Excellence and Enjoyment: learning and teaching in the primary vears

Classroom community, collaborative and personalised learning

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Excellence and Enjoyment: learning and teaching in the primary years

Creating a learning culture

Classroom community, collaborative and personalised learning

Professional development materials





Contents

	General introduction	4
	Introduction to classroom community, collaborative and personalised learning	6
Section 1	Learning and teaching	9
	1 The learning process and pedagogic approaches	9
	2 Talk and learning	19
Section 2	Contexts for learning	29
	1 Whole-class teaching and learning	30
	2 Learning in a group	41
	3 Independent and individual learning contexts	45
Section 3	Diverse learning needs	49
	1 Learning styles	52
	2 Multiple intelligences	58
Section 4	Resources	61

Accompanying video

Creating a learning culture, 'Classroom community, collaborative and personalised learning'

- Clip 1 How learning develops
- Clip 2 Managing group work
- Clip 3 Researching Greek armour
- Clip 4 In all kinds of weather

General introduction



Helping children to develop as confident, enthusiastic and effective learners is a central purpose of primary education. *Excellence and Enjoyment: a strategy for primary schools* affirms a vision for primary education that provides opportunities for all children to fulfil their potential through a commitment to high standards and excellence within an engaging, broad and rich curriculum. Ofsted reports show that the best primary schools and early-years settings achieve this. In these schools and settings children are engaged by learning that develops and challenges them and excites their imagination. The learning and teaching environment in these schools and settings is shaped by an understanding of what children can achieve and by teaching that meets their individual needs as learners.

A note about the units

This collection of continuing professional development (CPD) materials on classroom community, collaborative and personalised learning is one of six units that focus on important aspects of learning and teaching in the primary years. The six units are organised into three themes:

- Planning and assessment for learning
- · Creating a learning culture
- Understanding how learning develops

Although the content has been organised under the headings given above, it often overlaps across units. For example, questioning is one of the key teaching strategies explored in the *Conditions for learning* unit but it is also addressed in other units.

Learning and teaching is a broad and complex area of study. It is important to note, therefore, that these units represent a starting point for whole-school investigation, action and reflection on areas for improvement identified within the school development plan or, within an early-years setting, as part of the management plan or quality assurance process. The introductory guides to Learning and teaching in the primary years (May 2004) offered advice and suggestions for identifying areas for development through self-evaluation.

Self-evaluation is an essential element of effective school performance management systems. Such systems make clear links between school improvement, teachers' performance, management objectives and CPD plans and can therefore help to deliver personalised



learning for all children. The CPD materials in these units provide opportunities for professional discussions about teachers' work which will support both individual and school development needs.

How to use the units

There is no expectation that schools and settings will use all of the materials in the units. You should use the materials flexibly, to support your school development needs and CPD focus.

You may, for example, decide to combine elements across units as well as within units, or select one or two sections within a unit for attention. In order to facilitate such cross-unit and within-unit usage, a chart itemising the content of each unit is given on the inside back cover of all the units.

Each section of a unit includes materials for staff study, discussion and reflection, along with ideas for how the materials could be used in professional development sessions. Some of the suggested activities are developed fully to provide models for organising staff sessions; other suggestions are briefly outlined.

Schools and settings may go further than indicated in the materials by using some of the many excellent resources that already exist, for example other Primary National Strategy, QCA and DfES materials, subject association resources and readings and so on. Some suggestions for further resources are given in the units. Enquiry groups may also wish to draw on support from local authority colleagues or others and work with other schools and settings who are focusing on the same areas for development.

It is anticipated that a designated member of staff will take the lead in selecting and running CPD sessions based on these materials and

that you will adapt and supplement these materials

While many of the materials are written with primary teachers and practitioners in mind,

> you will want to include teaching assistants, parents, carers and governors when appropriate.



Introduction to classroom community, collaborative and personalised learning



Most children are natural-born learners. Like the young of many other species, children arrive in the world predisposed to learn. The human brain is organised to distil useful patterns out of experience. In normal conditions, most children are highly inquisitive and naturally attentive to whatever they find interesting. In a complicated environment the majority have no trouble homing in on what are the next things to learn. They are disposed to experiment and play – and this 'seeing what happens when I ... ' enables them to develop flexible expertise of all kinds: eating, chattering, playing games and so on. Instinctively they attend to what the other humans around them are doing. Human voices and faces have an irresistible attraction, and within a year most children are expert at reading intonations and expressions, and tuning their own interactions accordingly. Children also naturally imitate: their brains are 'wired' so that they are predisposed to copy the actions that they see and hear; thus they learn and build concepts through their interactions with the world around them. (Some children have medical or social conditions which impair their early learning and they will need direct teaching in order to support such developments.)

These first stages of learning – sometimes called 'intuitive' learning - happen within the child's home and community. As they grow and develop, children continue to learn many things in this way, but other ways of learning also become important. Children begin to learn within the context of schools and settings and the different groupings within these, as well as from home and parents. Some aspects of this learning – such as learning to read and write, play an instrument, mix paints, hit a cricket ball and so on - may require a more conscious effort and a more explicit focus on acquiring and improving a range of skills and knowledge. To help children's learning develop, teachers and practitioners adjust their pedagogy to match children's learning needs and the contexts for learning. They use assessment for learning to tailor their teaching so that all children are involved, motivated and helped towards the next steps in their learning. In this way, teachers can expect high levels of improvement for every child. Such an approach is at the heart of personalised learning.



Personalised learning means adapting educational provision to meet the needs and aspirations of individual children. It is not about individualised learning but about building independence through interaction, intervention, stimulation and collaboration. This interaction can accelerate children's progress beyond what they can do alone. This approach to learning and teaching stresses deep learning as an active, social process and is explicit about learning skills, processes and strategies. The aim is to enable children to understand themselves better as learners and so to take greater control of and responsibility for their learning as they transfer and apply a widening repertoire of learning approaches in different subjects and different learning contexts.

In this unit we will look briefly at some of the ways children learn and the implications for learning and teaching in schools and settings. We will examine the importance of talk in developing learning and deepening understanding. We will also examine the main contexts for learning within schools and settings – whole-class, group and independent – and look at how learning can be supported within these contexts.

At the heart of the workforce reform agenda is a wider role in schools for support staff and they will be increasingly important to the delivery of effective teaching and learning. These materials assume that teachers and support staff are working together as part of a team to deliver personalised learning for all children.

This unit is one of two units on creating a learning culture, and some of the materials in this unit draw on the materials in the companion *Conditions for learning* unit.

Aims of the unit

The aims of *Classroom community,* collaborative and personalised learning are to consider:

- some of the ways children learn and the implications for the classroom;
- the centrality of talk to developing learning;
- different contexts for learning within schools and settings – whole-class, group and individual.



Section 1 Learning and teaching

Part 1 The learning process and pedagogic approaches

Learning is not a singular activity; we learn in many different ways. There are several working theories about how we learn and we are constantly gaining new insights from psychology, from neuroscience and from the social sciences. Some background papers on learning theories are to be found on the *Learning and teaching in the primary years* CD-ROM.

Most teachers and practitioners draw on a range of working theories and their own practical classroom experiences in arriving at their views on how children learn and how their teaching can support this learning. Research can help us to refine these views and to recognise that certain methods work best for different kinds of learning. Drawing on this, teachers and practitioners can then use their professional experience and expertise to select appropriate methods to fit the learning needs of the children and the particular context in which these are occurring. Pedagogy is thus informed by an understanding of working theories, knowledge of the social context of the learning and the practical 'craft' knowledge of teachers and practitioners. For example, research shows us that questioning with suitable wait times is a key element of 'teaching as enquiry' to promote children's concept development. But whether this is done in pairs or as a class activity will be determined by the teacher or



practitioner, based on their knowledge of the children and the particular context of the school or setting. The exact nature of the questions will be amended 'on the hoof', based on an ongoing assessment of children's learning needs at any particular point in time.

Excellence and Enjoyment proposed a set of learning and teaching principles, which were subsequently developed following wide consultation:

- Set high expectations and give every learner confidence they can succeed.
- Establish what learners already know and build on it.
- Structure and pace the learning experience to make it enjoyable and challenging.
- Inspire learning through passion for the subject.
- Make individuals active partners in their learning.
- Develop learning skills and personal qualities.

These principles arise from some key understandings about learning:

- Learning has affective as well as cognitive dimensions.
 Or, as it is often put, it is about the heart as well as the head.
 Factors such as motivation or self-esteem, and their impact on behaviour and consequently on learning, are important. Effective teaching pays attention to these aspects of learning and this includes developing positive and supportive relationships and a positive and supportive ethos (see the *Conditions for learning* unit).
- Learning is a process of interaction between what is known and what is to be learned.



This involves building cognitive structures – schemas, maps, concepts – by adjusting our mental models to accommodate new experiences. Effective teaching recognises the critical role in learning played by experiences or interactions with the surrounding environment and supports this by exploratory pedagogic approaches.





Learning is a social process.

When working with others learning develops through:

- shared consciousness (group interaction);
- borrowed consciousness (expert others).

