SEN: Training materials for the foundation subjects

Complementary materials for foundation subjects' teachers of pupils with special educational needs

Introduction

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They form part of the Key Stage 3 Strategy's commitment to ensuring that every learner succeeds. The materials, which are designed for use by teachers of foundation subjects, senior managers and SENCOs, complement and enhance the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002).

About the *SEN: Training materials for the foundation subjects*

All teachers will teach pupils who experience difficulties in some aspects of learning. Their difficulties may relate to communication and interaction, cognition and learning, behaviour, emotional and social development, or sensory and physical needs. The training materials in this pack are intended to provide professional development opportunities for teachers who have pupils with SEN in their classes, to support them in adapting their teaching to the potential and needs of each individual. The materials consist of a series of presenter's notes, OHTs and handouts and an accompanying video (Ref: DfES 0137/2003). These complementary SEN materials are provided for 12 of the 14 foundation subjects modules in the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002). Additional resources for the modules on 'Challenge' and 'Big concepts and skills' have not been provided as part of this phase of SEN provision. The SEN complementary training materials are underpinned by the same principles for teaching and learning as those described on page 4 of the *Training materials for the foundation subjects* folder.

How to use the training materials

The complementary SEN training materials for each module should be used in conjunction with the *Training materials for the foundation subjects* (Ref: DfES 0350/2002); they are not freestanding. This introduction and the 12 modules are designed to be inserted into the appropriate sections of the folder and are intended to provide alternative 'pathways' through the training modules, to help meet the more diverse training needs which may arise for teachers who have pupils with SEN in their classes. Decisions as to which version of the training materials to use will need to be made on a module by module basis, according to the participants' needs and expertise.

As the SEN complementary materials cannot operate independently from the *Training materials for the foundation subjects* it is important that, when planning training based on these resources, presenters first read the introductory section of the *Training materials for the foundation subjects* (Ref: DfES 0350/2002). This includes practical advice on organising training and using the training materials (pages 12 and 13). When preparing to deliver the foundation subjects training modules the following guidance for the use of the SEN complementary materials is offered:

- It is essential that the module in *Training materials for the foundation subjects* is read through first. This will enable the presenter to become familiar with the objectives for the session and will also provide a 'big picture' and context for the SEN materials. It should be noted that the complementary materials are designed to meet the same objectives as those stated in each of the modules in *Training materials for the foundation subjects*.

- Having considered the module and its objectives, read through the SEN complementary presenter's notes, OHTs and handouts. These are intended to provide information which could be used as either an alternative or in addition. It is imperative that the two sets of training materials are considered in conjunction with each other.

- Only alternative and additional OHTs and handouts are shown within these presenter's notes. Although the materials in *Training materials for the foundation subjects* may be referred to they are not shown within the text.

- In order to assist in cross-referencing the two sets of training materials:
  - the numbering of each section in the presenter's notes is consistent in both sets;
  - alongside each subheading in the SEN presenter's notes, the page number of the equivalent section in *Training materials for the foundation subjects* is provided;
  - an 'x' following the number of an OHT or handout (e.g. OHT 1.4x) denotes that it is based on an original OHT or handout, but contains amended content;
  - the SEN OHTs and handouts not labelled with an 'x' are additional resources not referred to in *Training materials for the foundation subjects*. These contain new content, for example case studies.

- At this point, the contexts and settings in which the course participants teach should be considered. Some teachers of pupils with special educational needs will find *Training materials for the foundation subjects* more appropriate to their training needs. In order to meet the training needs of some teachers it may be appropriate to select only some of the alternative activities, OHTs and resources from the SEN complementary materials and to use *Training materials for the foundation subjects* for the rest of the session.

- Once the content of the training session has been established, it will be necessary to devise a way of clearly signalling the relevant path through the 'notes for presenters' provided in the two sets of training materials. This could be done with numbered sticky notes.

- It is important to involve teachers or other professionals with SEN expertise in planning these training events.

When using the presenter's notes with teachers, it should be remembered that special schools do not always have foundation subjects departments and subject leaders. Also, many teachers will teach more than one subject, often in areas where they are not subject specialists.

Using the training materials with 'additional adults'

The provision of additional adult support for individuals or groups of pupils is a widely used access strategy. Ensuring that such support is used effectively is a key management task for teachers, SENCOs and senior managers. Involving 'additional adults' in partnership training with teachers using the foundation subjects materials is crucial. This view is encouraged throughout the complementary training materials.

The video

The video for *SEN: Training materials for the foundation subjects* includes two sequences:

Video sequence 1: Assessment for learning in everyday lessons (module 1)

This was filmed at Lonsdale School, a school for pupils with physical and neurological impairments. It shows Maria teaching a design and technology lesson to nine pupils in a mixed age class (Years 7, 8 and 9). The pupils are working between P6 and National Curriculum level 2.

Video sequence 2: Questioning (module 4)

This was filmed at Brookfields School. It shows Mary and the two teaching assistants teaching a geography lesson to ten pupils in a mixed age class (Years 7, 8 and 9). The pupils are working between P4 and National Curriculum level 3.

Further information about these sequences can be found in the presenter's notes and handouts for the relevant modules. The short-term plans for the lessons from which the sequences have been taken are provided in **handout 3.5x**, page 1 (the geography lesson) and page 4 (the design and technology lesson).

Planning to teach pupils with special educational needs

The term 'special educational needs' has been used as set out in the 1996 Education Act.

> Children have special educational needs if they have a *learning difficulty* which calls for *special educational provision* to be made for them.
>
> Children have a *learning difficulty* if they:
>
> a) have a significantly greater difficulty in learning than the majority of children of the same age; or
>
> b) have a disability which prevents or hinders them from making use of educational facilities of a kind generally provided for children of the same age in schools within the area of the local education authority
>
> c) are under compulsory school age and fall within the definition at (a) or (b) above or would so do if special educational provision was not made for them.
>
> Children must not be regarded as having a learning difficulty solely because the language or form of language of their home is different from the language in which they will be taught.
>
> *Special educational provision* means:
>
> a) for children of two or over, educational provision which is additional to, or otherwise different from, the educational provision made generally for children of their age in schools maintained by the LEA, other than special schools, in the area
>
> b) for children under two, educational provision of any kind.
>
> see Section 312, Education Act 1996

The term 'disability' has been used as set out in the Disability Discrimination Act 1995:

> A person has a disability for the purposes of this Act if he has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities.
>
> Section 1 (1), Disability Discrimination Act 1995

Teachers need to be able to make appropriate choices in planning for teaching and supporting the learning of different groups and individuals. The factors which influence these decisions become even more important when planning to teach pupils with SEN. These can be fundamental in determining the rate of progress pupils are able to make. This section briefly explores some factors which play an important role in improving teaching and learning for pupils with SEN. These factors are specifically referred to in the SEN complementary materials.

Checking and reinforcing understanding

Pupils need to be assured that their successes will be recognised and rewarded and that, when they have difficulty accessing learning, the necessary support will be available. Teachers need to know when things are going well and when they are not, so that they can change their teaching approaches as appropriate.

It is important for pupils to understand what they are expected to learn and what counts as success. This relates to:

- the learning objectives identified for individual lessons and, for some pupils, objectives set for separate episodes of learning within the lesson – each of these requires straightforward success criteria;

- the learning objectives set out in an individual education plan (IEP) which provides medium-term priorities for learning. These may be written as key skill objectives, for example communication or independent learning, or in terms of the pupil's priority needs. A good planning tool or IEP will include success criteria related to these. For example, *I will know if I have achieved X when …*

The principles of assessment for learning apply to each type of objective and their respective success criteria. However, for many pupils with SEN, there will be barriers to this and other areas of understanding. It follows that all adults working with the pupils need to be clear about what is expected of them in a lesson and what counts as success for members of the group. Teachers should also keep to the medium-term priority targets for individuals as set out in their IEP or other documentation.

Lesson preparation might include discussion of:

- how to check for signs of success;

- how information about pupils' understanding and misunderstanding will be communicated between adults during the lesson.

The classroom team can then:

- work together to help pupils to recognise their own success in each objective, helping them to reflect on their achievement in appropriate ways;

- ensure that success, where possible, is identified, even if it is shown by a single remark or other response;

- ensure that a lack of full understanding or misconception is not overlooked and that reinforcement is available or a different approach is tried, perhaps through the use of a different teaching skill. For example, modelling, rather than explaining.

It is particularly important to reinforce success where behaviour is an issue. All adults need a general understanding of good practice in the use of praise, which is backed by the school policy. They also need to understand that some pupils find praise, particularly in front of their peers, hard to accept and such reinforcement will need to be made appropriate for them.

Modes of communication

We all have preferred modes of communication. Some are particularly comfortable with the telephone; some prefer e-mail, others like face-to-face communication. The same is true for pupils who use alternative or augmentative communication (AAC) to overcome barriers to learning.

Many possibilities for the use of AAC in lessons now exist, particularly as a result of the rapid and continuing development of information and communication technology. Several examples are listed in the glossary. Most pupils will have their preferred method. It should not be assumed that because a pupil has a specific disability or impairment a particular mode will be preferred or appropriate. For example, someone who is blind may much prefer to receive documentary information by audiotape rather than Braille.

It is also important to realise that all interpersonal communication is multimodal. Our body language, for example, says at least as much as other forms of conversation. The deliberate use of an alternative method of communication alongside a more usual form, for example sign and speech together, is good practice, as it allows for information to be communicated through a range of channels. It can also aid progression in learning, for example:

- a symbols ICT package can enable pupils to grow in confidence and to progress from symbols alone, as representations of language on screen, to written text alongside symbols and then to written text alone;

- a teacher can gradually discontinue the use of a picture of an object as the pupil builds their understanding of the concept in question.

Teachers and other adults will probably be well aware of their pupils' preferred mode(s) of communication.

Glossary of terms

Asperger's syndrome

Pupils with Asperger's syndrome share the same triad of impairments as pupils with autistic spectrum disorder but have higher intellectual abilities and their language development is different from the majority of pupils with autism.

Autistic spectrum disorder (ASD)

Autistic spectrum disorder is a relatively new term which recognises that there are a number of subgroups within the spectrum of autism. Pupils with autistic spectrum disorder find it difficult to:

- understand and use non-verbal and verbal communication;

- understand social behaviour – which affects their ability to interact with children and adults;

- think and behave flexibly – which may be shown in restricted, obsessional or repetitive activities.

Bio-feedback technology

Electronically generated feedback systems for support with movement difficulties.

British sign language

The sign communication medium most commonly used by deaf people and others in the UK. British sign language has recently been recognised by the Government as a language in its own right.

Disabled

A person has a disability if he has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities.

Eye-pointing

A communication system in which the learner uses their eyes to direct attention to a choice between symbols, pictures or objects. It is possible to use eye-pointing, for example, to choose from letters of the alphabet and hence to join in conversations.

Fine motor skills/Gross motor skills

Distinction made between skills used to achieve finely controlled movements and those used to achieve substantial movements.

Individual education plan (IEP)

A teaching and learning plan that sets out three or four short-term learning targets and the additional or different strategies or interactions that will be used. IEPs are only necessary when the school's usual planning processes do not record detailed planning for pupils with SEN.

Moderate learning difficulties (MLD)

Pupils with moderate learning difficulties will have attainment levels significantly below expected levels in most areas of the curriculum, despite appropriate interventions.

Pupils with moderate learning difficulties have much greater difficulty in comparison to their peers in acquiring basic literacy and numeracy skills and in understanding concepts. They may also have associated speech and language delay, low self-esteem, low levels of concentration and under-developed social skills.

Multi-sensory impairment

Pupils with multi-sensory impairment have a combination of visual and hearing difficulties. They are sometimes referred to as 'deafblind', but may have some residual sight and/or hearing. Some also have additional disabilities, but their complex needs mean that it may be difficult to ascertain their intellectual abilities. They have difficulties in perception, communication and the acquisition of information. Incidental learning is limited. The combination can result in high anxiety and multi-sensory deprivation. They may need alternative means of communication.

Neurological impairment

Impairment of the nervous system.

Non-verbal interventions

Interventions not using words, for example nods, gestures, body language.

Objects of reference

Objects that, like words or symbols, can be used to represent the things about which we communicate.

P scales

The P scales are a set of indicators for recording the achievement of pupils with special educational needs who are working towards the first level of the National Curriculum. The scales are designed for pupils who are working below the level of their peers. There is a P scales for every National Curriculum subject.

Picture exchange communication

Communication systems that start from using pictures to represent the things about which we communicate.

Profound and multiple learning difficulties (PMLD)

Pupils with profound and multiple learning difficulties have complex learning needs. In addition to very severe learning difficulties, pupils have other significant difficulties, such as physical disabilities, sensory impairment or a severe medical condition. Pupils require a high level of adult support, both for their learning needs and also for their personal care. They are likely to need sensory stimulation and a curriculum broken down into very small steps. Some pupils communicate by gesture, eye-pointing or symbols, others by very simple language. Their attainments are likely to remain in the early P scale range (P1–P4) throughout their school careers.

Sensory impairment

Normally used to refer to hearing and/or visual impairment.

Severe learning difficulties (SLD)

Pupils with severe learning difficulties have a significant intellectual or cognitive impairment. This has a major effect on their ability to participate in the school curriculum without support. They may also have difficulties in mobility and coordination, communication and perception and the acquisition of self-help skills and may also require teaching of self-help, independence and social skills. Some pupils may use sign and symbols, but most will be able to hold simple conversations. They will need support in all areas of the curriculum.

Specific learning difficulty

Pupils with specific learning difficulties (SpLD) have a particular difficulty in learning to read, write, spell or manipulate numbers so their performance in these areas is below their performance in other areas. Pupils may also have problems with short-term memory, organisational skills and coordination. Pupils with specific learning difficulties cover the whole ability range and the severity of their impairment varies widely. Specific learning difficulties include dyslexia, dyscalculia and dyspraxia.

Tactile board

A board with objects or symbols attached to it that are meant to be identified by touch.

Tactile symbols

Symbols designed to be identified by touch.

Visual cues

Any system for directing attention to something which uses the visual channel, for example a control bar that flashes when a new e-mail has been received. Important for systems that rely heavily on auditory alerts.

See also the DfES guidance on SEN categories (*SEN Code of practice* [ref: DfES 581/2001]; *Data collection by type of special educational needs* [ref: LEA/0200/2003]; both can be downloaded from SEN website www.dfes.gov.uk/sen).

Acknowledgements

Module 1

Assessment for learning in everyday lessons

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Assessment for learning in everyday lessons' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 1.1–1.4 • Handouts 1.1–1.3 • Appendix 1.1, Background notes • Video sequence for this module • Flipchart and pens	• OHT 1.4x • Handouts 1.1x, 1.2x, and 1.3x • Additional video sequence

Additional notes for presenters

The essential elements of assessment for learning are the same for all sectors of education. The approach adopted will depend on individual pupils' strengths and barriers to learning, especially the communication modes with which they are most comfortable (see further information about communication modes on page 6).

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about assessment for learning* (Ref: DfES 0045/2003) which provides information for teachers about the first three modules in the *Training materials for the foundation subjects* folder. The leaflet includes sections on 'The importance of assessment for learning' and on the key messages for this module, 'Assessment for learning in everyday lessons'. It can be downloaded from www.standards.dfes. gov.uk/keystage3

Pre-course task   (DfES 0350/2002) page 19

In addition to reading **appendix 1.1**, Background notes, participants should read *QCA Planning, teaching and assessing the curriculum for pupils with learning difficulties*: *General guidelines* and in particular the chapter, 'Recognising progress and achievement'. This can be downloaded from www.nc.uk.net/ld

1.1   Introduction   (DfES 0350/2002) page 20

Share the objectives for the session shown on **OHT 1.1** and, in addition to the points made on page 20 (DfES 0350/2002), make clear that the session should help participants to:

- understand the important role of teaching assistants in supporting participation and engagement in the learning process. Make the point that where the term 'teacher' is used in the session it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists;

- recognise the importance of employing effective strategies for including all pupils. Successful approaches to assessment for learning will reflect the strengths of and the barriers to learning for individual pupils and inform effective planning for the class;

- recognise that the organisation and structure of the lesson should enable both planned and unexpected achievements to be included in assessments.

Point out that where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

1.2   Assessment for learning –   (DfES 0350/2002) pages 20–21
defintion and key characteristics

After showing **OHT 1.3**, the following additional points can be made.

- Barriers to learning need to be minimised. This requires teachers to identify appropriate and responsive strategies to ensure that learning goals are shared with pupils through the use of oral or visual prompts, signing, symbols, object of reference, eye-pointing and ICT (see page 6 for information about modes of communication).

- An understanding of individual learning characteristics will help to inform strategies, cues and prompts to motivate and promote the active engagement of all pupils.

- All classroom staff can contribute to the provision of information and evidence about errors, misconceptions and the learning challenges experienced by pupils with different needs.

- Next steps in learning may require a more careful focus on planning and presenting activities which encourage and support independence so that pupils do not become over-reliant on adult intervention.

- In showing evidence of progress, it is important that the recording systems used in the classroom or school capture the small but significant steps in learning for individual pupils and recognise the value of lateral progression, working at similar objectives in different applications over time.

- It is possible that a small number of pupils may regress because of the impact of medical needs on their learning.

1.3 Identifying effective teaching strategies for assessment for learning (DfES 0350/2002) page 22

Handout 1.1x is provided as an alternative to **handout 1.1**. It includes teaching strategies which will support and promote assessment for learning for pupils with learning difficulties.

1.4 Lesson video (DfES 0350/2002) page 22

The *Training materials for the foundation subjects* video sequence showing a Year 7 music lesson at Langley School is likely to be suitable for many teachers of pupils with SEN, especially pupils with behaviour, emotional and social difficulties or moderate barriers to learning. An alternative video sequence (*SEN: Training materials for the foundation subjects* Ref: DfES 0137/2003) has been provided for teachers of pupils with sensory impairments and more profound and complex difficulties. Where the alternative video sequence is used:

- Ask participants to note examples of the strategies being used in the video, and their impact on learning, on **handout 1.1x**.

- Point out that the excerpts from the lesson will only show some of the assessment for learning strategies employed. More would be evident if the whole lesson were observed.

- Provide the following information:

   – Lonsdale School is an age 3–18, mixed school in Stevenage for pupils with physical and neurological impairment.

   – The video shows a design and technology lesson with a mixed age class (Years 7, 8 and 9). The pupils are working between P4 and National Curriculum level 2. Following the lesson there is a sequence where the class teacher, Maria, reflects on using assessment for learning with her pupils.

   – The lesson is adapted from the QCA scheme of work unit 7B, 'Using control'.

   – The lesson is supported by four teaching assistants, Jacquie, Amanda, Anne and Emma. Anne and Emma are assigned to individual pupils.

- Show the first part of the video until the first pause and then allow a couple of minutes for participants to begin noting examples.

- Ask participants to continue adding examples, and restart the video.

- Stop at the second pause to allow a couple of minutes for participants to add to their notes.

- Restart the video and show the plenary to the lesson.

The short-term plan for the lesson from which this video sequence is taken is provided on **handout 3.5x**, part 4 (module 3, 'Planning lessons').

1.5   Discussion of video   (DfES 0350/2002) page 23

Handout 1.2x provides examples of strategies used in the design and technology lesson observed and their impact on learning.

The four minute video sequence in which Maria reflects on using assessment for learning can be shown and used to support the discussion of the lesson. The six clips should be used selectively and flexibly according to the prior knowledge of the audience and their initial responses to discussion about how the key characteristics of assessment for learning have featured in the lesson and impacted on learning.

1.6   Departmental implementation   (DfES 0350/2002) pages 23–24

Handout 1.3x is provided as an alternative to handout 1.3. It includes teaching strategies that will support and promote assessment for learning for pupils with SEN.

1.7   Conclusion (DfES 0350/2002) page 24

Where relevant, the following additional points can be made in summing up.

Areas of assessment for learning that will make the most significant impact on pupils with SEN include:

- using a range of strategies for sharing objectives with pupils;

- ensuring objectives are shared and displayed so that teaching and support staff can refer to them during the lesson, through 'mini-plenaries';

- giving some pupils short-term targets in the lesson (perhaps timed) to help them to meet learning objectives and maintain focus and engagement;

- linking the learning objectives to the bigger picture by making connections with prior learning, present experiences and next steps, for example by referring to work on display at appropriate points in the lesson;

- giving targeted positive feedback and reasons for gains in learning, for example: *Good, well done because …* and *What will this help you to achieve?* Be aware, though, that some pupils cannot cope with positive feedback so the question alone may have a bigger impact;

- building on strengths, such as the effective oral skills of many pupils experiencing social, emotional and behaviour difficulties, when planning for assessment for learning;

- promoting a positive learning environment in the classroom as *a place where we all learn, even when we get stuck*.

Areas of assessment for learning that will make the most significant impact on pupils with identified special educational needs in cognition and learning, low-self esteem, language processing, social skills, ability to generalise and transfer will include:

- learning objectives which are linked to previous lessons and prior learning opportunities. They should be linked to clear success criteria for individual pupils. They may need to be communicated in 'pupil friendly' language that pupils understand;

- a major emphasis on promoting confidence that every pupil can improve. This will build confidence in their ability to engage in learning;

- the provision of time for pupils to reflect upon what they have learned and understood, and to identify where they still have difficulties. This approach will provide support for learning which seeks to minimise the isolation of the pupil so as to reduce comments such as *I can't do this, I'm no good at this*;

- an age-appropriate focus in tasks and activities which should promote engagement, motivation and participation in learning.

1.8   Ready for more?   (DfES 0350/2002) page 25

OHT 1.4x can be used instead of OHT 1.4. Explain that it presents suggestions for further work.

Ready for more?

Next half-term 'have a go'.

