

Excellence and Enjoyment: learning and teaching in the primary years

Designing opportunities for learning

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.

Excellence and Enjoyment: learning and teaching in the primary years

Planning and assessment for learning

Designing opportunities for learning

Professional development materials





Contents

General introduction	4
Introduction to designing opportunities for learning	6
Section 1 Developing a shared understanding	9
1 Values, principles and aims	9
2 Reflecting on current practice	17
Section 2 Key elements of planning	21
1 Key elements of planning and the planning processes	22
2 Making cross-curricular links	29
3 Planning for inclusion	38
4 Planning and assessment	48
5 Lesson structure	50
Section 3 Using existing resources	53
1 Planning resources	53
2 Adapting and annotating externally produced plans	55
Section 4 Resources	61
Accompanying video	
Planning and assessment for learning, ‘Designing opportunities for learning’	
Clip 1 Values and principles and the curriculum	
Clip 2 Planning for cross-curricular links	
Clip 3 Planning for inclusion: EAL	
Clip 4 Adapting and annotating unit plans	

General introduction

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

A note about the units

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

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

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

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

Self-evaluation is an essential element of effective school performance management systems. Such systems make clear links between school improvement, teachers' performance, management





objectives and CPD plans and can therefore help to deliver personalised learning for all children. The CPD materials in these units provide opportunities for professional discussions about teachers' work which will support both individual and school development needs.



How to use the units

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

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

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

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

It is anticipated that a designated member of staff will take the lead in selecting and running CPD sessions based on these materials and that you will adapt and supplement these materials for your particular context.

While many of the materials are written with primary teachers and practitioners in mind, you will want to include teaching assistants, parents, carers and governors when appropriate.



Introduction to designing opportunities for learning

Learning can and does happen in a range of ways and in a variety of contexts. Learning is not always predictable – sometimes we learn in unexpected ways or learn things we did not set out to learn. Teachers and practitioners cannot totally control learning (nor would they wish to do so) but they can do much to help children develop as learners. To do this they carefully design the curriculum, taking into account:

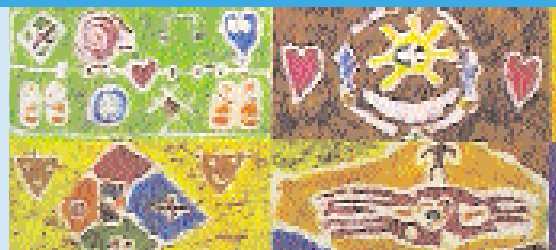
- the content it offers;
- how it is experienced, taught and assessed;
- how it is adapted and amended to engage all children and personalised to meet their needs and abilities.



In schools and settings, teachers and practitioners create learning environments and learning experiences with the aim of helping children develop into confident, enthusiastic and successful learners who understand how they learn and can cooperate with others. In order to help all children achieve their full potential, teachers and practitioners ensure that the learning experiences children encounter are not random, but carefully planned.

The material in this unit explores how planning allows teachers and practitioners to design learning at both macro and micro levels. Good planning is an important aspect of effective teaching and

assessment for learning. It is one of the means by which schools and settings translate their vision and aims into a coherent, purposeful curriculum for all children. By planning, teachers and practitioners can think and talk about how they can build on what children already do, know and understand, and identify what they want children to learn and the teaching that will support and develop that learning.



Good planning:

- ensures inclusion, curriculum coverage, relevance, continuity and progression;
- offers opportunities to personalise a shared curriculum so that it meets the needs and interests of learners;
- supports high standards for all.

Aims of this unit

The aims of *Designing opportunities for learning* are to:

- develop a shared understanding of approaches to planning;
- explore the planning process, identifying the key elements of successful planning;
- support teachers and practitioners in creating plans that meet the needs of children;
- consider how to reduce unnecessary planning;
- review planning and planning procedures to ensure efficient use is made of available planning resources and guidance.

In order to do this, this unit will:

- draw together the advice and insights from several key documents published in recent years;
- consider a range of examples of successful planning;
- provide practical resources schools can use to help with planning.



Pricewaterhouse Cooper's study of teacher workload (2001) found that most teachers would like to spend less time on planning and that they often feel they are producing plans for the benefit of external agencies rather than to meet their own needs and the needs of the children. The materials in this unit will help schools and settings address both of these issues.



Reviewing the progress of different groups.

- pattern of achievement across the school
- half termly teacher assessment against targets
- which groups are achieving targets?
- consider support for target groups?

What changes do we need to make to planning and teaching?

next steps-

Section 1 Developing a shared understanding

This section will be useful for schools and settings who wish to develop a shared understanding of some fundamental aspects of designing learning. This includes considering the values and principles underpinning the curriculum and the learning opportunities it offers. The unit then moves on to look at specific areas of planning in more detail.

Part 1 Values, principles and aims

Each school or setting is a unique context, and planning will reflect this. The age and number of children, the staffing (including teaching assistants and other support staff), the physical environment and available resources will all influence planning, but the values and principles for learning and teaching (which underpin the aims of the school or setting) are fundamental in shaping their curriculum. These values, principles and aims include beliefs about the curriculum and the ways children learn.



- *Curriculum guidance for the Foundation Stage* sets out the aims and underpinning principles for early years education (handout 1, page 13).
- The National Curriculum sets out the values and aims for the curriculum for primary schools (handout 2, page 14).
- *Excellence and Enjoyment* sets out principles for primary education (handout 3, page 15).

CPD ACTIVITY

Values, principles and aims and planning the curriculum

Aim

- To consider values, principles and aims and how these are reflected in the curriculum.

Materials

- Video clip 1, 'Values and principles and the curriculum' (optional)
- Handouts 1, 2, 3 and 4
- A copy of the current statement of values, principles and aims document for your school or setting for each person
- Poster paper
- Sticky notes in assorted colours

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- If you wish, watch video clip 1, which shows a staff meeting undertaking the activity you are about to do.
- You are going to revisit your values, principles and aims to see if they need updating. Before beginning the activities outlined below, you may like to begin by drawing or discussing your vision of a 'perfect school'. Different individuals or groups could think about it from the different viewpoints of the children, the staff, the parents and carers, and the wider community. Share your visions, recording your ideas.
- Next compare the current values, principles and aims with the guidelines on handouts 1, 2 and 3 and with the 'visions' people have described. Each group could have all three handouts or could look at just one.
- Note the points you wish to retain or discard in relation to the existing statement, recording these on sticky notes and using a different colour for each category.
- Now note any new values, principles or aims you think should be included in a revised statement.
- Place the sticky notes on three poster sheets (headed Retain, Discard, Add).
- In a plenary session, go through the points on the sheets, reaching a consensus on each suggestion. When you have agreed your updated values, principles and aims, draw up a list for distribution amongst all the staff.

Classroom activity

- During the week, note two examples of where you think the learning and teaching you have planned and delivered reflects the revised list of values, principles and aims – and two examples of where you feel the curriculum does not reflect the revised list.

Follow-up discussion

- After allowing time for the classroom activity above, in a further meeting look at the values, principles and aims that you have decided in the previous meeting and at your current plans for

this half-term. Discuss the following questions in pairs:

- Does our planning reflect the values, principles and aims? Share the two examples you identified where you think this occurs in your planning and practice.

Example:

Making learning vivid and real

In science, the children planted beans and set up experiments to see what conditions were needed for growth. The hands-on experience made this more engaging than them watching me plant the beans.

- Are there any values, principles and aims that are not reflected in our planning and practice? Share the examples you identified.

Example:

Recognising the importance of ICT and using it in our learning and teaching

On several occasions this week we could have used the Internet as well as books to undertake research, but we did not do this.

- If there is time, join up in pairs and share your discussions.
- Regroup to discuss the following questions:
 - Which values, principles and aims are we reflecting in our plans?
 - What are the barriers preventing us from achieving those we think are not reflected? (These barriers may exist in several different areas – e.g. resources, attitudes, knowledge or time.)
- Using handout 4, discuss your current curriculum in the light of these freedoms.

Next steps

- Are there any changes you wish to make to ensure the curriculum more readily reflects your values? Are there other things you need to explore? How will you go about doing this? How will you monitor and share what you plan to do?
- At subsequent meetings, continue to examine planning and practice in relation to the agreed values and aims, sharing the results of these observations.





Other possible CPD activities

- In pairs, track a value through the existing curriculum map, identifying opportunities for reflecting that value in the curriculum. Note any gaps or missed opportunities. Use these findings and the National Curriculum and Foundation Stage guidance documents to identify where it would be possible to reflect any missing values in a redesigned curriculum.
- *Designing and timetabling the primary curriculum*, pages 6–10, gives 17 brief examples of how schools have made use of planning freedoms. Select those that are most relevant to your context and issues, and use them as a basis for discussing possible ways to overcome any barriers you have identified.
- Using handouts 1, 2 and 3, identify the common principles behind *Birth to three matters*, *Curriculum guidance for the Foundation Stage* and *Excellence and Enjoyment*. How do these principles inform curriculum planning and support continuity of learning for children in your school or setting?
- Invite parents, carers and governors to join you in drawing up the revised values.
- Discuss the values of your school or setting with the children and bring their perspectives to your staffroom discussions.



Principles for early years education

- Effective education requires both a relevant curriculum and practitioners who understand and are able to implement the curriculum requirements.
- Effective education requires practitioners who understand that children develop rapidly during the early years – physically, intellectually, emotionally and socially.
- Practitioners should ensure that all children feel included, secure and valued.
- Early years experience should build on what children already know and can do.
- No child should be excluded or disadvantaged.
- Parents and practitioners should work together.
- To be effective, an early years curriculum should be carefully structured.
- There should be opportunities for children to engage in activities planned by adults and also those that they plan or initiate themselves.
- Practitioners must be able to observe and respond appropriately to children.
- Well-planned, purposeful activity and appropriate intervention by practitioners will engage children in the learning process.
- For children to have rich and stimulating experiences, the learning environment should be well planned and well organised.
- Above all, effective learning and development for young children requires high-quality care and education by practitioners.

Taken from *Curriculum guidance for the Foundation Stage*, pages 11–12

The National Curriculum

Values and purposes underpinning the school curriculum

Education influences and reflects the values of society, and the kind of society we want to be. It is important, therefore, to recognise a broad set of common values and purposes that underpin the school curriculum and the work of schools.

Foremost is a belief in education, at home and at school, as a route to the spiritual, moral, social, physical and mental development, and thus the well-being, of the individual.

Education is also a route to equality of opportunity for all, a healthy and just democracy, a productive economy, and sustainable development. Education should reflect the enduring values that contribute to these ends. These include valuing ourselves, our families and other relationships, the wider groups to which we belong, the diversity in our society and the environment in which we live. Education should also reaffirm our commitment to the virtues of truth, justice, honesty, trust, and a sense of duty.

At the same time, education must enable us to respond positively to the opportunities and challenges of the rapidly changing world in which we live and work. In particular, we need to be prepared to engage as individuals, parents, workers and citizens with economic, social and cultural change, including the continued globalisation of the economy and society, with new work and leisure patterns and with the rapid expansion of communication technologies.

Taken from *The National Curriculum*, page 10

Principles for learning and teaching

Set high expectations and give every learner confidence they can succeed

This includes:

- demonstrating a commitment to every learner's success, making them feel included, valued and secure;
- raising learners' aspirations and the effort they put into learning, engaging, where appropriate, the active support of parents or carers.

Establish what learners already know and build on it

This includes:

- setting clear and appropriate learning goals, explaining them, and making every learning experience count;
- creating secure foundations for subsequent learning.

Structure and pace the learning experience to make it challenging and enjoyable

This includes:

- using teaching methods that reflect the material to be learned, matching the maturity of the learners and their learning preferences, and involving high levels of time on task;
- making creative use of the range of learning opportunities available, within and beyond the classroom, including ICT.