This means learners can develop greater knowledge and skills when working with more expert guidance or with peers than they can attain alone. Interaction with others as well as with the environment is crucial. Effective teaching encourages paired and group work and recognises the importance of scaffolding to support learning.

Learning is a situated process.

We learn in a particular context and environment. Learning can be seen as searching to create meaning from our environment. This constructivist view of learning sees teaching as assisting in the process of enquiry.

• Learning is a metacognitive process.

Initially learning may be unconscious – we learn but do not know that we know. Gradually we acquire more active conscious control – we begin to know what we know and what we don't know. Effective teaching encourages explicit reflection on learning and seeks to make learners more aware of the learning processes they are using. It encourages children to develop a range of problemsolving strategies that they consciously apply in a variety of contexts.

• Learning can be seen as information processing.

This view of learning uses the analogy of the mind as being like a computer that acquires and uses information. Effective teaching recognises the importance of direct teaching and responsive feedback.

• Learning can be seen as self-regulation.

Effective teaching encourages the development of independence through scaffolding and carefully structured learning experiences.

Each of these working theories can inform our pedagogy and help us deepen our understanding of how to ensure that the teaching approaches we adopt are selected to ensure fitness for purpose and to personalise the learning according to the needs of the learner.

CPD ACTIVITY

How children learn

Aim

To consider the different ways children learn.

Materials

- Video clip 1, 'How learning develops'
- Handout 1, 'How children learn', cut up into sort cards
- Notes from the pre-meeting task

Pre-meeting tasks

- Read the background information on pages 9–11 on thinking about learning.
- Make brief notes at intervals during one day of teaching, recording any evidence of children learning in different ways from each other, from direct instruction, from being scaffolded and so on. Note details of what was happening and the evidence that learning took place.

Organisation

- At a staff meeting, get into groups and look at the statements on the sort cards (handout 1).
 Place them in order, putting those you strongly agree with first and those you most strongly disagree with last.
- Come together to share any points that arise from this activity. Then share notes from the premeeting task and look for examples of children learning from:
 - direct teaching;
 - feedback:
 - first-hand experience;
 - investigation or testing;
 - having their existing knowledge challenged by new experience;
 - being scaffolded in a new task;
 - problem solving or trial and error;
 - working in groups and learning from peers;
 - modelling and imitation;
 - any other ways.
- You will probably find that a wide variety of ways of learning is evident in your observations. Are your beliefs about effective learning reflected in the classroom? Are you happy with the range of learning experiences that are on offer? If not, what are you going to do?
- Watch video clip 1, which shows three groups of children (4–5-year-olds, 7–8-year-olds and 10–11-year-olds) from the same school undertaking the same problem-solving task. The children were given a piece of cloth to represent a river, some blocks and some cars. They were asked to get the cars from one side of the river to the other. There was no adult intervention. These video clips show the first two minutes of this activity.

- You may wish to stop the video after each age group for some preliminary discussion about what you have noticed about the children's learning. This might include:
 - how they undertook the task;
 - the prior experience they drew on;
 - how they helped each other learn;
 - what they learned from this activity;
 - the interactions between the members of the group.
- After watching all three groups, discuss the ways in which their actions and learning are:
 - the same across age groups;
 - different across age groups.
- Discuss what you have learned about children's learning from your observations, from your discussions and from your reflections on the video. What are the implications for your teaching?

Next steps

- As a staff, identify the important ideas to emerge from this activity. You might like to write them on a large sheet of paper and display them in the staff room.
- How could you apply the ideas you have learned over the next few weeks? This might include going on to explore further sections of these units before undertaking any classroom actions.
- Agree some practical steps, and consider how you will monitor their impact and share the results.
- At a future meeting, discuss what you have done and what more you have found out about different ways of learning. Decide on your next steps.



How children learn

Children learn best from exploring their environment.
Children learn best from 'teachers' who understand what they already know and scaffold their new learning.
Children learn best by being given rewards when they get it right.
Children learn best by finding their own meanings through the support of more experienced learners.
Children will learn at their own level, given suitable experiences.
Children need an appropriate learning environment and support to develop their own meanings.
Children learn best from getting on by themselves.
Children learn best when they have a problem to solve.
Children learn best from direct instruction.

Pedagogic approaches

Pedagogic approaches are influenced by beliefs about how children learn, the context in which the learning and teaching is to take place (including the wider social and political context) and the purpose of the learning. Most teachers and practitioners use a range of pedagogic approaches, including direct, inductive, exploratory, experiential, enquiry and problem-solving approaches as well as social or relationship approaches (such as role-play and simulation). However, research has shown that particular approaches are most effective in supporting different kinds of learning. Part of professional knowledge and expertise is in matching appropriate pedagogic approaches to learning needs. The chart below summarises three main approaches used by most teachers and practitioners. Within each pedagogic approach, teachers and practitioners will draw on a range of teaching strategies, techniques and tools, including ICT-based resources.

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. Children 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. Children decide what information to collect, obtain the data and analyse it.		
Examples	Developing communication skills, such as using different text types in writing; 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 -sion rather than -tion; 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 bridge from newspapers; exploring the likely causes of flooding in a particular area; exploring the waterproof properties of different materials.		
Key questions	- How could you? - Why am I doing this?	Can you group these?Can you see any pattern?	What might affect?What possible reasons are there for?		

Inclusive pedagogy

Planning learning experiences and matching teaching approaches to children's learning needs is at the heart of personalised learning and is inclusive of all children. However, there are further factors that will influence the pedagogic approaches adopted by teachers when planning for specific groups of children.



EAL pedagogy

Research over the past two decades (see 'Resources' section) into the development of young bilingual learners has resulted in the development of a number of theories and principles that underpin the distinctive pedagogy for children who are learning English as an additional language (EAL) – children for whom the additional language being learned is also the medium of education.

The development of EAL pedagogy has been influenced by social constructivist theories and those which highlight the importance of socio-cultural and emotional factors. Children learning EAL will be affected by attitudes towards them, their culture, language, religion and ethnicity.

A distinction needs to be made between interpersonal communicative skills and cognitive and academic language proficiency. Generally speaking, children learning an additional language can become conversationally fluent in the new language in two to three years, but may take five years or longer to catch up with monolingual peers in the development of cognitive and academic language. The distinction between these two types of language and their rates of development is recognised in the Ofsted framework for inspecting EAL in primary schools.

There is research evidence that bilingualism confers intellectual advantages. It also highlights the important role of the first language in the child's learning and in their acquisition of additional languages. Once children have developed cognitive and academic language, they can transfer much of this learning to additional languages. Children benefit enormously if they are given opportunities to continue to develop their first language alongside English.

Bilingual learners face two main tasks in the school or setting: they need to learn English and they need to learn the content of the curriculum. Learning a language is more than just learning vocabulary, grammar and pronunciation; it involves using all these appropriately for a variety of real purposes or functions. There are language functions (such as questioning, analysing, hypothesising) that children will need for mathematics, science, history and so on. These functions are clearly linked to thinking and learning skills and should be explicitly taught.

It is important to recognise that children learning EAL are as able as any other children, and the learning experiences planned for them should be no less cognitively challenging. High challenge can be maintained through the provision of contextual and linguistic support.

Contextual support for children learning EAL includes:

- opportunities to build on previous experience;
- teacher or practitioner modelling;
- use of visual props and realia;
- key visuals such as diagrams and time lines;
- opportunities to work collaboratively in mixed-ability groups;
- opportunities to use the first language;
- planned opportunities to listen and speak in a wide range of situations across the curriculum.

SEN pedagogy

It is a question of academic debate whether there is a specific SEN pedagogy or whether 'good teaching is good teaching for all'. All children benefit from the kinds of approach once seen as the particular province of SEN – systematic procedures for assessing and monitoring progress, appropriately tailored learning objectives, parental engagement. A wide range of children in any class – not just those who have been identified as having SEN – will learn more effectively when their teachers use inclusive teaching strategies such as those outlined in *Learning and teaching for children with special educational needs in the primary years*. Nevertheless, research suggests that there may be some approaches that are particular to SEN. These include:

- access strategies which ensure that difficulty in one area of the curriculum does not hold a child back in other areas – for example, presenting material orally for children with reading difficulties;
- special means of access to the curriculum, such as communication systems like Braille, British Sign Language or Makaton;
- providing, for children with difficulties in cognition and learning, more examples to help them acquire a concept, more practice in applying the concept, and more opportunities to generalise the concept from one context to another;
- an increased focus on building confidence and self-belief.

Gifted and talented pedagogy

Like all learners, gifted and talented children need frequent opportunities to apply their skills and understanding, and to develop their knowledge, within a secure and flexible learning environment, and to be offered learning challenges and teaching approaches that meet their individual needs.

QCA gives helpful and detailed advice on matching teaching to the learning needs of gifted and talented children on:

www.nc.uk.net/gt/general/05_environment.htm.

This includes advice on:

- developing an effective learning environment for gifted and talented children;
- levels of challenge and differentiation for gifted and talented children:
- helpful approaches for gifted and talented children;
- assessment for gifted and talented children.

CPD ACTIVITY

Pedagogic approaches

Aim

• To consider a number of different pedagogic approaches.