Step 1

Focus on one or two strategies you have identified on handout 1.3x and use them in a series of lessons. Agree and share strategies with teaching assistants who support learning.

Step 2

After the first few lessons, discuss with a colleague what went well and what didn't. Involve teaching assistants in providing their perceptions about individual pupils and possible ways forward for the teaching team.

Step 3

Consider what further support or training might be helpful. (For example, look at the presenter's notes for the other training modules to see if they are directly relevant.)

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Teaching strategies	Examples in lesson observed	Impact on learning
Sharing learning objectives with pupils	• Ensure objectives are expressed in language and communicated in a way that pupils can understand. • Ensure objectives are communicated through oral, visual and tactile approaches.		
Helping pupils to know and recognise the standards they are aiming for	• Give pupils clear success criteria that relate to the learning objectives. • Ensure that the success criteria recognise individual's barriers to learning.		
Involving pupils in peer- and self-assessment	• Give pupils opportunities to talk about what they have learned, and what they have found difficult, using the learning objectives as a focus.		

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Teaching strategies	Examples in lesson observed	Impact on learning
Providing feedback which leads to pupils recognising their next steps and how to take them	• Provide oral, visual and written feedback whenever possible supported by symbols as appropriate.		
Promoting confidence that every pupil can improve	• Encourage pupils to explain their thinking and reasoning within a secure classroom ethos.		
Involving both teacher and pupils in reviewing and reflecting on assessment	• Provide time for pupils to reflect upon what they have learned and understood, and to identify where they still have difficulties. • Support this with the effective deployment of teaching assistants. • Provide good peer and adult models.		

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Examples of teaching strategies in lesson	Impact on learning
Sharing learning objectives with pupils	Teacher: • agrees learning objectives with individual pupils and TAs; • expresses objectives in everyday language. They are grounded in pupils' prior experience; • uses a range of modes of communication e.g. visual media, cards on board; • repeats the objectives (and outcomes) during group work – TAs also do this • reviews learning with individuals against the objectives at the end of the lesson.	Pupils: • (individually) gain a clear understanding of what they are to learn; • are reminded throughout the lesson of what they should be learning.
Helping pupils to know and recognise the standards they are aiming for	Teacher: • shows pupils examples of good outcomes already produced in previous lessons; • states what she expects each pupil to have done by the end of the lesson; • differentiates outcomes according to individual pupil's ability.	Pupils: • (individually) are clear about what they should have achieved by the end of the lesson; • recognise the features of good work.
Involving pupils in peer- and self-assessment	Teacher: • asks individual pupils to evaluate their work in front of their peers during the plenary; • asks James to suggest improvements that could be made to Jamie's design board; • provides plenty of time for pupils to reflect on what they've learned; • ensures the TAs are clear about the success criteria so that they can encourage pupils to self-assess their work.	Pupils: • can assess the progress they have made; • can identify ways of improving their work.

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Examples of teaching strategies in lesson	Impact on learning
Providing feedback which leads to pupils recognising their next steps and how to take them	Teacher and teaching assistants: • repeatedly ask pupils 'What next' questions and are insistent on accurate responses; • provide oral feedback, supported by other communication modes throughout the lesson; • work in partnership, with the teacher directing the team; • use examples of work at different stages of completion to discuss 'next steps' during the plenary.	Pupils: • see clearly what they need to do next; • learn how to improve from the teacher and the work of their peers.
Promoting confidence that every pupil can improve	Teacher: • provides positive and constructive feedback (TAs also do this); • matches individual learning objectives to needs by pitching them at an appropriate but challenging level; • celebrates success and sets appropriate targets.	Pupils: • pupils gain satisfaction regarding their own progress; • have a sense that they can continue to improve; • remain engaged and on task throughout the lesson; • take responsibility for their own learning.
Involving both teacher and pupils in reviewing and reflecting on assessment information	Teacher: • maintains continuous dialogue about progress being made; • frequently reminds pupils of learning objectives and success criteria; • circulates around the groups during the main part of the lesson reviewing and reflecting on individuals' achievements; • involves the teaching assistants in reviewing the learning; • makes effective use of the plenary for reflection with groups and individuals.	Pupils: • have many opportunities to reflect on their learning; • focus on the learning objectives and success criteria; • measure their own progress; • take responsibility for their own learning; • perform at a high standard and make good progress.

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Teaching strategies	Context
Sharing learning objectives with pupils	• Share learning objectives at the beginning of the lesson and, where appropriate, during the lesson in language that pupils can understand. • Display learning objectives in the classroom. • Ensure that learning objectives link to previous learning. • Maintain the focus on learning objectives through the lesson to improve motivation and engagement. • Use these objectives as the basis for questioning and feedback during plenaries. • Evaluate this feedback in relation to the achievement of the learning objectives to inform the next stages of planning.	
Helping pupils to know and recognise the standards they are aiming for	• Show pupils' work which has met criteria, with explanations of why. Record and annotate whether the work was achieved with support. • Give pupils clear success criteria that relate to the learning objectives and individual learning outcomes. • Model what it should look like. For example, exemplify good writing on the board. • Ensure that there are clear, shared expectations about the presentation of work. • Provide displays of pupils' work, which show work-in-progress as well as finished products.	
Involving pupils in peer- and self-assessment	• Give pupils opportunities to communicate about what they have learned and what they have found difficult. • Encourage pupils to work/discuss together, focusing upon how to improve. Build pupils' experiences so that they are prepared for this approach. • Ask pupils to explain the steps in their thinking (How did you get that answer?). Give sufficient time to ensure that pupils can fully engage with this process.	

Assessment for learning – key characteristics

Key characteristics of assessment for learning	Teaching strategies	Context
Providing feedback which leads to pupils recognising their next steps and how to take them	• Value oral as well as written feedback. Recognise a range of strategies to ensure effective communication for individual pupils. • Ensure feedback is constructive rather than positive, identifying what the pupil has done well, what needs to be done to improve, and how to do it. • Identify the next steps for individuals and groups, as appropriate. • Identify the use of short-term targets and experiences to help pupils progress.	
Promoting confidence that every pupil can improve	• Identify small steps to enable pupils to see their progress, thus building confidence and self-esteem. • Identify the opportunities to enable pupils to see their progress in different learning environments (lateral progression). • Encourage pupils to explain their thinking and reasoning within a secure classroom ethos. • Engage support staff in reviews and reflection on pupil work.	
Involving both teacher and pupils in reviewing and reflecting on assessment information	• Reflect with pupils on their work, for example through a storyboard of steps taken during an investigation. • Emphasise the learning process, not just the correct answer. • Provide time for pupils to reflect upon what they have learned and understood, and to identify where they still have difficulties. • Adjust planning, review deployment of support, evaluate effectiveness of task, resources.	

Module 2

The formative use of summative assessment

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'The formative use of summative assessment' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 2.1–2.4 • Handouts 2.1–2.3 • Video sequence for this module • Flipchart and pens	• OHT 2.4x • Handouts 2.4, 2.5 and 2.6

Additional notes for presenters

Presenters may find it helpful to read the introductory notes for module 1, 'Assessment for learning in everyday lessons' on page 11 in conjunction with those provided here.

Summative assessment, as far as special educational needs are concerned, will normally relate to a school or subject-wide target setting model. Schools may use the P levels or a similar 'small steps' scheme of performance descriptions if National Curriculum levels are inappropriate for their pupils. They may set P level or other targets within an individual education plan framework.

Many links between formative and summative assessment depend on pupil communication – for example, the ability to cooperate with peers, reflect on progress made and discuss the development of their own questions and mark schemes. Many pupils with learning difficulties will find all or some of this challenging without significant support from teachers and teaching assistants. The challenge for teachers is to make positive links between formative and summative assessments. Successful approaches to assessment for learning:

- should reflect the strengths and the barriers to learning for individual pupils;

- require pupils to be cued into a lesson's aims through appropriate forms of communication. Other adults can help check that everyone has understood (see page 5 for information about checking for understanding);

- involve self-assessment against targets. This can be encouraged through the use of smiley faces, tokens, sliding scales that move towards a target and other appropriate devices, including many now made possible through developments in ICT.

Successful peer assessment will only be achieved when pupils feel assured that feedback will not be detrimental to their peers' view of them. Care and patience, possibly linked to a behaviour development programme, are needed to develop the group so that self-confidence is maintained.

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about assessment for learning* (Ref: DfES 0045/2003) which provides information for teachers about the first three modules of the *Training materials for the foundation subjects* folder. The leaflet includes sections on 'The importance of assessment for learning' and the key messages for this module, 'The formative use of summative assessment'. It can be downloaded from www.standards.dfes. gov.uk/keystage3

Useful information about improving pupils' learning and performance is set out in the document *Planning, teaching and assessing the curriculum for pupils with learning difficulties: Developing skills* (QCA/DfES 2001: www.nc.uk.net/ld).

Pre-course task   (DfES 0350/2002) page 43

An alternative task for participants who have not received training in module 1, 'Assessment for learning in everyday lessons', would be to read the leaflet *Key messages about assessment for learning* (Ref: DfES 0045/2003) which can be downloaded from www.standards.dfes.gov.uk/keystage3

2.1   Introduction   (DfES 0350/2002) page 44

While showing **OHT 2.1** and introducing the objectives of this module, make the following additional points.

- Where the term 'teacher' is used in the session it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists.

- Where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

2.2   Identifying factors   (DfES 0350/2002) pages 45–46
contributing to learning

Introduce the RE lesson on the video (DfES 0351/2002). Explain that the lesson on the video demonstrates several of the key characteristics of assessment for learning in a mainstream context.

While introducing the lesson, presenters should emphasise the importance of participants looking beyond the context in which assessment for learning takes place. Experience has shown that this can sometimes be an obstacle when the extract is viewed. Point out that the purpose of the video is to enable teachers to

see an approach which effectively embeds the key characteristics for assessment for learning in action. Although this is demonstrated in optimal mainstream conditions, the principles would be true for all contexts, though the approaches would need to be adapted to suit the learning characteristics of the pupils.

2.3   Discussion of video   (DfES 0350/2002) page 46

Arrange participants in groups of four. Teachers who teach classes in which there are pupils with similar barriers to learning should be grouped together. Avoid separating the teachers from the teaching assistants. Show **OHT 2.3** (which should be distributed as **handout 2.3**) and ask the groups to discuss the factors that contributed to the pupils' learning in the RE lesson in the video.

Use questions, such as those below, to prompt discussion.

- How easy or challenging would it be to apply these strategies?

- How might these approaches be adapted for the pupils you teach?

- What alternative strategies have you used?

When circulating among the groups, be active in preventing the discussion from becoming negative. Make the point that, even for capable and articulate pupils, productive peer-assessment doesn't happen overnight!

2.4x   Discussion of case studies   (DfES 0350/2002) page 46
(*in place of 2.4 'Pupil discussion' and 2.5 'Discussion of issues raised'*)

The alternative activity which follows will be most suitable for teachers for whom some of the approaches shown in the video may not be suitable.

Give out **handout 2.4** and ask participants to skimread the two case studies which come from different special schools. The first case study is from a PMLD school and the second from a school for the deaf. Point out to participants that the groups are not representative of pupils in PMLD schools or schools for the hearing impaired.

Give out **handout 2.5**. Ask the groups of four to divide into two pairs. One pair should analyse and make notes on case study 1, while the second pair deals with case study 2. Allow about 5 minutes then ask the pairs to compare notes.

Lead a discussion which focuses on these two issues:

- the extent to which the key characteristics of assessment for learning are evident in the two case studies;

- the adaptations that have been made to cater for the special learning needs of these pupils.

Ask participants to suggest ways in which more of the characteristics of assessment for learning might be incorporated into the two case studies, given the learning characteristics of the pupils concerned. **Handout 2.6** offers some possible answers, but other responses will be equally valid.

2.6 Ready for more? (DfES 0350/2002) page 47

Show **OHT 2.4x** which includes some alternative follow-up activities for teachers and teaching assistants wishing to develop their practice in the formative use of summative assessment. Ask participants to decide on their key priorities for development.

Ready for more

Identify three ways you could develop assessment for learning using summative assessment in your school or subject area. For example:

- making assessment criteria easier to understand and therefore more accessible to pupils

- supporting pupils in developing the social and evaluative skills for peer- or self-assessment

- developing individual target setting

- breaking down targets into smaller, more achievable steps

- involving teacher assistants more effectively in assessment for learning – for example, in one-to-one dialogue to help pupils to identify strengths and areas for development

Where is the existing good practice in curriculum target setting in your school and how can this good practice be shared more widely?

Case study 1: Art and design

Context

A Year 7 group of seven pupils, all with severe learning difficulties, two have profound and multiple learning difficulties. Several pupils have ASD. All the pupils are attaining significantly below age-related expectations, with the majority working between P1(i) on the QCA scales and level 1 of the National Curriculum.

Assessment task

The task involved the production and use of incised print blocks. Pupils were given woodblocks with a polystyrene tile glued to them, a selection of tools (pencil, paintbrush, glue spreader, etc.), a tray of paint and a piece of paper. They were then asked to prepare their print block and print onto the paper. Staff had discussed beforehand the assessment criteria to be used in relation to the task. These included:

• is willing to participate in printing process, fully prompted (P1(i))
• enjoys watching printing process – shows pleasure as print is revealed (P2(i))
• is able to press a block applied to paper (P2(ii))
• applies paint appropriately (P4)
• is able to carry out a basic print action (P4)
• selects appropriate tool to incise polystyrene (P5)
• selects an appropriate method to apply paint to block – using a paintbrush or dipping directly into paint (P5)
• transfers design onto polystyrene (P6)
• understands how to turn the block paint side down and apply to paper smoothly, holding still and pressing down firmly (P7)
• understands which part of the block will put paint onto the paper and which part will remain white (above P7)
• is able to evaluate own print (above P8)
• is able to identify ways in which print could be improved (above P8)

How the task and criteria were used

This assessment was carried out at the end of an extensive series of lessons involving the printing process. Support was available to those pupils who were not able to complete the tasks unaided, but every opportunity was given for them to attempt all or parts of the task without intervention.

At the beginning of the lesson all staff, using appropriate modes of communication, outlined the task. Prints undertaken in previous lessons were shown as reminders. Pupils were told that our 'plans' for this lesson were to make our own block to see if we could print a picture of our favourite piece of fruit. They were also told that, while making the blocks, we would be trying to see what had been remembered about printing and making blocks.

Pupils worked in small, supervised groups where staff could observe individuals to assess their independent work. During the session teaching assistants involved pupils in peer- and self-assessment by asking pupils to point out any strengths or problems in their own or each other's work. The teaching assistants used prompts, often in the form of questions, to encourage pupils to improve their level of achievement in relation to the success criteria, for example *what if?* questions and suggestions, such as *try to find out what happens if...* Where appropriate, individual pupils were asked to say what they felt they could do now that they couldn't before and what they needed to learn next. Responses from pupils were in a range of forms including sign, gesture and use of symbols. At the end of the session pupils were asked to show their completed work to the group and to give basic feedback, for example *Which bit do we like best?*, *Which print has worked best?*, *Why has this bit smudged and what could we do next time to stop this?* and *Did we finish what we wanted to do?*

Case study 2: Religious education

Context

A Year 7 religious education class of eight pupils in a school for the deaf. All members of the group are profoundly deaf and are British sign language users.

Assessment task

The task was divided into a number of separate subtasks, building on work the pupils had carried out over the previous five lessons. Pupils were required to:

1. recall and communicate three pieces of information about Moses to a partner.
2. write down the key words that were used to communicate the information.
3. work with three other pupils to discuss and agree on how to organise this information, and then explain why they had decided on these groupings.
4. role-play the part of an Israelite explaining to Pharaoh why they should be set free.

In the work that followed, pupils were able to compare and amend the way they organised their information for tasks 3 and 4. For example, they observed one another's role-play activities and were able to compare the key information used to convince Pharaoh. The pupils had earlier been introduced to the idea of traffic-lighting their confidence and understanding in lessons and were comfortable with demonstrating whether they needed help or could proceed without teacher support. In this assessment task they used the appropriate traffic light to signal their judgements about their own performance.

Following on from this, the teacher and pupils identified one or two areas for development in their next module of work on the environment. They were guided by the teacher who helped them to produce target statements which focused on important knowledge, skills, understanding and attitudes and values in RE. For example, if, in their work on Moses, a pupil had been able to independently support a decision they had made with a simple reason, then their next step for improvement might involve the application of their knowledge and understanding. For this pupil the next set of success criteria might include:

- *I can identify three environmental problems* – knowledge
- *I can group Christian beliefs about stewardship* – comprehension
- *I can explain what a Christian might do to help solve an environmental problem* – application

The teacher explained to the pupil the next steps in learning and then planned opportunities for the pupil to engage in tasks that would develop the pupil's ability to apply understanding.

This way of working with pupils is proving very successful. Pupils are keen to discuss their work, their improvements and their planning for future learning. When they begin work on the next module they already know what they are aiming for and are able to place their learning within a wider context. The approach allows an increasing degree of peer involvement in assessment as pupils become more confident.

Initially the class teacher had been concerned that pupils would be unwilling to use the red traffic light. In practice she found that, in an atmosphere where pupils are positively supported and praised for their initiative and good judgement in their requests for help, this was not an issue. Pupils are more interested in taking an active part in their learning and making progress than in worrying about being judged negatively by their peers.

A comparison of two case studies

Handout 2.5

Key characteristics of assessment for learning	How are these characteristics evident in the case studies? What adaptations have been made to cater for the special learning needs of the pupils?	
	Case study 1	Case study 2
Sharing learning objectives with pupils		
Helping pupils to know and recognise the standards they are aiming for		
Involving pupils in peer- and self-assessment		
Providing feedback which leads to pupils understanding their next steps and how to take them		
Involving teacher and pupils in reviewing and reflecting on assessment information		

A comparison of two case studies

Key characteristics of assessment for learning	How are these characteristics evident in the case studies? What adaptations have been made to cater for the special learning needs of the pupils?	
	Case study 1	Case study 2
Sharing learning objectives with pupils	• Pupils asked to remember what they had learned about printing and making blocks. • Pupils told that they should make their own printing block and print a picture of their favourite piece of fruit.	• The teacher negotiates target statements with the pupil at the end of an assessment task. These inform the learning objectives for the next piece of work.
Helping pupils to know and recognise the standards they are aiming for	• Pupils reminded of expected outcomes by being shown examples of blocks and prints made in previous lessons.	
Involving pupils in peer- and self-assessment	• Teaching assistants used prompts, often questions, to encourage pupils to improve achievement in relation to success criteria. • Pupils asked to say what they feel they can do now that they couldn't do before. • Pupils show their completed work to the group and give feedback.	• Pupils were able to compare their own work with that of others and then make amendments.
Providing feedback which leads to pupils understanding their next steps and how to take them	• Teaching assistants provide continuous feedback throughout the lesson.	• After each assessment the teacher negotiates the next steps for learning with pupils. • Pupils know their targets before learning starts and are reminded of them as targets are broken down into individual lessons. • The familiar assessment pattern enables pupils to understand their targets.
Involving teacher and pupils in reviewing and reflecting on assessment information	• Pupil reflection involves some affirmation of their own success and that of their peers. • Assessment will inform future teaching strategies.	• By traffic-lighting pupils are able to make judgements about their levels of achievement. • Having identified pupils' targets, the teacher then plans learning opportunities which match them.

Module 3

Planning lessons

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Planning lessons' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 3.1–3.5 • Handouts 3.1–3.7 • Appendix 3.1, Long, medium and short-term planning • Flipchart and pens	• OHT 3.3x • Handouts 3.1x, 3.5x and 3.7x

Additional notes for presenters

The session is not a general one about short-term planning but emphasises the relationship between assessment for learning and effective lesson planning.

- The principles of lesson planning for pupils with special educational needs apply to all sectors of education. Teachers should start from what they want the pupils to learn (the objectives) and how pupils can demonstrate their achievement (the learning outcomes), and then choose strategies and activities that will enable pupils to meet them.

- The learning objectives and outcomes are unlikely to be the same for all pupils in a class: teachers must set appropriate challenges for pupils of different abilities but the lesson structure can, and should, remain intact.

- Small group and whole-class working can encourage both language development and the skills of peer- and self-assessment. Teachers should not underestimate the support that even pupils working at different levels can give one another.

- Teachers need to ensure that lesson plans incorporate:
  - their understanding of the range of profiles in the group, especially those strengths and barriers which might affect assessment for learning practices;
  - appropriate expectations, based on pupils' prior achievement in the subject;
  - structured individual support for pupils who are likely to need it, particularly in relation to developing assessment activities;
  - motivating activities which address the learning objectives set for the group;

- identification of additional or alternative activities for pupils who cannot access the learning. These can include the use of modelling or other approaches to back up explanations of learning objectives and outcomes;

- awareness of key targets and strategies within pupils' individual education plans. These may be set in terms of specific skills, within plans for subject-focused group activities.

- Teachers need to think carefully about how they can best share the learning objectives with their pupils. Different pupils require different modes of written communication, such as signs, symbols, pictures or line drawings (this may depend upon whether they are working one-to-one or in a group). Others will understand objectives better with adult support in the form of accompanied verbal, gestural and physical prompting (see page 6 for information about communication modes).

- In many special schools and resourced provision, foundation subject coordinators may not be specialists and may require subject-specific support for their short-term planning. The QCA subject schemes of work and *Planning, teaching and assessing the curriculum for pupils with learning difficulties* (QCA/01/736) provide specific advice on each subject for those working with pupils unlikely to reach level 2 of the National Curriculum by the age of 16 and can be useful sources of support.

- When planning assessment for learning it is essential that teachers understand progression in that particular foundation subject, that is, the order in which knowledge, skills and understanding can be developed.

