Learning and teaching for dyslexic children

Session 1: Access strategies

The Coalition Government took office on 11 May 2010. This publication was published prior to that date and may not reflect current government policy. You may choose to use these materials, however you should also consult the Department for Education website www.education.gov.uk for updated policy and resources.
Learning and teaching for dyslexic children

Session 1: Access strategies
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This session will take a minimum of 75 minutes

Objectives

• To increase our understanding of dyslexia and how it can feel to be a dyslexic learner
• To review the way we identify dyslexic learners and assess their learning needs
• To develop the range of whole-school strategies we use to enable dyslexic children to succeed

Resources

• Slides 1.1–1.33
• Handouts 1.1–1.9
• Flipchart and marker pens
• Copies of some of the classroom resources available in the library section of the CD-ROM, for example timetable icons, writing scaffolds, common word lists, writing mat template
• A3 paper for classroom drawing task

Note: All the sessions in these materials are intended to be used flexibly. You will need to select from the information and activities only those that are relevant for your school or group, adapting activities and timings accordingly.

Many of the PowerPoint slides in the sessions contain hyperlinks to video sequences and sound recordings. These links will only operate when the slide show is playing. Follow the instructions on the slide to hear the sound or watch the video.

The slides can be projected onto a screen or an interactive whiteboard. You will need additional speakers if you are using a screen. It is unlikely that the ordinary sound equipment of a laptop will be sufficient.
Session outline

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<th>Session outline</th>
<th>Time</th>
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Introduction 5 minutes

You could begin the session with an overview of the aims of the professional development sessions you are going to be using (slide 1.1) and their structure (slide 1.2), explaining how the school will be using the sessions (for example, as an inservice training day or as a series of staff meetings).

Slide 1.1

Aims of the sessions

- To increase our understanding of dyslexia and its implications for learning and teaching
- To develop the range of strategies we use to enable dyslexic learners to succeed

Slide 1.2

Structure of the sessions

Use slide 1.3, which presents a visual model of the National Curriculum Inclusion Statement, to explain the structure of the sessions.
You could use slide 1.4 to explain that the National Curriculum Inclusion Statement statutory requirement that all teachers set suitable learning challenges for children can be interpreted in terms of **getting the learning objectives right**. Inclusion is not necessarily about every child working on the same learning objectives as every other child in the class; it is essential that we are able, where necessary, to ‘track back’ through objectives, such as those in the NLS and NNS Frameworks, in order to identify the appropriate objectives, linked to the topic the class are working on, for children who are out of step with their peers. We can then plan how to address these objectives through differentiated questioning and demonstration during whole-class teaching, and through the work we plan for individuals and groups. For dyslexic children such ‘tracking back’ will be necessary for aspects of literacy teaching (particularly word level work) and sometimes for aspects of mathematics.

This aspect of inclusion will not be covered in the course as it is a straightforward process already well embedded in most classrooms. If necessary, you could offer colleagues additional help through input to year group or class planning sessions.

The second National Curriculum Inclusion Statement requirement, overcoming barriers to learning, means using appropriate access strategies (slide 1.5). Teachers need to be very aware that children with special educational needs can often work on the same learning objectives as others in the class, as long as the teacher plans access strategies to overcome a barrier between the child and the learning.
Some examples might be:

- if the barrier to learning is written recording, the child might use ICT or work with a ‘buddy’ who acts as scribe;
- if a barrier to a lesson on problem solving is lack of fluent knowledge of number facts, the child may need to use a calculator;
- if the barrier is motor coordination, so that the child has difficulty in drawing shapes or graphs, they may need to use appropriate software that draws shapes and graphs for them.

Such access strategies are often needed for dyslexic children, and this session explores their use.

The third National Curriculum Inclusion Statement requirement, responding to pupils’ diverse needs, means choosing appropriate teaching styles and approaches to take account of the way that different children learn. You could give examples, such as the use of visual, auditory and kinaesthetic modalities, varying the length of tasks, and whether tasks are open or closed. Session 2 of these professional development materials explores teaching styles and approaches that are particularly effective with dyslexic children.
might be the commonly used access strategy of attaching a teaching assistant to the child as if by Velcro, but if the appropriate learning objectives and teaching styles and approaches are not also adjusted the child may be ‘helped’ to access a totally inappropriate curriculum. All three circles need to work together to ensure inclusion.

What is dyslexia and what does it feel like to be dyslexic?

Ask participants to think about what they already know about dyslexia. Words such as letter, reversal, sequencing, memory, clumsiness, spelling, reading and writing difficulties may be mentioned.

Give out handout 1.1 to draw out some key points about dyslexic learners. Ask the group, working in pairs, to read the statements and decide whether they are true or false.

<table>
<thead>
<tr>
<th>True or False?</th>
<th>Key points about dyslexia</th>
</tr>
</thead>
<tbody>
<tr>
<td>True</td>
<td>Dyslexia occurs across the ability range.</td>
</tr>
<tr>
<td>True</td>
<td>There are dyslexic children in every classroom, and dyslexic adults in most staff rooms.</td>
</tr>
<tr>
<td>True</td>
<td>4% of the population are severely dyslexic, and an estimated 10% mildly so.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexia is a learning difference – a combination of strengths and weaknesses which affect the learning process in reading, spelling, writing, and in memory, number and calculation.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexic learners may also have weaknesses in short-term memory, sequencing and the speed with which they process information.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexia has a physiological basis – research indicates neurological differences which generally affect the left hemisphere, which deals with language and sequential processing.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexia runs in families.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexia occurs on a continuum from mild to severe.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexia occurs in all ethnic groups and in all languages.</td>
</tr>
<tr>
<td>True</td>
<td>Four boys are affected to every one girl.</td>
</tr>
<tr>
<td>True</td>
<td>Self-esteem is often low which can lead to reduced motivation and sometimes to behaviour problems.</td>
</tr>
<tr>
<td>True</td>
<td>Dyslexic learners can do as well as anyone else when identified and given appropriate support.</td>
</tr>
</tbody>
</table>

Take feedback, then make clear that all the statements are in fact true.

You might then want to give out handout 1.2, taken from recent British Dyslexia Association guidance, for participants’ reference.
Ask the group to reflect on the classes they teach or work with and note down the names of children known to be dyslexic. Say that later in the session they will be returning to this list to see if there are any names they might want to add.

Use slide 1.7 to show some of the talents that dyslexic learners can have. This would be a good time to give examples of some very successful and creative dyslexic people, for example Leonardo da Vinci, Einstein (who did not speak till he was 4 or read till he was 12), the architect Richard Rogers, the actress Suzannah York, the poet Benjamin Zephaniah, the writer Lynda La Plante, the comedian Eddie Izzard and the sportsman Steve Redgrave (who has only read four books, two of which he himself wrote).

Make the point that talents may not be apparent at school if self-esteem is low or children’s learning needs are not being met and they become frustrated and disillusioned.
Activity 1.1: What does it feel like to be dyslexic? (15 minutes)

This activity uses a video sequence (hyperlinked to slide 1.8) that gives some insight into what it might feel like to be dyslexic. The sequence comes from a BBC television series and was made some time ago. As they watch the extract, participants might reflect on how far the experiences of the child portrayed are still current today.

Use slide 1.8 to set the task.

Slide 1.8

Take feedback on what feelings the child in the video extract might have (frustration, anger, anxiety) and initiate a discussion on the impact of these feelings (low self-esteem, reduced motivation, behaviour difficulties). Handout 1.3, What children say, might be useful at this point.

Handout 1.3

If any of the staff group are themselves dyslexic they might be willing to share some of their own experiences of school and their feelings about those experiences. If you can, draw out what helped
them and what teachers and others did that made a positive difference, as well as their feelings about any negative experiences.

End this section by pointing out that identification and understanding of the difficulties that dyslexic children face is essential if we are to prevent children experiencing the frustrations that have been discussed and enable them to learn effectively.

**Identification and assessment**

15 minutes

Say that while in the past there has been an emphasis on referring children to outside agencies for specialist assessment and waiting – sometimes a long time – for the outcome, practice is now changing so that all teachers feel able to identify indicators of dyslexia and take appropriate action.

*Slide 1.9*, an extract from recent British Dyslexia Association guidance, emphasises this point.

It will be important to reference your own school or LEA policy on identification and assessment of dyslexia here, but you might want to make the point that current best practice often starts from an assumption that children who experience persistent literacy difficulties not explained by other factors probably fall somewhere on the dyslexic continuum. This enables everyone to focus on action (‘What are we going to do about it?’) rather than lengthy debate.

*Slide 1.10* describes tools teachers can use to identify dyslexia and assess learning needs. The slide places assessment for learning at the heart of this process.
Expand on the points on the slide using the examples that follow.

**National Curriculum assessment profiles**

Strengths in some subjects (including speaking and listening), weaknesses in reading, writing and often in numbers and the number system, calculations.

**Achievement of curricular targets**

Particular difficulties with class or group curriculum targets involving spelling, sequencing skills or rote recall. Examples might be curricular targets in class to ‘understand how to use alphabetically ordered texts to retrieve information’, ‘order 3-digit numbers in ascending/descending order’ or ‘use known facts and place value to consolidate mental division’.

**Day-to-day assessment in class**

Response to questions and oral discussion that shows greater understanding than is evident in written work, observations that show the child struggling to hold facts in mind when they work on a multi-step mathematical problem, response to questions in word level work that show difficulty in analysing and synthesising the sounds in spoken words, observations that show the child having difficulty in remembering instructions and organising themselves for learning, discussions with the child about what they are finding easy and difficult in their learning.

**Marking children’s work**

Letter reversals, spelling a word in several different ways in one piece of writing, unusual spellings that bear little relationship to the sounds in the word or are heavily phonetic.

Make reference here to assessment tools provided by the Primary National Strategy, such as the screening tools to identify children with poor phonological awareness that form part of *Playing with sounds: a supplement to Progression in phonics* (DfES 0281-2004), which you can find in the Library section of this CD-ROM, and the screening and selection tools in *Early literacy support* (DfES 0651-2001).

**Activity 1.2: Checklists (5 minutes)**

Explain that checklists can be useful in drawing together observations from assessment for learning and from other information about the child, for example, from parents/carers. In this activity (slide 1.11) the group will look at one checklist, perhaps in year group or class teams, and consider as they read whether any children they teach come to mind. You could ask the group to reflect on the list they made earlier of dyslexic children in their class and consider whether there are any children they might want to add. They might want to keep this list in mind as they work through the sessions.

Emphasise that many children will show some of the signs identified on the checklists, but it is only when they show a high number, or when a key indicator such as a family history of dyslexia is combined with several other indicators, that there is cause for concern.

**Handout 1.4** provides a checklist for the Foundation Stage, and **handout 1.5** for Key Stages 1 and 2.
Emphasise that some children will need more specialist assessment if they fail to respond to the kinds of teaching strategies discussed in these sessions. **Handout 1.6** suggests some appropriate referral routes.
Activity 1.3: Identifying dyslexic learners  
(5 minutes)

This activity (slide 1.12) involves watching a video sequence about how one school identifies dyslexic learners.

Notice similarities and differences between this school and your practice. You could ask half the staff to look out for similarities and half to note differences between practice at the school in the video extract and practice in your school.

Take feedback about people’s reaction to the extract. Make the point that because the school in the video sequence teaches all pupils in a dyslexia-friendly way, many children with mild dyslexia need no further help. The professional development sessions you are undertaking together will enable you to adopt a similar approach.
End this section with a discussion of the vital role of parents and carers in identification and assessment. Ask participants to pick out items from the checklists they looked at earlier (handouts 1.4 and 1.5) where parents and carers would have important insights to share. Encourage discussion about whether approaches based on the school’s own rapid identification of dyslexic learning needs, rather than referral on for more specialist assessment, are likely to be helpful to parents and carers. You could use slide 1.13 to make some key points about communication with parents/carers. Emphasise that it is essential to work with parents and carers, not only because of their concerns and the insights that they may bring to the assessment process, but also because children will need systematic help from both school and home.

Further information about working with parents and carers can be found in the Library section of this CD-ROM.

Whole-school access strategies 25 minutes

This part of the session is about how a school can organise learning in a dyslexia-friendly way. You could say that, if we do this, not only do we help all children, but those children with mild dyslexia may not need further support. Those with more severe difficulties will be able to access the curriculum. If children feel successful, many of the secondary difficulties such as behaviour or lack of motivation are reduced.

If we can minimise the above difficulties, the learning of all pupils will be improved.

Slide 1.14 emphasises the importance of a whole-school approach – everyone working together, rather than individual teachers doing excellent work in their own classrooms, without opportunities for everyone to share practice.
The learning and teaching approaches recommended by the Primary National Strategy (slide 1.15) are a good basis for dyslexia-friendly education. The professional development materials *Excellence and Enjoyment: learning and teaching in the primary years* (DfES 0518-2004 G) could be a reference point here. If you have used these materials in school, you could make links to your school discussions about the themes on the slide.

You could use slide 1.16 to outline some components of a whole-school approach that overcomes barriers and enables dyslexic children to access learning.
Dyslexia-friendly classroom organisation

Begin with a discussion about dyslexia-friendly classroom organisation, using slides 1.17–1.30. The slides provide a case study of work in one classroom. Run through the slides, clicking on the sound button to hear the class teacher or SENCO talking about the approach. Explain that most of the approaches will be familiar to teachers. The important thing is that they are consistent throughout the school and that the class teacher regularly reminds the children about them. Without this, dyslexic children will forget to use the help available.

You might want to expand on slide 1.27, which shows a rainbow alphabet. Rainbow alphabets are useful to help children manipulate letters, see patterns and work in a multisensory way on spelling and phonics. On the slide we see a metal whiteboard and magnetic letters. The vowels are in different colours. Children are given repeated experience of setting out the letters of the alphabet in an arc and using it to make words, play full circle, play onset and rime games, and so on.

Activity 1.4: Dyslexia-friendly classrooms (10 minutes)

Slide 1.31 explains this activity in which participants reflect on their own classroom organisation.

Give out handouts 1.7 (Jenny’s classroom plan) and 1.8 (Dyslexia-friendly classrooms). A3 paper might be useful here. You could also put out a range of resources available on this CD-ROM.

- Timetable icons (for visual timetables)
- Writing mat template
- Instructions poster
- What can I do if I can’t spell a word? poster
- Common words
Staff may want to take some of these resources away with them to use in their classrooms.

Emphasise that people can draw or label any arrangements or resources that support dyslexic learners, such as grouping of pupils for whole-class, group and independent work, arrangements for paired talk, displays, coloured pens, spelling equipment, plastic letters, sticky notes to remind children of the task in independent work, and so on.