Inspire learning through passion for the subject

This includes:

- bringing the subject alive;
- making it relevant to learners' wider goals and concerns.

Make individuals active partners in their learning

This includes:

- building respectful teacher–learner relationships that take learners' views and experience fully into account, as well as data on their performance;
- using assessment for learning to help learners assess their work, reflect on how they learn, and inform subsequent planning and practice.

Develop learning skills and personal qualities

This includes:

- developing the ability to think systematically, manage information, learn from others and help others learn;
- developing confidence, self-discipline and an understanding of the learning process.

Taken from: www.standards.dfes.gov.uk/seu/coreprinciples1/core-principles.doc. Developed from *Excellence and Enjoyment: learning and teaching in the primary years*.

Existing and planned freedoms

The DfES, PNS, QCA and HMI all recognise and support these freedoms.

Within the curriculum, teachers and schools have the freedom to decide:

- **How to teach** – the programmes of study state in outline what is to be taught, but not how it is to be taught. Schemes of work are an optional tool – schools can ignore them, adapt them, or pick and choose between them. The National Literacy and Numeracy Strategies, though they are supported strongly, are not statutory and can be adapted to meet schools' particular needs. Ofsted will recognise and welcome good practice.
- **Which aspects of a subject pupils will study in depth** – the requirement is that schools cover the programme of study, but it is for individual teachers to decide which aspects they wish to emphasise. For example, they may choose to cover some aspects in a single afternoon, and turn others into work lasting a whole term.
- **How long to spend on each subject** – it is for schools to decide how they are going to organise their timetable. QCA guidance suggesting how much time should be allocated to each subject is not statutory.
- **How to arrange learning in the school day** – there is no requirement for subjects to be taught discretely – they can be grouped, or taught through projects. If strong enough links are created between subjects, pupils' knowledge and skills can be used across the whole curriculum.

- **To use sections of previous or later programmes of study** – some pupils' learning needs will be better matched by programmes of study from earlier or later key stages.

As far as the teacher workforce, pay and conditions are concerned, headteachers can:

- Shape their workforce in accordance with current and planned flexibilities offered in the **National Agreement** between the Government, employers and school workforce unions.
- Make use of available **national pay flexibilities** by giving additional main scale points for excellence, or offering recruitment and retention allowances.
- Employ **teachers without qualified teacher status** where they have skills and experience to offer.

Around governance and school organisation, they can:

- Vary, from September 2003, the **number of school governors** on the governing body.
- Change **school session times**, having consulted on them (though there should be 380 half-day sessions each year).

Around funding, they can:

- Fund **school federations** as if they were a single institution.
- Use most categories of the **Standards Fund** as they think best to raise standards in the school.

Taken from *Excellence and Enjoyment: learning and teaching in the primary years*, pages 16–17.

Part 2 Reflecting on current practice

CPD ACTIVITY

Reflecting on current planning practice

Aims

- To reflect on current planning practice.
- To reach a shared understanding of the importance of effective planning.
- To consider when, why and how you plan.

Materials

- Examples of current medium- and short-term planning for an agreed subject or area of learning to share with each other

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- In the groups, discuss the following questions:
 - What is the purpose of planning?
 - What different kinds of plan do you produce?
 - What kind of plan do you think you should produce?
 - Does everyone produce the same kinds of plan? Should they?
 - Are there occasions when you might plan in more detail, and why?
 - Are there occasions when you might plan in less detail, and why?
 - Do you ever share planning with other colleagues and/or involve teaching assistants? Should you?
- Each group then feeds back key points and issues from their discussion. The notes on pages 18–20 cover some of the points that may arise.

Next steps

- As a result of your discussions, you may have identified areas for action such as sharing planning or revisiting some areas of planning. Section 2 offers materials to support you in addressing some of these key areas.
- It is important that any work on planning focuses on improving learning and teaching and makes the process more efficient and less time-consuming in the long term.



Notes to accompany CPD activities

What is the purpose of planning?

Individuals may use different levels of planning, different recording methods and so on, but all teachers and practitioners engage in the planning process. The amount of detail in their plans may vary according to their level of experience and expertise, and any expectations and agreed procedures of the school or setting.

Most teachers recognise that planning is one of their professional responsibilities because it enables them to ensure:

- curriculum coverage and progression;
- high expectations and achievement;
- inclusion;
- a balance of challenge and support;
- personalised learning for all children that builds upon previous experiences and learning;
- a clear focus for teaching and assessment;
- that all those involved in the classroom know what will be happening.

What different kinds of plan do you produce? What kind of plan do you think you should produce? Does everyone produce the same kinds of plan? Should they?

In most schools, planning takes place at three levels, but there may be different practices with regard to what is included in each level.

A **long-term plan** usually shows the planned programme of work for each subject or area of learning for a year group. Long-term plans will often be brought together to cover age phases (e.g. science from Year 3 to Year 6). For those schools and settings with mixed-age classes, they involve two-year (or longer) cycles of work.

Long-term planning usually takes place within the context of an overall **curriculum map** (the planned programme of work bringing together all subjects and areas of learning, covering every year group and based on *Curriculum guidance for the Foundation Stage*, the National Curriculum Programmes of Study, the National Literacy Strategy and Numeracy Strategy Frameworks and *Planning, teaching and assessing the curriculum for children with learning difficulties* (QCA, 2001).



A **medium-term plan** is usually a planned sequence of work for a subject (or for more than one subject) or area of learning for a period of several weeks, such as a half-term or term. Medium-term planning focuses on organising coherent units of work around clustered learning objectives and their outcome(s) and on the learning experiences that will enable these to be achieved.

A **short-term plan** covers a week, a day or a lesson, and consists of the working notes for the structure and content of a planned activity. These may contain details of key questions to ask, teaching strategies and resources, differentiation and assessment opportunities. (Some teachers include some of these items in medium-term plans. The exact balance between the detail in medium- and short-term plans is something to be decided at school level.)

Experienced teachers and practitioners often work directly from a medium-term plan and make brief notes, as and when needed, to support their teaching. Such notes focus on learning (e.g. noting specific questions to ask) rather than merely listing activities.



Schools and settings have considerable flexibility and freedom in planning (see handout 4, page 16) but most have agreed expectations for curriculum mapping and long- and medium-term plans.

The DfES makes the point that a standard form of presentation is not a necessity and can cause extra work for teachers. It is more important to ensure a shared understanding about the **key elements** of planning (see 'Key elements of planning', pages 24–25).



Are there occasions when you might plan in more detail, and why?

Even experienced teachers and practitioners sometimes plan in more detail, especially when:

- making new thinking explicit to themselves, for example through:
 - using new materials or drawing on new subject knowledge
 - using a new teaching strategy (e.g. demonstration writing);
- making their thinking explicit to others, for example when:
 - leaving plans for others to follow (e.g. for a supply teacher or cover supervisor)
 - being observed or monitored by others;
- developing a shared understanding or coaching others, for example when:
 - joint planning (e.g. with a nursery nurse, teaching assistant or trainee teacher)
 - planning for co-teaching (e.g. with a colleague offering English as an additional language (EAL) support)
 - drawing on specific expertise which is provided from outside the school or setting (e.g. LEA-based ethnic minority achievement (EMA) or SEN staff).

Are there occasions when you might plan in less detail, and why?

When reusing or sharing planning, brief notes or annotations may be sufficient.

In using different levels of detail, teachers and practitioners are applying their professional judgement to planning flexibly – with fitness for purpose being the key factor in deciding the level required.

Do you ever share planning with other colleagues and/or involve teaching assistants? Should you?

Sharing out planning between groups of colleagues and involving teaching assistants where appropriate can reduce workload, save time and stimulate discussion. Staff with specific expertise can also bring their specialist knowledge to the process.

Section 2 Key elements of planning



Part 1 Key elements of planning and the planning processes

Effective planning in successful primary schools

The HMI investigation into successful primary schools found a number of effective practices in relation to planning. The main points are summarised below; for a fuller version see the Ofsted report, *The curriculum in successful primary schools* (paras 44–54).

Schools' approach to curriculum planning

- Schools capitalised on existing materials but applied their professional judgement and subject knowledge whenever they adopted plans from elsewhere.

Long-term planning

- Often the subject coordinators planned which aspects or units of work would be taught in each year group. This provided a whole-school perspective and ensured systematic development from year to year.
- Schools brought together their plans for each subject into a cohesive curriculum map, which became the long-term plan for the whole curriculum.

Medium- and short-term planning

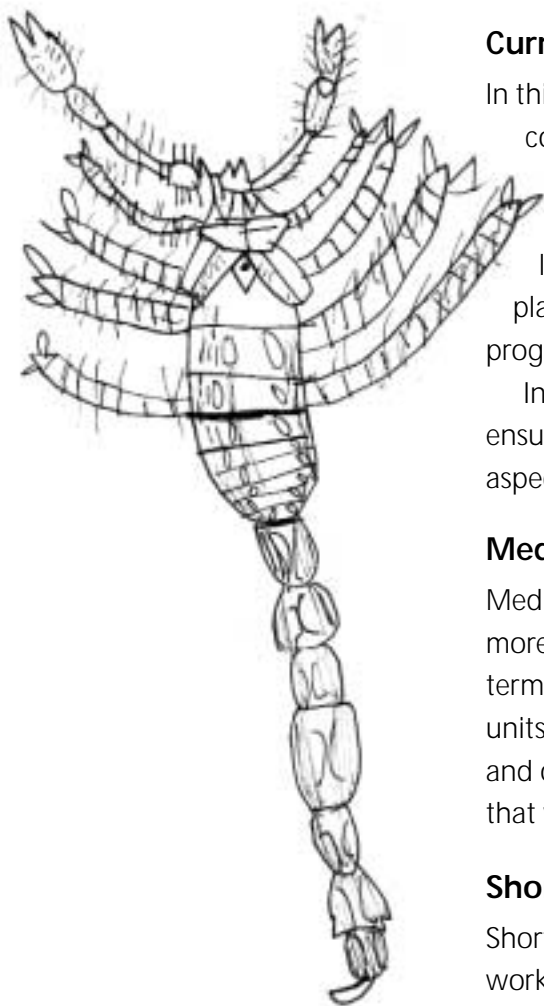
- Schools had two different approaches to medium- and short-term planning:
 - medium-term plan in simple outline and

detailed short-term plans;

- medium-term plans in detail but short-term plans in simple outline.

However, the key to success in both was the complementary nature of the plans – the approach in one influenced the other.

- Learning objectives were precise.
- The subject headings from the long-term plans (which give coverage for each subject over time) were used to determine detailed learning objectives.
- The effective use of ICT was a strength of the planning at all levels (see page 27).
- Schools were applying principles from the literacy hour and daily mathematics lesson to other subjects:
 - setting clear objectives that were shared with pupils;
 - adopting a three-part lesson structure including a clear introduction and plenary where appropriate;
 - engaging in lively, interactive direct teaching.



Different levels of planning

Curriculum mapping and long-term planning

In this document we are using ‘long-term plan’ to describe a plan that covers a year. It sets out the range of learning opportunities that will be provided in a subject or area of learning. A curriculum map brings together the long-term plans for each subject or area of learning and covers a whole phase or more. By bringing the yearly plans together, the balance of subjects or areas of learning and progression over a phase can be checked.

In the Foundation Stage, the curriculum map or long-term plan ensures that all six areas of learning are given equal emphasis and that aspects within each area are covered regularly.