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about assessment for learning* (Ref: DfES 0045/2003) which provides information for teachers about the first three modules in the *Training materials for foundation subjects* folder. The leaflet includes sections on 'The importance of assessment for learning' and on the key messages for this module, 'Planning lessons'. It can be downloaded from www.standards.dfes.gov.uk/keystage3

The QCA Assessment for Learning site includes guidance on implementing assessment for learning with low-achieving pupils: www.qca.org.uk

Pre-course task (DfES 0350/2002) page 59

If adults, other than teachers, are participating in the training session they should read **appendix 3.1** and should bring with them either a planning sheet they have produced or materials they have generated which were designed to support one or more of the bulleted points under the heading 'The purpose of lesson plans'.

3.1 Introduction

(DfES 0350/2002) page 60

While identifying the objectives for the session using **OHT 3.1** make the
following points.

- The term 'teacher' should be considered in the broadest sense to include all
classroom staff who contribute to pupils' learning, for example teaching assistants,
support staff and therapists.

- It is important to emphasise the role of teaching assistants in the planning and
delivery of the lesson.

- Where the term 'school' is used within the training materials it should be taken
to mean all types of teaching environments.

3.2 Objective-led lesson planning

(DfES 0350/2002)
pages 60–61

When introducing this section make the point that there is value in a lesson structure
that includes a starter and plenaries, even for pupils receiving one-to-one adult support.
The following points can also be made.

- Some pupils with more severe and complex special educational needs may be
working towards the same objective(s) for a considerable period of time. If learning
is to be thoroughly established over this period, they will need to address these
objectives through a range of applications and experiences.

- It can be useful for some pupils to have learning objectives broken down into
small, incremental, achievable steps. Clear objectives help pupils to grasp what
is expected of them and simplify the necessary transition between activities.

OHT 3.3x provides additional suggestions for objective stems for pupils working
between P5 and P8.
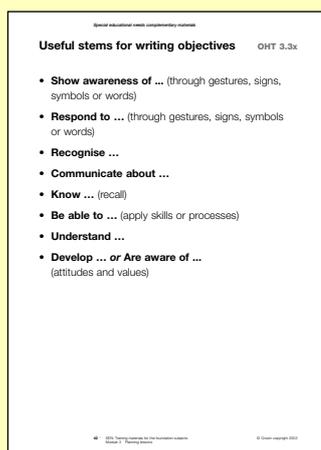
Handout 3.1x provides exemplification of these stems from the foundation subjects
P levels.

3.3 Writing objectives (DfES 0350/2002) page 61

Organise participants into groups of six, subdivided into three pairs. Where possible each pair should include one teacher and one teaching assistant.

Continue with the activity as described.

It may be appropriate to add an additional activity to those described on **handout 3.2** as follows.

- Select a pupil in a class you teach for whom the learning objectives you have written would be unsuitable.

- Rewrite the learning objectives so that they are realistic and achievable for that pupil.

- Ensure that the objectives are clear and precise, and agree on an appropriate mode of communication for that pupil, for example signs, symbols, picture exchange, simple words.

Offer the following word of caution: sometimes teachers provide learning objectives for pupils in ways which involve a comparative. For example:

- have a better understanding of why volcanoes erupt;

- have more understanding of why discussing something with other people can help you make good choices.

Session leaders can point out that unless both adults and pupils are clear about the baseline for these statements, or how much understanding there was in the first place, comparatives like these can prove unsatisfactory in measuring success.

3.4 Key elements of good lesson plans (DfES 0350/2002) page 62

The following additional points can be made.

- Many groups of pupils find it hard to make connections and need the 'big picture' to be presented on a regular basis.

- Plans should leave adequate time for the plenary.

- Peer-assessment is not easy at first and the development of trust in a group is essential.

3.5 Lesson plan formats (DfES 0350/2002) pages 63–64

Three alternative lesson plans, in three different planning formats, have been provided in **handout 3.5x**. They originate from three special schools.

- Sample lesson plan E is from a school for pupils with severe learning difficulties but also includes pupils with moderate learning difficulties in its intake. It shows planning for a geography lesson for a mixed-age Key Stage 3 class with 11 pupils who are working between P4 and National Curriculum level 2. A video sequence from this lesson is provided to accompany the SEN materials on 'Questioning' (module 4).

- Sample lesson plan F is from a school for pupils with profound and multiple learning difficulties. It shows planning for an art and design lesson for a mixed-age Key Stage 3 group working between P1(i) on the QCA scales and level 1 of the National Curriculum.

- Sample lesson plan G is from a school for pupils with physical and neurological impairment. It shows planning for a design and technology lesson for a mixed-age Key Stage 3 class of nine pupils who are working between P5 and National Curriculum level 2. A video sequence from this lesson is provided to accompany the SEN materials on 'Assessment for learning in everyday lessons' (module 1).

Participants should use handout 3.6 to record the strengths and weaknesses of the three formats but should amend the first column to state lesson plans E, F and G, instead of A, B, C and D.

Key elements of good lesson plans Handout 3.6

	Lesson objectives which can be shared with pupils	Evidence that will demonstrate that pupils have achieved the objectives	Clear lesson structure	Brief notes on key questions and teaching points and on specific activities	Brief notes relating to needs of individuals or groups and how any additional support will be used	Reference to subject issues, for example developing vocabulary	Reference to relevant resources	Indication of any homework to be set
Comments on plan A format	Strengths:							
	Weaknesses:							
Comments on plan B format	Strengths:							
	Weaknesses:							
Comments on plan C format	Strengths:							
	Weaknesses:							
Comments on plan D format	Strengths:							
	Weaknesses:							

After discussing the feedback from this task distribute **handout 3.7x** and acknowledge where participants have made other helpful points.

Key elements of good lesson plans Handout 3.7x

	Lesson objectives which can be shared with pupils	Evidence that will demonstrate that pupils have achieved the objectives	Clear lesson structure	Brief notes on key questions and teaching points and on specific activities	Brief notes relating to needs of individuals or groups and how any additional support will be used	Reference to subject issues, for example developing vocabulary	Reference to relevant resources	Indication of any homework to be set
Comments on plan E – geography	**Strengths** Clear lesson structure. Identifies cross-curricular links, resources and key vocabulary. Learning objectives clear and succinct, although the group objectives are not in 'pupil speak'. Needs of different groups of pupils planned for in the learning objectives, outcomes and the organisation of the group work. The role of additional adults is identified in the planning process. Focus for next lesson made clear. **Weaknesses** Role of teaching assistants not apparent in the starter and plenary activities. Links to IEPs are not apparent. No reference to homework. May become too detailed and a paper exercise; teachers might think they have to fill all the boxes every lesson.							
Comments on plan F – art and design	**Strengths** Clear lesson structure, all on one side of A4 paper. Open format encourages teachers to decide on the level of details and areas to comment on. Scripts the learning objectives within the structure of the lesson. Focus for next lesson made clear on the plan. Some indication of individual needs and the role of the teaching assistants. **Weaknesses** Lacks prompts which would invite teachers to plan resources, key vocabulary, cross-curricular links. Limited differentiation of learning objectives and outcomes relating to the needs of individuals or groups.							
Comments on plan G – design and technology	**Strengths** Clear and succinct lesson plan, all on one side of A4. Places an emphasis on learning objectives and outcomes which are differentiated for individual needs. Supports three-part lesson structure. Assessment for learning is included in plenary (learning objectives revisited, peer/self-assessment employed, next steps identified). Key vocabulary and resources identified. **Weaknesses** Sizes of boxes may not suit everyone. No space for extra notes, cross-curricular links and homework. Links to IEPs not evident.							

3.6 Improving lesson plans (DfES 0350/2002) page 64

It is suggested that teaching assistants are grouped together for the activity. They should refer to the materials they have brought to the session and use **handout 3.8** as a checklist for matching them to the planning process.

You may wish to make the following points.

- Teaching assistants are a rich source of information about pupils. Under the direction of the teacher, they often support IEPs and therefore have direct access to pupils' learning and also to the kinds of support, for example prompts or cues, that pupils require to succeed and progress.

- Teachers and teaching assistants, as a team, can collaborate on:
  - checking for understanding of objectives and standards to be met: (see page 5 for information about checking for understanding);
  - the development of peer- and self-assessment;
  - sharing the lesson evaluation, including reviewing pupils' performance.

If time allows ask the teaching assistants to suggest five golden rules for the way in which they can support learning effectively, and ask for five golden rules from teachers on how they could improve collaborative planning with teaching assistants. The emphasis here is on partnership.

3.7 **Ready for more?** (DfES 0350/2002) page 65

When presenting **OHT 3.5** the following point can be made about referring back to the objectives during the plenary.

- Often teaching assistants have evidence about the learning that has been achieved by individuals. They can also help pupils to reflect on what has been learned by eliciting responses from them that demonstrate understanding.

3.7 **Ready for more?** (DfES 0350/2002) page 65

Useful stems for writing objectives   OHT 3.3x

- **Show awareness of ...** (through gestures, signs, symbols or words)

- **Respond to ...** (through gestures, signs, symbols or words)

- **Recognise ...**

- **Communicate about ...**

- **Know ...** (recall)

- **Be able to ...** (apply skills or processes)

- **Understand ...**

- **Develop ...** *or* **Are aware of ...** (attitudes and values)

Useful stems for writing objectives

with examples from the QCA P levels

- **Show awareness of ...** (through gestures, signs, symbols or words)
  - significant differences between specific physical/natural and human/made features of places (geography P5)
  - how to join in different situations (physical education P8)

- **Respond to ...** (through gestures, signs, symbols or words)
  - signs given by a musical conductor, e.g. to start or stop playing (music P5)
  - others in a group (MFL P6)

- **Recognise ...**
  - distinctions between the past and the present in their own lives (history P6)
  - set routes around familiar places (geography P5)

- **Communicate about ...**
  - activities and events in the past (history P5)
  - preferences in their designing and making, for example, adding selected felt shapes to fabric (design and technology P7)

- **Know ...** (recall)
  - episodes from their own past and some details from other historical events with prompts, for example, past school or local events (history P8)
  - simple geographical language to communicate their ideas about various locations, functions and roles (geography P8)

- **Be able to ...** (apply skills or processes)
  - use ICT skills to access the internet and exchange information, with guidance from other pupils or adults (MFL P7)
  - use tools, materials and simple actions to produce a piece of work (art and design P6)
  - kick a ball towards a target or throw a ball to a partner (physical education P7)

- **Understand ...**
  - how to classify objects to given criteria (history P7)
  - the differences between the physical/natural and human/made features of places (geography P6)
  - a few words presented in a familiar context with visual clues (MFL P8)

- **Develop... *or* Are aware of ...** (attitudes and values)
  - their role in caring for their own environment, *for example, watering plants in the classroom or garden, picking up litter* (geography P7)

Sample lesson plan E

Adapted from the QCA geography scheme of work for Key Stage 3, unit 4, 'Flood disaster – how do people cope?'

Objectives	Learning outcomes	The big picture
Whole class *Be able to:* • look at differences between floods in the UK and Bangladesh • find out how floods affect people and their lives in those countries **Group 1: (working between P4 and P6)** *Be able to:* • make a flood to see what happens to a river when it rains heavily and overflows its banks • use at least two key words to describe the effects of flooding e.g. 'houses wet' **Group 2: (working between P7 and P8)** *Be able to:* • recognise maps of the UK and Bangladesh • describe some of the effects of flooding in each country • Identify some differences between flooding in Bangladesh and the UK **Group 3: (working between National Curriculum levels 1 and 2)** *Be able to:* • Understand some effects of flooding on people and places • Understand some differences between the effects of flooding in Bangladesh and the UK • Use appropriate geographical vocabulary about flooding	**Group 1:** *The pupils:* • create a flood in the sand tank • use words like 'dry' and 'wet' to describe the effects of flooding in the sand tank **Group 2:** *The pupils:* • describe the effects of flooding shown in photographs of the UK and Bangladesh • Sort the photographs into 'the UK' and 'Bangladesh' and provide reasons when prompted (orally) **Group 3:** *The pupils:* • explain the effects of flooding shown in photographs of the UK and Bangladesh using geographical vocabulary • write simple sentences, using a writing frame, explaining how Bangladesh could reduce the effects of flooding	We have already learned about the *causes and effects* of flooding in York. We have looked at the impact of flooding on people and the buildings in York. We are now going to think about how flooding in Bangladesh is the same/different to York (the UK). In the next lesson will decide if Bangladesh could use the same ways of stopping the effects of flooding as they did in York and if not, why not.
Links with LAC/NAC/ICT objectives *LAC links:* • reading of key geographical vocabulary • use of explanation writing frame – group 3 only	**Resources** • Water spray/music • Length of guttering embedded in a tray of sand • Watering cans • Large map of Asia • Photographs of York and Bangladesh • Writing frame	**Key vocabulary** United Kingdom, Bangladesh, flood, storm, rain, overflow, sediment, mud, sandbags, emergency services, warning.

Sample lesson plan E (continued)

Starter	Development	Plenary
Focus pupils on geography and flooding by listening to a piece of music about rainfall and spraying 'rain' water. Learning objectives shared with pupils and understanding clarified. Key vocabulary revisited. Recap on previous learning about flooding in York. **Questions** Knowledge 1. What does this music remind us of? 2. What have you been doing? 3. Which country have we already looked at? 4. Can you remember which city it was? Comprehension 1. What effects did flooding have on York? 2. What causes flooding? 3. Why does flooding happen if there is too much rain?	Introduce flooding in Bangladesh to the whole class. Use a world map to locate Bangladesh. Pupils move to their groups. **Group 1: Practical activity (Teaching assistant – Denise)** Simulate rainfall and flooding in a practical activity using the sand tank. Pupils observe the effects of flooding. • What is this? (point to the 'river channel') – *knowledge* • Is the soil/carpet wet or dry? – *comprehension* • How did the soil get wet? – *comprehension* • What has happened to the animals/houses? – *comprehension* **Group 2: (Teaching assistant – Jane)** Describe the effects of flooding in the UK and Bangladesh shown in the photographs. Sort the photographs into those of the UK and those showing Bangladesh. **Sequence of questions** • Which map is the UK and which is Bangladesh? – *knowledge* • What causes flooding? – *comprehension* • What could be done to stop the river flooding? – *comprehension* • Which country does this photograph show? – *analysis* • How do you know? – *justify, synthesis* **Group 3: (Class teacher – Mary)** Discuss why effects and solutions to flooding differ between more and less developed countries. Complete an explanatory writing frame on the effects of and solutions to flooding in Bangladesh. **Sequence of questions** • What effects of flooding in Bangladesh are shown in the photographs? – *comprehension* • How could Bangladesh reduce flooding if it had more money to spend? – *synthesis* • What things are the same in both countries … and what things are different? – *analysis* • Where will most damage have been done – the UK or Bangladesh? – *evaluation* • In which country will the flooding have killed more people? – *evaluation/synthesis* • Which country will need more money to repair the damage? – *evaluation/synthesis*	Play 'fact or fiction'. Give out statements about flooding on cards. Pupils decide whether it is true or false and put the cards onto a board under correct heading. Ask group 3 pupils to explain why they think they are true or false. Review the whole-class objectives. Discuss whether they have been achieved.

Sample lesson plan F

Subject: *Art and design*

Topic: *Printing fruit* (lesson 3)

Class: *Key Stage 3, working between P1(i) on the QCA scale and National Curriculum level 1.*

Starter – Recap on previous learning objectives

- *What are we learning about?* answers such as 'fruit' or names of individual fruits, or signs e.g. 'food' would also be an acceptable start.

- *What can we do with fruit?* 'printing', 'pressing' or some kind of gesture imitating print action.

Show the printing blocks used last week.

- *Which part of the block makes the mark on the paper?* 'raised part' using gestures and pointing, etc.

Introduction and sharing of this lesson's learning objectives

This week you will learn:

- *how to make a print block from the fruit you drew last week;*

- *the names of fruit we've all drawn;* (some will only learn their own fruit)

- *what makes a good print block.*

Alicia (has more complex learning difficulties) *I want you to be able to:*

- *taste two fruits;*

- *choose which you prefer;*

- *press a block which shows the fruit* (made for you and supported by the teaching assistant).

Development

Pupils work in small groups of two or three, supported by teaching assistants. They decide which parts of the designs they drew last week to cut out of polystyrene. They cut out the polystyrene and glue it to the wood blocks. When dry, they print with the blocks using a single colour.

Note levels of support required by individuals.

Plenary – recap and evaluation as a group

- *Who can tell me what they have learned today?* Show or tell as appropriate to individual's ability. Encourage the use of key vocabulary.

Evaluate prints, comparing them with the actual fruit and designs from previous lesson.

- *Who can say which the fruit is?* – name or match by pointing or eye-pointing.

- *Does it look like we wanted it to?* Identify reasons for smudging or other problems.

- *Is there a difficulty in just using one colour?*

- *What could we do to overcome this?* Make two blocks; add colour after with a brush; use another colour, etc.

Next week we will use different ways of adding colour to make a two-colour print.

Sample lesson plan G

Subject: *Design and technology*   **Module:** *Using control to control a display*   **Class/group:** *Key Stage 3 Group 2*

Learning objectives	Learning outcomes	Content, activities and strategies
Group 1 – Ben, Sinead, Jamie *Be able to:* • name the components in an electrical circuit • know how a simple circuit works • design and make (Ben with TA support) a simple electrical circuit on your display board **Group 2 – Carl, James, Jenny** *Be able to:* • name the components in a mechanism you have designed • know how levers and pulleys work • make moving parts on your display board using levers (Carl and Jenny with TA support) **Group 3 – Daniel, Becky, Michael** *Be able to:* • know what a graphic is • create and change graphic lettering • choose appropriate lettering for your graphic • make your graphic 3D on your display board	• Describe the electrical components in their product and explain what they do • Design and make a simple electrical control circuit (e.g. Ben – spinning football, Sinead – Barbie light, Jamie – spinning sun) • Describe the mechanical components in your product and explain what they do • Name the equipment you used • Make a mechanism for the motion you chose (e.g. Carl – jumping dog, James – waving hand, Jenny – tongue moving in/out • Describe your graphic's features • Create and change the lettering • Improve the appearance of your product (e.g. Daniel – 2D/3D, Becky – font size and colour, Michael – font size and colour)	**Starter** Whole class: Draw a mind map to recap previous learning. Set individual pupil objectives and explain the structure of the lesson. Explain to pupils what is expected of them and what they will accomplish by the end of the lesson. Use pupils' display boards to demonstrate expectations for today's work on graphics, electrical and mechanical control. Use pictures, symbols, signs and modified language to communicate this. Four teaching assistants support as previously agreed. **Main part** Group 1 (TA Anne): Electrical circuits, using components to make an electrical part for their board. Group 2 (TA Amanda): making levers and other mechanical moving parts to go on their boards, use of craft knives, paper fasteners, etc. Group 3 (TA Jacquie): Pictures and graphics using the computers, 2D and 3D, use of the laminator. Teacher to work with all groups, reinforce objectives and give feedback. Cue pupils and staff to timing of lesson and to the end of the lesson. **Plenary** Whole class; recap focus of each group's work. Ask questions to determine whether learning objectives/outcomes have been achieved. Ask pupils to evaluate their own and their peers' work. Agree next steps for individuals.
Key vocabulary: display, product, control, movement, mechanical, electrical, design, make, names of materials, construction, construction methods	**Resources:** electrical circuits, card, corroflute, fabrics, camera, photos, Word Art, Clip Art, glue, scissors, tape, double-sided adhesive tape, masking tape, paper fasteners, craft knives, string, pulleys; additional materials as required	

Key elements of good lesson plans

Lesson objectives which can be shared with pupils	Evidence that will demonstrate that pupils have achieved the objectives	Clear lesson structure	Brief notes on key questions and teaching points and on specific activities	Brief notes relating to needs of individuals or groups and how additional support will be used	Reference to subject issues, for example, developing vocabulary	Reference to relevant resources	Indication of any homework to be set

Comments on plan E – geography

Strengths
Clear lesson structure. Identifies cross-curricular links, resources and key vocabulary. Learning objectives clear and succinct, although the group objectives are not in 'pupil speak'. Needs of different groups of pupils planned for in the learning objectives, outcomes and the organisation of the group work. The role of additional adults is identified in the planning process. Focus for next lesson made clear.

Weaknesses
Role of teaching assistants not apparent in the starter and plenary activities. Links to IEPs are not apparent. No reference to homework. May become too detailed and a paper exercise; teachers might think they have to fill all the boxes every lesson.

Comments on plan F – art and design

Strengths
Clear lesson structure, all on one side of A4 paper. Open format encourages teachers to decide on the level of details and areas to comment on. Scripts the learning objectives within the structure of the lesson. Focus for next lesson made clear on the plan. Some indication of individual needs and the role of the teaching assistants.

Weaknesses
Lacks prompts which would invite teachers to plan resources, key vocabulary, cross-curricular links. Limited differentiation of learning objectives and outcomes relating to the needs of individuals or groups.

Comments on plan G – design and technology

Strengths
Clear and succinct lesson plan, all on one side of A4. Places an emphasis on learning objectives and outcomes which are differentiated for individual needs. Supports three-part lesson structure. Assessment for learning is included in plenary (learning objectives revisited, peer/self-assessment employed, next steps identified). Key vocabulary and resources identified.

Weaknesses
Sizes of boxes may not suit everyone. No space for extra notes, cross-curricular links and homework. Links to IEPs not evident.