Participants might discuss their plan with a neighbour when they have finished it.
A whole-school approach to building children’s confidence and self-esteem

You could use slide 1.32 to illustrate some of the things dyslexic children often say about themselves. The slide hyperlinks to another video sequence of effective school practice.

Ask participants, as they watch, to note how the school builds the confidence and self-esteem of all its children.

Take suggestions from the group about ways in which they build self-confidence for the children they teach or work with. Compare their ideas with those on slide 1.33.

You might want to ask staff to look at handout 1.9 here, which is taken from Excellence and Enjoyment: learning and teaching in the primary years (DfES 0518-2004 G) and describes particular kinds of language that build children’s confidence.
Conclusion

You might want to end this session by quoting the conclusions drawn from a survey of the views of dyslexic children.

Overall, it is clear that these pupils have no difficulty recognising the learning environment in which they can succeed. It is interesting that the underlying theme is the emotional climate in the classroom rather than any specific techniques or special methodology. They want calmness and security, the feeling that teachers might actually like them and are enthusiastic about their subject, quiet recognition of their difference and the provision of low-key differentiation and support.

Ask staff to reflect on this important message.

End by summing up the objectives for the session.

- To increase our understanding of dyslexia and how it can feel to be a dyslexic learner.
- To review the way we identify dyslexic learners and assess their learning needs.
- To develop the range of whole-school strategies we use to enable dyslexic children to succeed.

As a group, identify three ideas you will all aim to try out as a result of the session.
If you are using these sessions as a series of short professional development meetings rather than an inservice training day or half-day, plan how you will implement your ideas and support each other in making the changes you have identified. Make time, when you next meet as a staff group to focus on dyslexia, for people to talk about the work they undertook, and what they learned.
## Key points about dyslexia

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Handout 1.2

What is dyslexia?

Dyslexia is a learning difference, a combination of strengths and weaknesses which affects the learning process in reading, spelling, writing and sometimes number and calculation. Dyslexic learners may also have accompanying weaknesses in short-term memory, sequencing and the speed at which they process information. These are skills that everyone needs if they are to learn effectively in a busy classroom. They are also key skills for life.

Learning problems arise if dyslexia is not recognised and the teaching is inappropriate. To best understand how to meet the needs of dyslexic learners in mainstream, an appreciation of the subtle changes required in policy and practice is needed. If it is the policy to view dyslexia as a learning deficit, essentially because there is something ‘wrong’ with the child, then practice will tend to focus on special educational needs, remediation and teaching. However if it is the policy to view dyslexia as a learning difference, one which conveys a range of strengths and weaknesses in common with all learning styles and preferences, then practice is able to focus on inclusion, differentiation and learning.

Viewing dyslexia as a learning difficulty implies that something is ‘wrong’ with the learner. This leads to a focus on identifying weaknesses rather than celebrating strengths. This, in turn, can result in an emphasis on remediation by specialists rather than resolution by knowledgeable class and subject teachers. One inevitable consequence has been to focus on a school’s special needs provision. However, this places responsibility for remediation on the SENCO and diverts attention away from the mainstream classroom which is, after all, the place where dyslexic students spend most of their time.

Specific learning difference

Acknowledging a ‘specific learning difficulty’ as a ‘specific learning difference’ places the focus firmly on how all lessons are planned, resourced and taught and also on the way teachers are supported through school policy, practice and ethos. This offers real opportunities for an emphasis on inclusive mainstream strategies which are designed to empower all learners to be the best they can be. In dyslexia-friendly schools the focus has changed from establishing what is wrong with children in order to make them ‘better’, to identifying what is right in the classroom in order to enhance the effectiveness of learning.

Placing the focus on learning in the mainstream classroom also offers the potential to improve the quality and quantity of discrete intervention. This can take the form of in-class support, withdrawal or a needs-based combination. This can lead to opportunities for more, higher quality intervention as additional needs are met in dyslexia-friendly mainstream settings.
One of the basic principles of becoming a dyslexia-friendly school is the expectation that teachers take immediate action when faced with learning needs, rather than refer for assessment and wait for a ‘label’. In a dyslexia-friendly school all teachers are empowered, through training, policy and ethos, to identify learning issues and take front-line action. This is the policy of ‘early intervention’ being translated into classroom practice.

Defining dyslexia as a specific learning difference also conveys a realistic balance of opportunities and costs, strengths and weaknesses for the child. The ‘straight-line thinking’ typical of some learners is effective for the step-by-step processing of certain types of material, yet is less effective when creativity is required. The eclectic style of other students may enhance creativity yet fail to yield results when a task calls for step-by-step processing.

While it is acknowledged that some dyslexic learners will still require discrete specialist support at some time, the notion of dyslexia as a specific learning difficulty is arguably unhelpful, certainly within the inclusive ethos of a dyslexia-friendly classroom. The skill of the teacher lies in achieving a balance between empowerment and challenge within clearly understood patterns of strength and weakness. Therefore, viewing dyslexia as a difficulty may be to fundamentally misunderstand the situation. In the mainstream classroom setting the class teacher, guided by school ethos, policy and practice, has the power to make dyslexia a learning difficulty or a learning difference – it really is as simple as that.

**Constitutional in origin**

A learner who is dyslexic is just that – and teaching ‘harder’ cannot change that reality. Research into the architecture of the brain suggests that very real differences occur as the foetus develops and these differences are responsible for the familiar pattern of strengths and weaknesses that typify dyslexic learners. While research continues to focus on a range of neurological issues, for the classroom teacher it is enough to appreciate that dyslexia defines dyslexic learners, making them what they are. Paying attention to empowerment, emotional intelligence and self-esteem may prove to be more valuable than a detailed knowledge of a learner’s neurological makeup.

**Unexpected and persistent difficulties**

It would be foolish to suggest that dyslexic learners do not experience difficulties in learning certain skills. However, there is growing awareness of the extent to which these difficulties are ‘institutional’, that is, created by policy and practice. The key to recognising dyslexia in mainstream settings is to focus on ‘unexpected’ aspects of performance in relation to ability. Teachers often readily recognise learners who find it very difficult to produce ability-appropriate evidence of learning. Yet these teachers also acknowledge that dyslexic learners are often
as effective as their peers during the oral, group work phase of a lesson. Therefore, a helpful starting point is to focus on learners who ‘think’ a subject. These are pupils who perhaps demonstrate a clear verbal understanding of concepts but who experience unexpected difficulties when it comes to getting it down on paper.

‘Persistent difficulties’ are also an important concept. Once again it helps to focus on learners who continue to have persistent difficulties in certain areas despite quality learning opportunities, which have helped others with apparently similar needs. Teaching ‘harder’ does not address persistent learning difficulties, though teaching differently does. The most effective response to persistent difficulties is to acknowledge that ‘if they don’t learn the way we teach them, we must teach them the way they learn’.

**Acquiring certain skills**

The ‘unexpected’ problems tend to arise in the acquisition and application of aspects of basic skills. These problems often occur despite adequate opportunity to learn and are highlighted against a background of ability-appropriate skill acquisition in other areas. Dyslexic students are usually as good as their peers at many things until, for example, they need to write it down. In the mainstream classroom, problems seem to occur in areas such as speed of processing, short-term memory, sequencing and possible weaknesses in auditory and/or perceptual skills.

We are grateful to the British Dyslexia Association for permission to reproduce this guidance, taken from their *Achieving Dyslexia Friendly Schools* pack.
Handout 1.3

What children say

<table>
<thead>
<tr>
<th>Dislexser</th>
<th>Alistair, aged 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was born with it</td>
<td></td>
</tr>
<tr>
<td>But because of it</td>
<td></td>
</tr>
<tr>
<td>I got hit for it</td>
<td></td>
</tr>
<tr>
<td>I cried about it</td>
<td></td>
</tr>
<tr>
<td>Fought because of it</td>
<td></td>
</tr>
<tr>
<td>Tried to get rid of it</td>
<td></td>
</tr>
<tr>
<td>Albert Einstein had it</td>
<td></td>
</tr>
<tr>
<td>Sulked about it</td>
<td></td>
</tr>
<tr>
<td>Called names because of it</td>
<td></td>
</tr>
<tr>
<td>I didn’t like it</td>
<td></td>
</tr>
<tr>
<td>Mum had enough of me because of it</td>
<td></td>
</tr>
<tr>
<td>Couldn’t be bothered to live with it</td>
<td></td>
</tr>
<tr>
<td>Do we really have to have it?</td>
<td></td>
</tr>
<tr>
<td>Mum thought I was lazy because of it</td>
<td></td>
</tr>
<tr>
<td>I thought I was crazy because of it</td>
<td></td>
</tr>
<tr>
<td>Punched walls because of it</td>
<td></td>
</tr>
<tr>
<td>Got in trouble over it</td>
<td></td>
</tr>
<tr>
<td>Disrupted class because of it</td>
<td></td>
</tr>
<tr>
<td>Walked out, away from it</td>
<td></td>
</tr>
<tr>
<td>Embarrassed because of it</td>
<td></td>
</tr>
<tr>
<td>I’m ashamed of it</td>
<td></td>
</tr>
<tr>
<td>I swore at teachers because of it</td>
<td></td>
</tr>
<tr>
<td>Just have to live with it</td>
<td></td>
</tr>
<tr>
<td>John Rogers and Lea Bourne</td>
<td></td>
</tr>
</tbody>
</table>

1. Disappointment

**Monday:** I worked realey hard at lurning to nit and did a brite purpul egg cosie with air holes in it. It took me over two weeks to do it. Took my cosie in to show but I lost it before showing. I forgot to bring my cote home.

2. Embarrassment

**Tuesday:** My glasses were not in my draw but I don’t were them any moor anyway because people make fun of me so it dosent realey matter My traners had gone walkys and I had to do PE in my football boots.

3. Humiliation

**Wednesday:** I opend my bag at lunch time and found that I had not put my dinner in. I lost the beet in music and was sent out.

4. Frustration

**Thursday:** I rembered to take my lunch to school but then forgot to bring my lunchbag home. I left my outdoor shoes at school as well.

5. Relief

**Friday:** A good day. Found my traners in lost propurtey. Scored a gol.
Handout 1.4

Foundation Stage checklist

There is a large body of research linking speech and language difficulties in early childhood to later literacy problems. As much can be done pre-school to help a child at risk, early identification is really important. Although some children may have difficulties with some parts of their learning, they are just as bright and able as their peers – in some cases even brighter! They are often creative and imaginative. At the same time they also have difficulties. If a child shows a cluster of difficulties, you will need to take action.

Here are some hints on identification.

Watch out for the child who does not outgrow the following possible indicators:

- has difficulty learning nursery rhymes
- has difficulty in paying attention, sitting still, listening to stories
- likes listening to stories but shows no interest in letters or words
- has difficulty learning to sing or recite the alphabet
- has a history of slow speech development
- gets words muddled, e.g. cubumber, flutterby
- has difficulty keeping to a simple rhythm
- finds it hard to carry out two or more instructions at one time (e.g. put the toys in the box, then put the box on the shelf) but is fine if tasks are presented in smaller units
- forgets names of friends, teacher, colours
- has poor phonological awareness – cannot easily analyse the sounds in spoken words or blend sounds to make words
- has difficulty cutting, sticking and crayoning in comparison with their peer group
- has persistent difficulty in dressing, e.g. finds shoelaces and buttons difficult
- puts clothes on the wrong way round
- has difficulty with catching, kicking or throwing a ball
- often trips, bumps into things and falls over
- has difficulty hopping or skipping
- has obvious ‘good’ and ‘bad’ days for no apparent reason

A child who has a cluster of these difficulties may be dyslexic, but remember that the levels of development and speed of learning differ significantly for each child in this age group.

We are grateful to the British Dyslexia Association for permission to reproduce this guidance, taken from their Achieving Dyslexia Friendly Schools pack.
Handout 1.5

Key Stages 1 and 2 checklist

Do any of your pupils struggle with spelling, writing, reading or mathematics? Do they not progress as quickly as their classmates – or worse, not seem to progress at all? There are obvious inconsistencies in these individuals, many of them exhibiting abilities alongside weaknesses.

You have been teaching well and hope that, like other pupils in your class, this child will improve their basic skills over time; but you see little or no change.

How can you tell if they might be dyslexic? Look out for the following signs, but remember: not all dyslexic children have the same cluster of difficulties and abilities. Watch out for strengths in areas of creativity and/or highly developed verbal skills.

General

- speed of processing: spoken and/or written language slow
- poor concentration
- has difficulty following instructions
- forgetful of words
- has difficulty remembering anything in a sequential order, e.g. tables, days of the week, the alphabet

Written work

- has a poor standard of written work compared with oral ability
- produces messy work with many crossings out
- is persistently confused by letters which look similar, particularly b/d, p/g, p/q, n/u, m/w
- has poor handwriting, possibly with ‘reversals’ and badly formed letters
- spells a word several different ways in one piece of writing, e.g. wippe, wype, wiep, wipe
- makes anagrams of words, e.g. tired for tried, breaded for bearded
- produces badly set-out written work, doesn’t stay close to the margin
- has poor pencil grip
- produces phonetic and bizarre spelling: not age/ability appropriate
- uses unusual sequencing of letters or words
Handout 1.5  page 2 of 3

**Reading**
- makes poor reading progress
- finds it difficult to blend letters together
- has difficulty in establishing syllable division or knowing the beginnings and endings of words
- no expression in reading
- comprehension poor
- hesitant and laboured in reading, especially when reading aloud
- misses out words when reading, or adds extra words
- fails to recognise familiar words
- loses the point of a story being read or written
- has difficulty in picking out the most important points from a passage

**Mathematics**
- shows confusion with number order, e.g. units, tens, hundreds
- is confused by symbols such as + and × signs
- has difficulty remembering anything in a sequential order, e.g. tables, days of the week, the alphabet
- difficulty learning and remembering times tables
- may reverse numbers 2 .. 5

**Time**
- has difficulty in learning to tell the time
- shows poor time-keeping and general awareness
- has poor personal organisation
- has difficulty remembering what day of the week it is: birth date, seasons of the year, months of the year
- difficulty with concepts – yesterday, today, tomorrow

**Skills**
- has poor motor skills, leading to weaknesses in speed, control and accuracy of the pencil
- has a limited understanding of non-verbal communication
Handout 1.5  page 3 of 3

• is confused by the differences between left and right, up and down, east and west
• has indeterminate hand preference
• performs unevenly from day to day

**Behaviour**

• employs work avoidance tactics, such as sharpening pencils and looking for books
• seems to ‘dream’, does not seem to listen
• is easily distracted
• is the class clown or is disruptive or withdrawn (these are often cries for help)
• is excessively tired due to amount of concentration and effort required

We are grateful to the British Dyslexia Association for permission to reproduce this guidance, taken from their Achieving Dyslexia Friendly Schools pack.
Handout 1.6

Further assessment

The British Dyslexia Association suggest that if after 12 weeks a child has not made progress under normal dyslexia-friendly classroom teaching, refer on to the SENCO. You may need to consult with:

- a speech and language therapist;
- an occupational therapist;
- the behaviour or learning support service;
- an educational psychologist;
- an optometrist/orthoptist;
- an ear, nose and throat specialist.