Materials

- Poster paper sheets headed 'Direct', 'Inductive' and 'Exploratory'
- Sticky notes

Pre-meeting task

• Read the material on learning theories, pages 9–11, and on pedagogic approaches, pages 15–17.

Organisation

- Individually, make notes of how you taught during the day (e.g. 'set up sand play and provided questions to support learning') and write each example on a separate sticky note. Place each sticky note on the appropriate poster. As a staff, look at the distribution of sticky notes under the different headings and reflect whether this shows a spread of approaches or a focus on any one approach.
- Are your approaches consistent with your beliefs about the way children learn? How well matched were the approaches and the learning objectives?
- Discuss the implications of your findings. Do they matter?

Next steps

- Leave the poster sheets up in the staff room. Add further sticky notes with examples of activities during the week.
- At the next meeting, look again at the different approaches used and agree what you might do
 as a result of your observations and reflections. This may include visiting other schools or settings
 where you know they have taken a particular approach, or observing colleagues, advanced skills
 teachers or expert teachers. Then discuss the other approaches you have observed. Which
 seemed most effective? Why?



Part 2 Talk and learning

Talk is an important means by which we communicate and build social relationships, and it plays a crucial role in learning. We use language (in the broadest sense, which includes non-verbal communication and, for some children, signs and symbols) to build concepts and understanding. Many educationists have emphasised the interrelationship between thought and language, and have stressed the importance of open, exploratory talk in developing learning. Vygotsky pointed out that thought is not only expressed in words but comes into existence through them.



The recently published speaking and listening materials (Speaking, listening, learning: working with children in Key Stages 1 and 2, DfES, 2003) and the accompanying handbook Professional development materials, are a major resource for any school or setting wishing to look

at progression in speaking and listening and at classroom activities that support the development of speaking and listening. Further speaking and listening guidance will be available shortly relating to:

- children learning English as an additional language;
- children with special educational needs;
- speaking and listening in mathematics.

Speaking and listening form a strand in the English curriculum, but they are significant across all areas of the National Curriculum. This is

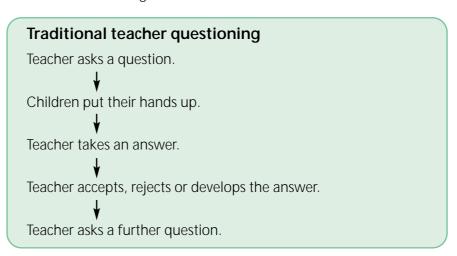
indicated in 'Use of language across the curriculum' within the general teaching requirements and in the inclusion of communication as a key skill.



Classroom talk

Research going back for decades has shown that, in classrooms, teachers control the majority of the talk – selecting who will speak, when they will speak and for how long. Teachers also do most of the talking in classrooms.

The most common form of teacher–child discourse in classrooms is that shown in the diagram below.



Such exchanges often close down learning opportunities because children are steered towards a correct answer that the teacher is seeking.

The effectiveness of teacher–learner exchanges depends on the quality of the questioning (or alternatives to questioning).

See the section on 'Questioning' in the *Conditions for learning* unit for a detailed examination of questioning and suggested CPD activities.



Extending classroom talk

Another feature of classroom discourse that has been identified through research is the brevity of many children's responses. In a comparative study of classrooms in the UK, Russia, India and the USA, Alexander (2001) has argued for a greater emphasis on developing dialogic talk, where extended responses from children are expected, encouraged and supported.

Teaching through dialogue enables adults and children to build on ideas in sustained talk. When teaching through dialogue, teachers and practitioners encourage children to listen to each other, share ideas and consider alternatives; to build on their own and others' ideas to develop coherent thinking; to express their views fully; and to help each other reach common understandings. Teaching through dialogue can take place when a teacher or practitioner talks with an individual child, or when two children are talking together, or

when the whole class is joining in in a discussion.



Strategies for encouraging extended dialogue

- Allow thinking time before taking responses.
- Use 'think, pair, share' (30 seconds to think, 1 minute to share with a partner).
- Do not respond immediately after a child has replied often they will say more.
- Challenge the response 'Tell me why ...', 'But what about ...?'
- Ask the child to elaborate 'Can you say more?'

Also see the 'dos and don'ts' chart in the handbook for *Speaking*, *listening*, *learning*, page 47.

Evaluations of the use of interactive whiteboards in Years 5 and 6 found that their use led to children talking for longer in their responses and using a range of extended vocabulary in their explanations.

Exploratory talk

The learning potential of collaborative discussion, where children are able to speculate, hypothesise and evaluate, can be developed through careful planning and classroom management. Barnes (1976) distinguishes between two kinds of talk – 'process' talk and 'presentational' talk. In 'presentational' talk, the child gives a prepared reply or exposition, however brief. It is public and intended for a listening audience, often the teacher or practitioner. 'Process' talk is



very different. It is exploratory talk concerned with working things out. It is often tentative and uses speculation and hypothesis. Shared understandings can be developed.

Group and paired work can be fruitful contexts for encouraging such talk. In the following example, two eight-year-olds are preparing an experiment on growing mustard seeds. Their talk includes repetition and backtracking, but gradually they talk themselves into an understanding of what they are planning to do (soak the cotton wool in water) and their reason for doing it.



Ros: Put them [the seeds] on this paper ... put them on here first.

Bridie: No ... on the cotton wool's best. They'll be best on the cotton wool not ... (interrupted)

Ros: Who says cotton wool ...? ... We haven't been told cotton wool ... Mrs ... (interrupted)

Bridie: I know, but it's best I think ... for keeping water...

Ros: Yeah, but hang on ... W ... we've got to wet it next, haven't we? O ... or ... (interrupted)

Bridie: Ooh yeah, or else they won't ... (interrupted)

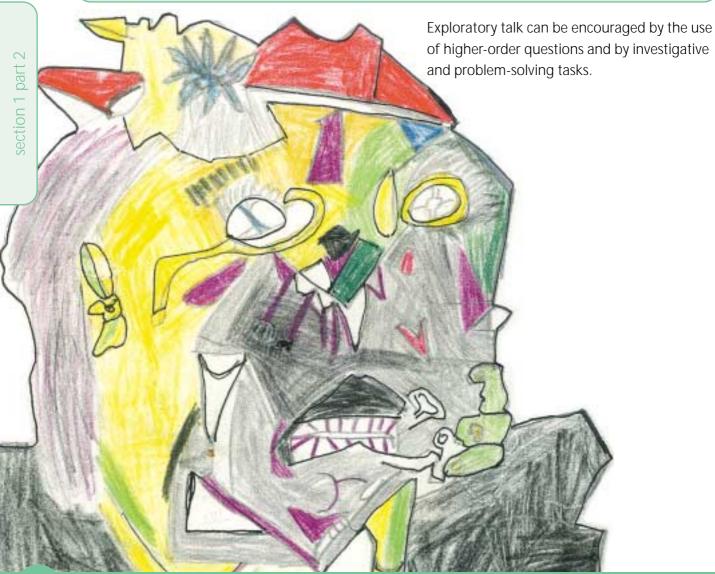
Ros: A ... and after that ... after we've wet 'em, they'll grow then.

Bridie: G ... grow ... no ... so the cotton wool's got to be soaked first, so the seeds ... (interrupted)

Ros: T ... they can drink then, they can drink then ... from the cotton wool 'cos ... (interrupted)

Bridie: Can live off the cotton wool ... off the water in the cotton wool.

(From Literacy and learning through talk, page 25 (Corden, 2000))



CPD ACTIVITY

Observing classroom talk*

Aim

• To reflect on the quality of children's classroom talk.

Materials

Observation notes

Pre-meeting task

• Read the material on talk and learning (pages 19–22) and then arrange to undertake observations in a classroom or other teaching context for about an hour. Choose two or three children and track their talk/communication during this time. Fill out an observation sheet like the one below and note examples of their talk. If possible, arrange to make an audio recording of some of the talk.

Event	Duration	Type of talk
Context		For example:
What the child was doing		brief reply to question
Who they were talking to		extended reply to question
		social talk
		child asks question
		exploratory talk
		Note a few phrases and sentences

Organisation

- Pair up and discuss your observations of children's talk. How much of it was exploratory talk concerned with developing understanding? If you have managed to record or note some specific examples, listen to these and identify the learning that is taking place.
- Come together to discuss whether you need to undertake specific actions to encourage:
 - more talk/communication from the children:
 - less talk/communication from the teacher or practitioner;
 - more exploratory talk.
- Decide how you are going to implement and monitor this.

Next steps

- As a staff, identify the important ideas to emerge from this activity. You might like to write them on a large sheet of paper and display them in the staff room.
- How could you apply the ideas you have learned over the next few weeks? This might include going on to explore further sections of these units before undertaking any classroom actions.
- Agree some practical steps, and consider how you will monitor their impact and share the results.
- At a future meeting, discuss what you have done and what more you have found out about different ways of learning.
- * 'Talk' here refers to all forms of communication, including the use of signs and symbols.