Module 4

Questioning

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Questioning' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 4.1–4.7 • Handouts 4.1–4.7 • Appendix 4.1, Questions for learning • Video sequence for this module • Flipchart and pens	• OHT 4.4x and 4.6x • Handout 4.5x • Appendix 4.2, Exemplar planned sequence of questions

Additional notes for presenters

The key messages and most of the activities contained within this module will be relevant to the majority of teachers responsible for teaching pupils experiencing learning or behaviour, emotional and social difficulties. Issues are most likely to arise where teachers use questioning with pupils who are non-verbal or experiencing communication difficulties. In these circumstances, questioning still remains an important technique within the teaching repertoire, although the range of non-verbal communication approaches appropriate to the pupils will have to be used, such as British sign language, sign-supported English, symbols (Makaton/rebus) or pictures (PECs), alongside more informal indicators such as physical affirmations or gestures (for example, nodding) or facial expressions. In these instances, it becomes important for teachers to identify and build on signs of understanding (see page 5 for discussion of checking for understanding) so that progression in questioning can take place.

Pupils' misunderstanding or misinterpretation of the questions themselves can be an issue. This will often arise as a result of communication impairment or more profound or complex learning difficulties. Here, planning for the clarity and appropriate level of complexity of questions, especially the way they are phrased and sequenced, will be important. It can also clarify the question being asked if other adults in the class are alerted to model an appropriate answer.

Pupils can easily be 'shown up' if they misunderstand or give wrong answers to questions in front of their peers. It is, therefore, important that their learning characteristics and prior knowledge are considered when planning questioning. One strength of questioning as an

approach is the challenge it can create. If challenge for an individual, perhaps a pupil with low self-esteem, is likely to be threatening in a large group, the same approach in a smaller group or one-to-one can be just as valuable and less daunting.

Before delivering this module presenters may find it helpful to read the leaflet *Key messages about teaching repertoire* (Ref: DfES 0047/2003) which provides information for teachers about the 'Teaching repertoire' section of the *Training materials for foundation subjects* folder. The leaflet includes sections on 'Why the teaching repertoire is important' and on the key messages for the module 'Questioning'. It can be downloaded from www.standards.dfes.gov.uk/keystage3

4.1   Introduction   (DfES 0350/2002) page 92

While introducing the objectives shown on **OHT 4.1** point out that the term 'teacher' should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists. Also point out that where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

The reference made to 'instinctive' practice in the bullet points on page 92 takes on a wider context when working with pupils with learning difficulties. It not only implies the formulation of questions, wording and their sequence of progression and challenge, but also may refer to teachers' ability to interpret pupils' non-verbal responses in understanding.

4.3   Purposes of questions   (DfES 0350/2002) page 93

At this point it is useful to acknowledge that teachers can often follow a line of questioning starting from concrete, familiar ideas or concepts (such as a straightforward question about pupils' experience *How do you come to school?*) and working outwards towards a bigger picture or more complex abstract technical concepts (for example, 'forms of transport'). For a definition of these terms refer to **handout 5.2** on page 135 in the 'Explaining' module in *Training materials for the foundation subjects*. In this way, teachers are able to step and sequence the level of challenge appropriately to the knowledge, skills and understanding of pupils.

The penultimate bullet point on page 93 suggests that questions are distributed to a mixture of 'conscripts' and 'volunteers', to model good practice. When questioning, conscripting pupils rather than asking for volunteers promotes greater inclusion and supports self-esteem. This sense of participation and involvement will be valuable to most pupils with learning difficulties. However, conscripting participants in a large group can result in stress and may lead to challenging behaviour in some pupils. A degree of sensitivity and professional judgement should therefore influence planning. An alternative is to provide an opportunity for pupils to respond in a one-to-one situation. This approach can be facilitated by teaching assistants.

4.4 Questioning: pitfalls and alternatives

(DfES 0350/2002) pages 94–95

OHT 4.4x includes pitfalls which are more specific to teachers questioning pupils with various learning difficulties and may be substituted for **OHT 4.4** where appropriate.

The following points may be used in the feedback which follows the discussion.

- There is a difficult balance to be achieved between allowing pupils time to consider their responses and to respond at length, and pressing ahead with the lesson so as to maintain pace and avoid the class becoming bored. This is an important consideration when judging the value of 'wait time' or 'think time' for pupils who have difficulty in processing information or physically responding (whether verbally or through signing). In whole-class interactive teaching, such as this, the use of questioning may be inappropriate. In these circumstances explaining or modelling may be more suitable. Questioning can sometimes be more productive in group work activities where teaching assistants can play an important role in asking questions and supporting individuals. This can provide more 'information processing' or 'response' time.

- The wording of questions becomes more acutely important when working with pupils with learning difficulties. Certain question stems should be dropped and avoided because of their literal interpretation, for example *Can you explain…* or *Are you able to describe…* should become *Explain to me…* or *Describe for me…*

- When formulating and wording questions it is often necessary to be specific, especially if the teacher expects a particular answer. For example, in response to the question *How many fingers have you got?* some pupils might respond literally or laterally and say *all of them*. In this example it may appear obvious that the teacher intended the pupil to provide a different and more specific response. Teachers therefore need to consider the wording of questions, and the self-esteem of the pupil, as unintended responses may leave pupils open to ridicule. Questions therefore require careful planning which considers the needs of individuals.

- Sensitivity in fielding incorrect answers is crucial. Attempts should be made to turn every situation into a positive learning experience. Praise should be given for the contribution, but misconceptions must be made clear, and not avoided.

When asking participants to add ideas or give examples of alternative strategies when using **Handout 4.2**, encourage them to consider the learning characteristics of the pupils they teach and to choose approaches that would play to their strengths. Examples of responses are as follows.

- When inviting pupils to elaborate, *show me* can be used. Negative phrases such as *I'm not clear about…* should be avoided, particularly with pupils on the autistic spectrum as they often will only understand key words. Complex sentences, particularly negatives, cause confusion and some pupils may filter out or miss less important words. This can often cause misinterpretation and distress for the pupil.

- With non-verbal interventions, teachers are encouraged to have exaggerated responses with facial expressions and body language, particularly with pupils who are visually impaired.

- As with question stems, clarity of speech with the alternatives to questions is also important. A number of examples cited on **handout 4.2** can appear too complicated for some pupils. For example, *I am not sure I'm certain I know what you mean by that*, has a combination of positive and negative implications and several non-essential words. This should be avoided as it can cause confusion and misinterpretation for some pupils. It is important to keep structures simple, for example *Tell me what you mean*.

- The 'forced alternative' form *Is it this…or that?* is a particularly supportive way of questioning: it offers a model of the answer while still encouraging pupils to think about their choice.

4.5   Using questions to promote thinking   (DfES 0350/2002) pages 95–96

Activity

Handout 4.4 presents an activity for participants to classify questions using Bloom's taxonomy (see **handout 4.3**). Acknowledge that most of these questions are not suitable for pupils who are working towards the National Curriculum level 1 in foundation subjects, but that the purpose of the task, to recognise that a hierarchy exists and needs to inform planning, remains. It can be pointed out that even when planning questions around performance descriptions or P levels a hierarchy of thinking exists.

- *What is this?* (identify)

- *What do we do when we cross the road?* (recall)

- *What do we use to stir our tea with?* (select)

- *Which colour group should we put our pebble in?* (sort or classify)

- *What can you buy in this shop?* (link)

- *What happens if we add more sugar?* (predict)

- *What would happen if everyone dropped litter?* (hypothesise)

Appreciating the context, wording and sequence of questions is vital in ensuring that progression of thinking is encouraged and the appropriate levels of challenge are met.

4.6 Classroom tactics for effective questioning

The history lesson in the video sequence (*Training materials for the foundation subjects* Ref: DfES 0351/2002) illustrates many features of effective questioning. In principle, most of these apply to teaching pupils with special educational needs. It highlights the importance of planning for questioning and shows that for pupils to understand key or 'big' questions, they must first be supported with more simple or 'smaller' questions.

The points made here should support discussion and identify the positive features of questioning. As an alternative task, provide copies of page 98 for participants and ask them to consider these points and to decide which features of questioning are most appropriate or how they might be adapted for the pupils they teach. Then identify possible benefits and contexts for using each tactic.

4.6x Classroom tactics for effective questioning

(DfES 0350/2002)

For some teachers of pupils with SEN the alternative video sequence (Ref: DfES 0137/2003) may be more appropriate. It shows a geography lesson filmed at a special school for pupils with severe and moderate learning difficulties.

This video illustrates a range of approaches to questioning used by the classroom teacher and two teaching assistants. The teacher has used Bloom's taxonomy to plan the lesson with appropriate levels of challenge for the individual pupils in the class.

Distribute **handout 4.5x** and ask participants to divide into groups of four. Ask them to subdivide into pairs and invite pair A to note down the different questioning approaches employed by the teacher and teaching assistants. Use the prompt questions provided in handout 4.5x. Ask pair B to produce a tally showing the number of questions posed by the teaching staff according to the levels in Bloom's taxonomy. The matrix on handout 4.5x allows them to analyse the whole-class activities and the work of the three groups during the developmental phase of the lesson.

Before showing the video provide participants with the following information.

- Brookfields School caters for pupils with severe learning difficulties. In recent years the school's intake has centred on pupils with autistic spectrum disorder, complex learning difficulties and those exhibiting challenging behaviour.

- The Key Stage 3 class has 11 pupils from Years 7, 8 and 9. They range in ability from P4 to National Curriculum level 2.

- The class teacher Mary and the two assistants Denise and Jane have been working with their LEA foundation subjects consultant to improve their questioning skills. They want to provide an appropriate level of challenge for the pupils they teach.

- In their geography lesson the pupils are comparing flooding in Bangladesh and the UK. The pupils have studied the causes and effects of flooding in York for two lessons. This lesson introduces flooding in a new country of study, Bangladesh.

- During developmental work, the pupils are organised into three groups so that work matching the learning objectives can be tailored to their levels of ability. The levels that the groups are functioning at are:
  – Group 1: P4–P6
  – Group 2: P7–P8
  – Group 3: National Curriculum levels 1–2

Show the video sequence, stopping at the two pause points to allow a couple of minutes for participants to make notes.

After watching the video allow 3 minutes for the pairs of teachers to compare notes. Provide a further 7 minutes for pair A to feed back to pair B and vice versa.

Ask participants to provide feedback to the whole group. Record ideas on a flipchart to build a list of tactics that made the questioning successful.

The following points can be used to support discussion:

- Mary frequently uses questions which require pupils to recall learning gained in previous geography lessons, e.g. *who can tell me what happened in York?* These predominated during the introduction to the lesson.

- Individuals are encouraged to develop their initial responses through the effective use of wait time, which allowed them to process the questions and formulate their answers. Mary and the teaching assistants also use supplementary, follow-up questions for this purpose.

- The learning objectives for this lesson were designed to allow for questions of differing levels of challenge to be asked in relation to them, e.g. knowledge, comprehension, analysis, synthesis, evaluation. Before the lesson, sequences of questions were planned around the objectives (see the lesson plan shown in Handout 3.5x). These focused particularly on how floods affect people and their lives in the UK and Bangladesh.

- Mary and the teaching assistant, Jane, use sequences of questions during the group work, mostly with the higher achieving pupils. These are designed to move pupils towards higher order thinking such as analysis, synthesis and evaluation.

- The lower achieving pupils tend to be asked more closed questions which often require simple recall or understanding. Where pupils are struggling to respond, alternative answers are provided for them to select from or 'staged' questions used to draw them towards understanding. The use of 'conscripts' during the whole-class elements of the lesson often enables pupils to correctly answer questions demanding only recall or simple understanding and thus building their confidence.

- Level of challenge in the whole-class questions: the level of challenge in the questions used in the introduction to the lesson, involving all the pupils, focused mainly on knowledge and simple comprehension, particularly on recalling information from previous lessons. During the plenary Mary uses supplementary questions to encourage pupils to build on their initial responses and to incorporate what they have learned during this lesson into their answers or to justify their answers.

- Level of challenge in the group work questions: group one, working between P4 and P6, are asked questions which tend to require simple knowledge and understanding. Group two, working between P7 and P8, are asked about what the photographs show and in which country the flooding event depicted took place. This is more challenging as it requires them to apply their understanding and to analyse the photographs. Group three, working between National Curriculum levels 1 and 2, are asked to consider more abstract concepts such as flood prevention. Mary's questions to this group are more challenging than those planned for the other groups as they require the pupils to synthesise and to evaluate information.

Note: A short-term plan for the lesson from which this video sequence is taken is provided on **handout 3.5x** in the SEN complementary materials for module 3 on 'Lesson planning'. This could be provided as a handout following the video-based activity.

4.7 Questioning – an overview (DfES 0350/2002) page 99

OHT 4.6x makes some additional points about effective questioning for pupils with learning difficulties and may be substituted for **OHT 4.6** where appropriate.

4.8   Ready for more?   (DfES 0350/2002) page 100

The third bullet point on **OHT 4.7** suggests that departments plan a sequence of questions that build on pupils' understanding. **Appendix 4.2** offers an exemplar sequence of questions, based on the hierarchy of thinking in Bloom's taxonomy, and is provided to support a planning activity of this kind.

Exemplar planned sequence of questions   Appendix 4.2

The group is working on their last lesson of a design and technology unit and is designing and making a pizza. The class comprises a small group of Key Stage 3 pupils with a broad range of learning difficulties, including pupils with multiple sensory and physical difficulties. The teacher wants to engage the pupils in analysis and evaluation, though at a fairly concrete level.

- *What have we been doing?* (**Knowledge** – recall)

- *What types of pizza have we made?* (**Knowledge** – recall)

- *What toppings did we use?* (**Knowledge** – recall)

- *What was your favourite?* (**Knowledge** – recognise/identify/select)

- *What was Jason's favourite?* (**Knowledge** – recognise/identify/select)

- *What is this called?* (**Knowledge** – identify)

- *Is it bacon or a green pepper?* (**Knowledge** – identify)

- *What do we do before we start making a pizza? Why?*
  (**Comprehension** – describe and explain)

- *What are we going to make with flour and margarine?* (**Application**)

- *How do we mix them together?* (**Comprehension** – describe)

- *How do we make the dough fit the tray?* (**Application** – solve)

- *What do we put on the pizza next?* (**Analysis**)

- *Then what will we put on?* (**Application** – sequence)

- *Is the pizza spicy?* (**Knowledge** – identify)

- *Does it taste salty or sweet?* (**Analysis** – compare/identify)

- *Do you like sweet pizza or cheese pizza?* (**Analysis** – compare/identify/select)

- *What would happen if we added pineapple? Would it make it salty or sweet?*
  (**Synthesis** – hypothesise)

- *What topping would you leave out if you made it again? Why?* (**Evaluation** – evaluate)

Pitfalls of questioning OHT 4.4x

It is easy to fall into the trap of:

- asking too many closed questions
- asking pupils questions to which they can respond with a simple yes or no answer
- asking too many short-answer, recall-based questions
- asking bogus 'guess what I'm thinking' questions
- dealing ineffectively with incorrect answers or misconceptions
- not giving pupils time to reflect, or to pose their own questions
- asking too many questions that allow only verbal responses
- only choosing pupils who can answer verbally
- not planning questions that allow non-verbal pupils to respond
- losing lesson pace by asking too many complex or higher order questions which pupils are unable to process and respond to quickly
- asking questions which are open to literal interpretation
- asking questions when another strategy such as modelling or explaining might be more appropriate

Effective questioning

Effective questioning:

- reinforces and revisits the learning objectives

- includes staging questions to draw pupils towards key understanding or to increase the level of challenge in a lesson as it proceeds

- involves all pupils

- engages pupils in thinking for themselves

- promotes justification and reasoning

- creates an atmosphere of trust where pupils' opinions and ideas are valued

- shows connections between previous and new learning

- encourages pupils to speculate and hypothesise

- encourages pupils to ask as well as to receive questions

- encourages pupils to listen to and respond to each other as well as to the teacher

- will involve 'conscripts' as well as 'volunteers' adopting the 'no hands up' rule

- will engage pupils' emotions and feelings as well as their knowledge

- is challenging and varied rather than a routine

- allows pupils time to respond, especially if the pupil has difficulty in responding verbally or difficult open questions are asked

- not too lengthy, and accounts for the concentration span of the pupils

- utilises visual stimulus, as well as the spoken or written word

Tactics for effective questions

Pair A

During the video extract how do the classroom teacher and the teaching assistants use questions to:

- help pupils build on their prior knowledge?

- encourage individuals to develop their initial responses?

- reinforce objective-led learning throughout the lesson?

- scaffold learning by carefully sequencing them?

- involve pupils of all abilities, using different questioning strategies?

Pair B

Classify the questions asked according to the levels of Bloom's taxonomy. Produce a tally to show the number of each type of question asked of the whole class and of each of the three groups.

	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
Whole class						
Group 1						
Group 2						
Group 3						

Module 5

Explaining

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Explaining' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 5.1–5.4 • Handouts 5.1–5.5 • Video sequence for this module • Flipchart and pens	• Handouts 5.2x, 5.3x, 5.4x and 5.5x

Additional notes for presenters

A teacher's choice of skills to give understanding to pupils will be governed partly by the nature of the learning they are trying to bring about and partly by their knowledge of pupils' learning characteristics: their strengths and barriers to learning. Questioning or modelling may be more appropriate approaches where, for whatever reason, pupils process information slowly or where a sensory or physical impairment can create barriers to accessing meaning through explanation. Modelling and explanation used together are often effective.

If explanation alone provides the best way of promoting an aspect of learning it needs to be carefully planned with close attention to pupils' learning characteristics. Carefully planned explanations aid understanding and engagement, and are less likely to lead to misunderstanding or confusion.

Explanations can often fail to hit the spot for pupils because:

- they go on too long;

- they don't build in motivators or hooks using humour or an unusual slant on a topic to bring it to life;

- they are too complex, often with too many different things being explained at once, so pupils struggle to process and assimilate the information;

- they don't take into account prior learning and experience: many pupils lack the foundations on which to build meaning and cannot relate the explanation to their own lives;

- teachers take for granted that the meaning that pupils attach to the language used is the same as the meaning in their own heads;

- explanations of abstract concepts are not rooted in concrete contexts and experiences in which pupils can locate themselves.

Before delivering this module presenters may find it helpful to read the leaflet *Key messages about teaching repertoire* (Ref: DfES 0047/2003) which provides information for teachers about the foundation subjects modules on 'Questioning', 'Explaining' and 'Modelling'. The leaflet includes sections on 'The importance of teaching repertoire' and on the key messages for this module, 'Explaining'. It can be downloaded from www.standards.dfes.gov.uk/keystage3

5.1   Introduction   (DfES 0350/2002) page 124

Presenters can use the following starter activity to help participants connect with the issues while sharing the module objectives. It also provides an opportunity for all involved in teaching the pupils to share their experiences.

Ask the participants to consider an occasion when they spent 10 minutes explaining something only to find …

In order to model good practice in the task you can give them an example from your own experience.

Last week I spent 10 minutes explaining a task that involved classifying EU countries according to when they became members. Because my explanation focused on colouring in rather than the concept of classification some pupils misunderstood and used the colours to identify each EU member. Next time my explanation will focus on explaining the process of classification.

Give no more than 3 minutes for discussion.

Take feedback listing the key points on flipchart. Say that you will come back to this list later in the session.

Then share the objectives for the module shown on **OHT 5.1**.

Make the following additional points.

- Where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

- The term 'teacher' should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists.

- Joint planning with support staff promotes understanding and contributes to a consistent approach to explanations in the classroom. You might quote the example of the school in outer London where teaching assistants have a specific role at the beginning of many Key Stage 3 subject lessons in introducing and explaining key vocabulary using drama, pictures or any other appropriate method.

5.2   Types of explanation   (DfES 0350/2002) pages 125–126

Handout 5.2x can be used instead of **handout 5.2**. It provides more information and guidance about abstract concepts. If advice is needed, remind participants that training for speech and language therapists includes the learning of this type of hierarchy; they can give very practical advice.
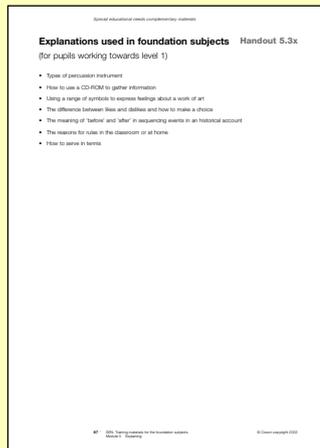
Handout 5.3x has been provided as an alternative to **handout 5.3** for participants who have not been able to do part C of the pre-course task. It is appropriate for teachers of pupils who are working towards level 1.

The examples in handout 5.3x can be categorised as follows.

- Types of percussion instrument
  - This is a **concept** explanation (concrete technical) where pupils are learning to recognise the different types of percussion instrument. If you are explaining how to use each instrument it is a **process** explanation.

- How to use a CD-ROM to gather information
  - This is a **process** explanation but it does rely upon pupils having a grasp of some concrete and abstract technical terms.

- Select from a range of symbols to express feelings about a work of art
  - This can be placed in a number of categories depending on emphasis. If you are explaining the meaning of the symbols then this is a **concept** explanation – abstract familiar. If you are explaining the reason for exploring art through our emotions this is a **purpose** explanation. It could also be a **process** explanation, if you are explaining a sequence through which pupils have to move in order to make their selection.

- The difference between likes and dislikes and how to make a choice
  - This is a **similarities and differences** explanation but also involves explanation of abstract familiar concepts if pupils are also being taught how to name their emotion or preferences.

- The meaning of 'before' and 'after' in sequencing events in an historical account
  - This is a **concept** explanation.

- The reasons for rules in the classroom or at home
  - This is a **causal** explanation since the relationship between rules and what happens if they are broken have to be explained. There is also an element of **purpose** explanation since it involves explaining the reasons for rules in general.

- How to serve in tennis
  - This is a **process** explanation.