You may want to have hearing checked (for example, to see if the child has ‘glue ear’), if the child:

- becomes restless after periods of listening;
- shows poor phonological awareness.

You may want to consult an optometrist/orthoptist if the child:

- loses place easily when reading;
- needs to use a finger or card to mark place;
- moves head a lot when reading; head close to page;
- tires quickly with close work;
- has headaches after study;
- has difficulty copying from the board;
- complains of eyestrain or discomfort about the eyes;
- rubs eyes or blinks a lot – especially when reading;
- has untidy handwriting;
- shows inaccurate reading, which deteriorates quickly with time.
Handout 1.7 Jenny’s classroom plan

Children's mathematics work, mathematics vocabulary and prompts on wall; practical equipment on tables.

English prompts and work on walls. Pencils, choice of paper, dictionary, etc.

Common words on wall

Science words

ICT prompts

Sound field system

Door

Computers

Display of children’s work

Compliment and Target board

D&T and Art words and prompts

Windows

Door

Window

Some work displayed on windows to reduce glare

Playground
Handout 1.8

Dyslexia-friendly classrooms

Seating and grouping
- Group according to the requirements of the task, not by literacy level, unless specifically teaching literacy skills.
- Seat dyslexic children away from distractions and next to children who are good at focusing on learning.
- Seat dyslexic children where the teacher can make eye contact easily.
- Seat left-handed children on the left side of right-handed children.
- Check that the chair and table are at the appropriate height and angle.
- Use a writing wedge to rest on if it is helpful.
- Check that the child is sitting in good light and can see the teacher and the board easily.

Texts and independence
- Give transcripts or photocopies rather than ask the child to read from the board. Make all text dyslexia-friendly (see handout 2.1).
- Present information in a range of ways, e.g. pictures, flow charts, through drama, cards to sort, etc.
- Display prompts and reminders about what to do, where to find things, useful words, etc. Refer to them often and leave them in the same place.
- Provide word lists and word banks, colour-coded and organised systematically so children can find words easily. Use sticky tack so that word cards can be taken to child’s desk and then returned. Refer to the word lists regularly.
- All children can have word lists, prompts and personal targets on their tables.
- Use visual timetables. Personal and more detailed timetables can be given to individuals. Remind class/child of dates/activities before events.
### Equipment

- Ensure easy access to equipment, computers, tapes, etc. Use labels to help children find what they need.
- Use tapes for both listening and recording children’s ideas.
- Use the digital recording facility on computers to record instructions or texts for children to listen to or to make their own recordings instead of a writing outcome.
- Ensure good access to software such as spelling game programs using the child’s own words for over-learning spellings, programs that provide on-screen word banks, talking wordprocessors.
- Have mathematics resources, plastic letters, magnetic rainbow alphabets, word cards and word mats available. Consider the use of a spelling tray containing some of these things, which can be taken to a table when appropriate.

### Colour

- Use colour to distinguish between ideas. Encourage all children to use colour in their work to do this.
- Give a choice of pastel coloured paper for children to use rather than always just white.
- Use a variety of colours on the board to separate lines, sections or columns.
- Have coloured pens on tables.
- Use sticky notes in different colours. Large sizes are available.
Handout 1.9

To build self-confidence, use:

- **the language of success**
  Signal confidence to the children in their ability to succeed with phrases such as ‘I know you can…’

- **the language of hope**
  Create an ethos where it is acceptable for children to say ‘I’ll try but I need some help…’ rather than ‘I cannot do it…’. Support this by using phrases such as ‘You can do it…’, and ‘What helps you do it?’

- **the language of possibility**
  Learners may express limits to their achievements with phrases such as ‘I’m no good at…’ and ‘I always get X wrong’. Support a climate of greater possibility by the language you use in response, such as ‘Yes, you did get it a bit mixed up but let’s see which bit is causing you problems.’

Learning and teaching for dyslexic children
Session 2: Teaching styles and approaches

This session will take a minimum of 75 minutes

Objectives

- To explore teaching styles and approaches which are particularly effective for dyslexic learners:
  - multisensory approaches
  - Mind Mapping®
  - explicit teaching of memory skills
  - the use of ICT

Resources

- Slides 2.1–2.14
- Resource sheet 2.1
- Handout 2.1
- Sugar paper and coloured pens
- Sticky tack
- Sticky notes
- Flipchart and pens

As participants will spend a short time planning, it may be helpful for teachers to bring their planning folder.

The presenter or a colleague will need to be familiar with the mathematics Interactive Teaching Program (ITP) used in this session.
Session outline

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Introduction 5 minutes

You could begin this session with a reminder about the three circles of inclusion from session 1, explaining that this session will focus on teaching styles and approaches that are particularly effective for dyslexic learners (slide 2.1).

Slide 2.1

The circles of inclusion

Setting suitable learning challenges
Learning objectives
Responding to pupils’ diverse needs
Access
Overcoming potential barriers to learning

Slide 2.2

Sets out the objectives for the session and the particular aspects of teaching and learning that will be explored. In this session the focus will be cross-curricular learning. Sessions 3 and 4 will consider teaching styles and approaches in literacy and mathematics.

Slide 2.2

Objectives

To explore teaching styles and approaches which are particularly effective for dyslexic learners:

- multisensory approaches
- Mind Mapping®
- explicit teaching of memory strategies
- the use of ICT
Multisensory teaching

Activity 2.1: What can we remember? (5 minutes)

Ask participants to discuss in pairs something they learned at school and can still remember.

Take feedback to highlight the fact that usually people remember things that have been taught using several senses – seeing, hearing, touching or feeling, perhaps even smelling.

You could note that multisensory teaching does not mean using all of the senses all of the time; this would cause overload. It does, however, mean using a range of modalities to present information and support independent learning. It also means encouraging children to use multiple modalities when learning something new, not just the one with which they are most comfortable.

Slides 2.3–2.5 give examples of multisensory teaching and learning. Talk quickly through these. Ask for examples from participants’ own teaching as you go, recording ideas on a flipchart or interactive whiteboard. It may be helpful to have the ideas typed up or printed out for later distribution.

If as a school you have already worked together on visual, auditory and kinaesthetic (VAK) learning and teaching, you may not need to do more than make the links between this development work and the concept of multisensory teaching that has been used by the dyslexia world for many years.

Note: ‘Key visuals’ were originally developed to support children learning English as an additional language, but are very useful for dyslexic learners with or without EAL. You can find out more about them in the Further information section of the Library of this CD-ROM.
Explain that there will be time to return to these ideas and apply them to teachers’ own planning later in the session.

**Mind Mapping®**

20 minutes

You might want to establish whether anyone in the group regularly uses Mind Mapping® in class, and what they see as the benefits. Make reference to Mind Mapping® as an example of multisensory teaching using the visual modality. It is a useful tool for all learners, but particularly so for dyslexic children and children learning English as an additional language. If participants would like more information there is a background paper in the Library section of the CD-ROM.

Slides 2.6–2.8 illustrate the use of Mind Mapping® in a Cambridgeshire school.
Activity 2.2: Creating a Mind Map®

This activity (slide 2.9) involves participants in creating their own Mind Map®. You may need to demonstrate this first, building up the map as you would do it with a class – using different colours, arrows, labels and drawings. Take suggestions from the group as you work. Choose a subject in which you feel confident. It could be ‘What we have learned about dyslexia’; this would allow you to revisit what people learned in the previous session, especially if there is a gap between sessions. It could be on the subject of one of the Cambridgeshire school’s Mind Maps® and then be used to make comparisons.

It will be helpful if you have decided what the main spokes are going to be before you start. The aim is to show the links and the ways that colours and drawings can be used. Mind Maps® are essentially a quick tool so don’t spend too long on this. Do just enough so that participants will be ready to try it on their own.
At the end of the activity display the Mind Maps® using sticky tack. Allow time if you can for a ‘gallery walk’ during which participants look at each other’s work and add comments on sticky notes.

**Memory strategies**  
15 minutes

You could introduce this section using slide 2.10, which describes some of the memory difficulties dyslexic learners may show.

Ask participants how they remember things such as spellings, ‘to do’ lists, shopping lists, telephone numbers, route directions, facts, people’s names. Draw out some of the strategies people use, such as making pictures in their heads, writing reminders to themselves or using mnemonics.

Point out how helpful it can be for children if teachers and other adults model and make explicit for them these ways of remembering. Teachers can, for example, ask children to remind them of things in class and engage children in discussion about the best way for them to learn spellings, mathematics facts, history facts, and so on.
Activity 2.3: Memory strategies  (10 minutes)

In this activity (slide 2.11) groups try out different ways of remembering things: role-play, making a picture in the mind, making up a sentence or a story.

You will need to divide participants into groups of four and give each group a task card made by cutting up resource sheet 2.1.

Take feedback from groups at the end of the activity and record key ideas about remembering things in the form of a Mind Map®, on a flipchart or whiteboard. Initiate a discussion about how participants might implement the strategies in class.

End this section by reminding the group that even with effective use of a range of strategies to aid recall, dyslexic learners will still often struggle. This is why the classroom organisation features explored in session 1 (lists of words on the wall, word mats, mathematics resources such
as personal table squares) are so important – they provide children with back-up in the form of an aide-memoire.

The use of ICT

This section offers opportunities to explore the use of ICT as a tool for teaching and learning. Slides 2.12 and 2.13 suggest some particular advantages of the use of ICT for dyslexic learners. Participants may well be able to think of others.

Each point on the slide hyperlinks to a video sequence or an example of children’s work. You might choose to focus on just one or two examples, with opportunities for an in-depth discussion of each, or sample them all briefly to provide a general overview of the potential of ICT.

**Slide 2.12**

*The advantages of ICT for dyslexic learners*

- Provides visual support for the teacher’s explanations and key vocabulary, click for example
- Supports multi-sensory approaches – for example using digital image and sound to stimulate and extend writing, click for example
- Provides a variety of ways in which children can record their work, click for example, click for another.
- Allows children who do not process information in linear, sequential ways to read non-linear texts, click for example

**Slide 2.13**

*The advantages of ICT for dyslexic learners*

- Allows children to organise and arrange notes when planning writing, access on-screen word processors or predictive word processing, spell-check their work, and end up with a product of which they can feel proud
- Children can revisit earlier work and use the computer’s feedback to amend and edit, correcting errors within an uncritical medium
- ICT can provide a template on which to experiment alongside a scaffolded writing frame that has key words and structures

Point out that ICT also allows children with reading difficulties to access ‘talking’ text – either through talking wordprocessors or pen readers that read text aloud when scanned over a word or sentence. Some schools are having success with voice-recognition software that allows children to write by dictating text.

You might want to demonstrate tools like this that are available in your school, or decide as a group to explore them further with the help of an outside specialist. There is a list of useful sources of information in the Library section of this CD-ROM.
Finally, you could point out that ICT provides a way for teachers and other staff to modify the way they present written information.

Show **slide 2.14** to illustrate how difficult many dyslexic learners find it to access complex written information.

Ask volunteers to describe how they felt when reading the text on the screen. Give out **handout 2.1**, which describes how print can be presented so that it is easier to read, and invite discussion on, for example, whether it might be helpful to use the dyslexia-friendly styles suggested on the handout for all school documents, including letters to parents and carers.

**Conclusion**

End by suming up the objectives for the session.

- To explore teaching styles which are particularly effective for dyslexic learners:
  - multisensory approaches;
  - Mind Mapping®;
  - explicit teaching of memory skills;
  - the use of ICT.

Ask participants to look at the planning for current or future units of work that they have brought with them. Suggest that everyone spends a few minutes adding multisensory, Mind Mapping®, memory or ICT ideas to their plans.

If you are using these sessions as a series of short professional development meetings, rather than an inservice training day or half-day, suggest that everyone might now try to implement the elements they have added to their planning. Make time, when you next meet as a staff group to focus on dyslexia, for people to talk about the work they undertook and the impact it had on children’s learning.
Many, but not all, dyslexic adults report difficulties with the written word. For example:

- seeing ‘rivers’ of white on the page rather than lines of text;
- words moving around on the page;
- words going out of focus after a few minutes of reading;
- letters, numbers and shapes blurring;
- not seeing words clearly when print is black on white paper;
- reaching the end of a line and rereading the same line or going up or down one line by mistake. This causes a major difficulty in comprehension and calculation.

Children often do not report such aberrations, as they are not aware that they see any differently to anyone else. Would a six-year-old say to another ‘Do the words move for you?’

Currently, research has not produced an absolute explanation that meets the needs of each and every individual. However, the following guidelines may well help many. These ideas have been taken from discussion with both adults who are dyslexic and behavioural optometrists working in the field.
Use paper that is off-white (also for the background of the screen on computers, interactive whiteboards, etc.). Some people prefer a range of pastel colours, others prefer cream. Offer white or colour so that children have a choice as a matter of course.

Use a minimum of 12pt or ideally 14pt in the written text.

Use fonts such as Arial, Helvetica or Tahoma that are rounded and reflect a cursive script.

rounded rounded rounded

Keep lines left justified with a ragged right edge.

Use a line space between paragraphs to break up text.

Use wide margins and headings to break up text.

Use **bold** to highlight – *italics* or underlining can make words appear to run together.

Where possible, use bullet points or numbered lists rather than continuous prose.

Write clear, concise sentences and instructions.
- Keep sentence length to a minimum.
- Use the active rather than the passive tense as far as possible to increase readability.

Use flow charts to represent information visually wherever possible.
Role-play

Use this strategy when the children are familiar with the facts they need but do not fully know them or the order they should be in. Children move around and act out the ‘story’.

Task

Key Stage 1

Find a partner. Imagine you are eggs that have been laid by a butterfly. Hatch out together and describe what is happening to you as you change into a butterfly. Move round as you are talking.

Key Stage 2

Imagine you are:

- a bit of food going down your digestive tract;
- an egg leaving the ovaries;
- a drop of water in a river going to the sea.

Describe your journey. Make use of the correct technical vocabulary (this could be on a prompt card for the children).

Use the first person – perhaps you could describe what you see and hear on your journey, and so on.

Making a picture in your mind

Use this to remember terms that might get muddled. Children make a picture in their minds that links the word and the meaning – for example in evaporation the water turning to steam and going to ‘heaven’, while in condensation the water gets dense and heavy or goes down to a den which is on the ground.

Task

Think of some images to help children remember the difference between suspension and solution.