Medium-term plans

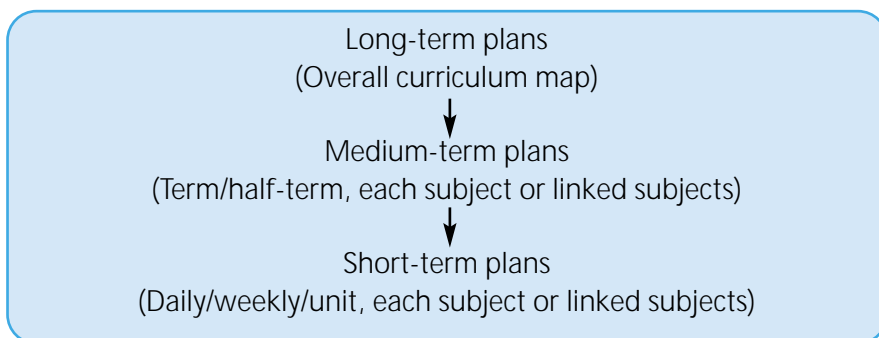
Medium-term plans usually cover a planned sequence of work for one or more subjects or areas of learning for a period of weeks, such as a half-term or term. Medium-term planning focuses on organising coherent units of work around clustered learning objectives and their outcome(s), and on the contexts for learning and the learning activities and teaching that will enable the learning outcomes to be achieved.

Short-term plans

Short-term plans cover a week, a day or a lesson, and consist of the working notes for the structure and content of a planned learning experience. These may contain details of key questions to ask, success criteria and outcomes, teaching strategies and resources, differentiation and assessment opportunities. Some of these items may be included in medium-term plans, in which case short-term plans may be very brief. The exact balance between the detail in medium- and short-term plans is something to be decided within each school or setting.

The planning process

Planning usually involves moving from an overview to the specific:



The grid on the following pages shows the key elements in each level of planning.

Key elements of planning

<p>Planning level: Long-term – key stage, phase or year-group plans Outcome: A broad framework of curricular provision for each year group, reflecting the school's overall aims, objectives and policies</p>		
<p>Participants</p> <ul style="list-style-type: none"> • Headteacher • Teachers and governors in schools • Managers and staff in early-years settings • All staff in private, voluntary and independent (PVI) provision <p>Planning may also be supported by LEA-based colleagues such as ethnic minority achievement (EMA) staff and SEN staff</p>	<p>Purposes</p> <p>To ensure:</p> <ul style="list-style-type: none"> • coverage of all aspects of the areas of learning in the Foundation Stage and the National Curriculum • progression in all aspects of the curriculum across key stages / phases • progression in key aspects of learning such as evaluation and working with others • balance within and across all aspects of the curriculum in each year of each key stage / phase • continuity between key stages / phases • age-appropriateness for children with learning difficulties 	<p>Key elements</p> <ul style="list-style-type: none"> • Specifying the breadth and balance of the curriculum • Specifying the content to be taught • Identifying the key learning focus • Identifying links between different aspects of the curricular provision • Allocating time to teach and assess • Sequencing the units of learning into manageable time frames
<p>Planning level: Medium-term – termly or half-termly plans Outcome: A detailed outline for each unit of work</p>		
<p>Participants</p> <ul style="list-style-type: none"> • Subject and inclusion or SEN coordinators, or class teachers supported by subject and inclusion or SEN coordinators, and/or year group coordinators in schools 	<p>Purposes</p> <p>To develop each year-group plan into a detailed sequence of learning experiences, specifying the contexts for learning in the Foundation Stage, and the sequence of continuing blocked and linked units of work at KS1 and 2</p>	<p>Key elements</p> <ul style="list-style-type: none"> • Identifying learning objectives • Organising content into manageable and coherent units of work, each with a clear focus for learning around a cluster of objectives • Identifying year-group and class targets • Determining learning outcomes • Identifying opportunities to develop key aspects of learning such as enquiry and evaluation • Indicating emphases and depth of treatment

<p>In the early-years settings, this level of planning will be supported by the setting manager, nursery nurses and support staff.</p> <p>Planning may also be supported by LEA-based colleagues such as ethnic minority achievement (EMA) staff and SEN staff</p>	<ul style="list-style-type: none"> • Showing links and references to other units of work* • Noting suggested teaching strategies and pupil groupings* • Indicating strategies for differentiating work* • Identifying assessment opportunities* • Noting resource requirements* <p>* These items may appear in medium- and/or short-term plans, depending on local practice</p>
<p>Planning level: Short-term – unit or session plans Outcome: Daily or weekly plans or appropriate records to ensure effective day-to-day teaching and assessment. They include suitably differentiated activities based on clear learning objectives</p>	
<p>Participants</p> <ul style="list-style-type: none"> • Teachers • HLTAs, teaching assistants • Nursery managers, nursery nurses and support staff <p>Planning may also be supported by LEA-based colleagues such as ethnic minority achievement (EMA) staff and SEN staff</p>	<p>Purposes</p> <p>To ensure:</p> <ul style="list-style-type: none"> • appropriate scaffolding and differentiation • a balance of <ul style="list-style-type: none"> – teaching strategies – learning activities – observation and assessment strategies – child-initiated and adult-led learning • effective co-teaching with support staff, where available • appropriate pace • time for assessment and feedback for children • the effective use of nursery nurses, teaching assistants and other adults • monitoring and evaluation of the medium-term plan, and modifications if required <p>Key elements</p> <ul style="list-style-type: none"> • Organising the detail of the session(s) • Identifying learning objectives, which may include reference to key aspects of learning • Identifying class targets and group targets • Listing success criteria / steps to success • Determining learning outcomes • Showing links and references to other units of work* • Noting suggested teaching strategies and pupil groupings* • Indicating strategies for differentiating work* • Identifying assessment opportunities* • Noting resource requirements* <p>* These items may appear in medium- and/or short-term plans, depending on local practice</p>

CPD ACTIVITY

Examining key elements of planning

Aims

- To reflect on current planning practices.
- To reach a shared understanding on key elements of planning.

Materials

- A copy of the 'Key elements of planning' grid (pages 24–25) for each person
- A range of examples of different levels of planning. (You may decide to focus on a particular subject or area of learning.) Possible sources include:
 - your own plans
 - Foundation Stage planning guidance
 - QCA schemes of work
 - NLS planning CD-ROM supplied with this unit
 - NNS unit plans CD-ROM
 - where relevant, exemplar planning for special settings from the PNS website

There are also many examples of planning available through the Internet, for example:

- <http://curriculum.becta.org.uk/docserver.php?docid=1424> (ICT/science)
- www.nacell.org.uk/bestpractice/schemes.htm (MFL)
- www.primary-networks.com/sow (small schools/ foundation subjects)
- www.primarydandt.org/home/index.asp (design and technology)

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- In groups read the points from the Ofsted report, *The curriculum in successful primary schools*, page 22, and look at the 'Key elements of planning' grid.
- Evaluate your own and other planning examples in the light of these documents.
- In a plenary session, share the evaluations and then decide whether there are any elements of your planning that you need to revisit following these discussions. You might want to consider the following questions:
 - Is continuity of learning experiences and opportunities from 3 to 11 planned for?
 - Are curriculum choices relevant, culturally inclusive and reflective of diversity within the school and the wider community (see the *Conditions for learning* unit)?
 - Are learning and teaching objectives clustered to create coherent units of work with a clear outcome?
 - Are cross-curricular links identified?
 - Is sufficient attention given to progression in key aspects of learning? (See the unit *Progression in key aspects of learning*.)

Next steps

- Decide what you need to do next to address any issues that arise. Agree how you will trial and assess any changes you decide to make.



The use of ICT in planning and teaching

Electronic versions of long-, medium- and short-term plans may take time to set up and type into a computer but, increasingly, this is being recognised as time well spent. Once established, the electronic versions can be annotated or adapted in the light of practice. They can also be amended to incorporate any in-house or locally agreed changes or to take account of any significant developments taking place in the school or setting. Most of the changes are quick and easy to make. Links between different subjects can be created within the medium-term plans to track progression across subjects or to inform some themed work involving, for example, problem solving or enquiry.

Support materials can be downloaded from websites or CD-ROMs and attached alongside, or even hyperlinked to the plans. If the classroom has access to ICT the teacher or practitioner can call up the learning objectives or load the hyperlinked materials from the plans and display these to the class. In those classrooms where the teacher or practitioner uses an interactive whiteboard, children's work from previous lessons can be displayed and annotated and saved for future reference. Resources developed with the plans can be used and saved ready to refer to again. Like any resource, the next time it is used the needs of the children will be different and the requirements of the

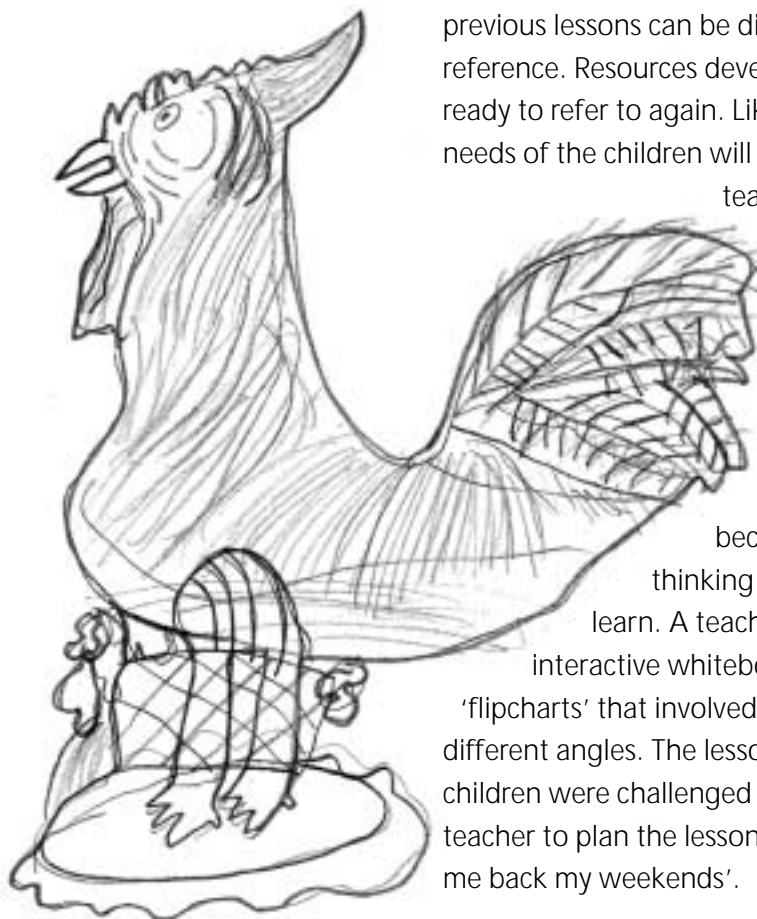
teacher or practitioner will change but, with ICT, the ease with which the resources can be amended means that teachers and practitioners do not have to start again.