5.4 Understanding characteristics of explanations

(DfES 0350/2002)
page 127
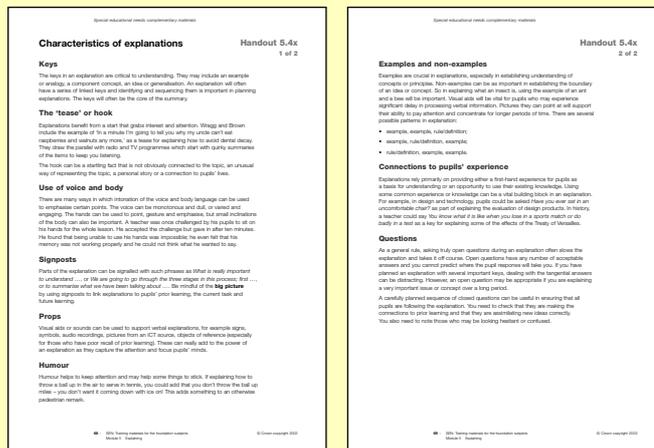
Handout 5.4x, which includes additional references to the characteristics of effective explanations for pupils with learning difficulties, may be used instead of **handout 5.4**.

5.5 Feedback on video

(DfES 0350/2002) page 127

You may wish to add the following discussion point for the geography lesson.

- This includes a good example of how props such as the balloon, and key visuals (the words on the board which link the explanation to prior learning) are judiciously employed. While the pupils are grappling internally with the new information and thinking around the concept being explained, they are relieved from having to recall key terms that have been explained earlier. It also demonstrates good practice in literacy.

## 5.6 Planning explanations (DfES 0350/2002) page 128

As pairs are working on their explanations listen for any who are caught on those characteristics that focus on visual and verbal aspects of explanations and direct them towards those characteristics that use other senses, for example touch or smell, and modes of communication other than verbal response. Some of the points below might support constructive interventions.

- Explain to participants the importance of establishing what prior learning the explanation will be building upon. For example, all teaching staff need to have detailed knowledge of each pupil's receptive and expressive language and communication skills. This can inform the planning of questions that help you track pupils through the explanation.

- If pupils are unable to respond verbally then a series of visual examples and non-examples from which they can choose can be a more effective alternative. Ask teachers to pay particular attention to the multi-sensory needs of the particular group of learners they are planning for. Being able to touch and handle objects might be more important for some pupils than simply having props demonstrated to them by the teacher.

- It is worth noting that the speed with which meanings of words mutate among the young provides a fertile ground for misunderstanding although it can also be a source of humour. Pupils can be kept on track through the use of well-planned, and placed, closed questions asked in anticipation of where erroneous associations are known to occur.

- As a general point at the end of this section emphasise the need to tie the explanation into the **big picture**. Refer participants to the 'Signposts' section in **handout 5.4x**.

5.7 Ready for more? (DfES 0350/2002) page 128

When showing **OHT 5.4** point out the importance of all those who support pupils being involved in the planning and implementation of the strategies for explanation set out in this module. This is particularly important because effective explanations should be used both in whole-class teaching and in individual or group work; the discussion of common misconceptions can be very productive. **Handout 5.5x**, 'First steps in improving explanations', is provided to support follow-up work back in schools.

Types of explanation

Concepts

Concepts are groups or classes of things. Sometimes important concepts are defined for pupils, but not necessarily understood. It is useful to subdivide concepts as follows:

Concrete familiar – terms in everyday use and observable through the senses, for example (sea) *wave, trench, container*.

Abstract familiar – terms in everyday use but not easily observable through the senses, for example *cause, belief, health, selection, choice*.

Concrete technical – terms used by specialists but observable, for example *survey, questionnaire, rhythm*.

Abstract technical – *urbanisation, observation, democracy*.

Abstract concepts usually need the most careful explanation because they are not experienced through the senses, therefore misconceptions can easily arise.

Similarly, **technical concepts** often need explaining because words (*mobile,* for example) can have one meaning in everyday usage and another in specialist usage. Others, such as *menu* in food technology and ICT, have different meanings in different specialist contexts.

The classification above helps in planning explanations. **Concrete concepts** are the most easy to demonstrate using visual or other representational aids.

The video of the geography lesson is a good example of how visual aids can be used to relieve the pupils' brains of routine memorisation while focusing on a complex causal explanation.

For **abstract concepts** it is often necessary to draw on experiences which are familiar to pupils to build understanding. For example, when describing stewardship in RE or geography, it can be helpful to compare this to the role of the caretaker who looks after the school buildings and grounds. Drama can be a powerful tool for creating shared experiences from which explanations of many abstract concepts can be drawn, for example *injustice, democracy, dictatorship, friendship*.

Similarities and differences

This type of explanation is linked to forming concepts but goes further in distinguishing between concepts and in putting them together in groups. It is important in establishing and clarifying classifications, for example the similarities and differences between festivals such as Christmas, Diwali and Passover.

Cause and effect

The pattern in these explanations is how one thing leads to another in a causal sequence. It is more difficult to explain events that are the result of a combination of factors, such as the outbreak of a war or the origins of an artistic movement.

Purposes

It is often important to explain why things are done and what they are to achieve. This might be appropriate at the beginning of a lesson, piece of work or topic so that pupils are clear about the objectives, for example outlining the reasons for studying musical clichés.

Processes

The focus of process explanations is on how things happen or work – there is an emphasis on sequence. Examples could include how one plays a forehand stroke in tennis or plays an Indian rhythm in music.

Explanations used in foundation subjects   Handout 5.3x

(for pupils working towards level 1)

- Types of percussion instrument

- How to use a CD-ROM to gather information

- Using a range of symbols to express feelings about a work of art

- The difference between likes and dislikes and how to make a choice

- The meaning of 'before' and 'after' in sequencing events in an historical account

- The reasons for rules in the classroom or at home

- How to serve in tennis

Characteristics of explanations

Keys

The keys in an explanation are critical to understanding. They may include an example or analogy, a component concept, an idea or generalisation. An explanation will often have a series of linked keys and identifying and sequencing them is important in planning explanations. The keys will often be the core of the summary.

The 'tease' or hook

Explanations benefit from a start that grabs interest and attention. Wragg and Brown include the example of 'In a minute I'm going to tell you why my uncle can't eat raspberries and walnuts any more,' as a tease for explaining how to avoid dental decay. They draw the parallel with radio and TV programmes which start with quirky summaries of the items to keep you listening.

The hook can be a startling fact that is not obviously connected to the topic, an unusual way of representing the topic, a personal story or a connection to pupils' lives.

Use of voice and body

There are many ways in which intonation of the voice and body language can be used to emphasise certain points. The voice can be monotonous and dull, or varied and engaging. The hands can be used to point, gesture and emphasise, but small inclinations of the body can also be important. A teacher was once challenged by his pupils to sit on his hands for the whole lesson. He accepted the challenge but gave in after ten minutes. He found that being unable to use his hands was impossible; he even felt that his memory was not working properly and he could not think what he wanted to say.

Signposts

Parts of the explanation can be signalled with such phrases as *What is really important to understand …,* or *We are going to go through the three stages in this process; first …,* or *to summarise what we have been talking about ….* Be mindful of the **big picture** by using signposts to link explanations to pupils' prior learning, the current task and future learning.

Props

Visual aids or sounds can be used to support verbal explanations, for example signs, symbols, audio recordings, pictures from an ICT source, objects of reference (especially for those who have poor recall of prior learning). These can really add to the power of an explanation as they capture the attention and focus pupils' minds.

Humour

Humour helps to keep attention and may help some things to stick. If explaining how to throw a ball up in the air to serve in tennis, you could add that you don't throw the ball up miles – you don't want it coming down with ice on! This adds something to an otherwise pedestrian remark.

Examples and non-examples

Examples are crucial in explanations, especially in establishing understanding of concepts or principles. Non-examples can be as important in establishing the boundary of an idea or concept. So in explaining what an insect is, using the example of an ant and a bee will be important. Visual aids will be vital for pupils who may experience significant delay in processing verbal information. Pictures they can point at will support their ability to pay attention and concentrate for longer periods of time. There are several possible patterns in explanation:

- example, example, rule/definition;

- example, rule/definition, example;

- rule/definition, example, example.

Connections to pupils' experience

Explanations rely primarily on providing either a first-hand experience for pupils as a basis for understanding or an opportunity to use their existing knowledge. Using some common experience or knowledge can be a vital building block in an explanation. For example, in design and technology, pupils could be asked *Have you ever sat in an uncomfortable chair?* as part of explaining the evaluation of design products. In history, a teacher could say *You know what it is like when you lose in a sports match or do badly in a test* as a key for explaining some of the effects of the Treaty of Versailles.

Questions

As a general rule, asking truly open questions during an explanation often slows the explanation and takes it off course. Open questions have any number of acceptable answers and you cannot predict where the pupil response will take you. If you have planned an explanation with several important keys, dealing with the tangential answers can be distracting. However, an open question may be appropriate if you are explaining a very important issue or concept over a long period.

A carefully planned sequence of closed questions can be useful in ensuring that all pupils are following the explanation. You need to check that they are making the connections to prior learning and that they are assimilating new ideas correctly. You also need to note those who may be looking hesitant or confused.

First steps in improving explanations

General

- Examine one unit of work and identify what concepts should be clearly explained to pupils.

- Discuss how these concepts are explained.

- Analyse the key misconceptions that your pupils have in relation to the ideas you are seeking to teach. Relate the analysis to their learning characteristics: this can help in planning next time around.

In relation to types of explanation

- **Concepts**

START HERE

Track back concept

Conceptual level appropriate to pupil

Key Stage 3 – age-appropriate

Age-appropriate context
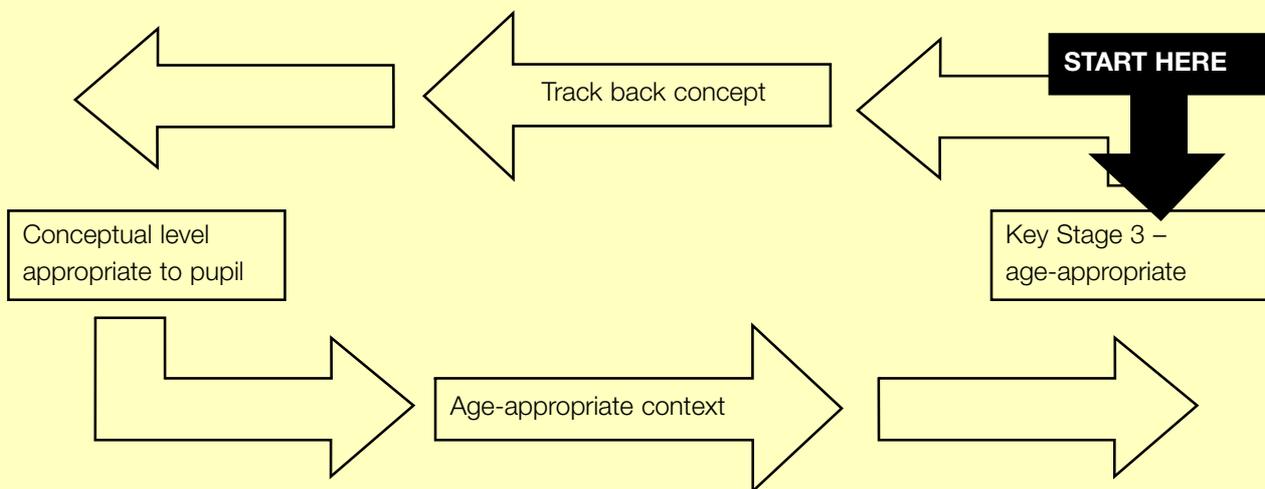
This diagram illustrates the process of generating teaching objectives and activities that are both age and conceptually appropriate for pupils with special educational needs.

– Start from the age-appropriate programme of study and select a concept that you want to focus on, for example democracy, earthquake, design.

– Track back the concept to a level which is appropriate for the knowledge of the pupils you are teaching.

– Return to the age-appropriate key stage to select a context in which to teach the concept. The suggested teaching activities from the QCA schemes of work may help with this.

Where more abstract concepts cannot be back-tracked easily it is possible to use subject-specific performance descriptions to clarify the hierarchy of understanding needed to scaffold its development. For example, the concept of 'causation' underpins most Key Stage 3 subjects. The history P levels and the level descriptions of the National Curriculum can offer a framework for exploration of causation for a range of pupils.

– Pupils … recognise some obvious distinctions between the past and present in their own lives and communicate about these, for example, *noting their attendance at a different school in the past*. (P6)

– Pupils … sort objects to given criteria, for example, *old toys and new toys*. (P7)

– Pupils ... begin to use common words, signs or symbols to indicate the passage of time, for example, *now/then, today/yesterday*. (P8)

– Pupils … find answers to some simple questions about the past from sources of information. (National Curriculum level 1)

– Pupils … observe or handle sources of information to answer questions about the past on the basis of simple observations. (National Curriculum level 2)

– Pupils … are beginning to give a few reasons for the main events and changes. (National Curriculum level 3)

• **Similarities and differences:** Use a Venn diagram to show what is similar in overlapped parts and different in separate parts.

• **Cause and effect:** Work out a clear sequence of linked points in a linked points in a linear causal explanation. Use a concept map to show how a number of factors interrelate in more complicated explanations, for example the causes of the First World War.

• **Purposes:** Make connections to pupils' experience to help explain the purposes of a piece of work. For example, how health and safety principles in a workshop apply equally to organising most sports.

• **Processes:** Think how you can model processes for pupils.

Module 6

Modelling

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Modelling' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 6.1–6.7 • Handouts 6.1–6.3 • Video sequence for this module • Flipchart and pens • Blank cards for participants to write on	• Handouts 6.1x, 6.2x, 6.3x and 6.4

Additional notes for presenters

Teachers use a range of skills to help bring about learning in whole-class, group and individual contexts. These include questioning, explaining and modelling. Teachers choose the skill to use because of the learning they intend to bring about and their knowledge of the learning characteristics of the pupils they are working with. Modelling is an effective way of teaching pupils to use skills or apply processes (teach specific skills in a precise sequence). Modelling can also develop understanding of abstract terms that are difficult to get across by explanation alone. For example, the lesson set out in the pre-course task could help the learning of ideas such as pattern, texture and combination.

Modelling can be particularly appropriate where there are concerns about pupils':

• concentration and short-term memory, including barriers to the retention of fine or gross motor skills;

• challenging behaviour and high levels of stress.

Modelling allows a clear focus on a key teaching objective, such as the construction of an object (for example, making a mask in art and design), or the practice of discrete aspects of a skill (for example, serving a ball in physical education).

Effective modelling draws pupils into the process by asking questions of them or prompting them to suggest what comes next (for example, in the choice of fruit in the lesson transcript in **handout 6.1x**). This can engage, motivate and build self-esteem and is particularly important with written tasks. Modelling, for example via shared writing, might be more appropriate than even the best-planned explanations.

This is especially true where pupils find writing an emotionally and physically challenging task. Modelling enables them to contribute to the group effort and use the end result to support their individual work.

When modelling for pupils with learning difficulties, teachers must take particular care to select the vocabulary they are going to use and, when they do, to use objects of reference, key words or any other relevant communication approaches to support the process.

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about teaching repertoire* (Ref: DfES 0047/2003) which provides information for teachers about the foundation subjects modules on 'Questioning', 'Explaining' and 'Modelling'. The leaflet includes sections on 'The importance of teaching repertoire' and on the key messages for this module, 'Modelling'. It can be downloaded from www.standards.dfes.gov.uk/keystage3

Pre-course task   (DfES 0350/2002) page 143
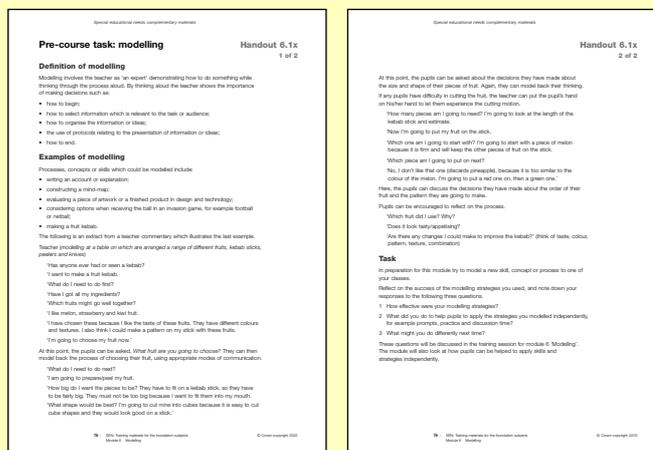
Distribute **handout 6.1x** at least a week before the session. It includes an extract from a commentary where a teacher is modelling making a fruit kebab.

6.1   Introduction   (DfES 0350/2002) page 144

In addition to the notes provided, you may also wish to point out the following.

- Where the term 'teacher' is used it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists.

- Modelling is not just a whole-class teacher-led activity. It is important that teaching assistants are trained in the skills and processes of modelling so that they can select and use the technique, as appropriate, when working with groups of pupils or one-to-one.

6.2   Modelling in practice   (DfES 0350/2002) page 145

In addition to the points made in the last paragraph of this section, emphasise the importance of:

- repetition and reinforcement. Successful reinforcement relies on classroom systems for checking understanding (see page 5 for further information about checking understanding): all of us can be bored by unnecessary repetition;

- allowing pupils plenty of time to answer questions and to absorb what is happening. Many pupils experiencing learning difficulties cannot process information quickly and need time to do so;

- the key message about supporting first attempts with prompts and scaffolds to build confidence;

- breaking down the task into small steps. This can be important for some groups, for example where short attention span is an issue, but this requires careful judgement. In classes where behaviour is an issue too, many small steps can detract from the freshness and excitement of good modelling.

6.3   Discussion of video   (DfES 0350/2002) pages 146–147

The *Training materials for the foundation subjects* video is in two parts and both clips are from mainstream schools. The first sequence shows a history lesson where the teacher models the process of concept mapping in the context of the 1914–18 war. It can be used as part of this training module where participants teach pupils who are working above level 4 in the National Curriculum.

For teachers of pupils working below level 4 in the National Curriculum the task can be adapted as follows.

Organise the participants into groups of three. Give out **handout 6.2x** and invite them to use it to guide their note taking.

Introduce the second video sequence showing a geography lesson in which the teacher models analysing a photograph. The details of the lesson are provided on page 147. This sequence, although from a mainstream setting, will allow participants to see an example of modelling in action. It could be noted that, owing to the way the video was edited, there appears to be an emphasis on teacher exposition. In reality, the pupils spent a lot of time carrying out guided and paired analysis of their photographs.

Use **handout 6.4** as an alternative resource to the first video sequence showing a teacher modelling concept mapping in history. It provides a transcript of an art and design teacher modelling the analysis of a painting. The activity derives from the QCA scheme of work for art and design, unit 9a Life events, and has been planned for Year 9 pupils working below level 4 in the National Curriculum for art and design. Ask participants to quickly read **handout 6.4**.

Explain to the participants that the case study demonstrates how, by modelling a process, teachers can help pupils to be more independent in their own application of that process. Many pupils find it difficult to make the move from modelling to the first steps of independent work, which may need to be guided or shared. Suggest that, where the teacher uses sentence stems to support the modelling process, these could be communicated using writing or other alternatives (see page 6 for information about modes of communication).

Use **handout 6.3x** to support and reinforce feedback.

6.4   Golden rules   (DfES 0350/2002) pages 147–148

This activity is appropriate for both teaching staff and teaching assistants. Participants may consider using modelling in different ways. For example, the teacher might model to a whole group and teaching assistants model to a small group or individuals. The differences in approach which may be required can be discussed as part of the exercise.

When considering **OHT 6.6** make the link between the process of effective modelling and the case study, a Year 9 art and design lesson (unit 9A Life events) on handout 6.4.

6.5   Ready for more?   (DfES 0350/2002) page 148

When considering **OHT 6.7**, suggest to participants that they could also write a modelling script and sentence stems for a skill or process that they are about to teach, using handout 6.4 to help them.

Pre-course task: modelling

Definition of modelling

Modelling involves the teacher as 'an expert' demonstrating how to do something while thinking through the process aloud. By thinking aloud the teacher shows the importance of making decisions such as:

- how to begin;
- how to select information which is relevant to the task or audience;
- how to organise the information or ideas;
- the use of protocols relating to the presentation of information or ideas;
- how to end.

Examples of modelling

Processes, concepts or skills which could be modelled include:

- writing an account or explanation;
- constructing a mind-map;
- evaluating a piece of artwork or a finished product in design and technology;
- considering options when receiving the ball in an invasion game, for example football or netball;
- making a fruit kebab.

The following is an extract from a teacher commentary which illustrates the last example.

Teacher (*modelling at a table on which are arranged a range of different fruits, kebab sticks, peelers and knives*)

'Has anyone ever had or seen a kebab?

'I want to make a fruit kebab.

'What do I need to do first?

'Have I got all my ingredients?

'Which fruits might go well together?

'I like melon, strawberry and kiwi fruit.

'I have chosen these because I like the taste of these fruits. They have different colours and textures. I also think I could make a pattern on my stick with these fruits.

'I'm going to choose my fruit now.'

At this point, the pupils can be asked, *What fruit are you going to choose?* They can then model back the process of choosing their fruit, using appropriate modes of communication.

'What do I need to do next?

'I am going to prepare/peel my fruit.

'How big do I want the pieces to be? They have to fit on a kebab stick, so they have to be fairly big. They must not be too big because I want to fit them into my mouth.

'What shape would be best? I'm going to cut mine into cubes because it is easy to cut cube shapes and they would look good on a stick.'

At this point, the pupils can be asked about the decisions they have made about the size and shape of their pieces of fruit. Again, they can model back their thinking.

If any pupils have difficulty in cutting the fruit, the teacher can put the pupil's hand on his/her hand to let them experience the cutting motion.