Making up a sentence or a story

Use this strategy when the children need to remember a list in order. For example ‘Jan fibbed while she was marching along in an apron made by June’, to remember the first six months of the year.

Task

Key Stage 1

Make up a sentence or a story to help you remember the days of the week.

Key Stage 2

Make up a sentence or a story to help you remember the order of the planets and their names:

Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto.
Learning and teaching for dyslexic children

Session 3: Literacy
Learning and teaching for dyslexic children
Session 3: Literacy

This session will take a minimum of 90 minutes

Objectives

- To increase our understanding of dyslexia and how it feels to be a dyslexic reader and writer
- To develop a range of strategies to support dyslexic pupils in reading and writing
- To increase our understanding of how to teach phonics/spelling to a class in a dyslexia-friendly way

Resources

- Slides 3.1–3.29
- Handouts 3.1–3.10
- Resource sheet 3.1, copied, cut up and placed in envelopes, along with some blank cards
- A copy of the ‘Alternatives to written recording’ poster from Including all children in the literacy hour and daily mathematics lesson (DfES 0465-2002), which can printed from the Library section of this CD-ROM if you do not have a copy in school
- ‘Tracking back through the NLS Framework’ from Including all children in the literacy hour and daily mathematics lesson (DfES 0465-2002), which can also be found in the Library section of this CD-ROM
- Selection of resources for multisensory carousel activities (such as sand trays, mirrors, coloured felt-tip pens, rhyme cards, pictures to sort, Early Literacy Support cards). The precise resources will vary depending on the equipment you have available. Please see resource sheet 3.2 for a complete list of suggested activities. These resources will need to be organised beforehand.
The following National Literacy Strategy/Primary National Strategy publications will also be useful to show to participants during the session. If you do not have these publications, order details or PDFs are available from the publications section of the Primary National Strategy website: www.standards.dfes.gov.uk/primary

- Playing with sounds: a supplement to Progression in phonics (DfES 0280-2004)
- Progression in phonics (DfES 0033/2000)
- Early literacy support (DfES 0651/2001)
- Speaking, Listening, Learning: working with children in Key Stages 1 and 2 (DfES 0623-2003 G)
- Developing early writing (DfES 0055/2001)
- Grammar for writing (DfES 0107/2000)
- Excellence and Enjoyment: learning and teaching in the primary years (DfES 0518-2004 G)
- Teaching literacy and mathematics in Year 3 (DfES 0496-2003)

Introduction 5 minutes

You could begin with an overview of the objectives for the session (slide 3.1).

Remind colleagues, if you need to, of the visual model of the National Curriculum Inclusion Statement (slide 3.2), which they will have seen in previous sessions.

In this session the focus will be on using all three of the circles, with specific reference to what this means in literacy teaching and learning.
Reading 20 minutes

Good teaching ensures the optimal conditions for learning are in place to support all children and so the focus of this session is about getting these in place for the whole class. This is sometimes referred to as ‘quality first teaching’ or as ‘Wave 1’ in systematic provision for children (slide 3.3). If quality conditions for learning are in place within classrooms this will provide the support that children with mild learning difficulties need.

These professional development sessions are not about the Wave 3 reading and spelling intervention programmes that children on the moderate to severe end of the dyslexia continuum will need. For further guidance on appropriate intervention programmes please refer to Targeting support: choosing and implementing interventions for children with significant literacy difficulties (DfES 0201-2003). The professional development sessions are about good class-based teaching for all.

Reading (and also writing) is a complex cognitive task for all children and adults (slides 3.4 and 3.5). It makes high-level demands on our brains, as we are required to operate a number of processes simultaneously. Reading is, therefore, hard work. If something is hard work we need to be persuaded it is worth doing.

It is important to make sure that whole-class reading is enjoyable through the choice of high-quality and engaging texts (both fiction and non-fiction) and the use of interactive teaching methods such as drama, paired talk, discussion, and so on.

We should ensure that children have plenty of opportunities to hear whole texts read aloud (the class novel, the class story, poems in the few minutes at the end of the morning, and so on) so that they can appreciate the pleasures of reading without the ‘hard work’. It is also a necessary part of learning to read – immersion in text. The National Literacy Strategy strongly advocates this as part of good practice.

All kinds of whole-class reading are particularly helpful for dyslexic learners because they enable these children to experience the pleasure to be gained from age-appropriate texts they might not be able to tackle on their own.
Reading consists of several processes that have to be orchestrated – decoding, sight word recognition, eye movement, understanding and remembering. We need to do these things simultaneously and at speed. All children have to cope with these aspects of reading. Dyslexic children may find them particularly difficult.

Many of these difficulties stem from the overload on short-term memory. Our short-term memories have limited capacity and fluent readers have automated some of the process (fluent readers for example have a high number of known sight words), thus reducing the demands on memory.

Remind participants that some of these difficulties are helped by straightforward physical solutions, such as the coloured backgrounds discussed in session 1.

Explain that each difficulty will be discussed briefly before moving on to a task that will help participants understand how they can support children with these difficulties.
Decoding

Explore difficulties in decoding using slides 3.6 and 3.7.

Slide 3.6

The possibility of physical problems such as glue ear should always be checked.

Despite these difficulties in analysing and synthesising sounds in words, for many dyslexic children understanding the phonic code is the only way they will learn to read and spell. This is because they find it so hard to recall ‘sight’ words visually. The phonic code needs to be explicitly taught in a systematic way to them, however, because their phonological difficulties prevent them from spontaneously working out and generalising the links between letters and sounds.

Slide 3.7

Each aspect of phonics will need to be carefully taught and over-learned because of the difficulties with memory that all dyslexic children have. This will be looked at again in more detail in the spelling and phonics section later in this session.

Give out handout 3.1, the sequence for teaching phonics from Playing with sounds, as a reminder of the phonic knowledge children need. Stress the importance of teaching phonics systematically and in a structured sequence.
If there are any queries about the sequence, explain that it is a slightly amended version of the original sequence set out by the National Literacy Strategy in *Progression in phonics*. It was updated on the basis of current research.

- It conflates Steps 2 and 3, and Steps 6 and 7.
- It gives increased attention to blending as well as to segmentation. We need to give children plenty of practice when they don’t know what the word is at the start. The cards on blending introduce the idea of saying words ‘in a funny way’ and the child responds by blending the sounds and saying the word. See card 7 ‘Cross the river’, ‘Which one?’ and ‘I spy’.

You might wish to show colleagues *Playing with sounds* and *Early literacy support* if you have copies of these resources. Many Key Stage 2 teachers are unaware of these materials but may find them useful if they want to update their subject and pedagogical knowledge in this area, and when they are working with children who have literacy difficulties.

Give out handout 3.2. This summarises the strategies that are useful for:

- tracking;
- understanding and sequencing a story;
- extracting and remembering information;
- speed of processing language.

Talk participants through the handout, using the points that follow.
**Tracking**

It is important that dyslexic learners have their own copy of a text. Provide them with a photocopy of shared text wherever possible and where copyright allows.

Highlighting can focus attention. Different colours can be used to distinguish different information so it can be tracked through the text. You can also use colour to help children keep their place. You might write alternate lines in different colours on a blackboard, whiteboard or flipchart, highlight alternate lines in different colours on an interactive whiteboard, or use highlighter pens on the child's own copy of the text.

There are commercially available products which help children track text by revealing a word or line at a time as the child slides them along or down the page. You can find out more about these from the suppliers listed in the Further information section of the Library on this CD-ROM.

Do not ask the child to read aloud in class unless they volunteer and the text is easy for them. The additional pressure of public performance can make keeping track even more difficult.

**Understanding and sequencing a story**

As decoding is hard work, the reader may be focusing on this aspect of reading so intently that they may lose all sense of overall meaning.

Specific techniques for building comprehension need to be taught. Teachers can model the use of these strategies during shared and guided reading.

Point out that teaching these techniques to the whole class will benefit all children and help them develop their comprehension skills.
**Extracting and remembering information**

Teach all children how to identify key points from detail. Model this in shared reading sessions through discussion, text-marking, oral note-taking, summary games, retelling to partners, and so on.

Make teaching active – use drama and mime, sorting cards or sticky notes and paired discussion so that important points are memorable and revisited in different ways. Remind participants of the Mind Mapping® activity from session 2.

**Speed of processing language**

A good use of any available additional adult support is to prepare the child for reading shared texts in class by pre-teaching – working with the child to identify key words and concepts in the text. This will mean that when they come to the whole-class work they have less to process and can focus on the learning objective linked to the text.

The other suggestions on the handout reduce the information-processing load by giving the dyslexic learner a clear focus, time to process information and time to think.

It is helpful to give advance warning of the specific question that you are going to ask a dyslexic child. It is also useful to ask children to jot down thoughts and answers on individual whiteboards. This helps you to check on understanding as well as giving them time to think.

**Activity 3.1: Supporting reading**

(10 minutes)

Split the group into three if it is large enough.

Allocate one of the following areas to each group:

- Understanding and sequencing a story
- Extracting and remembering information
- Speed of processing language

Give out handout 3.3, an extract from *Dogger* by Shirley Hughes.
You are only using a short extract for this activity. Within a lesson you would use a longer extract or the whole book depending on your objectives and the reading context in which you were using it. Children’s literacy skills and knowledge need to be developed through engaging with whole texts, for example by working on a text over time across a unit of work or before embarking on a unit of work, and having stories read to them regularly as part of their whole reading experience.

Explain the activity using slide 3.8.

After 5 minutes take brief feedback.
Writing

Begin by sharing some of the comments dyslexic children have made about writing (slide 3.9).

Slide 3.9

Comments dyslexic children have made about writing

- It takes me so long to write that I never finish.
- Everyone else has lots of ideas but I can’t think of any.
- I have lots of ideas but I don’t know how to sort them out and I forget them.
- I forget how the sentence ends as I’m writing at the beginning.
- I can’t spell.
- My handwriting looks like a spider.
- My teacher tells me to use a dictionary, but I don’t know the alphabet, so I can’t find the words.
- My teacher can’t read my writing. When she leaves it for a while, I can’t remember either.
- I think I have good ideas and stories but I feel ashamed of my writing.
- I hate writing. It’s such hard work.

Acknowledge that not all children have such negative views of writing but ask participants to suggest different categories for some of the difficulties described by the children above. For example:

- self-esteem;
- memory;
- organisation;
- spelling;
- handwriting.

Point out that writing is the product of a number of complex processes. Although reading is complex, writing is even more difficult than reading. This is because you have to:

- have something to communicate (purpose and audience);
- gather ideas (compose);
- produce words and sentences (compose);
- record the words and sentences (handwriting and spelling);
- organise the writing into meaningful ‘chunks’ (grammar and text organisation).

You also have to be able to read over what you have written.

Writing is often very public compared to reading and so achievement in writing can profoundly affect self-esteem.

Give out handout 3.4, which summarises the writing process.
Teaching needs to recognise the different aspects of the writing process and support children with all aspects of it.

Remind participants of the teaching sequence for writing which enables support for all aspects of the writing process to be built in to each stage (slide 3.10).

Within the guided and shared writing sessions the following sequence (slide 3.11) is recommended.
These sequences offer support and gradual scaffolding to independent writing. If participants are unfamiliar with these teaching sequences, refer them to pages 12–20 in *Grammar for writing* or pages 13–19 in *Developing early writing*.

You might wish to point out that these teaching sequences are exemplified in the National Literacy Strategy medium-term plans. These have units blocked into two or three weeks with the first week focusing on reading, understanding and analysing a genre, moving on to writing opportunities in the second week. This allows enough time to build in quality speaking and listening activities and preparation for all stages of the writing process. Children who find writing hard may be able to show understanding and creativity through drama. Planning units of work over time in this way makes differentiation easier as support can be built in at each stage of writing.

Children with dyslexia can have difficulties with any part of the writing process – although their greatest difficulties will be with the ‘transcriptional’ elements (spelling, handwriting, text organisation) rather than the ‘compositional’ elements (having something to communicate, gathering ideas, producing words and sentences). There are too many things to think of; nothing is automatic; it is hard to organise and remember ideas, sentences, words, letter shape, spellings. This gives rise to some guiding principles when thinking about writing and dyslexic learners (slide 3.12).

You could ask participants to reflect on whether these principles apply only to dyslexic children.
As you go through these principles show participants the ‘Alternatives to written recording’ poster from the *Including all children in the literacy hour and daily mathematics lesson* file.

Suggest, or ask participants to suggest, some further ways to record understanding, e.g:

- give a series of answers and let children circle the correct one;
- start the answers and let the children finish each sentence;
- use cloze procedure;
- give them a structured sheet with boxes for relevant answers. Ensure they know how many points they need to answer and into which boxes they should put their answers.

You could expand on the idea of clear objectives by emphasising that children should know the purpose for writing and know the focus of learning around a particular piece of writing. This point will be picked up again when looking at assessing writing and giving feedback.

Motivation for writing is enhanced by working with the child’s interests and by collaboration, exciting stimuli, use of drama, real experiences, writing for a purpose and a real audience.

Giving support for the different aspects of writing might mean, for example, for children who ‘ramble’ when they write, offering the opportunity of using a Mind Map® or a spider diagram in order to structure their ideas before writing.

This final point moves us into the next activity of considering which strategies might be helpful for different aspects of the writing process.

**Activity 3.2: Supporting writing**

(10 minutes)

Put people into pairs or small groups.

Give each group:

- an envelope containing cards made from *resource sheet 3.1*;
- a few blank cards.

Groups will also need their copy of the writing process grid (handout 3.4).
Explain that the envelope contains some strategies that may support children in the writing process. The task is to discuss which aspects of the writing process each strategy supports and place it on the writing process grid. Some strategies support more than one aspect. There are also some blank cards if they wish to add their own ideas.

After 5 minutes ask for feedback.

Share any ideas participants have contributed.

When taking feedback stress the importance of speaking and listening. Remind people of the speaking and listening fliers contained in the QCA/Primary National Strategy materials *Speaking, Listening, Learning: working with children in Key Stages 1 and 2*. These have many ideas for useful ‘talk into writing’ and ‘drama into writing’ strategies.

Give out *handout 3.5*, which shows further suggested strategies for supporting writing.
Point out that children need to know a range of strategies because when they have to write independently – and they do need to do this – it is important that their difficulties with the whole process of writing are supported.

The next part of the session looks at feedback and marking. Make the point that research shows clearly that assessment for learning (AFL) has an impact on children’s achievements, motivation and self-esteem.

If you have it, show the participants the assessment for learning unit from *Excellence and Enjoyment: learning and teaching in the primary years*.

Read out the definition of assessment for learning:

> ‘The process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.’

Stress the active involvement of the learner in this process.

Marking and feedback is one aspect of assessment for learning. It is an important and large area for consideration so you can only touch on it in this session. There are sections in the assessment for learning unit that go into more detail about the areas you are now going to briefly mention (slide 3.13).
You might make the following points as you show the slide.