Organising and supporting classroom talk

There are many grouping techniques that can be used to support the development of speaking and listening in all areas of the curriculum. These include:

snowballing

A/B talk partners

mini-presentations

adult in role

listening triangles

expert groups

individual think time

thought shower

information gap

Techniques to develop paired and group work in order to enhance learning can be used across the curriculum. The following examples all originate from primary schools in Hull who are taking part in *The Talk Project: direct and interactive learning and teaching.* This project was set up to encourage the embedding of speaking and listening into teaching across the whole curriculum, with the aim of improving self-esteem and social skills, supporting learning and raising achievement. The teachers involved have drawn on a wide range of techniques and, working together as a community of learners, they have shared their ideas, successes and issues.

Further examples will be available on the *Learning and teaching* CD-ROM, available from November 2004. Video clip 4, 'Classroom routines', from the *Conditions for learning* unit shows one of the teachers involved in this project using a variety of these speaking and listening techniques in history.

Reception: music

The children in the Reception class were learning and performing simple nursery rhymes. The children were put into **home groups** of four and each child was given a different picture from the same nursery rhyme (informationgap activity). The children were given an opportunity to think about their own picture (individual think time) before sharing their picture with the other children in their group. The groups were asked to discuss which nursery rhyme they thought their pictures had come from. One child from each group was asked to feed back their group's ideas. The children were then asked to sequence the pictures in their nursery rhyme and recite it together. Children were then sent as envoys to perform the nursery rhyme to a new group. Back in their home groups, the children were given a selection of instruments and asked to add

percussion to the performance. The children were encouraged to discuss as a group which instruments could be used at different points during the nursery rhyme. This was structured by asking the group to focus on one picture at a time, adding percussion to each. They were also asked to justify their choice. Each group then performed their nursery rhyme to the class, with the percussion accompaniment.

How the talk helped the learning

The talk during the **information-gap** activity ensured all children were involved in the task and had their attention focused. Practising and then re-performing to a new audience helped the children to remember and rehearse their rhyme. It also encouraged them to engage with a widening group of talk and listening partners. The group talk around suitable percussion involved children in justifying their choices.

envoying role-play jigsawing

home groups

hot-seating

talk pairs

Years 1 and 2: science - materials

The class were investigating the properties of a variety of materials. Children were placed into **home groups** of four, and each member of the group was given a different material (wood, metal, plastic, fabric).

The groups then re-formed into **expert groups**, according to the material they were given. A wide variety of resources for each material was made available to each group (e.g. books, pictures, posters and objects). Within the **expert group** they investigated the properties of their material using **snowballing** (working first as a pair and then joining up into a four). Adults worked with each group for part of the time to introduce and support the use of scientific vocabulary.

Children re-formed their **home groups** and the information each child had gathered about

was shared, following a teacher-given sequence that determined when children were speaking or listening. Finally, children were brought back together as a whole class for a **hot-seating** activity: 'What material am I?' This involved the rest of the class trying to identify the material by asking questions about its properties, for example 'Are you strong/transparent/rigid/natural/man-made?'

How the talk helped the learning

Paired and group talk in a variety of configurations ensured that each child was encouraged to participate in the discussion, using and becoming familiar with scientific vocabulary.

Repeating the facts orally to their **home groups** helped the children to retain the information gathered. The **hot-seating** gave them the opportunity to apply their knowledge.



envoying

snowballing

adult in role

individual think time

talk pairs

expert groups

Year 6: PSHE and literacy: bullying
As a class, children listened to 'First Day at completed a set of speech bubbles which contained snatches of conversations from

School' by Roger McGough to set the scene for a discussion about playground fears or problems in the classroom. Children thought-showered the feelings evoked on a whiteboard which they then shared with talk partners. The teacher modelled a scenario from the playground. Children then role-played with their talk partners (A is the child being bullied, B is doing the bullying, then vice versa) for a maximum of 2 minutes each. Hotseating followed, with children in character. Children then snowballed from twos into fours and made a word picture of a noisy, frightening playground scene. They thought of words and phrases for sounds and movement; for the feelings of those who do not enjoy the clamour and bustle of the playground and for the feelings of those who do. Children recorded their discussions on large sheets of paper which were displayed. Each group presented their posters in a minipresentation and these were discussed by the class. Next, the class divided into four groups. Group 1 and Group 2 represented those who enjoyed the

completed a set of speech bubbles which contained snatches of conversations from the playground and Group 2 completed thought bubbles for things that people were thinking but not saying. Groups 3 and 4 did the same for children who did not enjoy the playground environment. The bubbles were displayed and the notions of 'How might the playground be changed?' and 'How can we help each other in the playground?' were introduced. Children were asked to think about this for homework. In a subsequent discussed and **role-played**.

How talk helped the learning

Talking in role encouraged children to empathise with the point of view being expressed by their character, even if it was not one they personally supported.

Relaying their discussions to a new pair made their reasoning explicit. Presenting the posters gave them the opportunity to undertake some extended public speaking and engage in careful listening. All of these helped with understanding and developing confidence.

Year 3: history – Florence Nightingale

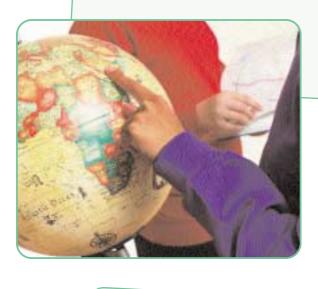
The children had a basic knowledge of Florence Nightingale, who she was and why she became famous. Pairs of children were given a grid of questions about her life that could be answered using resources in the classroom. These resources included: an artefact (a lamp like the one which Florence Nightingale would have used), a CD-ROM of Victorian Britain, an example of a nurse's uniform which would have been worn at the time, a world map for looking at the journey to the Crimea, a big book, a cassette tape with commentary about conditions in hospitals, a mystery envelope revealing the period of time in which Florence lived and a poster of Florence with a speech bubble saying how she felt on the journey to the Crimea. Children became 'detectives' to hunt for the information around the classroom.

Children worked in **talk pairs**, using the resources to find the answers to their questions. Both children had to agree the answer, and together they had to decide how much to record and when to move on to the next question. The activity ended when the first pair had got a 'full house' (i.e. all questions answered).

A quick-fire oral quiz in home groups then allowed children to rehearse and share the information they had found, and the adult to assess what had been gained from the experience. To finish, an adult in role took part in a hot-seating activity, allowing the children to pose questions that the activity had triggered for them.

How talk helped the learning

Talk pairs helped the children to understand and retain the information. Joint decision making was developed. Group talk during the quiz promoted turn taking and allowed the children to repeat orally the facts and information that they had acquired.



jigsawing

listening triangles

information gap

A/B talk partners

hot-seating

role-play

mini-presentations

home groups

thought shower

CPD ACTIVITY

Talk across the curriculum

Aim

• To reflect on opportunities to encourage speaking and listening in all areas of the curriculum.

Materials

Current science plans (or plans for another curriculum area of your choice)

Pre-meeting task

• Read the list of talk strategies and classroom examples on pages 24–27.

Organisation

- In pairs, share *two* successful speaking and listening activities recently undertaken in science. Regroup and list these briefly.
- In pairs again, look at the next science session you will be teaching. Discuss ideas for including a 10-minute speaking and listening activity. If this is already included, develop an activity which involves a new speaking and listening technique.
- Share suggestions and consider whether all the speaking and listening techniques are being explored.

Next steps

- As a staff, identify the important ideas to emerge from this activity. You might like to write them on a large sheet of paper and display them in the staff room.
- How could you apply the ideas you have discussed over the next few weeks?
- Agree some practical steps, and consider how you will monitor their impact and share the results.
- At a future meeting, discuss what you have done and what more you have found out about different ways of learning.

Other possible CPD activities

 In relation to speaking and listening issues discussed in this unit, you may find activities from Speaking, listening, learning: working with children in Key Stages 1 and 2, Professional development materials helpful. These include prompts for discussion which focus on bilingual learners and others that relate to children who have speech and language difficulties.

Issue discussed in this unit	Relevant sections in Speaking, listening, learning	
Extending oral responses	Page 47: Dos and don'ts list	
Ground rules for dialogue, discussion and group work	Page 13 and video sequence, Year 4 Term 1: 'Celts and Romans'	
Group discussion and interaction	Pages 52–53	
Active listening	Pages 16–17	
Questioning	Pages 40–41	
Teacher and practitioner talk	Page 47	





Part 1 Whole-class teaching and learning

Whole-class teaching has been used in schools for many centuries and in all cultures. It is one of a variety of groupings that are commonly used in classrooms. Across a unit of work, and within a lesson, whole-class teaching is combined with group, paired, individual and independent working. Matching the learning context to the task and the learning needs of children helps support learning. In whole-class teaching, learning is orchestrated through teacher or practitioner exposition, modelling and demonstration, questioning, discussion, learning activities and reflection on learning. Technology is now also used to support effective whole-class teaching.

Whole-class teaching is often used when:

- new topics, content or ideas are to be introduced;
- the teacher or practitioner as 'expert' has information not readily available to the learners, and wants to ensure all the children have access to this;
- learning objectives and outcomes need to be made explicit;
- the teacher or practitioner wishes to model a particular skill;
- learning needs to be drawn together, summarised or synthesised in order to consolidate and move learners on after group or individual work;
- it offers an efficient use of time.