'How many pieces am I going to need? I'm going to look at the length of the kebab stick and estimate.

'Now I'm going to put my fruit on the stick.

'Which one am I going to start with? I'm going to start with a piece of melon because it is firm and will keep the other pieces of fruit on the stick.

'Which piece am I going to put on next?

'No, I don't like that one (discards pineapple), because it is too similar to the colour of the melon. I'm going to put a red one on, then a green one.'

Here, the pupils can discuss the decisions they have made about the order of their fruit and the pattern they are going to make.

Pupils can be encouraged to reflect on the process.

'Which fruit did I use? Why?

'Does it look tasty/appetising?

'Are there any changes I could make to improve the kebab?' (think of taste, colour, pattern, texture, combination)

Task

In preparation for this module try to model a new skill, concept or process to one of your classes.

Reflect on the success of the modelling strategies you used, and note down your responses to the following three questions.

1   How effective were your modelling strategies?

2   What did you do to help pupils to apply the strategies you modelled independently, for example prompts, practice and discussion time?

3   What might you do differently next time?

These questions will be discussed in the training session for module 6 'Modelling'. The module will also look at how pupils can be helped to apply skills and strategies independently.

Modelling in lessons

Complete the following table while watching the video sequence and after reading **handout 6.4**.

Question	Geography lesson Video	Art and design lesson Handout 6.4
Which skills, processes or procedures were being modelled?		
How did the modelling make explicit the teaching and decisions behind the task?		
How did the teacher scaffold the learning following the modelled activity in order to move pupils towards independence?		

Modelling in lessons

Handout 6.3x

Question	Geography lesson Video	Art and design lesson Handout 6.4
Which skills, processes or procedures were being modelled?	Using questions in planning Analysing a picture	Analysing a painting
How did modelling make explicit the teaching and decisions behind the task?	The teacher: • was very clear about how questions could be used in planning; • slowed the process down by two creating steps; • involved pupils in decision making about the best kind of questions for each category; • thought aloud about what he was doing at every stage; • made the purpose of analysing a picture using prior learning clear; • was explicit about analysis rather than description as an outcome; • allowed pupils to practise the first stage before moving on to the second; • increased the involvement of pupils as he proceeded.	The teacher: • thought aloud about what she was thinking at every stage; • asked herself questions to illustrate the modelling process; • broke the process down into steps and explained the purpose of each one; • used sentence stem cards to reinforce the thinking process and to provide visible prompts for the pupils' own attempts; • gave the pupils an opportunity to practise modelling themselves.
How did the teacher scaffold the learning, following the modelled activity, in order to move pupils towards independence?	The teacher: • used paired work • provided prompts for some pupils, to help with writing questions • gave sentence starters for some pupils • split the task to allow for increased complexity • gave guidance and questions during the task • fed back to pairs during task • displayed pupils' work as an example	The teacher: • used a shared activity; • asked the pupils to repeat what she had done with the support of teaching assistants; • provided sentence stem cards to support pupils; • built in time for the pupils to reflect on each other's modelling; • encouraged the writing of key words; • asked pupils to work in pairs to analyse a different painting.

Modelling example: a Year 9 art and design lesson

In this unit, 'Life events', pupils explore ideas and feelings about an event in their own life as a starting point for image making. They analyse paintings, prints, photographs and digital images, including examples of photojournalism, to learn how visual qualities can be manipulated to evoke strong reactions and to represent ideas, beliefs and values. In the following transcript from an art and design lesson, the teacher is modelling her analysis of *Guernica*, a painting by Picasso, which is projected onto a screen. The teacher uses questions to draw the pupils into the modelling process.

Picasso's Guernica

We're going to look at a picture by an artist called Picasso. It is a picture about something that affected his life. I'm going to look at the picture. I have to look for clues to see what it is about.

First I'm going to think about the **content** *of the picture – Hmmm … what can I see?*
The teacher points at the painting while she speaks.
I can see a horse that is screaming. Its mouth is open and it has a sharp, pointed tongue.
I can see a bull with two eyes on the same side of its head.
There is a person lying on the floor with a broken sword.
There is a woman with a baby. Something is wrong. The baby might be dead. The woman has got a sharp, pointed tongue.
I can see a woman holding out one arm with a lamp. Another woman is running towards the horse. All the people are looking to the left, apart from a woman on the right who is looking up with her arms in the air. I think it might be a building that she is looking into and it looks as though it is on fire. I can see a light bulb at the top of the picture. It's difficult to see if it is on the inside or outside of a building.

Next I'm going to think about the **mood** *of the picture – how does this picture make me feel?*
I feel very worried. All the people look upset or worried. The horse looks to me as though it is in pain. There is a man on the floor. Something bad has happened.
I wonder what bad things might have happened?
Maybe there has been a fire. There might have been an earthquake. It could be a war.

*Now I'm going to think about how the picture was made (**the process**) and what it's made from (**the materials**).*

I'm trying to work out what the picture is. I think it is a painting.

I don't know how big it is. I think it is probably very big.

I wonder if the person who did this had to do some drawings first? I think they did because it is very complicated.

If I look closely at the bull's head, I can see some sketches.

I wonder what the artist has used to paint the picture? There is black and white paint and grey.

Some looks watery and some looks thicker.

What do you find unusual about the painting?

The teacher takes responses from the class.

Does anyone want to know what this painting is about?

While modelling the analysis of this painting, the teacher used prompt cards around it with sentence stems written on them. Examples of these are shown below.

Content

- *What can I see … ?*
- *I can see a …*
- *There is a …*

Mood

- *I feel …*
- *I wonder … ?*
- *I don't know if/how …*
- *I think it's probably…*

Processes and materials

- *If I look closely, I can see …*
- *The paint is …* colours, texture, etc.

After the teacher has modelled an analysis, the pupils' learning is scaffolded through a shared activity.

The pupils repeat what the teacher has done, using the sentence stem cards, with the support of teaching assistants.

Time is built in for pupils to reflect on each other's modelling.

A different painting is then considered by the pupils working in pairs.

They use the sentence stem cards to help them to analyse it more independently.

Module 7

Starters

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Starters' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 7.1–7.5 • Handouts 7.1–7.5 • Appendix 7.1, Bloom's taxonomy • Appendix 7.2, National Curriculum thinking skills • Video sequences for this module • Flipchart and pens	• OHT 7.3x • Handout 7.2x

Additional notes for presenters

The consistent use of a starter activity is important for many pupils with SEN. They respond positively to the safety of routine and the expectation that the lesson always begins straight away. Having a starter ready as pupils come into the room means they can get on with meaningful work immediately. Starters can use potentially wasted time while waiting for late arrivals or for pupils with physical disabilities to be settled into productive work. Similarly, there are fewer opportunities for pupils experiencing behaviour, emotional and social difficulties to move off task and create disruption.

Starter activities tend to require interactive teaching so, because communication skills can vary widely, teachers will need to adapt the activities to suit the preferred communication modes (see page 6 for information about communication) of their pupils. For example, in many starters, pictures, video or objects can be used rather than words and pupils can be asked to interact with objects and staff. Teachers will also need to consider exactly what appropriate challenge means for the pupils they teach. The complementary notes on 'Questioning' may also be useful for teachers wishing to develop their use of starter activities.

Starter activities should provide challenge, but some pupils with SEN process information slowly and may lack the cognitive ability for higher order thinking. Teachers will, therefore, need to consider exactly what 'challenge' means for the pupils they teach. It is important that materials that have to be conceptually simple are age-

appropriate or they will lose pupils' engagement. When considering the varying needs of the pupils, teachers may plan for the start of the lesson to create a calming effect. Many starters provide the engagement to serve that purpose.

Teaching assistants and other adults working in the classroom need to be involved in training both in the use of starters and in subsequent discussion and planning. When they are fully aware of the philosophy and pedagogy, they are in a better position to support pupils' learning.

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about structuring learning* (Ref: DfES 0044/2003) which provides information for teachers about the 'Starters', 'Plenaries', 'Challenge' and 'Engagement' modules in the *Training materials for the foundation subjects* folder. The leaflet includes a section on 'The importance of structuring learning'.

7.1   Introduction   (DfES 0350/2002) page 164

While introducing the objectives make the following points.

- The philosophy of starters applies to all sectors of education.

- Where the term 'teacher' is used in the training session it should be taken, in the broadest sense, to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists.

- Where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

7.2   A demonstration starter   (DfES 0350/2002) page 164

The demonstration starter on handout 7.2 is designed to draw attention to the level of challenge in different starter activities. It uses examples suited to pupils working above level 3 in the National Curriculum. Teachers of pupils with SEN may prefer to use the alternative starter activities in **handout 7.2x**. These are targeted mainly at pupils working towards level 1 in the National Curriculum. The starters will need to be considered alongside the pupils' barriers to learning and should be adjusted to match need accordingly.

Alternatively, the activities provided in **handouts 7.2** and **7.2x** can be mixed.

It is likely that much of the discussion following the demonstration starter activity will relate to the nature of the challenge being posed by the various starter activities. This will be highly dependent on individual pupils' strengths and weaknesses. For example, many pupils with behaviour, emotional and social difficulties will be able to cope with the level of cognitive challenge but may struggle with the demands for social interaction. For pupils with sensory impairments it may be the communication demands which create the challenge.

7.3 The importance of starters

(DfES 0350/2002) pages 164–165

When drawing discussion from **OHT 7.3** some teachers may express the view that they may not want to provide a challenging learning activity for pupils who arrive at their lesson in the wrong frame of mind for learning. Point out that well-managed starters can quickly calm pupils down and get them engaged in learning. For example, a starter activity which involves a stimulus on an overhead projector or individual sheets of instructions will mean that pupils who arrive late or noisily can join in part way through the activity. This will be less of an issue if starters are an established part of the lesson routine.

7.4 Successful starters

(DfES 0350/2002) pages 166–167

Point out that although the video sequences show pupils who are working above level 4 in the National Curriculum, the starter activities and the whole-class interactive teaching approaches being used can be adapted to suit different learning contexts. It may be helpful to explore this with the participants after the video sequences have been viewed.

7.5 Overcoming the problems with starters

(DfES 0350/2002) pages 167–168

An amended version of **OHT 7.3**, **OHT 7.3x**, has been provided to recognise the importance of effective communication as part of whole-class, interactive starter activities. Presenters should stress the need for a mode of communication which is appropriate to the learning difficulties of the pupils if the starters are to work. An example might be 'eye-pointing' for pupils who use that mode of communication.

Teachers presenting this module to colleagues may find it useful to demonstrate a range of materials at this point, which are appropriate to the needs of their particular pupils. Such materials might be 'show me' cards with symbols or pictures, bingo, loop games and especially, mini whiteboards, which can also be personalised to meet particular needs, for example with a clock face drawn on which pupils can indicate the time. It should also be pointed out that for pupils who are at the age-appropriate level of cognitive development some of these strategies may not provide sufficient challenge as they rely mainly on low-level recall and understanding.

7.6   Extending the repertoire   (DfES 0350/2002) pages 168–69

The starters shown in the video (DfES 0351/2002) will, in general, be appropriate for pupils working at levels 3 to 7. Teachers of pupils across a broad spectrum of SEN who have watched the video have welcomed the opportunity to consider these examples. Presenters may like to change the task supported by **handout 7.5** to one where participants are asked to adapt the starter activities in the video for the pupils they teach.

7.8   Ready for more?   (DfES 0350/2002) page 169

When considering **OHT 7.5** it is important to value the role that teaching assistants can play in planning and delivering starter activities.

Overcoming problems with starters

Barriers can be overcome by:

• establishing clear routines for the opening of lessons

• careful planning and preparation

• using an appropriate mode of communication

• establishing a clear focus and dealing decisively with distractions

• rigorously adhering to planned timings

• using a variety of starter activities over time

• using activities and routines which latecomers can quickly join and be assimilated into

• skilful teacher questioning, coupled with an insistence on thinking time

• providing additional, individual support for some pupils (for example, by use of teaching assistants)

• adding extra challenge for some pupils, for example by increasing the complexity or sophistication of the activity

Starter cards

GEOGRAPHY A story board is presented to class or group using pictures or photographs. Pupils put the cards into sequence, for example to show how coastal features develop.	HISTORY Pupils are shown an object related to a topic. The object can be passed round and handled. Pupils are encouraged to recall a previous lesson on the topic.
TECHNOLOGY Pupils mark dots around a simple shape such as a rectangle, square, parallelogram or triangle and then match a card bearing the name of the shape to the appropriate drawing.	MUSIC Pupils listen to taped sounds of wind, string or percussion instruments. They hold up a card showing the relevant symbol – *wind, string* or *percussion* – for the instrument they hear.
FOOD TECHNOLOGY Pupils taste a selection of foods and have to match taste to the symbol or word describing taste, for example *bitter, sweet*.	MODERN FOREIGN LANGUAGES Pupils play bingo on a grid which shows symbols and pictures in place of words. The teacher calls out the name of an image shown in this grid in French, e.g. *le chat*. Pupils cross out that picture if they have it on their grid.
DESIGN AND TECHNOLOGY Pupils are given a picture of a familiar object. In pairs, one describes the object without naming or showing it and the other one draws. The process is then repeated, using a different picture, with the drawer becoming the describer.	GEOGRAPHY Pupils are given cards showing pictures of different weather conditions. They are first asked to group (classify) them in any way they like and then to explain the chosen groupings. Can lead to a discussion exploring their prior knowledge about the weather.
DESIGN AND TECHNOLOGY – TEXTILES Pupils are shown a variety of objects and use true and false cards to indicate whether they are made of textiles.	PSHE Pupils make a 'loop' by matching cards bearing a word for an emotion with a picture for that emotion, e.g. a surprised expression.
PHYSICAL EDUCATION Pupils with profound and multiple learning difficulties are helped to move in a particular way, for example slowly or bouncy to a certain piece of music.	HISTORY Pupils are given a set of pictures with a common theme from different eras and are asked to sort them into either a sequence or themes.
ART AND DESIGN Dominoes with different coloured halves are provided. The game is played by putting a colour next to another that contains it or is derived from it, e.g. yellow next to orange, green next to yellow, etc.	GEOGRAPHY Pupils move counters on a simple map with a clear grid as the teacher calls two squares north, etc. This could be done by pupils actually moving on a tiled floor.
RELIGIOUS EDUCATION Pupils are shown three pictures of objects which have similarities and differences. They decide which is the odd one out. For example a church, a mosque and a school.	MODERN FOREIGN LANGUAGES Pupils are shown a large grid of numbered pictures illustrating different types of weather. The teacher calls out, for example, *il fait beau* and pupils have to write down the number of the appropriate picture on their whiteboards.

Module 8

Plenaries

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Plenaries' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 8.1–8.6 • Handouts 8.1–8.5 • Leaflet *Making good use of the plenary* which can be downloaded from www.standards.dfes.gov.uk/keystage3 • Video sequences for this module • Flipchart and pens	• Handout 8.6

Additional notes for presenters

- Plenaries need to be planned from the outset and all adults working in the classroom need to be informed of their purpose, structure and their role within them.

- Stress the need for the plenary to be flagged up throughout the lesson. *At the end of the lesson we are going to ask you to tell the group what you have learned …*

- It is important to minimise barriers that may prevent all pupils contributing to a plenary. (See page 6 for information about communication modes.) The length of time allowed for the plenary will need to take this into account.

- Short interim plenaries may need to be planned to enable pupils to consolidate incremental learning gains. This will be particularly important for pupils with short attention spans.

- Observations made by the teacher or teaching assistants can identify what pupils have learned or found difficult and can usefully inform a plenary. It is helpful if the teaching team can communicate these observations to each other prior to the plenary.

- Plenaries, like every other part of a lesson, will need to reflect the learning objectives of each pupil or group for that lesson.

- Where a pupil is working one-to-one, say with a teaching assistant, it is still important to hold a plenary; this allows the pupil to reflect upon and articulate their learning and deepen their understanding.

Before delivering this module presenters may find it helpful to read the leaflet *Key messages about structuring learning* (Ref: DfES 0044/2003) which provides information for teachers about the 'Structuring learning' section of the *Training materials for the foundation subjects* folder. The leaflet includes sections on 'The importance of structuring learning' and on the key messages for this module, 'Plenaries'.

8.1   Objectives   (DfES 0350/2002) page 186

After sharing the objectives for the module shown on **OHT 8.1**, make the point that where the term 'teacher' is used in the session it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists. Also explain that, where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

8.2   Plenaries   (DfES 0350/2002) page 186

The following points can also be made in relation to **OHT 8.2**.

- The effectiveness of the plenary is influenced by the teacher's classroom management and use of the teaching assistant to support pupils in reviewing and reflecting on their learning.

- Plan the questions you are going to ask and give advance warning to pupils and teaching assistants.

8.5   Observing plenaries   (DfES 0350/2002) page 188

Presenters can select from two options at this point.

1. It may be most appropriate to use the existing presenter's notes and video sequence from a geography lesson filmed in Knottingley School in Wakefield. There is a high proportion of pupils with specific learning difficulties in the class. The main purposes of the plenary, which focuses on metacognition, are:
   - to prompt deep thinking in pupils about how they have learned;
   - to develop and instil a habit of reflection about learning;
   - to help pupils to crystallise, understand and remember the strategies they have used;
   - to help develop pupils' perception of themselves as learners.

The task on **OHT 8.5/handout 8.1** can be adapted by asking participants to consider how the teacher is improving access to learning for pupils with special educational needs. Look for some of the following responses.

- The task itself is highly inclusive. The thinking skills strategy 'Maps from memory' focuses on the development of 'visual literacy' and group work strategies. Participation is not dependent on the pupils' literacy skills.

- The focus is on collaborative talk which enables pupils to think together – *There's more brains included!*

- Kaeti's identification of the patterns of thinking which underpin the strategies used – *first we plan, then we check, then we improve.*

- The focus on metacognition in the plenary which encourages the pupils to recognise and reflect on the different strategies they've used, so that they can apply them independently to other contexts – *You can use this approach when you write essays. Begin with the whole picture then fill in the details*.

- Kaeti's use of the whiteboard to record strategies, which supports discussion through both aural and visual channels.

- Kaeti's use of sequences of questions with individual pupils, which are used to probe, check and build understanding, for example the exchange with Peter in response to the initial question *How does this activity help you to use a map?*

- Kaeti's body language, which is used to encourage and to add emphasis to key learning points.

- The ways in which Kaeti gives the pupils' responses high status by adding to them in a constructive way followed by her watching for the pupils' confirmation that they have learned something.

2. An alternative task, which may be more appropriate for teachers of pupils with more severe and profound learning difficulties, is provided below.

   Ask the participants to read through the case study on **handout 8.6** which describes the final plenary in a food technology lesson where pupils have tasted and evaluated a range of pizzas.

They should then form pairs or groups of three and, using the information on **OHTs 8.3** and **8.4**, discuss the purposes of this particular plenary.

Take feedback, which might include the following points.

- Pupils are able to remember, embed and crystallise what they have learned in this and previous lessons.

- Pupils are able to express what they have learned in a form they can communicate.

- The learning from a series of lessons is drawn together and applied to the next stage in the learning.

- The teacher can take stock of what individuals have learned.

- The teacher can value the achievements of individuals.

Point out that this approach provides opportunities to fulfil other purposes of plenaries, though they may not be explicitly stated in this case study.

8.6   Hazards of plenaries   (DfES 0350/2002) pages 188–189

Acknowledge that plenaries are not without their hazards and explain that this part of the session considers solutions to some common problems in lessons with pupils who have SEN. The additional presenter's notes below may be used to prompt the participants' responses when taking feedback on **handout 8.3**.

- For some pupils show and tell may be an appropriate plenary activity, but teachers should always be looking to move them on to the articulation of what they have learned.

- Often the teacher and teaching assistants can help pupils to identify the new skills and knowledge they have acquired during the lesson, but this should always be as a route towards, or support for, pupils' active contributions to the plenary.

- Acknowledge that routine procedures may be an important element of the lesson structure for some pupils who need routines to support new learning. The challenge for the teacher is how to create and maintain routines that stimulate the learning.

- Teachers can enhance the success of plenaries by noting key learning by groups or individuals during the development part of the lesson. For example, they might say to a pupil, *That's a good piece of learning. I want you to share it with us all in the plenary*. It should be acknowledged, however, that not all pupils can cope with this kind of feedback and may actually become disruptive in order to lose the opportunity to speak in public.

- The teacher may consider it beneficial to learning to manage the order of responses by setting up who goes first, second and so on.

- Where pupils have been withdrawn from a lesson for extra support it is important that their teacher provides a plenary which is appropriate to the learning they have engaged in.

8.7   Extending the repertoire   (DfES 0350/2002) pages 189–191

The presenter will need to make a judgement about whether to show the second plenary sequence from the *Training materials for the foundation subjects* video. As the focus in the section is on using a range of strategies to support plenaries it is likely that many teachers of pupils with learning difficulties would find the approaches shown in the video useful. Teachers will need time to consider how they might adapt the strategies to suit the learning characteristics of the pupils they teach.

An alternative task here could be for teachers to discuss how they might extend their own repertoire. Below are some examples that consultants could flipchart to start the discussion.

- Using symbols, pictures, objects of reference to provide opportunities for pupils to review and clarify their learning. (4)

- Use of digital photography throughout the lesson to provide a visual record of the learning. Pupils can then use the photographs in the plenary to sequence the process, demonstrate patterns or create groups and suggest appropriate headings thus demonstrating the learning. This will help pupils to synthesise and transfer. (8)

- Teachers and teaching assistants use a whiteboard to create a symbol/picture mind-map by asking pupils to communicate something they have learned during the lesson. The teacher either orally and visually shows the links. This will help the pupils to develop strategies to organise and remember what they have learned (10) and build up a language to help pupils to talk about their thinking. (11)

Note: the numbers in brackets refer to numbered points on **handout 8.5**.