- Have a whole-school feedback policy. This ensures consistency and continuity.
- Link to the lesson objective – for example, mark content, presentation and spelling only if the children know that it was an objective for the writing. Many schools already mark to the learning objective with times for children to receive regular feedback on their work.
- Point out success – positive feedback is powerful for motivation and for building models of what good writing looks like.
- Try to mark with the child present – feedback and discussion at the point of writing or soon after allows for immediate correction or amendment.
- Identify one or two errors only that relate to things that the child has been taught and needs to focus on. Teachers could keep a list of the sounds that the child with dyslexia has been studying in a file. They then only comment on words containing sounds that the child has learned so that they can be reinforced.
- Suggest a way of avoiding the mistake in future – develop the child’s range of strategies.
Spelling and phonics

The MOSS approach

Write the letters M, O, S, S vertically down a flipchart. Leave a gap and write L, as follows:

M
O
S
S
L

Explain that MOSS is an acronym for an approach to teaching and learning that is very helpful for dyslexic pupils. In this part of the session we are going to learn about this approach, and the ‘L’, and apply it to spelling and phonics.

Ask people to speculate with a neighbour what the initials stand for. If you want to give them some help, write in ‘structured’ or ‘sequential’. Allow 30 seconds or so and then take a few suggestions. Do not linger over this activity. Its purpose is just to involve people and mark the start of a new part of the session.

Fill in the acronym:

M ultisensory teaching
O ver-learning using a
S tructured
S equential approach

Then fill in:

L earning how to learn

Make the point that learning how to learn, including understanding and reflecting on how you learn, is taking on a new significance in the primary curriculum. It is one of the central themes of Excellence and enjoyment: learning and teaching in the primary years. Helping children recognise how they learn, their successful learning styles and the ones they need to develop are key approaches to helping dyslexic pupils learn more effectively. You could make reference here to work you may have done as a staff group on the Learning to learn: progression in key aspects of learning materials (DfES 0524-2004) from Excellence and Enjoyment: learning and teaching in the primary years. Staff might reflect on which of the twelve key aspects of learning described in those materials...
materials (see below) are important to the dyslexic children they teach – either as strengths or areas of development.

Return to the MOSS acronym. All pupils with dyslexia have problems with spelling. It has a major impact on attitudes and attainment in writing. Multisensory teaching, over-learning through a cumulative structured and sequential programme and learning how to learn are key features of the support they will need.

Remind the group of what is meant by multisensory teaching using slide 3.14.

Slide 3.14

If you use a multisensory approach you play to children’s strengths if they have well-developed skills in some areas, while also developing weaker or less used areas.

For example, children with difficulties with auditory memory may find spelling mnemonics hard to remember but if the mnemonic is accompanied by actions and visual prompts this will help them.
Activity 3.3: Multisensory approaches (15 minutes)

This activity explores multisensory whole-class approaches to spelling. Set up tables as described below, using a selection of spelling/phonic activities taken from resource sheet 3.2.

- Table A multisensory – auditory emphasis
- Table B multisensory – visual emphasis
- Table C multisensory – kinaesthetic emphasis

If teachers cannot move to the activities set up on tables, they could be put on trays. This may be a way of organising such a carousel in the classroom.

Explain that you are going to undertake a carousel activity which will focus on visual, auditory and kinaesthetic approaches that can be used with the whole class to teach spelling/phonics.

You may wish to give a few examples of each approach, drawing on the chart overleaf, if you feel the group need more elaboration.
<table>
<thead>
<tr>
<th>Approach</th>
<th>Type of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>Use of colour</td>
</tr>
<tr>
<td></td>
<td>Highlighting of specific letter combinations together with reinforcement of use in real words</td>
</tr>
<tr>
<td></td>
<td>Games such as word searches and pelmanism</td>
</tr>
<tr>
<td>Auditory</td>
<td>Clapping</td>
</tr>
<tr>
<td></td>
<td>Counting phonemes</td>
</tr>
<tr>
<td></td>
<td>Rhyme</td>
</tr>
<tr>
<td></td>
<td>Syllable work</td>
</tr>
<tr>
<td></td>
<td>Use of tape recorders</td>
</tr>
<tr>
<td>Kinaesthetic</td>
<td>Use of mirrors and sand trays</td>
</tr>
<tr>
<td></td>
<td>Write on hand with finger</td>
</tr>
<tr>
<td></td>
<td>Write in salt on tin lid</td>
</tr>
<tr>
<td></td>
<td>Sandpaper letters</td>
</tr>
<tr>
<td></td>
<td>‘Write’ on the child’s back</td>
</tr>
<tr>
<td></td>
<td>Use plasticine or similar to make the letters/words and attach to objects</td>
</tr>
<tr>
<td></td>
<td>Have actions for each letter</td>
</tr>
</tbody>
</table>

Each group will look at one set of activities and then feed back to the others.

Allow 5 minutes for exploration and 10 minutes for feedback.

After this activity, engage the group in a short discussion about handwriting. Handwriting plays a key role in a multisensory approach to spelling. When we write a letter or a word our hand learns its shape. Constant repetition helps us remember the word through this bodily movement (kinaesthetic) as well as visual and auditory channels.

To be helpful within a multisensory approach, however, handwriting needs to be carefully taught. Dyslexic children benefit particularly from using continuous cursive script. Detailed advice on this can be found in *Developing early writing* pages 156–164. (This is available in the Library section of this CD-ROM, titled ‘Handwriting’, if you wish to give it out as a handout.)

Continuous cursive handwriting helps pupils retain spellings as the hand is taught to make the word automatically.

Because dyslexic children have difficulty remembering, they may find it easier to learn a script where every letter starts on the line and therefore usually has a lead-in stroke.

Pen grips or a rubber band around the pencil may help.
Over-learning

Remind the group of the MOSS acronym. Having looked at multisensory approaches to spelling, they will now think about over-learning and about structured and sequential teaching. Over-learning is the constant repetition of a skill until it becomes automatic. This repetition should take place in many different ways, for example in learning the alphabet – chanting and singing the alphabet, tracing letter shapes in different ways, making letters, linking letters to objects, and so on. Dyslexic children need many opportunities to revise, revisit and apply skills until they reach a level of automaticity.

Use slide 3.15 to make links with current National Literacy Strategy practice so that it can be seen that this good practice for children with dyslexia is an extension of what we already do.

Note: Teachers may not be familiar with the five-lesson sequence and it may need explaining. There is not time to explore this here but they can find it in *Teaching literacy and mathematics in Year 3*, page 39 onwards.

You could explore with the group the principles of backtracking to earlier objectives when finding a starting point for a child.

- The National Literacy Strategy reading and writing objectives are useful ways to find a starting point. Objectives are spiral and cumulative with opportunities for revisiting for all children.
- Point out and make available copies of ‘Tracking back through the National Literacy Strategy Framework’ on pages 35–50, section 2 of *Including all children in the literacy hour and daily mathematics lesson*.
- Point out that the *Playing with sounds* materials have ideas for over-learning skills of segmenting and blending sounds in words, for children who have difficulties in this area.
- Skills of blending, decoding and understanding word structure need to be specifically taught and revisited (see *Progression in phonics* and Year 2/3 spelling material in *Teaching literacy and mathematics in Year 3*).

Make the point that some children will also need specific additional intervention to ensure over-learning – Wave 2 approaches like *Early Literacy Support* and *Further Literacy Support*, and Wave 3 approaches as described in the leaflet *Targeting support: choosing and implementing interventions*.
for children with significant literacy difficulties (DfES 0201-2003). Teachers should always follow up Wave 2 and 3 intervention work – this helps in the over-learning process. Opportunities to follow up additional support that has been given are fundamental to the success of school action and school action plus.

**Structured and sequential teaching**

Show slide 3.16.

Encourage participants to think of a new skill they have had to learn recently, for example getting to grips with an interactive whiteboard. How did they need to start off?

Like all children, dyslexic children need to see the progress they have made. This is especially important when they forget things so easily and their performance varies. Using a structured programme ensures that they do not have too much to learn at a time and they can see the progress they have made. Small steps do not make overwhelming demands on short-term memory. Structured phonics and spelling programmes allow knowledge to build in small incremental steps with subsequent steps reinforcing early steps.

**Activity 3.4: Supporting spelling** *(5 minutes)*

The presenter will need to decide which of the following activities best suits the school and context.

Select from handouts 3.6–3.9 depending on your chosen focus. The handouts provide examples of a range of different approaches to spelling, for example ‘spelling contracts’ to help children work independently on over-learning a list of words.
As most of these are more effective if they involve a whole-school approach, presenters may like to select one of them to introduce to the whole staff rather than discussing all of them. Alternatively, you may wish to ask different groups to consider different strategies and feedback but this will take longer.

You will need to adapt slide 3.17 to suit your preferred focus.
Allow 5 minutes for participants to read and discuss one or two of the handouts.

Further work will be necessary if these methods are to be adopted. The aim of this activity is to familiarise teachers with possibilities with a view to further discussion in year group teams or as a whole school.

**Activity 3.5: Spelling from the point of view of a child with dyslexia (10 minutes)**

This activity involves either video viewing and discussion or listening to audio extracts of a dyslexic child talking about his experience.

**Video viewing and discussion**

Watch the 5-minute video sequence of a Year 2/3 spelling session, which is hyperlinked to slide 3.18. This might be familiar to teachers but ask them to watch it while focusing on the perspective of a child with dyslexia.

- How would the child experience the lesson?
- What does the teacher do that is helpful to a dyslexic pupil?
- What would be difficult?
- What else would a pupil with mild dyslexia need?
- What else would a pupil with severe dyslexia need?
A dyslexic pupil talks about his experience

Show slides 3.19–3.28, which have sound files attached and take about 5 minutes to play through.

Listen to Matthew, a Year 6 boy, talking about what helps and what doesn’t help him with spelling. He gained a level 5 in mathematics and science and a level 4 in English in the 2004 end-of-key-stage tests.

Ask teachers to reflect on what they think the child they identified in session 1 would say in such an interview. Is there anything further they can now offer to support this child?

This sequence of audio slides may be useful to play to dyslexic children in the school as a starting point for discussion. You could discuss what they find helpful or not after each audio slide.

Conclusion 10 minutes

In these final 10 minutes you will summarise what you have explored together in the session, providing an opportunity for people to revisit and reflect on what they have learned.

MOSS audit

Give out handout 3.10, a blank MOSS audit sheet. A completed audit is available in the Library section of this CD-ROM (titled ‘Moss audit completed’) if you wish to show an example.

Handout 3.10

MOSS audit

- Multisensory (learned, touched, repeated)
- Over-learned
- Structured
- Sequential

Remind people of the acronym you have scribed on the flipchart:

MOSS and L
Ask them to fill in the audit sheet over the next week to reflect on the approaches they are using and those they can add. Arrange a time when you will share your findings from the audit.

An audit is useful to enable teachers to add additional approaches to their teaching of certain literacy skills. Some of this may be done with the whole class, some in independent work in class or in Wave 3 work. It is important to keep the same approaches for whoever is teaching the child so this audit could act to coordinate approaches.

It can also be used to make suggestions for activities.

A SENCO or specialist teacher could fill it in for an individual child as an aide-memoire for a teaching assistant or teacher.

End by summing up the session using slide 3.29.

Slide 3.29

**Conclusion**

Dyslexic children need:
- to rely on visual and language despite their weaknesses in written text
- teaching and reinforcement of the specific skills needed for decoding and understanding
- support in all aspects of the writing process
- a reduction in the amount of writing required
- opportunities to use other ways of recording
- mnemonics, structured and fun approaches to spelling
- opportunities for overhearing

Ask teachers to reflect on an individual child they teach and the differences that using these approaches could make to that child. If you are using these sessions as a series of short professional development meetings rather than an inservice training day or half-day, plan how you will implement your ideas and support each other in making the changes you have identified. Make time, when you next meet as a staff group to focus on dyslexia, for people to talk about the work they undertook and what they learned.
## Handout 3.1

### A structured sequence for phonics teaching

#### Playing with sounds: programme

<table>
<thead>
<tr>
<th>STEP</th>
<th>Learning objectives</th>
<th>Concepts</th>
<th>Skills</th>
<th>Knowledge</th>
</tr>
</thead>
</table>
| 1    | Progression in phonics  
- Hear and discriminate general sounds, speech sounds and patterns.  
Curriculum guidance for the Foundation Stage stepping stones  
- Enjoy rhyming and rhythmic activities.  
- Distinguish one sound from another.  
- Show awareness of rhyme and alliteration.  
- Recognise rhythm in spoken words. | Develop the idea that  
- sounds are different  
- words are composed of sounds/phonemes. | Developing ability to  
- listen carefully  
- distinguish between sounds  
- recognise and talk about differences and similarities between sounds  
- join in with simple rhythms. | Developing knowledge of  
- vocabulary (e.g. first, next, same, different, matching). |
| 2    | Progression in phonics  
- To be able to continue a rhyming string.  
- To hear and say phonemes in initial position.  
- To know (some) phoneme-grapheme correspondences.  
Curriculum guidance for the Foundation Stage stepping stones  
- Continue a rhyming string.  
- Hear and say the initial sound in words and know which letters represent some of the sounds. | Developing  
- Words are composed of sounds/phonemes.  
- Sounds/phonemes are represented by letters. | Introducing  
- Segmentation  
- can identify the phoneme in the initial position in a spoken word.  
- Blending  
- can orally blend three phonemes into a word when they are said closely. | Introducing  
- Some phoneme/grapheme correspondences. |
| 2–4  | Progression in phonics  
- To use the skills of blending and segmenting and the knowledge of phoneme/grapheme correspondences in groups 1–4 to read and spell regular CVC words.  
Curriculum guidance for the Foundation Stage early learning goals  
- Hear and say initial and final sounds in words, and short vowel sounds within words.  
- Link sounds to letters, naming and sounding the letters of the alphabet.  
- Use their phonic knowledge to write simple regular words and make phonically plausible attempts at more complex words. | Developing  
- Sounds/phonemes are represented by letters. | Introducing  
- Segmentation of 3-phoneme words.  
- Blending 3-phoneme words. | Introducing  
- Phoneme/grapheme correspondences. |

| Group 1 Card 9 | s, m, c, t, g, p, a, o |
| Group 2 Card 10 | r, l, d, b, f, h, i, u |
| Group 3 Card 11 | v, w, y, z, j, n, k, e |
| Group 4 Card 12 | ll, ss, ff |
# A structured sequence for phonics teaching