The best whole-class teaching:

- engages children in active learning;
- builds on existing skills;
- is organised to teach the objectives and lead to the outcomes;
- draws on a variety of teaching strategies;
- provides for a variety of learning styles;
- supports children towards independent learning.

Research by Mortimore et al (1988) showed whole-class teaching to be an effective strategy for promoting learning. After tracking classes in 50 primary schools over several years, they concluded that whole-class teaching:

- increases the overall number of contacts each child has with the teacher;
- enables the teacher to use more higher-order, open-ended questions and statements;
- increases pupil challenge and stimulation.

This is achieved when the whole-class teaching involves the active engagement of the children.



Critics of whole-class, direct teaching and teacher exposition characterise it as a passive learning experience for children which fails to differentiate for the individual needs within the class. Later in this section, under 'Interactive whole-class teaching', we discuss ways to ensure that all children are actively engaged and that differentiation is achieved during whole-class teaching. Successful whole-class teaching includes the following elements:

- direct instruction (teacher exposition);
- discussion;
- interactive whole-class teaching;
- inclusion of all learners (differentiation).



Direct instruction (teacher exposition)

Teacher expositions are constructed using a variety of teaching strategies including:

- explanation;
- scaffolding;
- demonstration and teacher or practitioner modelling;
- questioning and the use of alternatives to questioning.



Pace and length are important aspects of teacher expositions. Observations of teacher expositions reveal that teachers and practitioners often say the same thing two or three times in different ways. While rephrasing and repeating can be useful strategies to offer children different ways into understanding, repetition can become a mere habit, slowing down the pace of a lesson. As an alternative to teacher repetition, other strategies (such as asking children to rephrase to a talk partner what the teacher or practitioner has said) offer opportunities to rehearse understanding, and vary the pace of the lesson.

Expositions should not be overlong. It has been suggested that 10 to 20 minutes is the average attention span; after that the mind tends to wander. Teacher expositions should be interspersed with activities that engage children in doing something other than just listening. Some suggestions for this are given in 'Interactive whole-class teaching' on page 38.

Good expositions are **clearly structured**. A piece of advice commonly given to public speakers is: say what you're going to say, say it, say what you've said.

In a structured exposition, a teacher or practitioner will:

- indicate the purpose and content 'I'm going to outline the causes of erosion so you have an overview';
- make the structure explicit 'I'll explain the four key factors and give you an example of each ... The main one ... The third factor ...';
- review progress at intervals and in a plenary 'So just to recap ...'.



Subject knowledge has an important influence on the quality of teacher expositions. Research indicates that if we know what we are talking about, we are more likely to be able to explain clearly and cope with others' misunderstanding by offering further elaboration.

Using a variety of ways to offer information – such as illustration, example, analogy and metaphor – helps understanding to develop by offering alternative ways to view and respond to the information being expounded. Varying the type and number of ways of offering information is one of the ways by which whole-class direct teaching can be differentiated and scaffolded to engage all children.



CPD ACTIVITY

Examining teacher exposition

Aim

To consider the quality of the elements of whole-class teaching.

Materials

Observation framework chosen from the list below

Pre-meeting task

- Agree to pair up and observe each other during a whole-class session or part of a session.
- To guide your observations, use one of the frameworks from the list below. Choose the one that reflects the area of greatest concern for you and focus on that throughout your observations.
 - Checklist for effective explanations (Conditions for learning, page 74)
 - Alternatives to questions (Conditions for learning, page 68)
 - Bloom's taxonomy (types of question) (Conditions for learning, page 70)
 - Strategies for promoting active listening in whole-class teaching (this unit, page 38)
 - Involving children in whole-class teaching (this unit, page 39)
 - Checklists for inclusive teaching (see 'Resources')

Organisation

Share the results of your observations at a staff meeting. Offer one example each of good
practice you have observed and one possible area for development. Make a list of the areas for
development.

• Individually, rank the areas from most pressing to least pressing. Share your rankings and agree the priority area(s) for development.

 Together, decide two actions that will help to bring improvement in the area(s) identified. Try both and note the results before the next staff meeting.

Next steps

 Bring the results to the next meeting and decide how you will continue to work on the area(s) identified.



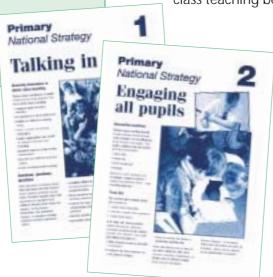
A set of leaflets, including *Managing discussion* and *Engaging all pupils*, is available as part of the pack *Teaching literacy and mathematics in Year* 3 (DfES, 2003). The advice in the leaflets also applies to

discussion and class teaching in other areas of the curriculum.

Discussion

Discussion is usually triggered by planned questions or alternatives to questions (see the *Conditions for learning* unit, page 68). Discussion is an important component of whole
class teaching because it can:

- encourage children to ask questions;
- give them opportunities to explain, clarify and justify their thinking;
- offer opportunities to assess understanding;
- strike a balance between teacher or practitioner contribution and children's contributions.



CPD ACTIVITY

Developing discussion

Aim

To consider some of the issues that may arise during class discussions.

Materials

Handout 2, 'Developing a discussion', and handout 3, 'Managing contributions'

Organisation

- In a staff meeting, pairs consider the scenarios that may occur in whole-class discussion. Use handout 2 and discuss, in pairs, either set A or set B.
- After 10 minutes, As and Bs jigsaw with each other and share the conversation about their respective scenarios and conversation.
- Afterwards, regroup and generalise about what produces purposeful discussion that children both enjoy and learn from. Handout 3 suggests some of the points that may arise during this whole-staff reflection.

Next steps

- As a staff, identify the important ideas to emerge from this activity. You might like to write them on a large sheet of paper and display them in the staff room.
- How could you apply the ideas you have learned over the next few weeks? This might include going on to explore further sections of these units before undertaking any classroom actions.
- Agree some practical steps, and consider how you will monitor their impact and share the results.
- At a future meeting, discuss what you have done and what more you have found out about different ways of learning. Decide on the next steps you will take.

Developing a discussion

Discuss how you commonly deal with the following situations in class discussion:

Set A

You ask a question and:

- get back an unexpected or even bizarre answer;
- the class starts pursuing a red herring;
- they look totally baffled.

Set B

You ask a question and:

- get back only trite, one-word answers;
- the discussion goes round in circles;
- one child gives back a fully fledged answer that pre-empts all your plans.

Managing contributions

A genuine attempt to explore children's knowledge and ideas will result in them being more engaged in their learning. You can help by:

- making sure children understand the purpose of the discussion;
- staying open to unexpected ideas;
- asking authentic questions that are shaped by what immediately preceded them;
- incorporating children's answers into subsequent questions;
- probing and extending the discussion by showing interest in what children think, not only in what they know (e.g. eliciting clarification of an answer, asking for additional information);
- modifying the course of the discussion according to the children's responses;
- encouraging children to elaborate on a response;
- drawing out the significance of children's responses;
- making connections with previous knowledge;
- rechannelling children's responses in a more fruitful direction;
- crediting and recalling useful contributions.



Interactive whole-class teaching

Whole-class teaching is not solely about direct instruction. Children can learn from each other and engage in other interactive activities during whole-class sessions. Key elements of interactive whole-class teaching are:

- active listening;
- involving children.

Active listening

Children are expected to listen during whole-class teaching. Listening is not a passive activity if children are engaged and understand what they are hearing (although some may see listening as passive by not distinguishing between physical inactivity and mental activity). Listening is always active, but there is a continuum that extends from hearing something as a background noise to which you give minimal attention, at one end, to fully engaging with the speaker and what they are saying, at the other.

Teachers and practitioners need to promote active listening.

Strategies for promoting active listening in whole-class teaching

- At intervals, ask children to summarise what they have just heard and share this with a talk partner.
- Ask children to visualise what is being said.
- Use props and visual aids such as puppets, models, pictures and artefacts.
- Include physical responses from the children, for example counting off points on their fingers.
- Notice and praise good listening.
- Offer clear signals of structures to support listening, for example 'Listen out for the main factors', 'Clap every time I mention the king's name'.
- Have a class figure, such as a stuffed toy, that 'sits and listens' attentively.
- Discuss explicitly with children what a good listener does, and why it is important.
- Include work on improving listening skills as part of the curriculum. See *Speaking, listening, learning* for listening objectives and suggested classroom activities.
- Engage listeners through variation in pace, tone, expression and gesture.



Involving children

Interactive whole-class teaching includes involving children in other ways as well as in active listening. These include:

- questioning and discussion;
- paired talk (child-to-child);
- children demonstrating to the whole class, for example adding labels to a diagram on an interactive whiteboard;
- Show Me* activities:
- Get Up and Go* activities;
- pausing and asking children to predict what comes next;
- focusing children's attention on a shared text or image by using sticky notes to mask key words or diagrams, and asking children to speculate, by reasoning, what might be concealed;
- children creating Mind-maps®, either using whiteboards or with an adult as scribe;
- children undertaking short practice tasks, such as writing or drawing on individual whiteboards or using number fans;
- using whole-body activities such as sculpting or freeze-framing scenes from a shared text;
- handling artefacts.
- * These activities are explained in *Progression in phonics* (DfES, 2000).