8.9   Ready for more?   (DfES 0350/2002) page 191

When considering **OHT 8.6**, it is important to value the role that teaching assistants can play in planning for, supporting and delivering plenaries. The latter will be particularly important where pupils are withdrawn for one-to-one teaching for all or part of a lesson. In this situation it will often be appropriate for the teaching assistant to lead a plenary with the pupil prior to their returning to the class.

Plenary case study

Subject	Design and technology
Topic	Food technology – 'Designing and making a pizza'
Teaching context	Mixed ability Years 8 and 9 class. Learning difficulties range from severe to profound and multiple. There are several pupils with autistic spectrum disorders.

Having tasted and evaluated a range of pizzas during the lesson and considered lists of possible pizza toppings in a previous lesson, the pupils return to the group for the plenary. They are informed that, in the next lesson, they will make a giant pizza.

A large pizza plate is placed in the middle of the table with pictures of the toppings that have been evaluated around it on the table. The pupils are asked to add the ingredients to the plate in the correct sequence for making a pizza. For example, *What goes onto the plate first? … the base …, then what comes next? … tomato puree, cheese,* and so on. Each pupil is encouraged to select a topping to add to the pizza. The responses expected will vary according to their appropriate communication mode and may include saying the words, signing, using a communication aid or eye-pointing between the items. Throughout the process the teacher prompts pupils, where appropriate, to give reasons for their choices. The activity encourages pupils to understand the link between the learning that has just taken place and the next lesson.

The group then reviews the choices made with the option to change or omit a topping which they collectively dislike or does not 'go' with the others, for example marshmallows on a savoury pizza. The symbols are then removed from the plate and glued onto a shopping list of ingredients to be purchased for the following week's lesson.

Module 10

Engagement

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Engagement' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHT 10.1–10.6 • Handouts 10.1–10.8 • Video sequence for this module • Flipchart and pens	• Handout 10.2x • Sticky notes

Additional notes for presenters

Participation in this training module will allow teachers and other adults in the classroom to reflect on their own practice and to share effective approaches to engaging pupils in learning. The key messages contained in this module are equally appropriate to every sector of education. There will, however, be differences in emphasis between the teaching approaches used for different individuals and groups of pupils according to their learning characteristics. Part of the aim of the SEN complementary materials is to allow participants to tease out these differences in emphasis.

One of the most important factors affecting engagement is the subject knowledge of the teacher: it is difficult to plan well-structured and paced lessons if you are not a subject specialist, as is sometimes the case in special provision. The QCA subject schemes of work and *Planning, teaching and assessing the curriculum for pupils with learning difficulties* (QCA/DfES 2001) can help here.

Some of the key issues in planning for engagement when teaching pupils with learning difficulties are outlined below.

Being clear about purpose and relevance in learning

• Are all adults in the class team clear about the purpose and relevance of the session being undertaken?

• Have all appropriate steps been taken, including the use of preferred communication modes (see page 6 for information on modes of communication), to ensure pupils are clear about the purposes of the learning?

• Are the activities chosen relevant to both the lesson objectives and the experiences and interests of pupils in the group?

Is the way the lesson is planned and taught responsive to the factors that affect engagement?

• Have pupils' physical and emotional states been considered and can activities be developed or varied in response to changes in those states? For example, if a pupil becomes very tired or over-stressed.

• Have the preferred learning styles and characteristics of pupils been taken into account? Was planning based on a clear understanding of pupils' prior knowledge?

Remaining engaged

• Does the lesson include a range of learning episodes or 'chunks' providing different types of activity and a good variety of learning opportunities?

• Are pupils able to affect the shape and direction of their work through effective communication with adults in their preferred mode?

• Are effective strategies for targeting praise and reward, and other ways of allowing pupils to recognise progress, an accepted part of class routine?

• Are all adults alert to recognise signs of disengagement, however manifested, and move quickly to put things right in a way that is appropriate to the pupils' needs (this may include tactfully letting other adults know that an approach is not working and needs to be changed)?

• If a pupil disrupts the lesson, are there behaviour management approaches in place, including individual plans, to ensure that the adults can help the pupil back to self-control without jeopardising the engagement of other pupils?

Before delivering this module, presenters may find it helpful to read the leaflet *Key messages about structuring learning* (Ref: DfES 0044/2003) which provides information for teachers about the 'Starters', 'Plenaries', 'Challenge' and 'Engagement' modules in the *Training materials for the foundation subjects* folder. The leaflet includes a section on 'The importance of structuring learning'. There are strong links to be made between this module and the modules on 'Planning lessons' and 'Explaining'.

10.1 The trouble today ...   (DfES 0350/2002) page 230

When introducing the objectives you should also point out that where the term 'teacher' is used during the session it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists. Also state that where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

10.2 Promoting pupils' involvement in learning

Activity 2: Identifying key features of teaching that promote pupils' engagement

Special educational needs complementary materials

Statements for activity 2 — Handout 10.2x

Pupils are involved in activities that promote thinking.	Additional adults in the classroom have a clearly defined role. The importance of their role in the team is recognised.	There is lively direct teaching and exposition.
Pupils get rewards for effort and for success.	Pupils are rapidly involved in the lesson.	There are opportunities for pupils to ask questions and find answers.
Work is pitched at levels that take account of prior attainment and provide appropriate challenge.	There is variety in the lesson activities.	There is a rhythm and a crisp pace to the lesson.
Activities take account of pupils' interests as a starting point.	The teacher establishes positive relationships.	Pupils are able to work in a variety of groups – as individuals, in pairs, small groups, whole class.
Teachers' expectations for achievement are clear.	There are opportunities for pupils to develop an understanding of their own attainment and what they must do to make progress.	Learning objectives are clear, are shared with the pupils, and are reviewed during and at the end of the lesson.
There are strategies that enable pupils to find meaning in the lesson.	Teachers ask challenging, open-ended questions.	Pupils enjoy what they are doing.
There are examples that reflect everyday life and provide relevance.	The lesson is adjusted in response to feedback from pupils.	There are opportunities for pupils to reflect on their learning.
The teacher monitors progress during the lesson to reinforce learning and give feedback.	There are opportunities for pupils to learn using a variety of styles, e.g. visual, auditory, kinaesthetic, sensory.	There is provision for pupils to communicate in a number of ways with different senses, e.g. signing, facial expression.

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Handout 10.2x provides an alternative set of statements for use in activity 2, including some that have been added to exemplify engagement issues for pupils with learning difficulties.

10.3 Planning to improve motivation and engagement

The original video sequence provided for this section is suitable for teachers of pupils with many different learning difficulties, although it may be less useful for those working with pupils with more severe multi-sensory barriers to learning. Alternatives might include the use of an in-house video of an effective teacher or the 'Assessment for learning in everyday lessons' sequence from Lonsdale School showing a design and technology lesson involving pupils working between P5 and National Curriculum level 2 (*SEN: Training materials for the foundation subjects* video). Participants using either alternative should be prompted to use **handout 10.4** to support their analysis of the video and as a basis for discussion.

10.4 Addressing different learning styles (DfES 0350/2002)
page 235

When discussing **handout 10.7**, you may need to acknowledge that different researchers propose varying numbers and classifications of learning styles. The visual, auditory and kinaesthetic approach described in module 10 is generally well known and is discussed at length in many publications on teaching and learning.

Ask participants to discuss the question:

If all these learners are present in one class, how might their preferred learning styles be accommodated in a way that is manageable and effective?

The following additional points can also be made.

- Requiring a pupil to work repeatedly outside his or her preferred learning style may lead to poor motivation, disaffection or distress. Targeted support from a teaching assistant who may be able to adapt the activity to meet the pupil's preferred learning style can help to overcome this issue. This might be done by adapting the stimulus or the activity itself.

- There is a tendency for teachers predominantly to use approaches that favour auditory learners. Other methods of communication, including signing which incorporates visual, kinaesthetic and auditory paths, are likely to be more effective for certain pupils.

10.5 Ready for more? (DfES 0350/2002) page 236

When considering **OHT 10.6**, refer to the potential role of the teaching assistant in what is suggested. For example:

- when analysing lesson plans, consider how the teaching assistant(s) might support those pupils whose particular learning styles may require some differentiation in the way the task is delivered.

Statements for activity 2

Pupils are involved in activities that promote thinking.	Additional adults in the classroom have a clearly defined role. The importance of their role in the team is recognised.	There is lively direct teaching and exposition.
Pupils get rewards for effort and for success.	Pupils are rapidly involved in the lesson.	There are opportunities for pupils to ask questions and find answers.
Work is pitched at levels that take account of prior attainment and provide appropriate challenge.	There is variety in the lesson activities.	There is a rhythm and a crisp pace to the lesson.
Activities take account of pupils' interests as a starting point.	The teacher establishes positive relationships.	Pupils are able to work in a variety of groups – as individuals, in pairs, small groups, whole class.
Teachers' expectations for achievement are clear.	There are opportunities for pupils to develop an understanding of their own attainment and what they must do to make progress.	Learning objectives are clear, are shared with the pupils, and are reviewed during and at the end of the lesson.
There are strategies that enable pupils to find meaning in the lesson.	Teachers ask challenging, open-ended questions.	Pupils enjoy what they are doing.
There are examples that reflect everyday life and provide relevance.	The lesson is adjusted in response to feedback from pupils.	There are opportunities for pupils to reflect on their learning.
The teacher monitors progress during the lesson to reinforce learning and give feedback.	There are opportunities for pupils to learn using a variety of styles, e.g. visual, auditory, kinaesthetic, sensory.	There is provision for pupils to communicate in a number of ways with different senses, e.g. signing, facial expression.

Module 11

Principles for teaching thinking

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Principles for teaching thinking' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 11.1–11.4 • Handouts 11.1–11.2 • Appendix 11.1, Teaching thinking in the Key Stage 3 pilot • Flipchart and pens	• Appendix 11.2, Sample lesson plans

Additional notes for presenters

Developing a thinking culture in classrooms involves processes and strategies which:

• are responsive and respectful towards individual differences;

• empower the individual with the language of thinking;

• offer opportunities to engage in authentic problem solving and decision making;

• facilitate collaborative inquiry and offer high levels of challenge, appropriately supported.

Presenters may find it helpful to read the leaflet *Key messages about teaching thinking* (Ref: DfES 0046/2003) which provides information for teachers about the 'Knowing and learning' section of the *Training materials for foundation subjects* folder. The leaflet includes sections on 'The importance of teaching thinking' and on the key messages for the module, 'The principles for teaching thinking'.

11.1 What is outstanding performance? (DfES 0350/2002)
pages 256–257

While introducing the objectives shown on **OHT 11.1**, also point out that the term 'teacher' should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists. Also state that where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

Stress that there is no reason why pupils with special educational needs should not perform outstandingly well in every sense and some teachers will be happy with *Training materials for the foundation subjects* for this section and the detail within it.

For more information about teaching thinking skills and problem solving to pupils with learning difficulties, suggest that participants refer to the QCA Guidance *Planning, teaching and assessing the curriculum for pupils with learning difficulties – Developing skills*. This can be downloaded from www.nc.uk.net/ld/

11.3 Study time (DfES 0350/2002) page 258

While considering **handout 11.2**, the following issues may be raised and explored.

- Some pupils may have difficulty in adjusting to group learning situations, for example pupils on the autistic spectrum.

- Curiosity sometimes needs to be developed by offering a range of relevant and motivating experiences.

- Some pupils may find listening to others and evaluating particularly challenging. The module 'Engagement' may provide helpful support.

11.5 Ready for more? (DfES 0350/2002) page 259

In addition to appendix 11.1, **appendix 11.2** can also be used to support teachers in their planning for teaching thinking. Appendix 11.2 includes two lesson plans which each focus on different types of thinking skills, with additional guidance for teaching pupils with autistic spectrum disorders and pupils with significant learning difficulties.

They offer some suggestions for ways in which the explicit teaching of thinking processes can be linked to problem-solving activities for pupils with SEN. **Appendix 11.2** (1 of 4) provides a lesson plan based on classifying. The lesson plan includes suggestions for making connections, to cross-curricular opportunities for consolidating the skill of classification. **Appendix 11.2** (2 of 4) considers the development of classification skills for pupils with autistic spectrum disorders. Some pupils prefer routine and predictable situations. These characteristics can be used as strengths to help pupils organise themselves effectively while encouraging greater flexibility and self-awareness.

Appendix 11.2 (3 of 4) takes the theme of analytical thinking. A lesson plan involving problem solving is again offered. The making connections section offers suggestions for cross-curricular opportunities to transfer and consolidate the skill. **Appendix 11.2** (4 of 4) considers the development of analytical thinking in pupils with significant learning difficulties. Examining the component parts of a whole, or seeing how one thing can lead to another, can be important prerequisites to understanding cause and effect and developing greater self-awareness for such pupils.

Sample lesson theme 1: Developing classification skills

Target group: Year 7 specialist setting

Thinking skills to be used: classifying, labelling (naming), comparing, planning, sequencing, reasoning, negotiating, choosing, justifying, applying

Objectives:

- To understand the importance of being able to classify

- To help us make sense of our world when things are unfamiliar

- To create order and meaning for efficiency and convenience

Starter: How do you find the coffee in the supermarket?

Main task: authentic problem solving – *How can we find the coffee in a supermarket?* (a real or virtual task, depending on the group profile). It could include selecting and buying coffee according to negotiated criteria.

Planned questions

- How are groceries set out in a supermarket?

- What clues are we given to help us find the coffee?

- Why are products set out in this way?

- That's interesting, how do you know that?

- What could we do if we couldn't find the coffee?

- What else might we do?

- Which coffee should we buy?

- How will we decide?

Plenary – Making connections
The skill of classification can be linked and transferred to other areas. For example:

Art: design a poster for the school disco (ensuring all relevant information is displayed)

History: time lines, charts, maps to illustrate events

Science: organising an experiment, understanding ecosystems (e.g. food chains)

Mathematics: displaying data as graphs, pie charts, columns for numerical values (hundreds, tens, units)

Study skills: checking the timetable, using a mind-map to plan an essay, planning a painting, arranging a party, finding books in a library

At home: setting the table, cooking from a recipe, arranging videos or CDs, managing an allowance, arranging a day out with friends, food in the cupboard

Personal: organising our thinking to make a choice or decision (examining all the possibilities, looking at pros and cons), finding names in the telephone directory

Developing classification (organisational skills) in pupils with autistic spectrum disorders

Pupils with ASD often prefer routine and predictable situations. These characteristics can be used as strengths to help pupils organise themselves effectively while encouraging greater flexibility. They should be introduced to problem-solving activities within a framework of security.

They may also find it hard to reflect upon their actions in a way that makes experiences meaningful. Additional time may need to be built in to lessons to coach the pupil in reflection upon what has been experienced and learned and how that relates to past and future learning. This time can also be used to develop his or her awareness of feelings about work in the class.

Pupils with ASD need (as do many other pupils):

- to know what is expected of them;

- to know where to find things;

- to have items that are labelled;

- to have materials that are accessible;

- to have their attention drawn to salient features of a task;

- to have their attention drawn to how they are doing the task;

- to have task instructions reinforced with prompt sheets presented visually and in words;

- to know what to do when they are finished.

Sample lesson theme 2: Developing analytical skills

Target group: Year 8

Thinking skills to be used: data gathering, labelling (naming), comparing, planning, sequencing, reasoning, negotiating, choosing, justifying, relating cause and effect, applying, analysing (breaking the whole into its parts), synthesising (putting the parts together to make a whole)

Objectives:

- To understand the importance of analytical thinking

- To think about how to tackle a problem we haven't faced before

Starter: How can I wrap this box as a present for someone?

Planned questions:

- How are we going to wrap this box?

- What factors do we need to take into account?

- How will we decide? How will we work together?

- Can you explain why you think that?

- What do you think might happen if …?

- Have you considered any alternative ways of doing this?

Main task: authentic problem solving – wrapping a present

Plenary – Making connections
The skills of analytical thinking can be linked and transferred to other areas.

Art: making a collage, mosaic or patchwork; understanding primary and secondary colours; selecting and sequencing pictures to make a story

History: doing a 'mystery' (see page 3 of appendix 11.1); understanding relationships between events, for example how individual votes contribute to outcomes in elections

Science: understanding how each piece of litter contributes to environmental pollution; carrying out a 'design a mammal' task (see handout 11.1)

Mathematics: values, for example how many ways can we make fifty pence, tangrams – making different pictures from the same pieces

Study skills: reading difficult words by breaking them down into sounds or syllables

At home: the components of family systems and cultures

Personal: getting dressed – selecting items to make up different outfits, personal characteristics

Developing analytical skills in pupils with significant learning difficulties

Exemplar contexts

Aim: Pupils learn that the whole is made up of parts.

To make a cake we need several ingredients. Flour, eggs, butter, sugar. Does it matter if we miss out one of them? Can we add anything extra? What will happen? In which order should we add the ingredients?

Aim: Pupils learn that the whole can be divided into parts and the parts need not be equal in size.

We made a cake and now we can cut it into the number of slices we need according to who will eat it.
Jo can have the biggest piece because he missed lunch … I will have a tiny piece because I'm on a diet … Anna is diabetic, is it ok for her to have a taste? … Is there another way to plan how to eat this?

Aim: Pupils learn that the whole can be divided into parts and we need to know the names of each part.

My bike needs to be mended and I need to know the name of the new parts I need to buy. If I know the name of the part I won't need to take the whole bike to the repair shop. I need to know how the parts fit together and which order to fit them in …

Aim: Pupils with behaviour, emotional and social difficulties examine cause and effect.

So there was a problem in the playground at break. Let's look at all the things that might have led to that event …

Module 12

Thinking together

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Thinking together' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHTs 12.1–12.9 • Handouts 12.1–12.8 • Appendix 12.1, Thinking together: summary of relevant research • Appendix 12.2, Opportunities for talk: an example • Compilation of responses to pre-course task 2 • Flipchart and pens	• OHT 12.1x • Handouts 12.1x, 12.2x, and 12.9 • Appendix 12.3, Opportunities for communication: an example

Additional notes for presenters   (DfES 0350/2002) page 275

The module 'Thinking together' focuses on talk as the means of sharing thinking. In the SEN complementary materials many of the OHTs and handouts have been amended to refer to 'communication' rather than 'talk' in order to recognise learners who use alternative methods of communication (see page 6 for information about communication modes). For some teachers of pupils with special educational needs, it may be more relevant to use *Training materials for the foundation subjects*.

It is important that all pupils can have their views heard and considered by whatever means is accessible to them and that unnecessary barriers for pupils who use body language, signs, symbols, behaviour or other means to express themselves and their thinking should be avoided.

Research indicates that collaborative thinking may be particularly successful for pupils with learning difficulties because it provides concrete opportunities to learn through dialogue and share thinking, in a socially supportive climate. Equally, pupils with behaviour, emotional and social difficulties may more easily accept peer validation.

One particular issue which may need to be overcome is that of teacher perception whereby, in order to cater for individuals in classes with many and diverse learning difficulties, teachers individualise tasks. This may limit group experiences and social and interactive learning involving active pupil participation may be compromised.

Collaborative thinking will be dependent on the development of communication skills and support to enable this. This will need to be allowed for in teachers' planning for learning. For example, pupils may not be secure in their preferred method of communication and may struggle to operate beyond a rudimentary level; this will affect how far they can engage in collaborative work. Pupils who use non-verbal communication may also have developed their own personal, non-standardised style, which may make it difficult for others to understand them. Time delays in response may affect the fluency of communication or require a predominant use of closed questions.

Before delivering the training materials presenters may find it helpful to read the leaflet *Key messages about teaching thinking* (Ref: DfES 0046/2003) which provides information for teachers about the 'Knowing and learning' section of the *Training materials for foundation subjects* folder. The leaflet includes sections on 'The importance of teaching thinking' and on the key messages for the module 'Thinking together'.

Pre-course tasks   (DfES 0350/2002) page 276

Alternative **handouts 12.1x** and **12.2x** are provided for the pre-course task. These use the term 'communication' rather than 'talk' as the means by which thinking can be shared by pupils.

To help teachers to do this pre-course task, an example of responses to task 2 by a religious education teacher working with pupils with profound hearing impairment and loss is provided as **appendix 12.3**. This should be given to participants, together with **handouts 12.1x** and **12.2x**, a week before the training session.

12.1 Introduction: What is communication used for?

(DfES 0350/2002) pages 277–278

Show **OHT 12.1x** and state the objectives of the session. Make the following points.

- Where the term 'teacher' is used within the training materials, it should be considered in its broadest sense to include all classroom staff who contribute to pupils' learning. Teaching assistant and support staff input can be key to 'thinking together'. Intuitively many teachers look to support and develop talk by giving pupils who are stuck the answers and by intervening in the process of communication. By ensuring that all those involved in teaching pupils understand the principles that underpin 'thinking together' they will be able to make informed decisions about how best to support and promote collaborative thinking.

- Where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

- The module focuses on the value of exploratory talk as a means of thinking together to make sense of information. Where used, the term 'exploratory talk' should be taken to include all forms of communication including British sign language, sign supported English, symbols (Makaton/rebus) and pictures (PECs).

Alternative follow-up to pre-course task 1

Handout 12.9, 'The value of thinking together', has a set of prompt cards which provide parameters for participants to explore their views and to focus the discussion. It builds constructively on pre-course tasks 1 and 2 and aims to minimise demarcation between teachers, teaching assistants and other support staff.

Participants should form small groups of three or four ensuring a mix of teachers and teaching assistants in each group. Ask them to discuss the statements on the cards. Explain that they should use the cards to produce a short statement on the value of thinking together in their own school. The statements will have no more than three sentences and should be suitable for display. The statements can be used, rejected, modified, combined with others or supplemented using the spare cards.