<table>
<thead>
<tr>
<th>STEP</th>
<th>Learning objectives Concepts</th>
<th>Skills Knowledge</th>
<th>Phoneme/grapheme correspondences</th>
</tr>
</thead>
<tbody>
<tr>
<td>2–4</td>
<td><strong>Consolidating</strong>&lt;br&gt;– To use the skills of blending and segmenting and the knowledge of phoneme/grapheme correspondences in group 5 to read and spell regular CVC words.&lt;br&gt;&lt;br&gt;<strong>Main focus</strong>&lt;br&gt;– A sound can be represented by one letter, or by more than one letter.&lt;br&gt;<strong>Introducing</strong>&lt;br&gt;– There can be more than one way to represent a sound.</td>
<td><strong>Consolidating</strong>&lt;br&gt;– Segmentation of 3-phoneme words.&lt;br&gt;<strong>Extending</strong>&lt;br&gt;– To read and spell polysyllabic words.</td>
<td><strong>Consolidating</strong> Groups 1–4&lt;br&gt;<strong>Extending</strong>&lt;br&gt;Group 5 Card 13 sh, ch, th, wh Group 6 Card 14 ck, ng, qu, x</td>
</tr>
<tr>
<td>5</td>
<td><strong>Consolidating</strong>&lt;br&gt;– To use the skills of blending and segmenting to read and spell words with two and three consecutive consonant phonemes.&lt;br&gt;– To begin to read and spell two-syllable words containing consecutive consonant phonemes.</td>
<td><strong>Extending</strong>&lt;br&gt;– Segmentation of 4-phoneme words.&lt;br&gt;– Blending of 4-phoneme words.&lt;br&gt;– To read and spell polysyllabic words.</td>
<td><strong>Consolidating</strong> Groups 1–6&lt;br&gt;No new phoneme/grapheme correspondences.&lt;br&gt;Cards 16 and 17</td>
</tr>
<tr>
<td>6&amp;7</td>
<td><strong>Consolidating</strong>&lt;br&gt;– To use the skills of blending and segmenting to read words with one, two and more letter graphemes.&lt;br&gt;– To begin to make appropriate grapheme choices when spelling.</td>
<td><strong>Consolidating</strong>&lt;br&gt;– Segmentation of 3- and 4-phoneme words.&lt;br&gt;<strong>Extending</strong>&lt;br&gt;– To read and spell polysyllabic words.</td>
<td><strong>Consolidating</strong> Groups 1–6&lt;br&gt;<strong>Extending</strong>&lt;br&gt;Group 7 Card 19 /ee/ ee, ea, y, e, e-e /le/ igh, y, ie, i-e, i /r/ t, wr&lt;br&gt;Group 8 Card 20 /oe/ oa, ow, o-e /ai/ ay, a-e, a&lt;br&gt;Group 9 Card 21 /ue/ oo, ew, u-e /s/ s, ss, se, ce unaccented (schwah) vowel&lt;br&gt;Group 10 Card 22 /oo/ oo, ou, u /ow/ ow, ou&lt;br&gt;/oi/ oy, oi&lt;br&gt;Group 11 Card 23 /ar/ ar, a /aw/, or, aw, al, oor, (w)ar&lt;br&gt;/ur/ er, ur, ear, (w)or&lt;br&gt;Graphemes representing more than one phoneme, e.g. ‘ow’, ‘e’&lt;br&gt;Group 12 Card 24 /air/ air, are, ear /eer/ ear, eer, ere /e/ e, ea /i/ i, g, ge, dge</td>
</tr>
</tbody>
</table>
## Handout 3.2

### Helpful strategies for problem areas in reading

<table>
<thead>
<tr>
<th>Possible problem area</th>
<th>Helpful strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking</td>
<td>• Child reads from own copy</td>
</tr>
<tr>
<td></td>
<td>• Mark place on shared text with a pointer</td>
</tr>
<tr>
<td></td>
<td>• Highlight alternate lines in different colours</td>
</tr>
<tr>
<td></td>
<td>• Sliders and tracking devices</td>
</tr>
<tr>
<td>Understanding and sequencing a story</td>
<td>• Imaging. Make a picture in your mind and change the picture as you get more info</td>
</tr>
<tr>
<td></td>
<td>• Summarising. Make notes or pictures of key words</td>
</tr>
<tr>
<td></td>
<td>• Numbering events</td>
</tr>
<tr>
<td></td>
<td>• Rereading. Read twice. Think of the meaning of each sentence as you read</td>
</tr>
<tr>
<td></td>
<td>• Questioning. Ask yourself questions about the story</td>
</tr>
<tr>
<td>Extracting and remembering information</td>
<td>• Use colour and highlighting</td>
</tr>
<tr>
<td></td>
<td>• Distinguish key points from detail</td>
</tr>
<tr>
<td></td>
<td>• Use Mind Mapping®</td>
</tr>
<tr>
<td></td>
<td>• Make important points memorable by active teaching and revisiting them in different ways</td>
</tr>
<tr>
<td>Speed of processing language</td>
<td>• Pre-teaching – identify key words and concepts before reading</td>
</tr>
<tr>
<td></td>
<td>• Prioritise what the child really needs to understand</td>
</tr>
<tr>
<td></td>
<td>• Ask a child to listen out for specific things</td>
</tr>
<tr>
<td></td>
<td>• Paired discussion during and after reading</td>
</tr>
<tr>
<td></td>
<td>• Give a warning of the specific question that you are going to ask a dyslexic child</td>
</tr>
<tr>
<td></td>
<td>• Have children sketch answers on whiteboards</td>
</tr>
</tbody>
</table>
Once there was a soft brown toy called Dogger. One of his ears pointed upwards and the other flopped over. His fur was worn in places because he was quite old. He belonged to Dave.
Dave was *very* fond of Dogger. He took him everywhere.

Sometimes he gave him rides in a trolley.

Sometimes he pulled him along on a lead made of string like a real dog.

When it was cold he wrapped him up in a bit of blanket.
Now and again Dave’s Mum said that Dogger was getting much too dirty. She showed Dave how to wash him in a bowl of soapy water. Then they hung him up by his tail on the washing-line to dry.
<table>
<thead>
<tr>
<th>Writing process grid</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURPOSE AND MOTIVATION</td>
</tr>
<tr>
<td>IDEAS – SOMETHING TO SAY</td>
</tr>
<tr>
<td>STRUCTURE – SEQUENCE OF WRITING</td>
</tr>
<tr>
<td>SENTENCE CONSTRUCTION</td>
</tr>
<tr>
<td>SPELLING</td>
</tr>
<tr>
<td>HANDWRITING</td>
</tr>
</tbody>
</table>
An example of a completed writing process grid

<table>
<thead>
<tr>
<th>PURPOSE AND MOTIVATION</th>
<th>IDEAS – SOMETHING TO SAY</th>
<th>STRUCTURE – SEQUENCE OF WRITING</th>
<th>SENTENCE CONSTRUCTION</th>
<th>SPELLING</th>
<th>HANDWRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link to child’s interests</td>
<td>Pictures, drama, concrete objects as a starting point</td>
<td>Mind Mapping® to plan work, use pictures and colours</td>
<td>Practise sentences orally before writing with a partner</td>
<td>Prompts on wall to remind child what to do if stuck</td>
<td>Write with a partner</td>
</tr>
<tr>
<td>Break task up into short chunks</td>
<td>Plan using sketches, Mind Maps® and colour coding of ideas</td>
<td>Do story in short chunks</td>
<td>Sentence starts/writing frame</td>
<td>Have a go/Magic line</td>
<td>Use double space lines</td>
</tr>
<tr>
<td>Writing in pairs</td>
<td>Talk through plans</td>
<td>Reread own writing aloud frequently during writing</td>
<td>Dictate child’s own words back to reduce memory overload</td>
<td>Alphabet on table and walls</td>
<td>All children taught cursive writing</td>
</tr>
<tr>
<td>Variety of pens, papers, booklets to write in</td>
<td>Collaborative work</td>
<td>Writing frame with words and phrases</td>
<td>One child writes one sentence, adult or another child writes the next, etc.</td>
<td>Word cards of common words</td>
<td>Variety of pens, paper and colours to choose from</td>
</tr>
<tr>
<td>Use other ways of recording – not writing every time No unnecessary writing</td>
<td>Mini plenaries to share children’s ideas</td>
<td>Talk through ideas with a partner</td>
<td>Write each sentence in a different colour</td>
<td>Separate composing from transcribing. Edit later</td>
<td>Use computer</td>
</tr>
<tr>
<td>Scribe for child</td>
<td>Other ways of recording – drama, pictures, tapes, etc.</td>
<td>Basic text for child to adapt or add to</td>
<td>Have a basic text that can be adapted by child</td>
<td>Word bank with pictures for the current work</td>
<td>Use software such as Clicker 5, 2Simple, Co-writer</td>
</tr>
<tr>
<td>Use ICT</td>
<td>Free writing on any topic for 10 minutes only, spelling does not matter, no marking</td>
<td>Freeze-framing, storyboarding</td>
<td>Use word bank program such as Clicker 5, Co-writer</td>
<td>Use word bank program such as Clicker 5, Co-writer</td>
<td>Dictation</td>
</tr>
</tbody>
</table>
Handout 3.6

How to manage over-learning and reinforcement of spelling

Spelling contract (see handout 3.7 for details)

- Each half-term, pupils have five suggested activities to help them learn words; these can be differentiated.
- Over the course of a week, the pupil completes all the activities using the words in the current spelling list. Each activity is ticked off as it is done. Homework, ‘early morning’ time, times when other work is finished are all used. Sometimes only three activities a week are completed instead of five.
- The activities change every half-term.

Quick dictation

For this to be successful for dyslexic children, they need to be confident that all attempts at words will be valued. Mistakes made by all children need to be seen as interesting, with discussion as to why the mistake was made and what can be learned from it. Calling mistakes ‘learning steps’ helps this.

- Have two or three sentences linked to current words being studied by the class, in order of difficulty. Dictate the same sentences on several occasions. Children write on individual whiteboards.
- Start with the easiest one. Children can attempt all sentences if they want or only do the first one, which they then illustrate while dictation continues.
- Children mark their own work using the sentences displayed on the flipchart or a photocopy.
- Encourage children to make up a sentence, using their spelling words, that can be dictated to the class.
Whole-school phonic times

- Every class in Reception to Year 3 has 15 minutes of phonic or spelling work every day at the same time.
- This allows groups to be mixed, some large, some small, so that children have phonic approaches at the level they need.

Computer games

- Children who need extra practice with their spelling words work for 10 minutes, three times a week during afternoon registration, on computer games such as Word Shark or My Spelling Friend. Their own personal words are loaded into the computers and the children manage the program and the record-keeping independently. It is important that children say the words as they are doing ‘look cover say write check’ activities.

Independence file

- The class teacher in the case study in session 1 finds this very helpful. Work related to the child’s IEP is filed in a book. The child knows that he is able to do all work in the file without help. The SENCO helps the class teacher set up the file every half-term with appropriate worksheets and generic activities that the child understands. If the child is able to manage equipment successfully, some activities could include using the rainbow alphabet arc or sand tray rather than being purely paper-based.
- Examples of activities in one child’s folder might be instructions to draw something linked to their reading and spelling programme, for example ‘a dog on a box’, words handwritten using a highlighter for the child to write over, pictures to cut up, sort and stick, mathematics number bonds reinforcement.
### Handout 3.7

**Examples of spelling contracts**

**Contract 1**

These methods suit most dyslexic children, who will probably have only three or four words to learn.

<table>
<thead>
<tr>
<th>Year</th>
<th>Term</th>
<th>Class</th>
</tr>
</thead>
</table>

Spelling group

Name

Record the number of the activity on the day that you did it.

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trace your words in big joined handwriting on the carpet or on baking tray that has some salt on it. Say the letter names as you trace.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 2</th>
<th>Airwrite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write large in the air or on a board, eyes open and then shut, saying letter names aloud and then the whole word.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 3</th>
<th>Phoneme count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word families of rhyming words – repeat the rhyming words over and over; count the phonemes. Then write words on a phoneme frame or in joined handwriting.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 4</th>
<th>Wax words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write in wax crayon on card. Trace over the word with your finger, saying the letter names.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 5</th>
<th>Joined trace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use words that an adult has written in cursive handwriting with a highlighter pen. Choose another colour and trace over the letters, saying the letter names.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wk</th>
<th>Word list</th>
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<tbody>
<tr>
<td>1</td>
<td></td>
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<td>2</td>
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<td>3</td>
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<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Prepare for test of any word from this half-term</td>
</tr>
</tbody>
</table>

Contracts 2–4 overleaf have a variety of ways of learning, some of which may suit dyslexic children.
### Contract 2

<table>
<thead>
<tr>
<th>Year</th>
<th>Term</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Spelling group</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Record the number of the activity on the day that you did it.

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Crossword</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use squared paper. Link your words in a crossword grid. Fill in other random letters to make a word search. See if a friend can find your words.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 2</th>
<th>Riddles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Make up a riddle for each of your words. Do this orally with a friend who looks at your list while guessing. Example: 'My first letter is in the first five letters of the alphabet, I have four letters and one syllable, I have a vowel digraph in the middle, I rhyme with four.' There may be other words that fit. See if you can find them.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 3</th>
<th>Mnemonics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Make up a sentence where each word of the sentence begins with a letter of your word. Example: Worms And Spiders for WAS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 4</th>
<th>One-way crossword</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count the letters in each of your words. Make some clues for your words, using a dictionary to help. Example: An animal that has antlers (4) This animal has a bushy tail and eats nuts (8) Answers: deer, squirrel.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 5</th>
<th>Giant words</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Write your words big on some old newspapers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wk</th>
<th>Word list (up to ten words)</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
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<tr>
<td>6</td>
<td>Prepare for test of any word from this half-term</td>
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</tr>
</tbody>
</table>
Contract 3 (Key Stage 1)

Year | Term | Class
--- | --- | ---

Spelling group | Name
--- | ---

Record the number of the activity on the day that you did it.

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Silly picture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Draw a labelled picture containing all the words in your list that have the same letter string.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 2</th>
<th>Word stairs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Choose one of your spelling words. Write the first letter. Underneath it write the first two letters, underneath that write the first three letters, and so on. Draw steps round it. Do as many of the other words as you have time for.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 3</th>
<th>Word factory (only if learning a letter string)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Put letter string in the middle of the page in a bubble. Put a selection of letters, blends and digraphs round the edge. Make words containing the letter string. Draw pictures of the word you make.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 4</th>
<th>Bubble writing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Get a piece of scrap paper. Write your word big. Then go round it and make an outline. Then decorate it with a coloured pattern. Then do the other words in the same way.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 5</th>
<th>Big write</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Write your words big in joined handwriting in the air, on a board or on the carpet. Say the letter names as you write.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wk</th>
<th>Word list (up to ten words)</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>6</td>
<td>Prepare for test of any word from this half-term</td>
<td></td>
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</tr>
</tbody>
</table>
Contract 4

Record the number of the activity on the day that you did it.