As teachers and practitioners become more familiar with the ICT available to them and understand how to capitalise on the flexibility these resources offer, planning

becomes less onerous. More time can be spent thinking about how to teach and what children will

learn. A teacher whose mathematics lesson involved an

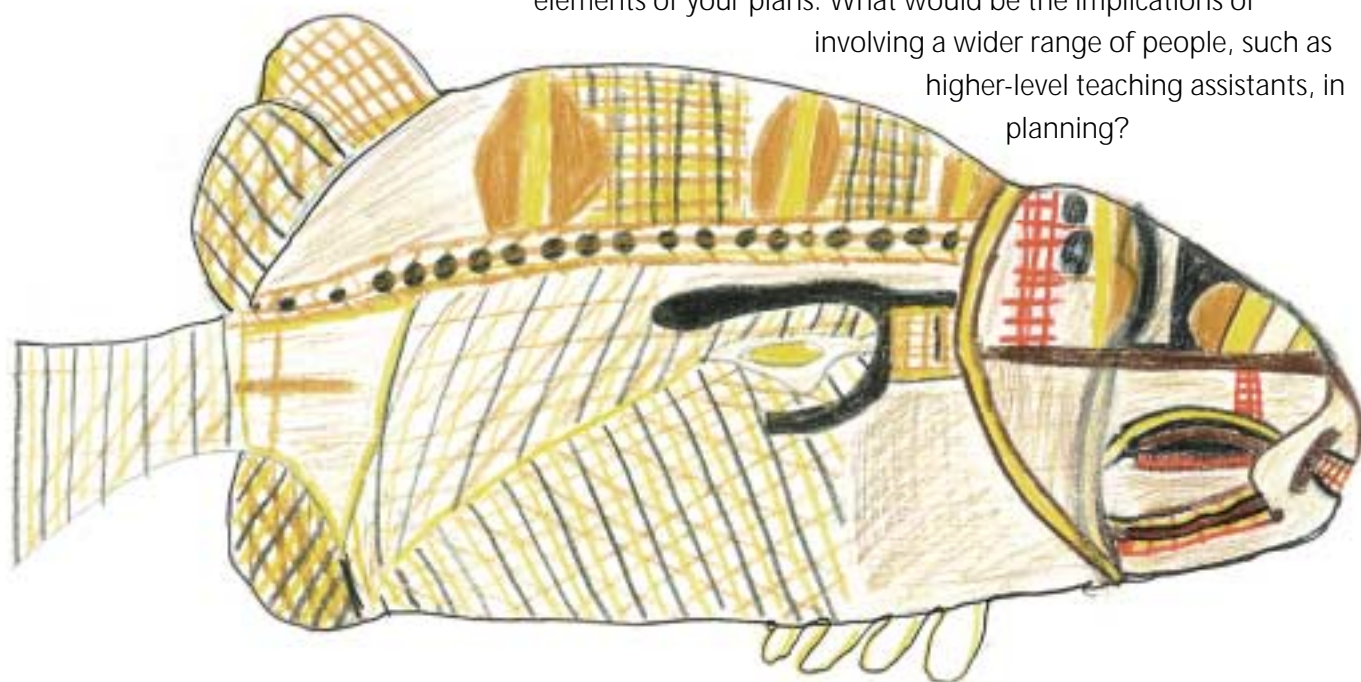
interactive whiteboard produced a number of displayed 'flipcharts' that involved the children in estimating and measuring different angles. The lesson was well delivered and pacy and the children were challenged and involved. The ICT had enabled the teacher to plan the lesson in 15 minutes and, in his words, had 'given me back my weekends'.

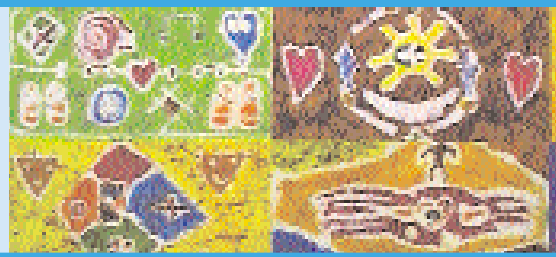




Other possible CPD activities

- Practical tutorials on layering down from medium-term plans to create short-term plans are given on the literacy planning CD-ROM supplied with this unit. These could be demonstrated and discussed during a staff meeting if projected onto a large screen.
- Ask coordinators to explain progression within the long-term plans to other members of staff to ensure everybody understands how progression is built into long-term planning.
- Go to www.ncaction.org.uk/index.htm, select a subject that you wish to focus on and download the outline of progression provided. Use this to track through your plans, looking at the key skills for that subject from Foundation Stage to Year 6. Identify any adjustments you wish to make.
- Ask an experienced teacher, leading teacher or AST to talk about how they relate long-, medium- and short-term plans.
- Use the guidance on progression in key aspects of learning (see the unit *Progression in key aspects of learning*) to consider how you could build aspects of learning (cognitive, social and emotional) into your planning.
- Use the 'Key elements of planning' grid on pages 24–25, the planning guidance for Foundation Stage and the summary from the Ofsted report on page 22 to reflect on your current plans. Look specifically at who is involved, and the purpose, outcomes and key elements of your plans. What would be the implications of involving a wider range of people, such as higher-level teaching assistants, in planning?





Part 2 Making cross-curricular links



Making links between curriculum subjects and areas of learning can deepen children's understanding by providing opportunities to reinforce and enhance learning. It does this in a number of ways, for example by:

- **building concepts** – when children meet the same or related information in different ways, it helps build concepts and also adds to the richness of their experience;
- **providing opportunities for practising skills** – skills such as using tools carefully, skimming and scanning, and analysing data, which are taught in one subject or learning area, can be developed through purposeful use in other areas;
- **assisting memory** – one of the ways memory develops is having opportunities to practise and use information in different contexts;
- **providing opportunities for application of knowledge** – applying knowledge in new contexts involves children in higher-order thinking skills, such as reasoning and problem solving;
- **providing opportunities for learners to recognise and develop key aspects of learning** – looking for patterns and relationships, and problem solving and reasoning, for example, can be applied across the curriculum.

Learning is most likely to be enhanced when the links are clear and recognisable to the children.



The Ofsted report, *The curriculum in successful primary schools* (para 34), notes:

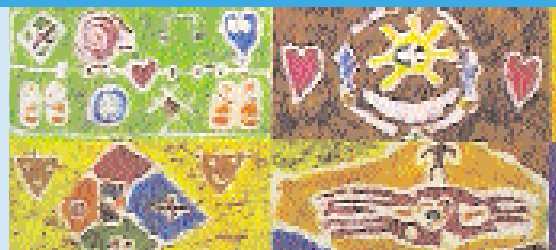
In almost all of these schools the curriculum was planned and organised in separate subjects. The teachers were adept at making best use of links between subjects. They recognised that where links are effective they enable pupils to apply the knowledge and skills learned in one subject to others, as well as bringing coherence to learning when complementary aspects of subjects are brought together. Where subjects were grouped under headings of a theme such as 'Where we live' or 'Food and healthy living' the number of subjects was rarely more than three or four and the links between them were strong. The schools, usually through their subject coordinators, ensured progression within each subject was secure within the long-term planning at each key stage. This thematic work bore no resemblance to the broad ranging topics that were common to primary schools in the past. The rigour with which each subject was planned in the sample schools, underpinned by objectives from the NLNS frameworks for teaching, and in many cases the QCA schemes of work, was providing pupils with the broad curriculum to which they were entitled.

The Foundation Stage curriculum is organised into six areas of learning, and the guidance document, page 21, points out the importance of children making real and explicit links in their learning.

Linking core and foundation subjects

Many primary schools start building links by considering how to link core and foundation subjects. (See the unit *Key aspects of learning across the primary curriculum* for case studies on literacy and numeracy across the curriculum.) For creating links, the following resources will also be helpful:

- Schemes of work website – QCA are currently developing the schemes of work website to support schools in customising their curriculum. Rationale, information and examples for adapting schemes of work, connecting units from different subjects and



embedding aspects of literacy and mathematics in the foundation subjects can be found on this site at: www.standards.dfes.gov.uk/schemes3/

- Case studies on the NLS website – a series of case studies from Year 1 to Year 6, including plans and showing linked units of work between literacy and science, and literacy and foundation subjects are available at: www.standards.dfes.gov.uk/literacy/prof_dev/case_studies/403685/403701/
- 'Writing in Context' on the QCA website – mapping the links between NLS literacy objectives and QCA schemes of work to show purposeful writing activities in history, geography, and so on: www.qca.org.uk/ages 3-14/subjects/English.html
- Non-fiction fliers – six fliers showing the following examples of linked units of work:
 - recount / history / PSHE (the life of Gandhi)
 - instructions / design and technology (making musical instruments)
 - non-chronological report / history (life in Ancient Greece)
 - explanation / science (solids, liquids and gases)
 - persuasion / geography (water usage)
 - discussion / art and design (gallery visit, examining the work of an artist)

can be downloaded or ordered from:

www.standards.dfes.gov.uk/literacy/publications/text/63353/



CPD ACTIVITY

Identifying strong cross-curricular links

Aim

- To explore strong links between literacy units of work and other curriculum subjects at Key Stage 1 and Key Stage 2.

Materials

- Video clip 2, 'Planning for cross-curricular links'
- Handout 5
- Current curriculum map for each year group
- Sheets of A4 paper, each with the name of a current unit of work from the curriculum map printed at the top. Use different coloured paper for each subject.

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- Read the comments on cross-curricular links from the Ofsted report, *The curriculum in successful primary schools*, page 30. In groups, discuss why making strong links between subjects can support deep learning.
- Share the case study outline and watch video clip 2. You could also add further case study examples from the sources listed on page 31.
- Undertake a similar activity using your own curriculum maps and the separate units of work, identifying where strong links could be made between foundation subjects and literacy units of work.
- You could undertake a similar activity using the other core subjects.

Next steps

- Consider how you are going to implement the changes you have identified and how you are going to share and monitor the impact of the changes.

CASE STUDY

Christ Church School

Christ Church School organised its curriculum around QCA schemes of work and gave each foundation subject a weekly slot on the timetable.

After reading *Excellence and Enjoyment* and *The curriculum in successful primary schools*, they decided to revisit their planning to see if they could identify strong opportunities for connecting the work in literacy with the foundation subjects.

The hall floor was marked out into terms and years. Working in phase groups, the staff laid out sheets containing the unit titles in their existing curriculum map. A different colour was used for each subject, for example pink for literacy range – explanation, traditional tales, etc.; green for geography – *Where in the world is Barnaby Bear?* etc. They then discussed the units, moving them around on the floor so that they could see where links could be made between literacy and other subjects, as a starting point.

They then looked for the very strong links where literacy objectives could be embedded in specific units of work, deciding that some provided rich opportunities and others were less appropriate. They discussed blocking time over a period of weeks and giving more time to some subjects within those weeks so that they could develop the linked units of work. They all agreed to trial and evaluate their new planning.

They also agreed to point out explicitly to the children the strong links across subjects when these arose during teaching, so that children could make links in their learning.

CPD ACTIVITY

Organising work to enhance cross-curricular links

Aims

- To explore how reorganisation of existing units of work can enhance the potential for cross-curricular links.
- To stimulate discussion about the potential for cross-curricular links within the existing curriculum.

Materials

- Handouts 6 and 7

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- Read the comments on cross-curricular links in the Ofsted report, *The curriculum in successful primary schools*, para 34 (see page 30).
- In groups, discuss why making strong links between subjects can support deeper learning.
- Handout 6 shows a curriculum map from a primary school. Discuss the possibilities for making strong links between any subjects within the existing map.
- Discuss the possibilities for making strong links between any subjects if units were rearranged.
- Look at handout 7 and compare your suggestions with what the school decided to do.
- Discuss the reordered map, considering the following questions:
 - What has been changed and why?
 - Do you feel the links are strong and likely to enhance learning?
 - Why do you think the school decided to start with just a small number of links?
- Working in pairs, undertake a similar exercise using the curriculum maps for one year group within your school.
- Foundation Stage colleagues could undertake a similar activity, identifying where they already make strong links between areas of learning and whether there are other or alternative links they wish to make.

Next steps

- Consider how you are going to implement the changes you have identified, how you will share and monitor the impact of those changes and how you will ensure coverage of programmes of study and continuity and progression in children's learning.