Participants should then go on to discuss the question:

- *What are the difficulties in ensuring that pupil communication is useful?*

Ensure that participants are able to share their issues. Some will be specific to pupils with SEN.

- For some pupils with learning difficulties, sensory and/or physical impairment it may be difficult to select, separate and explain incoming information and/or to adopt the social conventions and skills required to support higher order collaborate thinking.

Other issues raised may apply to all pupils.

- Discussion can lose focus and, as a result, pupils can quickly move 'off task'.

Explain that, with the issue of the loss of focus in group communication one useful strategy to use is card sorting, as in the task they have just completed where the prompt cards serve to focus the discussion. This can be a particularly valuable approach for pupils with hearing impairments or who are non-verbal but are able to manipulate the cards.

Transcripts are a good way of providing examples of discussions involving talk in order to make the discussion less abstract to participants. Although the transcripts provided in handouts 12.3 and 12.4 are based on verbal exchanges it is possible to observe similar discussions through other means of communication.

12.2 What kind of communication do we want? (DfES 0350/2002) page 279

The following are issues to be aware of.

- Pupils who use non-verbal communication will require additional time to share information, especially when using computer-aided communication devises. Time delays affect the fluency of communication, though this may be reduced by the use of carefully selected closed questions.

- Making sense of information requires skills such as processing, recall and pattern forming, and will require additional time for some pupils. Some pupils may have limited vocabulary or life experiences to draw on during collaborative work. This may curtail conceptualisation, understanding of others and their contributions. Scaffolds, talk cues, mind-maps or objects of reference may help to minimise this.

- For some pupils, critical thinking may not be possible because they do not have the capacity to analyse or reason.

12.3 Exploratory communication   (DfES 0350/2002) page 280

Acknowledge that, for some pupils, considerable support will be needed to generate discussion.

In addition to the points made about **OHT 12.6**, the following comments can be made in relation to pupils with special educational needs.

- The ease of spoken communication for some may cause frustration for pupils using other methods of communication where response is not spontaneous. Recognition of the need to build in sufficient time for all pupils to contribute can be built into the ground rules for communication (see section 12.4).

- Protocols of communication and socialisation may be more difficult to develop for some pupils. Where possible allow them to role-play communicating within authentic contexts. Recording pupils' work and playing it back to them so that good and poor practice can be highlighted may also help to develop more effective exploratory interactions.

- For pupils communicating with body language, sign and behaviour, it is important to clarify how the mode of response will operate before work begins.

- Exploratory communication may require a radical shift in thinking for pupils as well as teachers. Many pupils with SEN are used to being passive recipients.

- The conventions of exploratory communicating will need to be taught, for example how to step back and give views or speculate. Materials from module 6 on 'Modelling' can help teachers to develop this.

- There needs to be a planned progression in how group work develops from teacher-led experiences to greater pupil independence. Some pupils benefit most from teacher-managed group experiences. For example, they learn most when the learning context is continually refreshed with objects of reference or questions that maintain their engagement.

- Good exploratory talk should be measured in terms of quality of response rather than duration of dialogue.

- It is important to vary pupil groupings so as to increase the range of experiences they encounter. By becoming more aware of pupils' learning characteristics, teachers will be increasingly confident in creating and jigsawing groups for different activities and purposes. Module 7 on 'The management of group talk' from the training folder *Literacy across the curriculum* (Ref: DfEE 0235/2001) provides practical guidance in this.

12.5 Teaching and learning the   (DfES 0350/2002)
ground rules for communication   pages 281–282

When developing ground rules for communication it may be helpful to consider the following points.

- In establishing the ground rules, pupils may benefit from having a tangible reminder of how to operate. Using a conch as a communication device may encourage pupils and teachers to listen to each other. Only the person holding the conch is allowed to talk at that time. The device supports the establishment and maintenance of taking turns.

- Disagreement in the group should not be dismissed as a negative outcome or a suggestion that the work is not effective. What is important is that pupils begin to know how to work through conflict and to adopt these strategies in their collaborations.

- Rules may be in place and negotiated but this does not mean that pupils automatically have the same understanding of them or work with them in the same or desired way. Where pupils are unused to working collaboratively or have behaviour, emotional and social difficulties, it may be productive to start with pairs and to gradually increase the number of pupils collaborating together.

- Some pupils will be reluctant to make decisions. The reasons may be fear of taking responsibility for their decisions, learned dependency, wishing to please the teacher with the right answer or perception of an unsafe environment.

- The classroom dynamic for thinking together takes time to establish and can be easily disrupted. The teacher's role in group discussion and group activities cannot be overestimated.

12.6 Conclusion (DfES 0350/2002) page 283

These additional points can be made in summing up.

- All pupils have the right to develop their own voice: to express their understanding and to articulate their ideas, views and opinions.

- An understanding of pupils' individual and group learning characteristics can be used to support the development of collaboration and thinking together.

- Thinking together can play a very valuable role in building pupils' self-confidence and trust. This is particularly important for pupils with low self-esteem, behaviour, emotional and social difficulties.

- Thinking together supports pupils with learning difficulties in moving them from being passive recipients to active participants in their own learning.

Handout 12.7 may need adapting for use with certain sectors of SEN provision. For example, the list of 'talking words' may require alteration. Teachers may find it helpful to consider less challenging words during initial work and may prefer to ask pupils to match word and definition cards or pictures than to use dictionaries. Pictures could be used as visual prompts. Suitable words might include *show*, *tell*, *look*, *describe*, *state*, *point*.

12.7 Ready for more? (DfES 0350/2002) page 284

When considering **OHT 12.9** and **handout 12.8** it is important to value the role that teaching assistants can play in planning for, supporting and developing exploratory communication.

Refer participants back to **appendix 12.3** for ideas on how to plan exploratory communication into lessons.

Opportunities for communication: an example

Communication in my classroom: a Key Stage 3 religious education teacher, working with deaf pupils, identifies opportunities for communication and explains her strategies for encouraging group discussion. Her pupils are working, predominantly, at National Curriculum level 3 or below.

1   When and why do you ask pupils to work in groups?

Most lessons involve opportunities for pupils to work together. Pupils are reliant on lip reading and signing for communicating with each other. Our teaching groups are small, between six and eight pupils, and small group or paired communication opportunities are used for a variety of purposes – to raise issues, explore contexts, develop expressive and receptive skills and to build confidence and self-esteem. Pupils may be asked to speculate, justify, infer, interpret or analyse. They may be asked to communicate different information to each other and then to use their combined knowledge to find an answer. I always make sure that pupils have a clear time frame for their work and we make use of prompts and question frames. I sometimes choose the pairings depending on the task to make sure that the discussion is balanced and all contributions are received. Everyone is expected to join in, but the tasks may be differentiated either to provide appropriate challenge to individual pupils or to support learning and confidence.

2   What general strategies do you use to encourage the exchange of ideas in order to reach a solution or a greater understanding?

What's happening here?

I have a selection of photographs that feature clues but no specific indication of exactly what is happening in the scene. Pupils look carefully and discuss with their partner what is happening and choose from three possible scenarios presented on the back of the card. Beneath is a second question that requires an extension of thought and reasoning. Pupils arrive at an answer together with a justification drawn from their subject knowledge, logical deduction or empathetic understanding of the situation depicted.

Judge and jury

A moral dilemma is presented (teacher in role) and the class is divided into prosecution and defence. The groups work to collect evidence and to list four or five points with which to make their case. They may ask a further three questions of the 'person in dilemma'. Each group presents their case. The moral judgement or decision is made individually.

Back to back

Pupils work in pairs, back to back. They write short sentences to one another (these could be spoken by hearing pupils) in role, for example the prodigal son and father, Pharaoh and Moses, soldier to soldier, and so on. The exchanges are passed back and forth without eye contact as this often allows pupils to stay in role more effectively. Gradually, a dialogue is built up and this can be used in further discussion by the whole group or kept between the pair.

3   Give two or three examples of how 'talk' or communication are planned for in lessons.

Year 7: Moses

Mission Impossible – each pupil is given an instruction they may not want to carry out. They must decide whether to carry out the mission, then describe their decision and explain why. Responses are displayed for the whole group using different colours for mission, decision and explanation. This clarifies the distinction between decisions and explanations, something pupils often find hard to understand. Pupils then apply the technique to an account of Moses' decision to return to Egypt and his reasons and Pharaoh's decision not to allow the Israelites to leave and his reasons. Pupils work in pairs, highlighting the text for decision and explanation. Finally, pupils dramatise Moses' request to Pharaoh to free the Hebrew slaves. This is part of a self-assessment activity: pupils can assess whether they are able to demonstrate justification for decisions.

Year 8: This wide world

A photograph sorting activity is used to help pupils to reinforce, check understanding and promote thoughtful discussion. The photographs show suffering as a result of natural or man-made disaster and are carefully selected so that they are not upsetting. Pupils work together to divide the photographs according to the two categories. Feedback involves encouraging full answers, justifying why a flood or famine may be the result of man's action or inaction or a natural disaster.

Year 9: Relationships

Pupils are given a number of speech bubbles containing typical parental or carer remarks, for example *Tidy your bedroom*, *You're not going out dressed like that!* and so on. Pupils then work together in threes to compare their responses – what they are thinking and what they actually say – and they enter these in thought and speech bubbles.
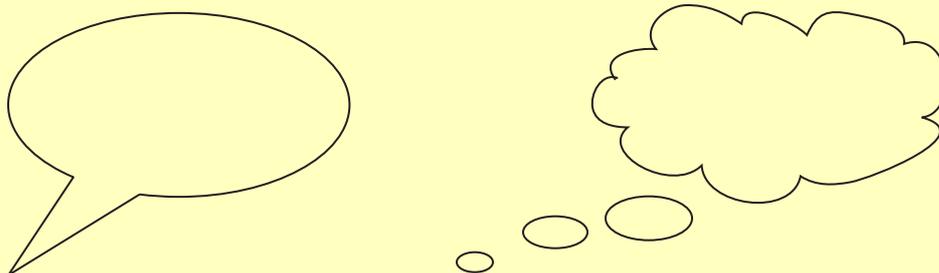
These are brought together to promote whole-class discussion about the changes in our relationship with our parents as we grow up, how what we say can promote or dissipate conflict and how to find peaceful solutions.

Objectives

- To consider talk and other methods of communication as tools for thinking and learning

- To evaluate and understand ways that pupils communicate in joint activities

- To consider how pupils can be helped to 'talk' and reason together most effectively

Pre-course task 1: What is communication used for?

On one day in the week before the session, observe the ways pupils communicate with each other in your classes. On the chart below, record your observations about what their communication seems to be used for and bring the handout along to the course session.

Name: _____

Date: _____

Function of communication	Tick for each example noted	Comment
Social interactions (for example, general conversations or 'winding up' peers)		
Exchange of factual information (for example about classroom task)		
Problem solving or decision making (in pairs or groups)		
Other		

Pre-course task 2: Opportunities for communication

In relation to your medium- or short-term planning, write brief notes (no more than two sides of A4) on the questions below. Provide the session presenter with a copy of these notes in the week before the course.

1   When and why do you ask pupils to work in groups?

2   What general strategies do you use to encourage the exchange of ideas in order to reach a solution or a greater understanding?

3. Give two or three examples of how 'talk' or communication are planned for in lessons.

The value of 'thinking together'

Handout 12.9

It gives pupils time and space to connect new ideas with what they already know.	When pupils share ideas with their peers, they can sharpen, refine and improve their own understanding.
The thinking of individuals is challenged by the contributions of others.	Through sharing ideas with others, pupils consolidate and extend their own understanding.
'There's more brains in groups!' because groups bring together a greater range of knowledge, experiences and ideas (distributed cognition).	It provides opportunities for affirmation by peers and teachers of pupils' thinking and communication skills and how they relate to others – this builds pupils' self-confidence and trust.
It raises levels of engagement and motivation – particularly for pupils with an interpersonal learning preference.	It allows the teacher to identify where pupils are in their thinking and to plan the next steps of learning.
Pupils develop their own voice or way to express their understanding.	It develops social and communication skills.
It encourages productive learning dispositions because skills and meanings develop in context.	Pupils can practise using subject-specific language within a specific context.
It encourages collaboration and mutual support in future lessons.	It promotes a critical response rather than passive acceptance of other ideas.
Pupils have greater ownership of learning because the joint thinking of the group can be gradually internalised by the individual.	It provides pupils with the opportunity to be exposed to and explore experiences they may not personally have had.
It supports pupils in moving from passive recipient to active participant in their own learning – going beyond the given and beyond the expected.	It provides the teacher with a 'window in' on what and how pupils think. This then enables teachers to make informed choices about how to prompt and scaffold the process of thinking.

Module 13

Reflection

These complementary materials are intended to support and promote inclusive approaches to both teaching and professional development in special and mainstream schools, including resourced provision. They are designed for use by teachers of foundation subjects, senior managers and SENCOs. The materials should be used in conjunction with, to complement and enhance, the *Training materials for the foundation subjects* folder (Ref: DfES 0350/2002) and video (Ref: DfES 0351/2002); they are not freestanding. This section provides alternative 'pathways' through the module 'Reflection' to meet the more diverse training needs which may arise for teachers of pupils with SEN.

Resources

Training materials for the foundation subjects	SEN complementary materials
• OHT 13.1–13.4 • Handouts 13.1–13.7 • Appendix 13.1, Pre-course task • Flipchart and pens	• Handouts 13.5x and 13.7x

Additional notes for presenters

An emphasis on reflection or metacognition involves making our thinking explicit. Many teachers, in working in the special educational needs sector, already focus on this with pupils because of the need to minimise barriers to learning. Many of the professionals they work with, such as speech and language therapists and educational psychologists, are trained in these approaches and can be a ready source of advice.

When preparing this session, presenters are recommended to watch the video sequence from Knottingley School, which accompanies the 'Plenaries' module. This plenary usefully exemplifies many of the key messages for effective reflection or metacognition, for example that often the best thinking is generated through a collaborative activity and that, by reflecting on how they have learned, pupils can become better independent learners.

To encourage effective metacognition teachers of pupils with learning difficulties should:

- understand the baseline from which their pupils are starting to think about their thinking: the hierarchies suggested in P levels and other systems for performance description can be helpful here;

- recognise the risks that thinking about thinking can pose for some pupils. The session can include discussion of the appropriate balance between patience, the provision of wait time and avoidance of counter-productive anxiety;

- draw on the widest possible range of contexts for pupils to learn about learning. It is as much a metacognitive activity to discuss how to learn a physical skill such as the crawl in swimming or use a memory tip, for example how to remember the spelling of 'believe', as it is to consider how to understand the difference between right and wrong. The point is that thinking about thinking, in any context, can help pupils to structure their own learning in future.

In reflecting on their learning many pupils can benefit from:

- assistance from adults or other learners in identifying successes in thinking, how they were achieved and where or when it will be appropriate to use those skills again (transfer);

- adults modelling reflection about their own thinking and learning;

- planned introduction to appropriate vocabulary for metacognition, perhaps by adults mirroring such vocabulary back to them;

- support in communicating about learning in their preferred mode;

- access to a wide range of activities, including games and other resources, that let them practise metacognition;

- activities across the curriculum that encourage reflection, such as journals or learning logs (in whatever media);

- opportunities to communicate about feelings and responses to learning (*what do I like/not like*; *how did I react when …*; *I was proud/happy when …*);

- opportunities to review their preferences in learning behaviour (*I like to work with a group*; *I need to go to the quiet area when I feel angry …*).

Presenters may find it helpful to read the leaflet *Key messages about teaching thinking* (Ref: DfES 0046/2003) which provides information for teachers about the 'Knowing and learning' section of the *Training materials for foundation subjects* folder. The leaflet includes sections on 'The importance of teaching thinking' and on the key messages for the module, 'Reflection'.

Pre-course task

(DfES 0350/2002) pages 314

The pre-course task described in **appendix 13.1** may be unsuitable for teachers of pupils who would find it challenging to take part in a focus group discussion and should be omitted.

13.1 The importance of reflection

(DfES 0350/2002)
pages 314–315

After showing **OHT 13.1** and discussing the objectives, point out that where the term 'teacher' is used during the session it should be considered in the broadest sense to include all classroom staff who contribute to pupils' learning, for example teaching assistants, support staff and therapists. Also state that where the term 'school' is used within the training materials it should be taken to mean all types of teaching environments.

After showing **OHT 13.2** make these additional points.

- Pupils with learning difficulties will benefit from the teacher or teaching assistant modelling reflective thinking.

- Support can be provided to pupils to help them to reflect on their new skills and understanding and record them in a meaningful way. This might involve the use of journals, photographs, video, symbols or other visual prompts.

- In relation to the last bullet point on **OHT 13.2**, acknowledge that the main reason for developing reflection for many pupils is to promote those skills needed both for meaningful learning in school and for meeting challenges in everyday life.

When setting up the group discussion activity based on **handout 13.1**, suggest that dialogue similar to this may take place using non-verbal communication approaches such as British sign language, symbols or pictures or may be supported by the use of symbols or objects of reference.

While taking feedback from the discussions about how reflection helps pupils to improve on their own learning and performance you may find it helpful to refer to the following information.

Teachers can assist pupils to reflect on:

- why a task was carried out and what they achieved, for example understanding that joining in with a discussion group to organise a day out, and careful planning, leads to a successful and enjoyable trip;

- how well they completed a task, for example having followed a sequence of symbols as a way to achieve an agreed outcome;

- their individual strengths and weaknesses, for example *I felt frustrated when I didn't know what to do next … I asked for help … when the task was explained again, I did well*;

- learning from mistakes, for example remembering to use facial expressions to guide a member of staff in pacing feeding;

- working in a group, for example *What did I do well*? *How can I use those skills at home?* or *What would I do differently next time?*;

- developing attention and concentration, for example *Yesterday, with help, I completed 3 minutes at the computer using my concept keyboard*; *today I completed 5 minutes at the computer using my concept keyboard, by myself ….*

Also make the point that promoting and supporting reflection in a one-to-one context level may sometimes be appropriate for pupils who find it difficult to participate in a group plenary but their experience over time should always include some group reflection.

13.3   Developing a language for learning in art and design

(DfES 0350/2002) page 317

Handout 13.5x provides some supporting information for identifying thinking words in art and design for Year 7 pupils with special educational needs. It should be used with **handout 13.5**, which also provides the task to be carried out.

Remind participants that guidance on planning, teaching and assessing the curriculum for pupils with learning difficulties at Key Stage 3 is provided by QCA for all subjects and can be downloaded from www.nc.uk.net/ld

13.4 Ready for more? (DfES 0350/2002) page 318

When using **OHT 13.4/handout 13.6** make the following points.

- In relation to the second bullet point about displaying thinking words: suggest the use of pictures as visual prompts and, after a suitable activity, allowing pupils to choose words or pictures which match their mental processes.

- Teaching assistants can facilitate all the 'developing reflection and metacognition' bullet points listed.

- Emphasise the importance of modelling thinking for pupils with SEN. Suggest that it is most effective when performance is modelled at a slightly higher level than is characteristic of the pupils. The following example could be used to demonstrate how to model the process of 'thinking through' finding evidence in a textbook. This may be helpful for teachers who have not modelled thinking before.

  - *I am trying to find out something about Henry VIII's wives.*

  - *I am looking in the contents page and seeing if I can see anything.*

  - *I can't see a chapter on Henry VIII's wives, but I'm not going to give up.*

  - *I'm going to look up the index. It's at the back. It's alphabetical so I look down the list until I get to Henry.*

  - *It doesn't seem to mention his wives so I'm going to search through the pages.*

  - *Ah, here's a picture of someone who may be his wife, let's look at the caption … Anne Boleyn … can we find that name on the page?*

Though many teachers will find the words suggested in **handout 13.7** appropriate, some additional thinking words, taken from the P levels, are provided on **handout 13.7x**. Point out that these are purely suggestions that teachers may wish to draw from and are not cross-referenced to any hierarchy of thinking. Words should be selected on the basis of the ability of their pupils to use and apply them with understanding.

Identifying thinking words for Year 7 pupils with special educational needs

Much of the art and design programme of study at Key Stage 3 is relevant to pupils with SEN. With modification, it can provide stimulating and challenging learning opportunities.

Key Stage 3 art unit 7b 'What's in a building?'

Pupils with learning difficulties (including those with the most profound disabilities) can be offered the opportunity, with support, to:

- experience colour, texture, shape, form and space in two and three dimensions;
- try out and choose different materials and suitable tools to make images;
- look at the work of architects, designers and sculptors;
- respond in different ways to their own work and to show likes and dislikes about the work of others.

Pupils with learning difficulties (including those with the most profound disabilities) can:

- use a variety of materials and processes to record observations, ideas and feelings and to make images and artefacts;
- review and express views on their own work and the work of others and make simple changes to their own work, for example by scanning photographs into the computer and manipulating them in different ways, to change the shape and form of the building, or the colours and textures.

A few pupils with learning difficulties may develop further aspects of knowledge, skills and understanding in the subject, for example they may work on their own when communicating what they see, feel and think when making images and artefacts. They may compare their own work and the work of others, and adapt and develop their own work as a result.

(Based on guidance in *Planning, teaching and assessing the curriculum for pupils with learning difficulties art and design – Opportunities and activities at Key Stage 3* (QCA) www.nc.uk.net/ld)

More thinking words

after	learn
before	like
behave	link
believe	list
cause and effect	match
change my mind	more
choose	not like
collect	plan
compare	predict
connect	recognise
copy	remember
discuss	repeat
dislike	responses
estimate	review
evaluate	search
feel	share
fewer	solve problems
forget	sort
group (together)	think
guess	understand
join in	
know	