<table>
<thead>
<tr>
<th>Activity 1</th>
<th>Letter cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make one of your words using letter cards. Turn the letter cards face down, muddle them up and then try to create your word by turning up one letter card at a time and putting the letters in the right order.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 2</th>
<th>Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>If your words all have the same letter string, put them in a silly story (or draw and label them in one picture). Get your friend to dictate the story for you to write down. Example: ‘The bearded man heard a noise clearly. His heart was beating with fear. A bear was digging in the earth.’ If your words have different letter strings do bubble writing.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 3</th>
<th>Draw my word</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pick a word and draw it without talking. Get your friends to guess the meaning. They have 30 seconds and must write their guess correctly to score a point.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Break the word into syllables and write the syllables in different colours.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Find little words in bigger words. Write them in a line underneath the main word. Draw pictures to help you remember.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wk</th>
<th>Word list (up to ten words)</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
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<tbody>
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</tr>
<tr>
<td>6</td>
<td>Prepare for test of any word from this half-term</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Handout 3.8

Activities to help children learn words

Use these activities with a spelling contract system.

**Bubble writing:** Get a piece of scrap paper. Write your word big. Then go round it and make an outline. Then decorate it with a coloured pattern. Then do another word.

**Word stairs:** Choose one of your spelling words. Write the first letter. Underneath it write the first two letters, underneath that write the first three letters, and so on. Draw steps round it.

- $T$
- Th
- The
- Ther
- There

**Crossword:** Use squared paper. Link your words in a crossword grid. Fill in other random letters to make a word search.

**Find little words** in bigger words. Draw pictures to remember them.

Identify the tricky bits in words to be learned. Identify how you’ll remember it. Do a poster to show someone how you remember.

**Word factory:** Put a letter string in the middle of the page in a bubble. Put a selection of letters, blends and digraphs round the edge. Make words containing the letter string.

**Riddles:** Make up a riddle for each of your words. Do this orally with a friend, then write your best one down.

- **a.** Make a riddle about the look of the word, for example my first letter is in the last four letters of the alphabet, I have four letters, I have two vowels in the middle, one of them is an ‘o’. My last letter is the same as the last letter of the prime minister’s surname.

- **b.** Make a riddle about the meaning – I am a science word. I describe the feel of something. I am hard.

Break the word into syllables and write syllables in different colours.
Handout 3.8  page 2 of 2

**Word web:** Link words in a web with others with similar letter strings. Example: television.

  telegraph, telescope, visual, visit, visible.

**Mnemonics:** Make up a sentence where each word of the sentence begins with a letter of your word, for example, Worms And Spiders for WAS.

**Letter cards:** Make one of your words using letter cards. Turn the letter cards face down, muddle them up and then try to create your word by turning up one letter card at a time and putting the letters in the right order.

**Giant words:** Write your words big on some old newspapers.

**Word labels:** Label your word with reasons why it is spelled that way, for example foxes could have a label “x” hisses so “es” in the plural.

**Alternatives to ‘Make up a sentence about each of the words on your spelling list’**

**Cartoon:** Children draw a penman cartoon with speech bubbles that includes the words, or fill in a blank cartoon speech bubble. Blanking out the speech bubbles in comics works quite well.

**One-way crossword:** Count the letters in each of your words. Make some clues for your words. You can use a dictionary to help. This could be done verbally. For example:

- an animal that has antlers (4)
- this animal has a bushy tail and eats nuts (8)

Answers: deer, squirrel.

**Silly story:** If your words all have the same letter string, put them in a silly story (or draw and label them in one picture). This could then be used as a dictation. For example, ‘The bearded man heard a noise clearly. His heart was beating with fear. A bear was digging in the earth.’

**Guess my word:** Talk about the word for 30 seconds without mentioning it. Your friends have to guess it. They must write the word down spelled correctly when they guess.

**Draw my word:** A version of Pictionary. Pick a word and draw it without talking. Your friends have to guess the meaning in 30 seconds and write the word down, spelled correctly, when they guess.

**What am I?:** Write, or say, riddles about the meaning of the words, or about the look of the word. For example, ‘I am needed by all living things, I have no colour’ or ‘I have two syllables and begin with one of the last letters in the alphabet’. Answer: water.
Handout 3.9

Is my classroom spelling-friendly?

These strategies will support all children with spelling.

- ‘Have a go’ at a word while writing. Children write as many of the letters as possible in the word, then underline it so it can be checked in more detail later.
- Praise and mark for content before mentioning spelling.
- Discuss how to learn words and some of the reasons for the different spellings.
- List topic words on coloured card – for example, blue for science, green for history.
- Have word banks on tables for specific written assignments.
- Have high-frequency words on the wall and on tables in coloured columns for ease of reference.
- Use alphabetically arranged personal word books or cards.
- Use a variety of dictionaries, for example the ACE Spelling dictionary from LDA, dictionaries with the quartiles in different colours or thematic and picture dictionaries.
- Make sure children can use spellcheckers.
- Put up lists of recent letter strings that groups of children have studied to remind both children and adults in the class.
- Use alphabet arcs, either with picture prompts around the board or on children’s desks.
MOSS audit

(Multisensory, Over-learned, Structured, Sequential)

Multisensory does not mean that you use all of the senses all of the time; that may overload children. Instead, make sure that over time children access a range of different modalities in their learning.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Say</th>
<th>Touch, feel or do</th>
<th>See</th>
<th>Hear</th>
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</thead>
<tbody>
<tr>
<td>Teach alphabet and ordering skills</td>
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<tr>
<td>Teach letter sound links</td>
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<tr>
<td>Teach decoding skills</td>
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<tr>
<td>Teach blending skills</td>
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<tr>
<td>Improve visualisation and visual memory</td>
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<tr>
<td>Improve auditory memory</td>
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<tr>
<td>Help children over-learn spellings</td>
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<tr>
<td>Teach sequencing and sequences</td>
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</tbody>
</table>
### Resource sheet 3.1

<table>
<thead>
<tr>
<th>Word cards of common words on table</th>
<th>Do story in short chunks</th>
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</thead>
<tbody>
<tr>
<td>Pictures, drama, concrete objects as a starting point</td>
<td>Writing frame with words and phrases</td>
</tr>
<tr>
<td>Separate composing from transcribing – edit later</td>
<td>Link the writing to child’s interests</td>
</tr>
<tr>
<td>Use other ways of recording – not writing every time</td>
<td>Pairs discuss ideas/sentence structure, one child does writing</td>
</tr>
<tr>
<td>Plan using sketches, Mind Maps® and colour coding of ideas</td>
<td>One child writes one sentence, adult or another child writes the next, etc.</td>
</tr>
<tr>
<td>Start a line that contains an appropriate mistake for the child to find</td>
<td>Ask child to proofread only for those words he has been taught</td>
</tr>
<tr>
<td>Use on-screen word bank program such as <em>Clicker 5</em> or <em>Co-writer</em></td>
<td>Word bank with pictures made for the topic</td>
</tr>
<tr>
<td>‘Have a go’ strategies during writing</td>
<td>Adult scribes for child, then selects one sentence for child to work on</td>
</tr>
<tr>
<td>Orally record the story or non-fiction content from the plan</td>
<td>Have sentences for the child to adapt or extend</td>
</tr>
<tr>
<td>Plan using pictures or a Mind Map®. Write up only a small part of the plan</td>
<td>Cursive handwriting so that words are learned in one movement</td>
</tr>
<tr>
<td>Free writing where children write about anything they want for 10 minutes only. No comments on spelling, no marking, just enthusiastic discussion, comments on content. Challenged to write more words next time</td>
<td>Spelling journals available for reference</td>
</tr>
<tr>
<td></td>
<td>Shared writing in pairs</td>
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</tbody>
</table>
Multisensory activities with a kinaesthetic focus

- Write one of your words on sandpaper or in sand. Say the letter names as you write them.
- Write your words in large sky writing while saying the letter names.
- Write one of your words a letter at a time on your partner’s back for them to identify.
- Write your word large on old newspaper or a flipchart.
- Make some of your words from the letter cards/letter shapes.
- Put your hand under your chin and count the ‘chin bumps’ to count the number of syllables.

Have a go at as many as you can in the time available.
Multisensory activities with an auditory focus

- Chose one of your spelling words, say it a phoneme at a time ‘robot-style’ for your partner to identify.
- Match rhyming pictures from two groups of pictures, each depicting a set of words that have the same spelling pattern.
- Count the phonemes in one of your spelling words. Write one of your words on a phoneme frame with one phoneme in each box.
- Select three pictures that have the same ending sound.
- Count the syllables in a spelling word. Split into syllables. Write each syllable in a different colour.
- Select three picture cards that have the same middle sound.
- Make up a mnemonic – like ‘A bus is always busy’.

Have a go at as many as you can in the time available.
Multisensory activities with a visual focus

- Draw a picture to help remember the tricky bit in a word.
- Make your word from the letters in the rainbow alphabet.
- Look at the word. ‘Take a picture of it’ in your mind. Visualise your word written in large coloured letters on a blank wall.
- Identify any hidden little words within longer words.
- Use a mirror and say your words. Watch how your mouth changes.
- Identify the tricky bit in some of your words. Write that part in a different colour.

Have a go at as many as you can in the time available.
Learning and teaching for dyslexic children

Session 4: Mathematics
Learning and teaching for dyslexic children
Session 4: Mathematics

This session will take a minimum of 90 minutes

Objectives

- To understand the possible difficulties encountered by dyslexic children in mathematics
- To consider a range of multisensory strategies to support dyslexic children in their mathematical learning

Resources

- Slides 4.1–4.22
- Handout 4.1
- A copy for each participant of the leaflet *The daily mathematics lesson: guidance to support pupils with dyslexia and dyscalculia* (DfES 0512/2001), which you will find in the Library section of this CD-ROM
- A copy for each participant of the Models and images charts from the *Models and images* CD (DfES 0508-2003), which you will find in the Library section of this CD-ROM
- *Teaching mental calculation strategies* (QCA/99/380)
- *Teaching written calculations* (QCA/99/4860) (A copy of these documents was originally provided in the green and yellow mathematics ‘lunch boxes’. If these are no longer available, you should order copies from QCA. They are £3 each or £2 if ordered on school headed paper. Ideally each teacher should have their own copy for the session, or at least one per year group.)
The following NNS/Primary National Strategy publications will also be useful to show to participants during the session as reference is made to them.

- **Excellence and Enjoyment: learning and teaching in the primary years** (DfES 0518-2004 G)
- **Learning and teaching using ICT** (DfES 1315-2004 GCDi)
- **Supporting children with gaps in their mathematical understanding** (DfES 1168-2005 G)
- **Models and images** (DfES 0508-2003 GCDi): each Year 1, 2 and 3 teacher should have their own copy of the CD-ROM

If you do not have these publications, order details or PDFs are available from the publications section of the Primary National Strategy website: www.standards.dfes.gov.uk/primary, or you can order them from the DfES order line on 0845 60 22 60.

Staff may also be interested in the research report *What works for children with mathematical difficulties* (DfES Research Report RR554), available by writing to DfES Publications, PO Box 5050, Sherwood Park, Annesley, Nottingham NG15 0DJ (priced £4.95 – cheques should be made payable to ‘DfES Priced Publications’).

**Advance preparation**

Teachers need to be prepared to talk about a mathematics resource regularly used in their classroom so that they can demonstrate/share how it can be used.

The presenter or a colleague will need to be familiar with an interactive teaching program (ITP). Two ITPs for you to select from are hyperlinked to the slides for this session. There are also tutorial hyperlinks if you need to familiarise yourself with these programs. The two ITPs provided are *Difference* and *Measuring cylinder*. Alternatively, you may choose to use any other of the ITPs if these are more familiar to you.
Session outline

<table>
<thead>
<tr>
<th>Session outline</th>
<th>Duration</th>
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<tr>
<td>Introduction</td>
<td>10 minutes</td>
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<tr>
<td>Teaching styles</td>
<td>50 minutes total</td>
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<tr>
<td>• Visual approaches</td>
<td>30 minutes</td>
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<tr>
<td>• Kinaesthetic approaches</td>
<td>10 minutes</td>
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<tr>
<td>• Auditory approaches</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Access strategies</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Case study</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Conclusion</td>
<td>5 minutes</td>
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</tbody>
</table>

Introduction 5 minutes

You could begin with an overview of the objectives for the session (slide 4.1). You may also wish to remind colleagues of the visual model of the National Curriculum Inclusion Statement (slide 4.2) which they will have met in previous sessions.

Slide 4.1

Objectives

• To understand the possible difficulties encountered by dyslexic children in mathematics

• To consider a range of multisensory strategies to support dyslexic children in their mathematical learning

Slide 4.2

This session will focus on teaching styles and access strategies which support dyslexic learners in mathematics. As with all of these professional development sessions, the strategies used are
beneficial for all children. This session draws on some strategies such as Mind Mapping® already discussed in other sessions and on recent National Numeracy Strategy/Primary National Strategy materials such as Models and images charts.

As in the literacy session, the focus will be on multisensory, quality first teaching for all – Wave 1 in the ‘Waves’ model. For some children this will need to be complemented by additional provision, for example through Springboard interventions or the Primary National Strategy Wave 3 mathematics materials Supporting children with gaps in their mathematical understanding. This might be a good point to show these to staff if they are not familiar with them.

**Activity 4.1: Mathematical difficulties associated with dyslexia** (5 minutes)

Invite the group to focus on particular children they teach.

In pairs, ask teachers to discuss the questions on slide 4.3 in relation to children in their own class.

Take some feedback. It is important to draw out the strengths these children have. Remind participants that these strengths should be celebrated in order to promote self-confidence.

After the discussion, show slide 4.4, which summarises some of the mathematical difficulties associated with dyslexia.
Check whether there are any possible difficulties you have identified that are missing from the slide, or any on the slide that have been missed in the discussion.

Many children may have some of these difficulties; one difficulty alone would not necessarily point to dyslexia. For example, many children briefly reverse numbers around Years 1 and 2 but this does not persist.

**Teaching styles**

Refer back to the circles of inclusion and say that this part of the session will focus on teaching styles. Teaching styles in mathematics, as in other subjects, need to be multisensory if they are to work for dyslexic learners.

**Visual approaches**

**Activity 4.2: Models and images**

Use slide 4.5 to introduce this activity.

Ask the group to look at the Models and images charts. The right-hand end of each chart has the progression from Reception to Year 4. Fold in the left-hand end to see the progression from Year 4 to Year 6.

Make the point that children should have access to these models and images throughout the primary school.