Curriculum map: Year 4 Term 1

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geography History	Geography How and where do we spend our time?							History What was it like for children during the Second World War?						
Design and technology PSHE Citizenship	Design and technology Storybooks							PSHE/citizenship Living in a diverse world						
English	Poetry	Plays (historical)		Narrative			Newspapers	Non-chronological reports		Instructions				
	S/L with drama focus							S/L with group interaction focus						
Science	Habitats							Moving and growing						
Mathematics	Mathematics Framework <i>Place value, number operations, money, measures, shape, handling data</i>													
Religious education	Celebrations							Celebrations – Christmas journeys						
Art and design	Portraying relationships							Journeys						
Information technology	Within other subjects Writing for different audiences							Branching databases						
Music	The class orchestra – exploring arrangements							Salt, pepper, vinegar, mustard – exploring singing games						
Physical education	Net/wall games, unit 1 Dance activities, unit 4							Net/wall games, unit 1 Swimming activities and water safety, unit 2: Developing and competence						

Rearranged curriculum map: Year 4 Term 1

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Geography History	History What was it like for children during the Second World War? <i>Link narrative reading/writing with making storybooks (D and T) and different audiences (ICT)</i>							Geography How and where do we spend our time? <i>Link with non-chronological report writing (English) and branching databases / handling data (maths/ICT)</i>						
Design and technology PSHE Citizenship	Design and technology Storybooks <i>Link narrative reading/writing with making storybooks (ICT)</i>							PSHE/citizenship Living in a diverse world						
English	Poetry	Instructions		Narrative Second World War stories			Newspapers	Non- chronological reports		Plays				
	S/L with group interaction focus						S/L with drama focus <i>Link with Christmas play</i>							
Science	Moving and growing							Habitats						
Mathematics	Mathematics Framework <i>Place value, number operations, money, measures, shape</i>													
Religious education	Celebrations							Celebrations – Christmas journeys <i>Link with play writing and class orchestra (Christmas play)</i>						
Art and design	Portraying relationships							Journeys						
Information technology	Within other subjects Writing for different audiences <i>Link with book making (D and T) and writing historical narrative (English)</i>							Branching databases <i>Link with geography and maths</i>						
Music	Salt, pepper, vinegar, mustard – exploring singing games <i>Link with history – Opies' collection of oral playground rhymes</i>							The class orchestra – exploring arrangements <i>Link with Christmas play, English and RE</i>						
Physical education	Net/wall games, unit 1 Dance activities, unit 4							Net/wall games, unit 1 Swimming activities and water safety, unit 2: Developing and competence						



Other possible CPD activities

- Examine adapted and combined units and units where English or mathematics has been 'embedded' in other subjects. See the QCA schemes of work website for examples of how schools have done this: www.standards.dfes.gov.uk/schemes3/.
- Print off some examples of adapted, combined and 'embedded' units from the website. Select an area of the curriculum which is a particular focus in your school. Compare these units to your planning and use this to stimulate discussion.
- Share ideas for adapting and combining units across the foundation subjects and for 'embedding' English and mathematics in different subjects.
- Ask your LEA adviser if they can recommend a local school which has successfully undertaken some curriculum replanning to establish strong cross-curricular links to enhance children's learning. Arrange to visit this school to see what you can learn from their experiences.



Part 3

Planning for inclusion

To enable all children to make progress, schools are expected to implement the National Curriculum inclusion statement. This sets out three principles that are essential to developing a more inclusive curriculum:

- setting suitable learning challenges;
- responding to pupils' diverse learning needs;
- overcoming potential barriers to learning and assessment for individuals and groups of pupils.



When planning, teachers should set high expectations and provide opportunities for all pupils to achieve, including boys and girls, pupils with special educational needs, pupils with disabilities, pupils from all social and cultural backgrounds, pupils from different ethnic groups including Travellers, refugees and asylum seekers, and those from diverse linguistic backgrounds.

National Curriculum handbook for primary teachers (OCA, 2000)



Most teachers consider issues around inclusion at the medium- or short-term planning level, and annotate and adapt their class plans accordingly.

The three principles of inclusion

Effective planning for inclusion addresses the three principles by drawing on a range of access strategies, varied teaching styles and appropriate learning objectives so that all work together to ensure inclusion.

Learning objectives

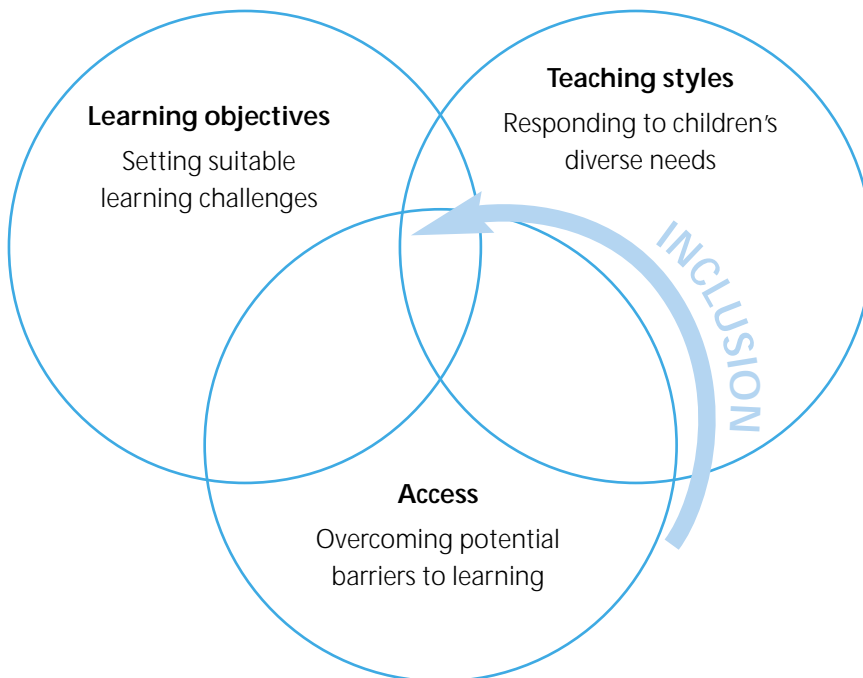
Planning for inclusion may or may not involve planning for every child to work towards the same learning objectives, for example:

- For more able children, it may involve accelerating their progress through objectives.
- For children learning EAL, it involves selecting objectives in order to ensure that the cognitive challenge is high.
- For some children with special educational needs (SEN), who may be out of step with their peers, it may involve tracking back to an earlier level of objectives.

Teaching styles

This means varying teaching styles to take account of the ways in which different children learn. For example:

- children with learning difficulties or children on the autistic spectrum might need tasks that are relatively closed;
- more able children might need tasks that are more open-ended or extended in time or in complexity;
- EAL learners may need to engage with appropriate models of spoken language in whole-class, group and one-to-one situations.



Access

Children who are capable of working towards the same learning objectives as their peers may nevertheless experience real or perceived barriers to their learning. It is essential that consideration is given to overcoming these potential barriers. This may need to be at the whole-school level – for example by:

- ensuring that barriers such as racism are addressed so that children feel safe, secure and valued;
- ensuring that curriculum choices reflect the diverse experiences of children;
- ensuring that the curriculum reflects disability awareness.

At the class level, teachers may need to plan specific access strategies within their teaching – for example by:

- providing alternatives to written recording for a child with dyslexia;
- providing opportunities for first-language use by EAL learners;
- providing opportunities for more able children to apply objectives in less familiar contexts.

Planning for children learning English as an additional language

EAL learners have to learn a new language whilst learning through the medium of that new language. To ensure they reach their potential, learning and teaching approaches must be deployed that ensure both access to the curriculum at a cognitively appropriate level and maximum language development.

Planning for EAL learners will be most effective when:

- it is part of the planning process of the whole school and the whole class, and is embedded in the usual planning format;
- it takes account of the language demands of the curriculum – both the subject-specific vocabulary and the appropriate language forms associated with the content;
- contexts for learning are relevant, motivating and culturally inclusive;
- it provides opportunities for speaking and listening, collaborative work and other strategies for language development;
- the role of additional adults with EAL expertise and/or bi/multi-lingual skills is clearly indicated, and they are either involved in the planning process or have plans shared with them at the earliest opportunity;
- consideration is given to the language demands of the task, how the children are grouped, use of first language for learning and how both language learning and language use will be assessed.

Resources

- *Supporting pupils learning English as an additional language* (DfES, revised 2002)
- If you are considering planning for newly arrived children in the early stages of English language acquisition, *Supporting pupils learning English as an additional language*, unit 5 (New arrivals and isolated learners) provides examples of annotated weekly planning for the literacy hour. You can download this from: www.standards.dfes.gov.uk/literacy/publications/inclusion/63381/.



CPD ACTIVITY

Planning for children learning English as an additional language

This activity is drawn from *Supporting pupils learning English as an additional language*. The example relates to literacy, but the principles illustrated can be applied when planning for other areas of the curriculum.

Aim

- To consider planning for EAL.

Materials

- Video clip 3, 'Planning for inclusion: EAL'
- Handout 8
- Circles of inclusion diagram, page 39

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff. It is important that additional adults with expertise in EAL or with bilingual or multilingual skills are involved in this CPD activity.
- Remind yourselves of the three circles of inclusion, relating them to EAL learners. Share handout 8, which indicates the areas the teachers in the video clip are discussing and the principles that underpin their approach.
- Watch video clip 3. This extract shows a class teacher and an ethnic minority achievement (EMA) teacher undertaking joint planning. The principles they are applying to this planning for inclusion can be applied to all areas of the curriculum.
- After viewing, discuss the video in relation to the main principles of effective planning for EAL given in the list on page 40. Then consider the following questions in relation to your own planning:
 - Do we plan clearly defined and purposeful tasks at an appropriate level of cognitive challenge?
 - Do we plan for collaborative work with visual and contextual support?
 - Do we plan tasks which encourage involvement with and contribution to the work of the class?
 - Are there opportunities for children to listen, tune in to and absorb good models of English before they feel ready to speak?
 - Are there opportunities for children to use their first language for learning?
 - Do we plan for pre- or post-teaching using an additional or first language?
 - Do we plan in ways that recognise the importance of talk for language acquisition and learning?
 - Are there opportunities for talk with a range of children who will act as models of fluent English?
- Discuss how to annotate existing plans to address the needs of learners with EAL.

Next steps

- In pairs, annotate a weekly plan in an identified subject or area of learning for a child with English as an additional language. Use the circles of inclusion to structure the annotations. Teach using the plan. The following week, share what was planned, annotated and taught. Discuss its effectiveness.
- Regroup and decide a shared policy on how you will continue to plan for EAL.