Inclusion of all learners: differentiation and scaffolding

Within whole-class teaching, all children can be actively engaged in learning through:

- Pre-tutoring preparing some children in advance for the questions that will be asked by, for example, playing a preliminary word game.
- **Differentiated questions** plan two or three specific questions to ask individual children (including higher-attaining and lower-attaining children) directly a better questioning technique than 'hands up'. If they can't answer a question, try not to move on to another child immediately or to say 'Who can help... (the child)?' Instead, stay with that child and provide scaffolding (e.g. linking the question to something they already know) until they are able to answer. Use open questions as well as closed questions, and give



- children thinking time, or time to talk with a partner, before answering (the *Conditions for learning* unit looks at questioning in more detail, including alternatives to questions).
- Differentiated support for example, talk partners may be varied to include mixed-ability pairs as well as friendship pairs or pairs of similar ability. Visual aids, ICT support and other scaffolds can be used selectively.
- **Differentiated tasks** for example, 'Write one example on your whiteboard', 'Give me three examples'.



Other possible CPD activities

- Discuss the list of strategies to promote active listening on page 38.
 Can you add any further suggestions? Which of these do you already use? Which do you need to work on?
- In relation to the speaking and listening issues discussed in this section and in the other sections of this unit, you may find activities from *Speaking*, *listening*, *learning*: working with children in Key Stages 1 and 2, Professional development materials helpful (see the chart on page 28).

Part 2 Learning in a group

Many theories of learning emphasise the social aspects of learning and the importance of interactions with others.

Cooperative and guided group work

Cooperative group work

In cooperative group work, children work together in small groups on an investigation, problem or other learning task that requires collaboration. It is a context that can develop both their learning and their social skills.

Cooperative group work gives children opportunities to:

- learn from each other:
- engage in exploratory talk, deepening their understanding;
- develop problem-solving and turn-taking skills;
- learn to negotiate and see things from someone else's point of view, and to argue their own point of view;
- build relationships with a wider circle of people than their own immediate friendship group.

For cooperative groups to be successful they have to be planned, implemented and monitored. Teachers and practitioners need to help children recognise the importance of working together and to understand how it helps their learning and social skills develop. This involves establishing rules for group talk and sharing roles, and encouraging children to self-monitor how they work together. Effective cooperative group work is more likely to happen when the task is clearly defined with an agreed timescale and negotiated success criteria.

Guided group work

In guided group work, the group works with an adult who guides the learning through a planned sequence of tasks and discussions. Guided group work offers opportunities for focused teaching and assessment.

The small number of children allows teaching to be fine-tuned to particular needs and for the level of challenge to be pitched appropriately.

Guided group work is a well-established feature of the National Strategies. Teaching assistants often lead guided group work, including using the National Strategies' intervention programmes. Some schools have begun to use guided group work in other areas of the curriculum. For example, guided reading of non-fiction texts is used in history lessons when the main focus is on sharing and discussing the information.

Across the whole curriculum, guided group work supports the development of language for effective oral as well as written communication, and is particularly supportive of bilingual learners. Through use of talk frames and focused input by teachers and practitioners, it provides an opportunity to listen to and use the specific language required in a range of genres. For example, the use of activities such as barrier games during guided talk supports extended talk linked to mathematical language and knowledge.

The *Speaking*, *listening*, *learning* handbook, pages 11–16, looks at speaking and listening across the whole curriculum and gives examples.

CPD ACTIVITY

Talk across the curriculum

Aim

To reflect on opportunities to encourage speaking and listening in all areas of the curriculum.

Pre-meeting task

Read the list of talk strategies and classroom examples on pages 24–27.

Materials

 Current medium-term plans for science or, for Foundation Stage, an aspect of knowledge and understanding about the world

Organisation

- In pairs, share *two* successful speaking and listening activities you have recently undertaken. Regroup and list these briefly.
- In pairs again, look at the plans for the next session in science or knowledge and understanding about the world. Discuss ideas for including a 10-minute speaking and listening activity in this. If it already has a speaking and listening focus, use the opportunity to develop some fresh ideas.
- Share the suggestions and consider whether all the speaking and listening techniques are being explored. As a staff, select one technique that is new or under-represented. Return to the plans and add a speaking and listening activity for a subsequent lesson using the new technique.
 Agree to share the outcomes at a future staff meeting and decide on your next steps.

CPD ACTIVITY

Rules for cooperative groups

Aim

• To consider how to implement rules for cooperative groups.

Materials

Video clip 2, 'Managing group work'

Organisation

- Discuss the following proposition: 'It is not enough to have a list of rules for group talk; children need to be taught how to work together in a group.'
- Suggest ways this teaching can occur.
- Watch video clip 2, which shows teachers supporting the establishment of group work, and then discuss the following:
 - How does the teacher support the children in working successfully as a group?
 - What strategies can be employed for constantly revisiting and reinforcing acceptable group behaviours?
 - How might you adapt this approach for the age group you work with?
- During your discussions, note any possible barriers to greater use of group work. Review the barriers you have identified. Some may be organisational or resource issues that can be quickly resolved. Others may be more fundamental issues that need a longer-term approach.
- If behaviour and/or ethos are barriers to implementing group work, you may wish to explore the sections on ethos (pages 42–52) or behaviours and routines (pages 53–55) in the *Conditions for learning* unit.
- Depending on the outcomes of your discussions, you may be ready to draw up group interaction rules with your class and work towards implementing them. Discuss the implications for this.
- Agree that each class will be involved in learning, using cooperative group work. Consider the group-work activity carefully to ensure that the task is clearly defined, with an outcome in terms of both learning and quality of interaction.
- Before you start, agree group interaction rules with your classes. You might begin this process by asking the class a question such as 'How will we know if you have worked well together?'
- Ask the class to evaluate the quality of the interaction against these rules, to consider whether the rules are appropriate and then to modify them in the light of their experience.

Next steps

- At the next meeting, share your class experiences and look at the rules each class has produced. Consider whether the rules should be class- or age-specific or a school-wide set.
- Draw up a group observation checklist based on the rules for use by children and adults in the classroom, to evaluate the quality of cooperative group work.
- Then try implementing the rules. Get the children to reflect on their successes and on areas for development.
- Share what happens in subsequent meetings and decide on how you will continue to develop group work.



Other possible CPD activities

- Discuss the progression poster and page 26 (progression in group interactions) from the *Speaking, listening, learning* handbook.
 Decide how you might use these to develop group work in your school or setting.
- Developing children's social and emotional and behavioural skills: a whole-curriculum approach contains teaching resources focused on children's group work within the theme 'Getting on and falling out'. These materials will be available to all schools and settings from April 2005.
- The Speaking, listening, learning professional development materials handbook provides suggestions for further school-based CPD. Page 13 of the handbook and the video sequence for Year 4 Term 1 'Celts and Romans' are of particular relevance.

Part 3 Independent and individual learning contexts

Working individually offers children the opportunity to encounter new learning and to practise and apply skills and knowledge they have learned. It may help build motivation, pride in their work and selfesteem. It offers teachers and practitioners opportunities for detailed assessment of the individual. An individual learning task might be something completed over an extended period of time, such as building a model, writing and making a book, or independent reading. Individual learning may also involve short, regular periods of practising a skill such as throwing a netball into a hoop, handwriting or playing an instrument.

There are many occasions when children will be learning independently of adult support. This may be individually or in a group situation. In both contexts, the teacher or practitioner will have planned a sequence of learning experiences leading up to the independent work to scaffold the children's independent learning. This should ensure that the balance of challenge and support creates a productive independent learning experience. Successful learners understand that learning can be difficult and that perseverance and motivation are required (see the *Conditions for learning* unit). However, there comes a point where children may lose interest if the challenge is too great.

Children working independently and individually can be supported by aids that provide further scaffolding, for example a writing frame, a help menu on a computer program or a highly structured and predictable environment. Posters with learning prompts such as 'What do I do when I get stuck on a spelling?' or 'How do I save my work to disk?' can be produced in collaboration with children and displayed in the classroom. Children should be encouraged to use such aids before seeking adult support. As well as focusing on subject skills and knowledge, learning-prompt posters can encourage children to think generally about how they become more independent learners.

Classroom organisation and management are also important factors in encouraging and supporting independence (see the *Conditions for learning* unit, section 2).



CPD ACTIVITY

Working independently

Aim

• To consider how to support the development of independence.

Organisation

- In pairs, discuss the following:
 - How do you encourage independence when children are working in groups and individually?
 - What supports independence in the classroom?
 - How is it supported in the wider school community or setting?
- Regroup to draw up a list of strategies you are already using successfully, both in the classroom and in the wider school community.
- Individually, select two strategies from this joint list that you do not currently use in your classroom, but are prepared to trial.
- As a group, decide on one key area for development in the wider school community. This might be, for example, encouraging peer mentoring and support at playtimes or allowing the school council more autonomy. Discuss how you will take this forward.

Next steps

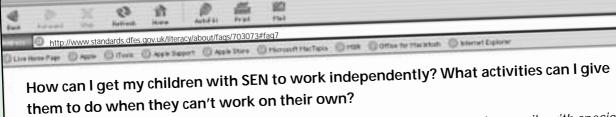
- Individually, trial the classroom strategies you have selected for a period of at least a month.