Fold in the right-hand end and you will see the potential difficulties children may have with these objectives. This is very useful for identifying common misconceptions. Raised awareness of these can mean that they can be tackled before they arise. This is useful for teaching assistants working with children so that they know this misconception is not peculiar to the child/children they are working with.

Ask participants to reflect on which of the resources on the charts they have in school and currently use.
At this point ask one or two teachers to demonstrate a resource they use to good effect in the classroom. Others can show theirs later in the session. Ask listeners to think about the following questions.

- When is it used?
- Which part of the lesson is it used in? Could it be used in other parts of the lesson?
- Is it a teacher resource or a pupil resource as well?
- Is it used by all children or a few? Can it be adapted for other year groups?

Share some feedback from these reflections.

**Activity 4.3: How visual is your classroom?** *(15 minutes)*

Raise the subject of displays using slide 4.6 and then explain that you would like participants to consider mathematics displays in a walk round the school (slide 4.7).

Depending on the size of the group or school, you may wish to send people off in smaller groups or ask them to focus on a set number of rooms. If you do this, ensure that everybody visits rooms that cover the full age range in your school plus some of the common areas such as hall, library and corridors. Ask people to return promptly in 10 minutes.
On their return, ask people to comment on what they have seen. Do they have any ideas for changes?

**Activity 4.4: Classroom practice** *(5 minutes)*

Give out the leaflet *The daily mathematics lesson: guidance to support pupils with dyslexia and dyscalculia* and ask people to skim read it. After reading, take feedback on the implications for classroom or school practice.

**Interactive teaching programs** *(5 minutes)*

If ITPs are already well established in your school you will want to move quickly through this section, pointing out the powerful visual support for learning contained in these programs. This makes ITPs supportive of all children’s learning but will be particularly supportive of children with dyslexia.

If their use is not widespread in your school you should explain how to obtain the ITPs, demonstrate how to use one of the programs and draw participants’ attention to the tutorials for each one. *Slide 4.8* has links to two ITPs and their tutorials.

ITPs are easier to download from www.nwnet.org.uk as they appear on one page and have their tutorials for download as well. www.standards.dfes.gov.uk also has a link to the whiteboard site.

The resources are not only for use on whiteboards but can be used on a range of laptops and PCs.

Make the point that suitable resources for children to handle and interactive questioning should be used alongside the ITPs to ensure that learning is not only visual.

**Kinaesthetic approaches** *(10 minutes)*

Remind participants that they have considered multisensory approaches, including kinaesthetic approaches, for children with dyslexia in previous sessions – for example ‘writing’ letters and words in the air or in sand to help remember letters. Movements can aid memory. Some learners ‘write to remember’. This applies across the curriculum.
Slide 4.9 hyperlinks to a video sequence from training materials for teachers of Year 3 children, which shows children using movements to help remember the differences between sharing and grouping. Ask people:

- How do the movements help children to memorise the differences between sharing and grouping?
- Is this a useful strategy and are there others you could use or do?

Encourage participants to watch the other video sequences on the Models and images CD-ROM after the session, with an emphasis on looking for multisensory teaching approaches.

Use slide 4.10 to initiate a further discussion about the use of kinaesthetic strategies.

If teaching assistants are not involved in this session, it may be useful for the presenter to offer some support for them around the Models and images CD-ROM and charts at a later date.

Auditory approaches (10 minutes)

Remind the group that mathematical learning needs to be supported by hearing and saying as well as by seeing and doing. Slide 4.11 hyperlinks to an example of auditory support for learning: it shows Reception children using a musical playmat for one-on-one correspondence facilitated by sound on the mat as they count.
Access strategies 15 minutes

Remind the group of the need to use access strategies to overcome the barriers to learning dyslexic children can experience. Slide 4.12 suggests some of the access strategies that may be helpful.

Make the point that one of the main barriers experienced by dyslexic children is lack of automatic memory for number bonds and tables, which slows down mental calculation. The next part of the session will focus on this issue.

You could begin by going through some ways of supporting children who have difficulty in remembering table facts, using slides 4.13 and 4.14.
Discuss how children can derive facts from those they already know. Do all staff encourage those who find rote learning hard, to use facts they do know to work out others?

Explore how the grid method of multiplication can be adapted to support dyslexic learners (slides 4.15 and 4.16).

Instead of just splitting numbers into tens and ones, splitting ones into five and a bit can help children to multiply by seven (a column for two and one for five). Similarly, four can be split into two lots of two. This means having more columns on the grid but will extend the child’s understanding.
Many children find $20 \times 10$ and later $20 \times 20$ difficult due to the number of zeros. Expanding this initially can help many children to understand the more compact method.

Explore other ways that the multiplication grid might help children who do not know all their table facts. Discuss when you currently use the grid method in your school and when you might use it (as early as Year 2). Apparatus such as $10 \times 10$ pegboards can help children to move from a concrete model to a written model for the grid method.

Give out:
- Teaching mental calculation strategies (QCA)
- Teaching written calculations (QCA)

Ask people to spend a few minutes looking at these booklets with the points on slide 4.17 in mind.

Allow a few minutes for people to familiarise themselves with the booklets, and then draw out the difference between rapid recall and mental strategies.

For some children with memory problems, most of their work will require a mental strategy rather than rapid recall.
Participants might want to consider whether they place enough emphasis on teaching children strategies and practising rapid recall and whether children have the required mental strategies before they move on to more formal written strategies.

Case study 10 minutes

Background

Crosshall Junior School in Cambridgeshire wished to improve the learning of all its pupils, but particularly those with dyslexia. It is working towards becoming a dyslexia-friendly school.

One of the school's first ventures was to introduce individual mathematics resource boxes and bags (handout 4.1). Initially these were given to children in lower sets. This was so successful that it was extended to include all children. Standards in mathematics have risen significantly at both level 4 and level 5. Staff feel that the individual mathematics resource box/bag has contributed to this by developing children's independence.

Handout 4.1

Mathematics resource box/bag

An individually owned resource bag, which is additive and moves on with a child from year to year, enables easy access to resources and helps develop independence. These resource and tool boxes and bags are often used very imaginatively by high achieving pupils. Most schools will have all the resources in their box and probably only need to find the initial items (i.e. rulers or rulers). This is a very quick and easy thing to do after they lose their own responsibility and then can use some resources which are big enough for laminated number squares and a whiteboard and rulers, often use a little pen which is double enough to be bought from the paper boy and even the number square, ruler and whiteboard easily in the child's box. This means the whiteboard and ruler fit in one subject but...

The following list is suggested. Most of these resources are advocated by the National Numeracy Strategy. The school’s decision on the resources is for the child to control and choose.

- Whiteboard pen and piece of cloth for eraser
  When children have their own pen they tend to tell you when it has run out, so this is a good time-saver.
- A number square
  Laminated A4 paper makes a good number square. These can be individually labelled and also move with the child from class to class. A reversible square marked from 0–99 on one side and 1–100 on the other is useful for working in pairs exploring different patterns.
- Number bond cards
  These are very useful for children with memory difficulties and initially for all children to establish recall of number bonds.
- Arrow cards for place value work
  From Year 1 children should work with at least tens and ones and hundreds can be added through the year or at the beginning of Year 2. In Year 3 add decimal arrow cards and thousands if you wish to use them. Some schools also have money cards, but decimal cards can be used equally well, with children annotating for pounds or pence.
- Bingo cards
  These are good for revision or for all children, and then there are ones printed that are good for revision activities.
- Number lines
  There are many number lines available, either commercial or teacher-made. Initially some children need a number line to support their calculations.

Slides 4.18a–4.18e show details of some of the materials in the bags and children using them. Each photograph links to a short video or sound file to exemplify how the resource may be used.

As people look at the case study ask them to think about whether these resources are already available in school and how easily children can access them.

Use the following notes to support the points on the slides.
These are a few of the resources that may be in a child’s individual resource bag.

Talk about the kinaesthetic advantage of laying out arrow cards from left to right and later (around Year 4) adding decimal cards. Discuss whether you have these cards in school for each child from Year 1 and whether teachers actively teach their use for partitioning and recombinining, and to demonstrate understanding of number sequences. Examples might be ‘Hold up a number between 123 and 129’, ‘What is the smallest number you could be holding?’, ‘What is the largest?’, ‘Which other numbers could you have?’, ‘Hold up an odd number’, ‘Which is the smallest odd number?’ (1), ‘The largest? (999 if using three-digit arrow cards), ‘Hold up ten more’, ‘Keep adding ten – which digit keeps changing? What happens after ninety?’

Olivia is used to holding up numbers that fit certain parameters but is not so familiar with using the cards to make numbers, then partition and recombine. She has used them mainly for directed activity and is now ready to use them more independently in her own work.

She found addition through partitioning and recombinining difficult to start with.

She was very pleased when she managed, at her own suggestion, to use them to subtract a three-digit number from a three-digit number and cross the tens barrier. She says they are her favourite piece of equipment.
Jasper knows his two and ten times tables securely. He is beginning to use these facts to find his fives and fours. He was concerned that he did not know his threes and was very pleased that he could use the calculator constant function for any table.

His commentary may be a little difficult to understand at first. Listen to it a couple of times. When he is talking about how the fives are going up he actually describes the pattern he is seeing as:

O (as the vowel sound instead of zero) 25 O 35 O 45, etc.

He is actually looking at 25, 30, 35, 40, 45 …

He is beginning to focus on the patterns he is seeing on the calculator and was able to identify that the twos always ended in even numbers, even when he got to very high numbers. He used the number square where he had identified the twos pattern to ‘check his calculator’.

You might want to consider whether calculators are used enough in your school for opportunities to explore patterns and have access to larger numbers.

Some children, when using blank number lines, will require some sort of demarcation on the line to show where landmark numbers may go. This is particularly important for children with special needs.
Leah explained how to use her number line to calculate but did not use the strategy of putting the smaller number first. This strategy needs to be taught explicitly so that children understand why they should use it.

She could demonstrate on a number line how to show an inverse operation by showing five jumps of two to make ten on the top of the line and two jumps of five on the bottom of the line. She also volunteered to show how many lots of six made 30 and how many lots of five made 30.

When you have shown the case study slides, sum up the advantages of individual resource packs using slide 4.19.

If staff like the concept of resource bags, you may want to plan further work to identify the resources you would want to include and the practical steps that would be needed to develop the idea.

The next two slides in the case study (slides 4.20 and 4.21) show how the school has used Mind Mapping® as part of its dyslexia-friendly approach to mathematics. Mind Mapping® can be very useful for a quick assessment at the beginning of a unit on what children already know about, for example, place value, or graphs. It can give the teacher a quick insight into a possible starting point for specific children. It also helps children make links across different aspects of mathematics.
Elijah is talking about his Mind Map® on odd and even numbers. He knows that if numbers end in digits 1, 3, 5, 7, 9 then they are odd. He does not use the word digits. He talks about numbers ‘over’ a number rather than ‘higher’. When asked if he knew what ‘higher’, ‘greater than’, ‘more than’ and ‘increase’ meant, he acknowledged that he did but that he liked to use the word ‘over’ when describing numbers himself.

He worked from right to left, writing the odd numbers first.

When drawing his map he realised when he worked on the even numbers that he need not write 10 if he had written zero, as when he said all numbers ending in 0 were even, 10 would be included. When working on the odd numbers he had written 11 and 13, but when he talked through the map realised he need not have written them.

Finally (slide 4.22) Anne, a teacher at the school, talks about the strategies she has learned to use in her teaching as a result of working with a number of dyslexic children in her class.
Conclusion  
5 minutes

Remind the group of the objectives for the session.

Ask them to talk to a partner about the ideas and resources that have been explored. They might identify one new thing they are going to try out in their class to make their mathematics teaching more accessible and multisensory as a result of today’s session.

If you are using these sessions as a series of short professional development meetings rather than an inservice training day or half-day, plan how you will implement your ideas and support each other in making the changes you have identified. Make time, when you next meet as a staff group to focus on dyslexia, for people to talk about the work they undertook and what they learned.
Handout 4.1

Mathematics resource box/bag

An individually owned resource bag/box, which is added to, and moves on with a child from year to year, ensures easy access to resources and helps develop independence. These resources aid inclusion and are often used very imaginatively by high-achieving pupils. Most schools will have all the resources in school and will probably only need to find the initial outlay for bags or boxes. This cost is offset by the need to replace resources less frequently, as children tend to look after them when they are their own responsibility and for their own use.

Some schools favour bags which are large enough to hold laminated A4 number squares and a whiteboard and ruler; others use a flat box which is durable enough to last through to Year 6 and fits into the child’s tray, and keep the number square, ruler and whiteboard separately in the child’s tray. This leaves the whiteboard and ruler free for other subjects too.

The following list is suggested. Most of these resources are advocated by the National Numeracy Strategy. Schools should decide what resources the children need regular access to and add them to the box.

- **Whiteboard pen and piece of cloth for eraser**
  When children have their own pen they tend to tell you when it has run out, so this is a good time-saver.

- **A number square**
  Laminated A4 paper makes a good number square. These can be individually labelled and also move with the child from class to class. A reversible square marked from 0–99 on one side and 1–100 on the other is useful for working in pairs exploring different patterns.

- **Number bond cards**
  These are very useful for children with memory difficulties and initially for all children to establish recall of number bonds.

- **Arrow cards for place value work**
  From Year 1 children should work with at least tens and ones. Hundreds can be added through the year or at least at the beginning of Year 2. In Year 4 add decimal arrow cards and thousands if you wish to use them.

  Some schools also have money cards, but decimal cards can be used equally well, with children annotating for pounds or pence.

- **Digit cards**
  These should be 0–9 initially for all children, and then 0–20; they are useful for a variety of activities.

- **Number lines**
  There are many number lines available, either commercial or teacher-made. Initially some children need a numbered line to support their calculations.
Blank lines can be put on the back. Number tracks with pictures for Reception and Year 1 are also useful before the children make the transition to number lines.

- **Calculator**
  Individual calculators are useful from Year 1 but many children will use them in Reception for play. Children will need an arithmetic, not a scientific, calculator. If overhead calculators are used then it is useful to have the same type. Although calculators should not be used to replace calculation by mental and written methods until Year 5, they are very useful for exploring large numbers and investigating patterns. Children who are familiar with a calculator from a young age are more proficient at using all the facilities later. They can also be a good access strategy for some children who are working below year group expectations. They also promote the reading of large numbers and are very motivating.

- **Counters or cubes**
- **10 or 20 bead string**
- **Die/dice**
- **A protractor**
- **A set square**
- **A compass**

Some of the early apparatus will become redundant for most children, but as the boxes are named it is easy to discreetly leave some children with apparatus they still need. All children benefit from keeping number squares and arrow cards throughout the primary school and will adapt them for their own use, for example moving all numbers on a number square by one decimal place, or stretching arrow cards to make very high numbers.