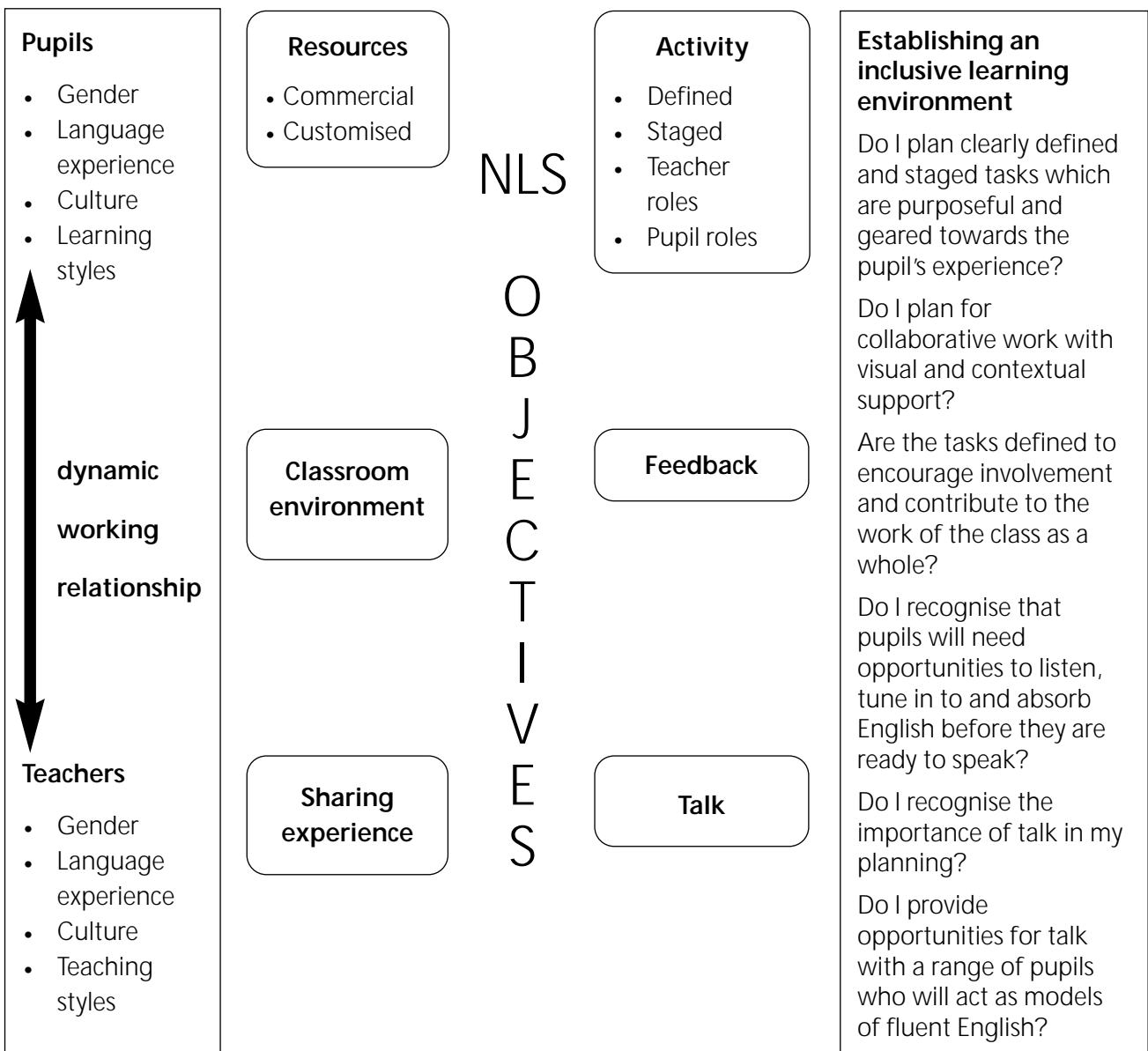
Elements of planning for inclusion

Planning

These teachers have a strong belief that:

'a lesson that doesn't include everyone is an incomplete lesson';

'in planning a lesson we imagine it from the children's point of view'.





Planning for children with special educational needs

Planning for children with special educational needs will be most effective when:

- it is part of the process of planning for the whole school or setting, and the whole class, and is embedded in the usual planning formats – evidence suggests that one of the most significant factors in the achievement of children with special educational needs (SEN) is the successful integration of any additional interventions into the curriculum on offer to everyone;
- it emphasises what children will learn based on an assessment of what they can do and what they know and understand – if, with appropriate access strategies and support, a child cannot work towards the same learning objectives as the rest of the class, you may want to track back to earlier learning objectives (this is sometimes called ‘multi-level curriculum planning’);
- it determines the teaching methods that will be used – there is a balance of visual, auditory and kinaesthetic learning, a mixture of collaborative, independent and teacher-led work, and consideration of the length of the task and the balance of open and closed tasks;
- it establishes how barriers to learning will be reduced or bypassed (e.g. by using pre-teaching, alternative methods of recording, concrete materials).



Resources

- *Learning and teaching for children with special educational needs in the primary years* DVD (DfES, 2004). This recently produced resource is available to order from Prolog.
- *Including all children in the literacy hour and daily mathematics lesson: management guide* (DfES, 2002) provides guidance on tracking back.
- *Planning, teaching and assessing the curriculum for pupils with learning difficulties* (QCA, 2001). Available from: www.nc.uk.net/ld.



CPD ACTIVITY

Planning for children with special educational needs

This activity draws on materials from *Including all children in the literacy hour and daily mathematics lesson* (DfES, 2002). Further examples are to be found in this file. The examples relate to literacy and numeracy, but the principles illustrated can be applied when planning for other areas of the curriculum.

Aim

- To consider the principles for inclusion in relation to planning for children with SEN.

Materials

- Handout 9
- Circles of inclusion diagram, page 39
- A Year 6 lesson plan for mathematics or English and one for any other subject

Organisation

- At a staff meeting, create groups that are cross-year and contain both experienced and less experienced staff.
- Remind yourselves of the circles of inclusion that should inform planning.
- Share the details of the case study on Claire (handout 9).
- In pairs, consider how you would annotate your plans to make the lesson accessible for Claire using Claire's IEP objectives, the recommended access strategies and the three circles of inclusion. Your SENCO could take the lead in this activity.
- Then share the following questions in the discussion groups:
 - Is this planning likely to lead to more effective learning and teaching for Claire? What are the strengths of this planning?
 - How could it be improved?
 - When planning, how do we currently give attention to the three circles of inclusion?
- Join together to share key points from your discussions.
- For examples of plans annotated for Claire, you might wish to look at pages 104–113 in *Including all children in the literacy hour and daily mathematics lesson* (DfES, 2002).

Next steps

- In pairs, annotate a weekly plan in an identified subject or area of learning for a child who has identified SEN. Use the circles of inclusion (access, teaching styles and learning objectives) to structure the annotations. Teach using the plan.
- At your next staff meeting, share what was planned, annotated and taught. Discuss its effectiveness and its impact on learning.
- Decide a shared policy on how you will continue to plan for children who have SEN.

CASE STUDY

Claire – Year 6

This Year 6 class includes one child, Claire, who is working at levels significantly below age-related expectations (overall level 2). She has a Statement of special educational need.

Claire has all the characteristics of children with general global learning difficulties. She has difficulty in moving from concrete to abstract thinking and needs much repetition in order to master new concepts. She reads simple unfamiliar texts accurately but does not always show understanding; she cannot always recount the main events or recall the key facts in her reading (level 2C). She has strengths in transcription skills for writing (handwriting, spelling and punctuation) but uses a restricted vocabulary; her writing draws more on the characterisation of spoken than written language, and lacks detail (level 2C).

Claire has some residual speech and language difficulties. Her teacher has assessed her at level 1B because of her limited vocabulary, simple syntax and difficulty in conveying information in conversation or response to questions. She has particular difficulty with accurate verb forms ('I wanted...').

In mathematics, Claire can count accurately to 1000, read, write and order numbers to 100, and has some understanding of place value when place value cards are used. She recognises odd and even numbers, recognises coins and can make amounts to 50p. She is fairly secure on number facts to 20 and can add and subtract within 20. She knows her multiplication facts for the 2 and 10 times tables. In shape, space and measures she has some knowledge of units of measurement including reading the time to the hour and half-hour; she recognises a half, whole and quarter turns to the left or right in a practical context such as physical education. Her teacher places her at level 2B overall.

Her IEP objectives are:

- Mathematics – to read the time to five minutes on analogue and digital clocks, and use calendars and timetables (in preparation for secondary school transfer);
- Communication – to convey information accurately in conversation;
- Literacy – to identify the main point and summarise orally the content of a passage of information text (Year 3 National Literacy Strategy target statement).

Access strategies noted on her Statement of special educational needs include:

- use of visual aids (visual learning style);
- clarify and write up new or difficult vocabulary;
- check for understanding of instructions;
- make abstract concepts more concrete;
- make open tasks more closed;
- pre-tutoring and oral work before tackling shared text;
- buddy with helping partner.

From *Including all children in the literacy hour and daily mathematics lesson* (DFES, 2002)



Planning for gifted and talented children

Planning for gifted and talented children will be most effective when:

- it is part of the process of planning of the whole school or setting and the whole class, and is embedded in the usual planning formats;
- it allows for opportunities for children to address objectives more broadly – by working at complex tasks which combine objectives or by applying objectives in less familiar contexts;
- it allows for opportunities for children to access an objective at a deeper level – by providing a greater degree of complexity or abstraction;
- it allows for acceleration by using objectives from those outlined for later years;
- it specifies more demanding criteria for learning outcomes and for assessing these;
- it provides opportunities for children to work independently, including setting their own tasks, working with minimal support and extending ideas on their own;
- it provides opportunities for children to make their understanding explicit, reflecting on and evaluating what has been achieved.

Resources

- Guidance on teaching gifted and talented children in all curriculum areas, including examples of classroom practice, can be found on the National Curriculum website at: www.nc.uk.net/gt.
- *Working with gifted and talented children: Key Stages 1 and 2 English and mathematics* (DfES, 2001) has a handbook, video and booklet of work samples, and can be obtained at: www.standards.dfes.gov.uk/giftedandtalented.



CPD ACTIVITY

Planning for gifted and talented children

Aim

- To consider planning for gifted and talented children.

Materials

- Circles of inclusion diagram, page 39
- Any current planning for gifted and talented children

Organisation

- Begin the meeting by reminding yourselves of the circles of inclusion that should inform planning and the criteria for effective planning for gifted and talented children (page 46).
- In pairs, share your current planning practice for those children in your school or setting who are identified as being gifted and talented (include all areas of talent in these discussions, not only ability in academic subjects).
- Share any issues and examples of successful practice with the larger group and consider the following questions:
 - What are the barriers to more effective planning for gifted and talented children?
 - How can we overcome these?

Next steps

- Identify how you will annotate your planning to take account of the needs of gifted and talented children. Decide how you will implement and monitor this.





Part 4 **Planning and assessment**

The 'Key elements of planning grid' on pages 24–25 shows that medium- and short-term planning includes identifying assessment opportunities. This assessment then feeds into the planning process and subsequent planning is adjusted in the light of assessment.

In this unit you will also find materials on assessment and planning in 'Adapting and annotating externally produced plans'. These show how:

- planning is adapted and annotated as necessary in the light of ongoing assessment;
- opportunities for reviewing progress and providing feedback to children are integrated into short-term planning.

If you have decided to focus on the importance of assessment to planning and vice versa, you should also refer to section 2 of the *Assessment for learning* unit and look at the following:

Curricular targets and planning

(Assessment for learning, pp. 21–26)

The section examines the following aspects of planning:

- How curricular targets in literacy and mathematics can be documented in medium-term planning and inform short-term planning.
- How teachers and practitioners set differentiated targets for identified groups.
- Where appropriate, how planning for guided and group work is explicitly linked to curricular targets for different groups and individuals.
- How children are involved in setting and evaluating curricular targets.



Success criteria and planning

(Assessment for learning, pp. 32–35)

The section examines the following aspects of planning:

- Success criteria focused on learning and shared with children.
- Success criteria evident in planning.
- Children involved in designing success criteria.
- Teachers and practitioners evaluating and refining their own success criteria.





Part 5 Lesson structure

Teachers and practitioners are familiar with the ways in which the literacy hour and the daily mathematics lessons are carefully structured and paced. It is worth reminding ourselves why this is so. Carefully structured lessons provide the opportunities to offer the following:

- **A 'route map' for teachers or practitioners and learners.** Considering lesson planning as a series of linked stages provides teachers and practitioners with a clear picture of what they are aiming for and how they plan to get there. It can do the same for learners. Familiar routines in the Foundation Stage, and lesson structures such as the literacy hour and daily mathematics lesson, support learners by helping them to know what to expect.
- **A series of stages that support learning by introducing, developing and reviewing the knowledge that is the focus of the lesson.** Learning is supported by knowing the purpose of the session, having opportunities to make links with and build on previous learning, undertaking task(s) to develop the learning, and reflecting on what has been learned.



- **Varying levels of support for learning at each stage.** This can include interactive whole-class work and group work where learning is supported by the teacher or practitioner and other adults; group work independent of an adult but with peer support within the group; and individual work done independently.
- **Varied timings for different stages within the lesson.** Learners' concentration spans vary with age and with their individual interest in and engagement with the task. In general, however, it is suggested that, even for adults, the



maximum concentration span is about 20 minutes. (This does not mean that learners do not sometimes become engrossed for longer, but in such cases there are often powerful intrinsic or extrinsic motivational factors at work.) The *exact* timings of different stages are not the issue (for example, the literacy hour timings were always intended to be approximate); rather it is a consideration of how long effective learning can be sustained before learners' concentration spans wane and off-task behaviour occurs.

