and learning techniques such as scaffolding, concept mapping and the use of role-play.

Classroom organisation

Classroom organisation concerns substantially more than furniture arrangement, display of pupils' work and the use and choice of equipment. It includes a consideration of pupil groupings and the use of other adults, whether teachers, teaching assistants or other helpers. Decisions about classroom organisation need to support interactivity; and teachers need to be conscious of the impact of different social settings on effective learning. Over the next year, the Strategy will provide further advice on these aspects of classroom organisation.

The process of lesson design

A process of lesson design is summarised in Chart 2. It illustrates how the design sequence incorporates the features already considered. It also emphasises the advice that successful lesson design should be viewed as a series of planned learning 'episodes'.

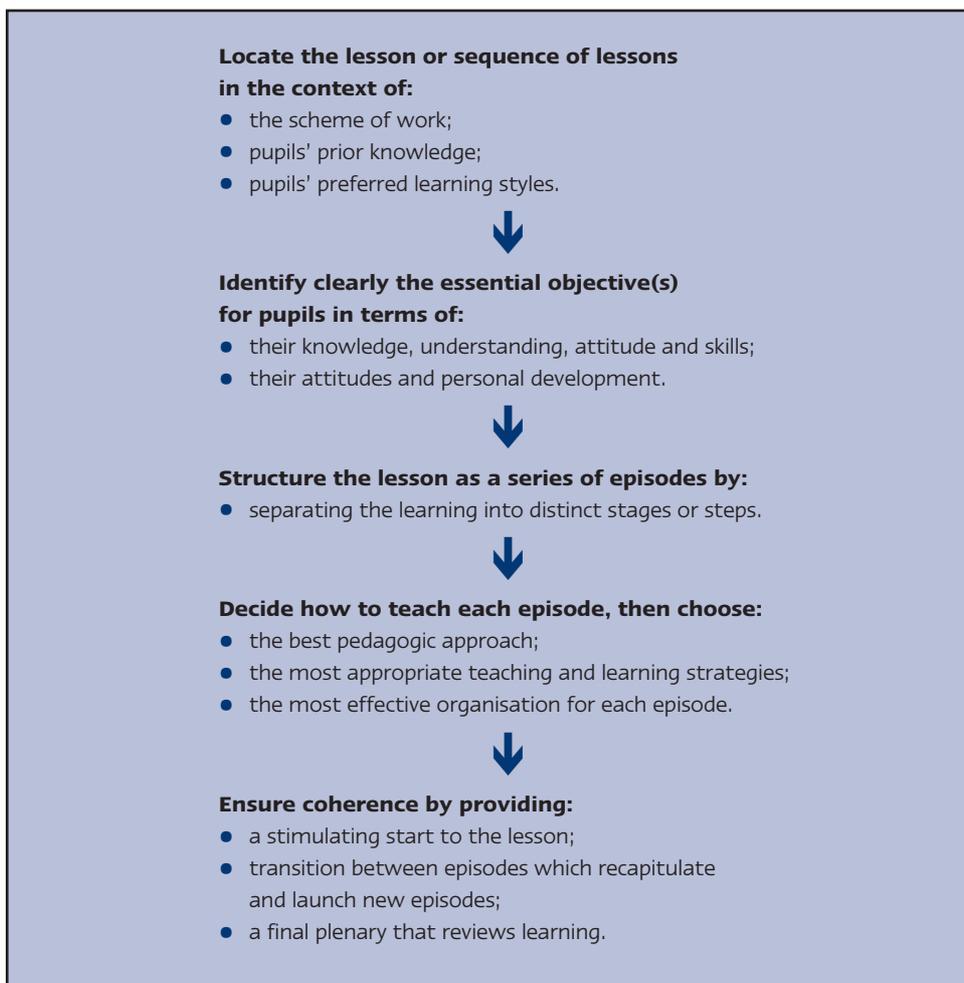


Chart 2: Stages in lesson design

Detailed lesson planning is of vital importance but it should not be seen as a straitjacket. Successful teachers are alert to the responses of their pupils and make modifications and adjustments to meet the evolving dynamics of each lesson.