 Arrange to share the effects of these changes in a subsequent meeting.
- Decide how you are going to implement, trial and monitor the whole-school focus you have selected, and agree a timetable for meeting to reflect on progress.



Encouraging independence for children with special educational needs

The following is one of a series of frequently asked questions about special educational needs posted on the inclusion pages of the Primary National Strategy website: www.standards.dfes.gov.uk/primary.



You can find some good ideas for activities in the NLS publication Supporting pupils with special educational needs in the literacy hour (DfES, 2000), on handouts 14 and 15 in module 3. There are also ideas on a chart called 'Alternatives to written recording' in the NLNS publication Including all children in the literacy hour and daily mathematics lesson (DfES, 2002).

Children will need to be actively taught core routines for certain tasks, practising them with progressively less help until they can quickly tell you and show you what they have to do if you ask them to do that type of task. They need to be given independent tasks that have previously been modelled for them in the shared time. Sometimes it helps to give them more complex independent tasks towards the end of the week, when they have seen other children demonstrate their learning in the plenary.

They will need very clear guidelines: 'I expect you to have produced at least three lines by ten past ten; I will be asking you then to share these with your writing partner."

Visual prompts in the form of pictorial task cards will help, as will support in the form of writing frames, word mats, relevant classroom displays, and prompts such as a card with ideas for 'Five things to do if you are stuck with your work'.

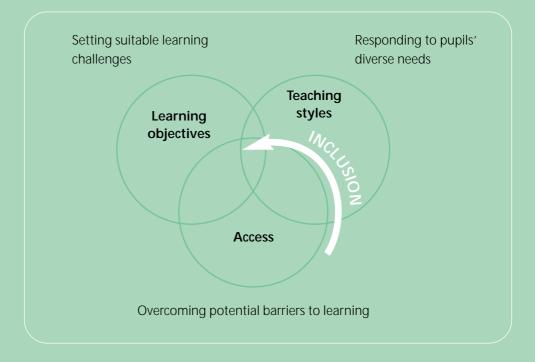
One problem may be that if you always seat children with learning difficulties together in one group, they have only their own more limited resources to fall back on when they get into difficulties. You might want to try varying your classroom organisation: where you or a teaching assistant are working directly with a group for guided work, then children need to be at the same level, but otherwise children should have opportunities to undertake collaborative tasks in mixed-ability groups, or work on independent tasks alongside more able children.

Whatever strategies you adopt, remember that all children need to learn the skills of working independently. Teaching them these skills is likely to be the most powerful contribution you can make to their future success in school.



Section 3 Diverse learning needs

In planning and teaching, schools must give regard to inclusion of all learners (National Curriculum, 2000, statutory statement on inclusion).



Setting suitable learning challenges in planning for inclusion is discussed in the unit *Designing opportunities for learning*.

The National Curriculum (pages 31–33) requires teachers to have high expectations of all pupils. This includes taking into account the needs of:

- boys and girls;
- higher-achieving children;
- children with special educational needs;
- children with disabilities;
- children from all social and cultural backgrounds;
- children from all different ethnic groups, including Travellers, refugees and asylum seekers, and those from diverse linguistic backgrounds.



In particular, the National Curriculum advises that teachers should take specific action to respond to pupils' diverse needs by:

- creating effective learning environments (see the *Conditions* for learning unit, pages 42–59);
- securing motivation and concentration (see the Conditions for learning unit, pages 14–30);
- providing equal opportunities (see the *Designing opportunities for learning* unit, pages 38–47);
- using appropriate assessment approaches (see the Assessment for learning unit);
- setting targets for learning (see the Assessment for learning unit).



Resources for CPD on diverse learning needs

There is a wealth of materials for schools to draw on if they need to undertake CPD in relation to the learning needs of any of the groups mentioned on page 49. These include the following:

DfES

The Standards website has areas on ethnic minorities, gender and achievement, and gifted and talented pupils: www.standards.dfes.gov.uk

Available to download from NLS/NNS/PNS websites or to order from Prolog are:

- Supporting pupils with special educational needs in the literacy hour
- Including all children in the literacy hour and daily mathematics lesson
- Supporting children learning English as an additional language (revised 2002)
- Learning and teaching for children with special educational needs in the primary years

OCA

The QCA website has sections on:

- Working with gifted and talented children
- Respect for all
- Guidance on planning, teaching and assessing the curriculum for pupils with learning difficulties: www.qca.org.uk/ages3-14/inclusion/303.html

Ofsted

Publications available to download from the Ofsted website (www.ofsted.gov.uk) include:

- Yes he can schools where boys write well
- Literature search on improving boys' writing
- Support for minority ethnic achievement: continuing professional development
- Provision and support for Traveller pupils
- Setting targets for pupils with special educational needs
- Gender divide: performance differences between boys and girls at school (available to buy)

Other

- Talking Partners is a programme developed by Bradford LEA to address the oral language development of children (particularly those who are bilingual): www.educationbradford.com/Useful+Resources/Talking_Partners/Intro.htm
- Guidelines on delivering a curriculum for cultural diversity and race equality (Hertfordshire County Council). Extracts from this publication can be found on the Learning and teaching in the primary years CD-ROM.



Part 1 Learning styles

There are several different theories of learning styles. The concept is rooted in the classification of psychological types, and learning-style theories are based on research demonstrating that – as the result of heredity, upbringing and current environmental demands – individuals have a tendency to perceive and process information differently. Different researchers have proposed different sets of learning-style characteristics.

The concept of learning styles is fiercely debated and some remain unconvinced by the research. Many schools have examined a learning-style approach known, colloquially, as 'VAK', a classification based on different sensory perceptions – visual, auditory and kinaesthetic (VAK). This approach claims that we all have a preferred learning style – visual, auditory or kinaesthetic – and will therefore learn best if new knowledge is presented in a way that appeals to our preferred style.

If interpreted too simplistically or too literally, a focus on learning styles could lead children (and teachers) to take the view that they have a *fixed* learning style and are unable to learn effectively in other ways. Most of us use – and need to use – a variety of learning styles. We all need to know how to gain information from interpreting graphs

and charts, how to listen carefully and how to

undertake practical tasks and experiments. Our learning experiences need to be varied and we should use different approaches strategically in response to a range of factors in each learning

opportunity. It is also the case that visual, auditory and kinaesthetic experiences may overlap. For these reasons, teachers and practitioners are careful not to encourage children to think of themselves as having a fixed learning style.





They may, however, use the ideas about learning styles to consider how:

- lessons can be varied and interesting to engage children in using visual, auditory and kinaesthetic modes;
- different subject disciplines can promote and develop particular ways of learning, for example art and design could support and develop visual perception, and PE could support and develop kinaesthetic learning;
- mixing different types of materials, elements and explanations can aid children's attention and help them learn more effectively.

The use of ICT can support the use of visual, auditory and kinaesthetic approaches.

Visual, auditory and kinaesthetic

Visual learning takes place through seeing pictures, charts, diagrams, video, ICT images, demonstrations and so on. Visual stimuli may also include the written word.



Classroom example: A group of children looked at pictures depicting Greek and Roman myths on the National Gallery website. Each child selected a painting and wrote a brief piece explaining what they thought was happening in the picture. They then researched the story of the painting to see if they were right. Finally, they selected another event from the myth and created their own painting or cartoon strip.



Auditory learners learn best through listening, as, for example, when listening to explanations and taking part in discussions. They also enjoy giving oral presentations.



Classroom example: Chris listened to an audio tape (a dramatisation of an ordinary day in classical Athens), making notes as he listened. He then used these notes to give a mini-presentation on the daily life and education of a boy of his age in ancient Greece.

Kinaesthetic learners learn best when physically engaged in a task. Role-play, simulations and practical tasks appeal to these learners.



Classroom example: To learn the names and characteristics of the city-states of ancient Greece, the children created a chant with accompanying actions. At the beginning of history lessons they repeated the chant and performed the actions.

CPD ACTIVITY

Examining a learning-style approach

Aim

• To consider how a variety of approaches can be used in sessions.

Materials

- Video clip 3, 'Researching Greek armour'
- Handout 4, 'Case study: VAK learning opportunities in a history lesson'
- Medium-term plans for history or, for Foundation Stage, for knowledge and understanding of the world

Organisation

- Read the introductory comments regarding learning styles (pages 52–54).
- In pairs, read the case study lesson on handout 4 and watch the video clip. Note the visual, auditory and kinaesthetic learning opportunities offered to the children in both, then share your observations with your partner.
- In pairs, reflect on the last history lesson (or other curriculum subject, or area of learning in Foundation Stage) you taught. How did you provide opportunities for children to learn in a variety of ways?
- Are there any learning approaches (visual, auditory or kinaesthetic), you tend to overlook?
- Share your discussion in a larger group and list some visual, auditory and kinaesthetic teaching techniques that have been particularly successful.
- Look at your plans for the next lesson or session. Annotate these with suggestions for including VAK learning opportunities. These might include opportunities to encourage children to choose different approaches.