Timings also vary depending on whether learners are revisiting knowledge or undertaking new learning. Typically, lesson starters briefly revisit or make links to prior learning; more time is allowed for exploring the new learning.

CPD ACTIVITY

Lesson structure

Aim

- To consider lesson structure.

Materials

- Handout 10

Organisation

- At a staff meeting, discuss in pairs each stage on handout 10 and note responses in the Purpose and Commentary boxes.
- During the following week, observe a teaching session in a foundation subject or area of learning. You may decide to all observe the same subject if it is an area of particular focus. Observe a small group of children. Note each stage in the lesson, its length and level of support for learning, for example whole-class, group, individual, other support (such as organisation of resources and access to an outdoor learning environment). Observe the 'on-task' and 'off-task' behaviour of the children during each stage. In the Foundation Stage, focus on a teacher-initiated session.
- At a subsequent meeting, discuss these observations in the light of your completed handouts and consider the following questions:
 - Were any stages not used? Why? What was the impact?
 - When were children off-task and on-task?
 - What are the implications for lesson structure within our planning?

Classroom observation

Stage	Purpose	Commentary
Introduction		
Introduction to the objectives	<ul style="list-style-type: none"> • To give learners the 'big picture' • To engage them in the new learning 	<ul style="list-style-type: none"> • Objectives and expectations shared and set in context of previous and future lessons • Links made to prior learning
New learning or task		
Extension/development/application		
Plenary		

Section 3 Using existing resources

Part 1 Planning resources

Schools are familiar with existing resources which can reduce the planning burden. These resources, which can also provide models for planning further units of work of the school's devising, include the following:



- *Planning for learning in the Foundation Stage* – this has examples of plans from a range of settings.



- National Numeracy Strategy unit plans – the National Numeracy Strategy produced unit plans for Years 4, 5 and 6 and the Primary Strategy has supplemented these with a sample of plans for Years 1, 2 and 3 on the *Models and images* CD-ROM. The plans are available in Word or PDF format from the NNS website, or on a CD-ROM (details in resources section).

- OCA schemes of work – these offer long- and medium-term planning for all subjects in the curriculum. One section of the website – valuing diversity and challenging racism – offers a range of plans to support inclusion.



- NLS planner and unit plans – the NLS has produced an interactive planner which supports teachers through the planning process as they plan units of work in literacy. This CD-ROM includes a planning tool which will help teachers to plan for all years in Key Stages 1 and 2. It provides step-by-step help and enables teachers to save and print out copies of daily and weekly plans. These plans and any subsequent amendments teachers make in the light of teaching and assessing can build into an ongoing and cumulative resource. The CD-ROM also contains medium-term plans from Reception to Year 6 and exemplified units of work, showing detailed short-term planning and resources for each year group. A copy of this CD-ROM is supplied with this unit.



Using planning resources from other sources

There are many excellent planning resources available. Teachers and practitioners can use these external resources to share good ideas and reduce workload. They will, however, want to assess external planning resources critically before deciding to use them. The 'Key elements of planning' grid on pages 24–25 can be used to evaluate the effectiveness of these resources in addressing the learning needs of children.



Part 2 **Adapting and annotating externally produced plans**

However good externally produced plans are, they will need to be adapted to suit the specific context and needs of individual classes. Use either of the CPD activities below to help you reflect on how external plans can be adapted. Although these focus on literacy and mathematics, the same principles apply when adapting plans in other curriculum areas.

CPD ACTIVITY

Adapting literacy plans

Aim

- To explore how and why plans are adapted.

Materials

- Handouts 11, 12 and 13
- Year 6 formal language Week 1 of the exemplified unit from the NLS planning CD-ROM

Organisation

- At a staff meeting, create discussion groups that are cross-year and contain both experienced and less experienced staff.
- Spend some time looking at the exemplified plan on the CD-ROM and then at the adaptations described in the case study on handout 11. Two examples of the teachers' annotated daily planning are shown on handouts 12 and 13. **The detail on these plans is for illustrative purposes only; the teacher would not normally record adaptations so comprehensively.**
- Discuss how you might adapt this plan for Year 6 children in your school. What are the implications for adopting externally produced plans in any subject or area of learning?

Next steps

- Decide how you can make any amended plans you have created within the school or setting easily available for members of staff to look at, and use if appropriate.

CASE STUDY

Adapting planning for Year 6

This case study shows how one teacher took the NLS Year 6 planning exemplification on formal language and adapted it for her class. Wyndcliffe Junior School is an inner-city school. About two-thirds of the pupils have families of Pakistani or Bangladeshi origin, nearly all of whom speak English as an additional language. About 10% are black Caribbean and dual heritage. The proportion of pupils entitled to claim free school meals (54%) is well above the national average.

Adapting the plans

The first part of the exemplified plan centres around informal and formal invitations. Resources such as sample invitations are included. To reflect the experiences and diverse needs of her pupils, the teacher made the following adaptations:

- Links were made to pupils' own experiences and cultural background, for example the names in the invitations and the type of food served at the buffet were changed.
- Links were made to earlier work undertaken by the pupils, for example the children had studied Shakespeare's plays, and so the ball invitation became an invitation to a ball to celebrate Juliet's engagement to Paris.
- The use of ICT was integrated into the unit, for example invitations were produced on the computer, using clip art and different fonts.
- Links were made to the rest of the curriculum (see details on the annotated daily plans).
- Independent activities were differentiated, for example a prompt sheet for comparing invitations and writing invitations was provided for some children.
- Assessment opportunities were identified.
- Additional activities were included to consolidate children's understanding of formal language, for example children undertook a sorting and matching activity of formal and informal words and phrases.
- A bilingual teaching assistant worked with different groups of children according to the challenges presented by the planned task.

Taking into account the inclusion of additional activities, her knowledge of her pupils and the need to give them opportunities to finish their written work, the teacher used her professional judgement and extended the time given to the unit. In total, it took about 8 hours rather than 5 hours.

CASE STUDY

Adapting planning for Year 6: adaptation of plan – day 1

Resources

- A range of invitations (formal/informal), which reflect various occasions/celebrations and the cultural experiences of pupils. (Encourage pupils to bring invitations from home.)
- Shared text: Resource Sheets S1 and S2 (a modified version of the original texts), to allow pupils to relate to the situation and to reflect the cultural background and identities of pupils.
- Extracts of formal/informal invitations (Resource Sheet S3) for independent task for middle achievers.
- A range of statements from invitations (refer to Resource Sheet S4) for independent task for lower-achieving group.
- Interactive whiteboard during Shared Text time for pupils to engage in highlighting/underlining features of the text.
- Matching Game cards to be used in the plenary to reinforce how the same message can be stated in different ways – formal/informal (Resource Sheet S5).
- ‘Poster’ to be used as a learning and teaching aid: What does an invitation need to inform the reader?

Differentiation for independent work

Higher-achieving groups

Pupils compare and contrast the features of formal/informal invitation – focusing on style, language, tone and layout. Show them how each feature highlighted needs to be supported with an example from the texts. Pupils to highlight how a message can be stated in different ways without altering the meaning.

Middle-achieving groups

To further reinforce and strengthen their understanding of the features of informal and formal invitations, pupils will be provided with extracts from a range of invitations to categorise and annotate. Annotations will require pupils to highlight a specific feature and explain its purpose, for example: ‘Personal language used – makes it sound as though it’s talking directly to you’.

Lower-achieving groups (supported by class teacher)

Pupils will be provided with a range of statements which can be found in formal and informal invitations. After group discussion, pupils will highlight the meaning of each statement and categorise as formal or informal. The adult supporting will use pupils’ home language, to further enhance their learning.

Day	Shared text, sentence and word level	Guided	Independent work	Plenary
1	Discuss invitations and their purpose. What do they need to tell you? List key information. Shared reading, discussion and partial annotation of informal invitation (Text A) and formal invitation (Text B). Add any further suggestions to key information. Discuss the different impact of each invitation. Begin a comparative list of features. Note formal phrases and vocabulary to return to in plenary. Y6 Term 2 T17, 20, S2	Reading	In pairs, complete comparative grid for the two invitations. Use the key information as a prompt for searches. Extension activity for able children – formal /informal comparative vocabulary	Take some phrases. Get them to identify the features from a formal invitation with, e.g., return to formal phrases/ words identified earlier. Demonstration: write a glossary / dictionary entry. Give rest of phrases as homework.

Assessment

Pupils developed a good understanding of the purpose of invitations. The enthusiasm and eagerness shown by pupils was evident in the number of invitations brought from home. During discussion they conveyed a good comprehension of the varying types of invitation and their impact on the reader. A longer session (than suggested on the above 1hr plan) was required for pupils to become immersed in and confident with the text type. Through discussion, pupils explored the use of language and how it differs in the two types of invitation. By the end of the session, pupils could recognise formal language, and understood how the impersonal stance provides the text with a tone of formality. However, this will be developed further next session.

Personal reflection

During the introductory stages, speaking and listening activities were used to activate pupils’ experiences of invitations. These experiences were essential to enhance pupil motivation and interest. Pupils were immersed in the text type (invitations) before analysing the shared text. The use of pupils’ home language was encouraged and planned for, as it allows every child to be included.



Cross-curricular links

- **Religious Education:** Exploring the celebrations of different faiths and religions.
- **PSHE:** To respect the beliefs and values of others. Explore the various ways in which celebrations may be different amongst groups of people, e.g. food, music, clothing.
- **ICT:** Use of interactive whiteboard, allowing pupils to annotate and highlight text.

Plenary

Middle-achievement group to act as ‘experts’ and ‘assess’ whether peers can categorise the extracts of invitations (studied by this group only). Can peers justify their conclusions?

Teacher and pupils to reinforce features of each type of invitation. Reinforce key vocabulary: personal, impersonal, colloquial, slang, contractions, abbreviations, etc.

To reinforce how a message can be conveyed in various ways through formal and informal language, introduce pupils to the game *Beat the Clock*. A pair will have a minute to match up as many statements as they can.

Begin a class glossary of formal terms, which will build up throughout the sessions/week and will be revisited each session.

CASE STUDY

Adapting planning for Year 6: adaptation of plan – day 2

Resources

- The *Animated Tales of Shakespeare: Romeo and Juliet* to focus on the Capulets' ball.
- Illustrations of Elizabethan costume – a visual resource for pupils to understand the elegance of such an event.
- Elizabethan music tape to allow pupils to gain an insight into the music played at the ball.
- Shared text: Resource Sheet T1, Verona *Daily News*. A modified version of the original unit text.
- A range of formal invitations in various forms: cards, scrolls etc.
- ICT: Microsoft Publisher. Groups will design and produce invitations using this program.
- Canvas, ink, dowelling rods and calligraphy pens. Middle-ability groups to create scrolls reconstructing an invitation as it would have been produced and delivered in Shakespearian times.
- Teaching Assistant to use pupils' home language to support the planning and design of the scroll.
- 'Poster' to be used as a learning and teaching aid: examples of 'formal phrases' used in invitations, identified and highlighted by pupils (Resource Sheet T2).

Differentiation for independent work

(children to work in mixed groups)

Group 1

Discussion in threes (one higher-achieving and two lower-achieving pupils) to support lower-achieving pupils to recall key points to include in invitations, e.g. time and date of event. They then work collaboratively as a group to plan and design a formal invitation to the Capulet Ball, using Microsoft Publisher with a focus on layout and formal language. This group to consider what other information an invitation might include, e.g. menu, maps, directions.

Groups 2, 3 and 4

As group 1, but following the discussion pupils to design and make scrolls inviting guests to the Capulet Ball, focusing on the formal language used and layout. Pupils to take on the role of the messenger and rehearse what to say when the invitation is delivered to the guest(s). A pupil who has newly arrived in the country with very little spoken English will produce a scroll in Urdu (support will be provided by an adult).

Day	Whole class	Guided	Independent	Plenary
2	<p>Shared reading of the account of a ball. Encourage recall, inference and deduction to identify key information. Note-take key facts on whiteboards.</p> <p>Spelling: make link between <i>accompanied</i> in ball text and <i>company</i> (from <i>request the company</i>).</p> <p>Create word family from root word. Y6 Term 2 T17, T20, S2, W5</p>	Reading	<p>Drawing on yesterday's formal invitation, write a formal invitation to the ball in the shared text. Children use their notes and yesterday's comparative grid/lists to support their work.</p>	<p>Share examples of children's work and ask others to assess use of precise details, formal phrases and vocabulary, whether key information is included, and layout.</p>

Whole class

Before introducing shared text, pupils revisit previous learning from Day 1. Highlight the features of formal and informal invitations. (Assessment point: can pupils support features with examples?) What kind of information does a reader need to gain from an invitation?

At this stage as pupils are familiar with the play *Romeo and Juliet* (through previous learning and viewing the video), they will engage in a short game *Heads/Tails: A Shakespeare Game* to revisit how the events in the play developed, providing a further context for the shared text.

Personal reflection

Pupils thoroughly enjoyed planning, designing and making the formal invitations. The wide range of resources used facilitated pupils' learning and understanding. The fictitious (but 'known') context of the invitations was beneficial and provided purpose and meaning.

Many cross-curricular links were established which increased pupil motivation and interest.

Plenary

To share and evaluate the invitations, one group to take on the role of the messenger and 'deliver' the invitation to the guest. Evaluate effectiveness – is an RSVP required in this invitation? If so, how do you think it was carried out? Compare scrolls to the recorded invitations and those produced on computer – which techniques and features are used to maintain formality of invitation? Reinforce how the use of impersonal language maintains a distant tone. This point to be developed in the next session when focusing on explanations.

Assessment

A longer session than the one suggested was vital to give pupils opportunities to plan, draft and redraft. At the planning stages it became evident that pupils needed further support in the layout of the invitation, so further reinforcement was provided. Pupils demonstrated a good understanding of the formal phrases used in invitations. Throughout their written/recorded outcomes, pupils displayed a good understanding of the features of formal invitations.

Cross-curricular links

Design and Technology: To design an invitation: layout, font, colour. To cut, measure and join together different materials.

ICT: Use of interactive whiteboard during shared text time, promoting pupil interactivity by pupils highlighting and annotating text. Use of Microsoft Publisher to produce invitations.

Drama: To empathise with and take on the role of fictitious characters in the play *Romeo and Juliet*.

CPD ACTIVITY

Adapting mathematics plans

Aim

- To explore how and why plans are adapted.

Materials

- Video clip 4, 'Adapting and annotating unit plans'
- Handout 14

Organisation

- At a staff meeting, create discussion groups.
- Watch video clip 4. This shows teachers adapting and annotating a mathematics unit plan.
- Discuss the adaptations these teachers make.
- Discuss how you might adapt this plan for children in your school. If you have the NNS CD *Models and images*, you could use this to see which annotations are identified.
- Look at the example of an annotated unit on handout 14. What are the implications for adopting externally produced plans in any subject or area of learning?
- Share examples of how you have amended plans, paying particular attention to assessment and inclusion.

Next steps


- Decide how you can make any amended plans you have created within the school or setting easily available for members of staff to look at, and use if appropriate.

Other possible CPD activities

- On the PNS website in the Inclusion community area, you will find examples of medium-term literacy and mathematics planning developed by literacy and numeracy consultants together with special-school coordinators. These are aimed at addressing the issue that in special settings for groups of children with severe learning difficulties, if teachers always use Reception medium-term plans, children don't get breadth or coverage. For example, they don't access (at the appropriate level) the range of genres in literacy or work on simple data handling in mathematics. This planning is also likely to be useful to mainstream teachers of classes where there are children working on the P levels, helping them to track back to find linked objectives relevant to the work other children are doing in literacy and mathematics. Explore these examples and discuss how they might inform your planning.

Annotating a mathematics unit plan

Associative - answer is the same regardless of how the elements are grouped.
Commutative - the operation is independent of the order of numbers.

Planning sheet	Day Three	Unit 9 Multiplication and division	Term: Spring	Year Group: 4
<p>Oral and Mental</p> <p>Recognize and extend number sequences by counting from any number in steps of 1, 2, 5, 10, 100, 1000.</p> <p>Replace with repetition of Day 1. Check recall of 4×7, 4×8 - target Keith, Hayleigh + Jonathan on $5 \times$ table.</p>	<p>Teaching Activities</p> <ul style="list-style-type: none"> Use counting stick to count in steps of 1/2 hour, e.g. from 9:30, half past 4, 7:00 both forwards and back. Count in steps of 1/2 hour, just using o'clock, 1/2 past, 1/2 past and 1/2 to, starting from different times, both forwards and back. Count in steps of 5 minutes, e.g. from o'clock in digital or analogue fashion. Count in steps of 10 minutes, as above. 	<p>Objectives and Vocabulary</p> <p>Understand the principles (not the names) of the commutative and associative laws as they apply to multiplication.</p> <p>Can they represent this as 3×4 and 4×3?</p> <p>Can they all apply comm. law? Check using written responses before going on.</p> <p>On the OHP use 12 counters to show the array:</p>  <p>3 groups of 4 4 groups of 3</p> <p>How many counters are there?</p> <p>Emphasise that it does not matter if we count the 4 lots of 3 or the 3 lots of 4, we still get 12. This can help us when we multiply numbers, as we can change the order of the numbers. Give other pupils a chance to demonstrate the rule.</p> <p>Can we extend the rule to multiplying 3 numbers together?</p> <ul style="list-style-type: none"> On the board write: $2 \times 4 \times 5$. Can we rearrange the 3 numbers to help us find the answer? Cover the 2s and ask: Can we reorder the 4 and 5? Agree we can and write as $2 \times 5 \times 4$. What is 2×5? <p>Using the answer 10 write 10×4.</p> <p>NNS Unit Plans - Need to check develop understanding - to get 10? ask 'Why do we want to get 10? How should we re-order to get 10?'</p>	<p>Teaching Activities</p> <p>Review homework activity. Quickly make a table of a few results and discuss the patterns.</p> <p>On the board write: 4×3 and 3×4.</p> <p>Do these have the same answer?</p> <p>Establish the answer to $2 \times 4 \times 5$ is 40. Using 2 x 7 x 5 demonstrate this is $2 \times 5 \times 7 = 10 \times 7 = 70$.</p> <p>Ask questions - see below</p> <p>Set children similar questions involving 2, 5 and a third number. Collect answers and correct any misunderstandings.</p> <p>$2 \times 9 \times 5$</p> <p>What is $4 \times 6 \times 3$?</p> <p>Record $26 \times 4 \times 5$ and rewrite as 20×6. Ask: How should I re-order? Demonstrate that as 20 is why? 2×10 we can use $2 \times 10 \times 6 = 2 \times 60$ and double 60 is 120.</p> <p>Repeat using $4 \times 4 \times 5$. Set children similar questions. Collect answers and discuss methods.</p> <p>Write 4×10 on the board.</p> <p>Which two numbers can be multiplied to give 10?</p> <p>Check understanding of factors</p> <p>Establish that 5 and 3 are a pair of factors of 15. Show how $4 \times 15 = 4 \times 3 \times 5$, and that these numbers can also be re-arranged as $4 \times 5 \times 3$.</p> <p>What is $4 \times 5 \times 3$?</p> <p>Rewrite as 20×3 and ensure that children can demonstrate that this gives an answer of 60. - Check by asking ch. to explain their methods</p> <ul style="list-style-type: none"> Write the numbers 2, 3, 4, 5 in one circle on the board and 15, 25, 35, 45 in another circle. Children choose one number from each circle and multiply them together in the way that has been modelled. 	<p>Plenary</p> <p>Teaching Activities/Focus Questions</p> <ul style="list-style-type: none"> Discuss children's work, asking for examples. Identify and correct any errors and misunderstandings. Ask children to explain. Write on the board: Explain. How many pencils will be in 3 boxes? What calculation is needed? <p>Establish that children recognise the calculation is the multiplication 24×5 or 5×24.</p> <p>Use the method taught to rewrite as $5 \times 4 \times 6$ etc.</p> <p>By the end of the lesson the children should be able to:</p> <ul style="list-style-type: none"> Know that multiplication can be done in any order. Know that multiplication calculations can be made easier by using factors. <p>(Refer to supplement of examples, section 6, page 52.)</p> <p>Get children to work in pairs within their groups. Observe more able group; discuss with middle group - get them to explain methods.</p>

Section 4 Resources

Additional CD-ROM

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

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

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

CD 2 *Excellence and Enjoyment: making the curriculum your own*

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

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

References and suggested readings

Key planning documents

The following resources can help schools and settings with the process of planning:

- *Curriculum guidance for the Foundation Stage* (QCA/00/587)
- *Designing and timetabling the primary curriculum* (QCA/02/912)
- *Excellence and Enjoyment: a strategy for primary schools* (DfES 0377-2003)
- *Including all children in the literacy hour and daily mathematics lesson* (DfES 0465-2002)
- *Learning and teaching using ICT: leadership team toolkit* (DfES 0369-2004)

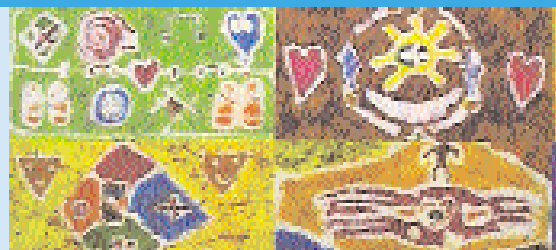


- *Models and images: using models and images to support mathematics teaching and learning in Years 1 to 3* (DfES 0508-2003 GCDI)
- *National Curriculum handbook for primary teachers* (QCA/99/457)
- NNS unit plans, available at:
www.standards.dfes.gov.uk/numeracy/unit_plans/
- *Planning for learning in the Foundation Stage* (QCA/01/799)
- *Planning guidance for primary teachers* (DfES 0751-2002)
- *Planning, teaching and assessing the curriculum for children with learning difficulties* (QCA/01/736)
- *Supporting pupils learning English as an additional language*, revised 2002 (DfES 0239-2002 G)
- *Teaching assistants in primary schools: an evaluation of the quality and impact of their work* (Ofsted, 2002)
- *The curriculum in successful primary schools* (HMI, 2002)
- The National Literacy Strategy. Framework for teaching (DfES, 1998)
- The National Numeracy Strategy. Framework for teaching mathematics (DfES, 1999)
- *Working with gifted and talented children: handbook* (QCA/01/801)
- *Working with teaching assistants: a good practice guide* (DfEE 0148/2000)

Useful websites

As well as the resources mentioned throughout the unit, the following websites may be helpful:

- Resources for Reflective Teaching website, with a section on planning and suggestions for further CPD activities:
www.rtweb.info/ch09/index.html
- Resource materials on the Teachernet website – over 2000 lesson plans, materials on various topics and themes and information on delivering each key stage of the curriculum:
www.teachernet.gov.uk/teachingandlearning/
- National Curriculum in action: www.ncaction.org.uk/



Useful sources of advice and guidance on planning for curriculum choices which are culturally inclusive and reflective of diversity can be found at:

- www.qca.org.uk/ages3-14/inclusion/
- www.standards.dfes.gov.uk/ethnicminorities/
- www.naldic.org.uk

Acknowledgements

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