Next steps

- Try out in the classroom the lesson you have planned. In a plenary, ask the children to reflect on which activities they enjoyed and why. Which helped them learn? Which did they find hard? Did individual children choose the approaches you expected from what you know about them as learners?
- Share your observations and discussions at a subsequent staff meeting. What are the implications of using a VAK approach to extend children's learning? Decide what changes, if any, you plan to make to your teaching.

CASE STUDY

VAK learning opportunities in a history lesson

The lesson starts with a few minutes of 'brain gym'. The children stand up and go through a familiar set of movements accompanied by lively music.

After a brief introduction reminding them of both their prior learning and the 'bigger picture' of the whole unit of work, they go through a chant they have composed about city-states. The children have added a movement to the name of each city, which they perform as they chant.

The teacher introduces them to the lesson objective – researching Greek armour – and places a piece of armour (reproduction 'dressing-up' armour) on each table. She invites them to handle the item and discuss what it is and where it comes from in reality, not what it represents. After a minute or so, they agree these are modern reproductions (not made of metal) and are for costume purposes only and not for fighting or protection.

Guided by a set of questions, the children discuss what information they can hypothesise from these reproductions that they will then check in their research. As they discuss, they make notes on their speculations and questions. The pieces of armour are circulated and more notes made.

Children share some of their speculations and questions (for example, why is the shield so small?) and begin to hypothesise some answers (involving, for example, the weight of the shield, the warriors' need for speed and whether there were different shields for different types of fighting).

Different research sources are introduced:

- laptops with history software and Encarta;
- books on ancient Greece;
- a video of a television programme on ancient Greece;
- a selection of postcards and other pictures and the reproduction armour.

As the children begin their research, they are encouraged to make both visual and written notes.

The children share some of the facts they have discovered or confirmed about Greek armour and suggest the further research they need to undertake.

The teacher draws the lesson to a close by reading them a picture book of a Greek myth. She asks them to listen carefully for any evidence about armour within the story. As she reads, she shows them the pictures in the book.



Other possible CPD activities

- In year groupings, go through your medium-term plans for a subject or area of learning. Identify VAK opportunities and resource implications.
- From the QCA schemes of work website, download one example of a medium-term plan for a unit of work. This could be for one area of the curriculum, for example history, or you may wish to look across two or three subjects, for example art and design, history and science, to see if there are common issues. Within the plan, highlight opportunities for a VAK teaching approach, using a different colour for each learning style. Are any under-represented? Can you suggest further activities?
- Watch video clip 4, 'In all kinds of weather'. This shows literacy teaching in a class of children who have profound and multiple learning difficulties. How does the 'sensory' approach adopted here support the use of a range of different approaches?





Part 2 Multiple intelligences

Another approach to supporting children's learning by acknowledging and drawing on their strengths is based on the concept of multiple intelligences. There are a number of different taxonomies of intelligences. The work of the psychologist Howard Gardner has had particular impact in schools. Gardner suggests that people have different ways of perceiving and understanding the world. Each is classified as a different type of 'intelligence' – a set of skills allowing individuals to recognise and resolve problems they face.

As with the theories of learning styles, there is debate about the concept of multiple intelligences. There is no empirical evidence to support Gardner's theory, although he does draw on a wide range of anthropological and biological knowledge. Critics believe multiple-intelligence theories lack rigour and precision and wonder if the number of intelligences will continue to increase.

Whether or not one subscribes to theories of multiple intelligences, the high standards within a rich and broad curriculum advocated in *Excellence and Enjoyment* encourage provision of all types of learning opportunity. Such a curriculum is personalised to encourage children to develop their strengths and to have these strengths acknowledged and celebrated.

It is claimed that traditional schooling favours verbal-linguistic and logical-mathematical intelligences, and that this may disadvantage children with aptitude in other areas of intelligence.

Gardner suggests:

- a balanced curriculum that incorporates the arts, self-awareness, communication and physical education;
- teaching approaches that appeal to all the intelligences, including role-playing, musical performance, cooperative learning, reflection, visualisation, storytelling and so on;
- assessment methods that take into account the diversity of intelligences as well as self-assessment tools that help children understand their own 'intelligences'.

Gardner emphasises the cultural context of multiple intelligences. He originally identified seven 'intelligences' but has added further ones.



Gardner's intelligences

Intelligence	Characterised by
Verbal-linguistic	A facility for words and language in speaking, reading and writing
Logical-mathematical	A capacity for inductive and deductive thinking and reasoning, as well as for the use of numbers and the recognition of abstract patterns
Visual-spatial	An ability to visualise objects and spatial dimensions, and to create internal images and pictures
Bodily-kinaesthetic	A high degree of control over physical motion; being adept with hands and enjoying active involvement in an activity
Musical-rhythmic	An ability to recognise tonal patterns and sounds; a sensitivity to rhythm and beat
Interpersonal	Strong social skills and relationships with others; being a sensitive listener
Intrapersonal	An ability to be reflective and intuitive; a high degree of self-knowledge and self-reflection (metacognition)
Naturalistic	Enjoyment of the outdoors; conducting own enquiries and making links between new learning and the natural world; collecting data and creating own categories for classification
Existential	Sensitivity and capacity to tackle deep questions about human existence such as the meaning of life and why we die



CPD ACTIVITY

Multiple intelligences

Aim

To consider multiple intelligences.

Materials

- Grid on page 59
- One week's plans

Organisation

- Working in cross-year groups, identify four occasions, from any subject or area of learning, where children have the opportunity to use the characteristics of 'musical-rhythmic intelligence'. Share these examples with the whole meeting and discuss how they support children's learning.
- Then try the same activity with the other 'intelligences'. Are there any for which it is a struggle to find examples? Are any over-represented in your planning? Are any under-represented? Do any patterns emerge? Does it change with year groups?
- As a staff, discuss the implications for your curriculum and the range of experiences offered to children.

Next steps

- As a staff, identify the important ideas to emerge from this activity. You might like to write them on a large sheet of paper and display them in the staff room.
- How could you apply the ideas you have discussed over the next few weeks?
- Agree some practical steps, and consider how you will monitor their impact and share the results.
- At a future meeting, discuss what you have done and what more you have found out about different ways of learning. Decide what your next steps will be.

Section 4 Resources

Additional CD-ROM

To complement these materials, a double CD-ROM will be available in the autumn term.

CD 1 Excellence and Enjoyment: learning and teaching in the primary years

This contains all the units from this set of materials plus additional materials such as background research papers, further case studies and advice on running CPD sessions. It will be fully searchable through a key word search.

CD 2 Excellence and Enjoyment: making the curriculum your own

This CD-ROM has been designed as a companion to the *Excellence and Enjoyment: learning and teaching in the primary years* materials. It is intended to help support schools and settings in making the curriculum their own – in designing their curriculum in order to develop key aspects of learning through curriculum subjects, and to promote enjoyment and creativity as important routes to excellence.

This CD-ROM contains an extensive bank of resources and examples (including video material from schools and settings sharing their own ideas and experiences), which are arranged both by curriculum subject and according to the 'key aspects of learning' that are highlighted in the *Excellence and Enjoyment: learning and teaching in the primary years* materials. The aim is to provide resources that can help schools and settings focus on and develop particular areas of their curriculum, and to give ideas about creative teaching approaches as part of a planned process of whole-school curriculum design.

References and suggested readings

DfES, QCA and PNS publications

- Curriculum guidance for the Foundation Stage (QCA, 00/587)
- Developing children's social and emotional and behavioural skills: a whole-curriculum approach (pilot edn DfES 0759-2003). This will be available to all schools and settings from April 2005
- Excellence and Enjoyment: learning and teaching in the primary years: introductory guides (DfES 0344-2004 G and DfES 0243-2004 G)
- The impact of parental involvement on children's education (LEA/03339/2003)
- Including all children in the literacy hour and daily mathematics lesson (DfES 0465-2002). This includes a checklist of inclusive teaching in section 3



- Learning and teaching for children with special educational needs in the primary years (DfES 0321-2004 G)
- National Curriculum handbook for primary teachers (DfES,1999)
- Speaking, listening, learning: working with children in Key Stages 1 and 2 (DfES 0627-2003 G)
- Supporting children learning English as an additional language, revised 2002 (DfES 0239-2002 G). This includes appendix 2, 'Checklist for inclusive teaching'
- Supporting pupils with special educational needs in the literacy hour (DfES 0101-2000)
- Teaching assistants in primary schools: an evaluation of the quality and impact of their work (Ofsted, 2002)
- Teaching literacy and mathematics in Year 3 (DfES 0495-2003)
- Working with teaching assistants: a good practice guide (DfEE 0148/2000)

Useful websites

- Reflective teaching www.rtweb.info
- Primary National Strategy www.standards.dfes.gov.uk/primary
- Becta www.becta.org.uk
- See page 51 for useful websites on diverse learning needs

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Acknowledgements

Many organisations and individuals have contributed to the development of *Learning and teaching in the primary years*. The Primary National Strategy would like to thank them all for their expertise, advice and comments.

In this unit we would particularly like to thank the teachers involved in the talk project led by John Peatfield, the Education Development Unit, St Martin's College, Ambleside, for the materials on pages 24–27.