



Planning, teaching and assessing the curriculum for pupils with learning difficulties

Design and technology



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Introduction

What is the purpose of this guidance?

This guidance supports the planning, development and implementation of the curriculum for pupils with learning difficulties. It draws on effective practice across a range of schools and can be used in mainstream and special primary and secondary schools, specialised units and independent schools. It also provides support to the range of services that work with these schools.

The guidance can be used with the school's own material, the national curriculum and the frameworks for teaching literacy and mathematics to:

- confirm the statutory entitlement to learning for all pupils and build on the principles of inclusion set out in the national curriculum
- help schools develop an inclusive curriculum by:
 - setting suitable learning challenges
 - responding to pupils' diverse learning needs
 - including all learners by overcoming potential barriers to learning and assessment
- provide a stimulus to revisit and revise existing schemes of work or a basis to develop new ones.

Who are the pupils?

The guidance relates to all pupils aged between 5 and 16 who have learning difficulties, regardless of factors such as their ethnicity, culture, religion, home language, family background or gender, or the extent of their other difficulties. This includes pupils who are unlikely to achieve above level 2 at key stage 4. (These pupils are usually described as having severe or profound and multiple learning difficulties.) This also includes pupils with learning difficulties who may be working at age-related expectations in some subjects but are well below this in others. (These pupils, along with those with other significant difficulties, are often described as having moderate learning difficulties.)

Who is the guidance for?

The guidance supports the work of a range of adults who are concerned with meeting the needs of pupils with learning difficulties. This includes class teachers, subject coordinators, special educational needs coordinators (SENCOs), senior managers, teaching assistants, parents,

carers, governors, therapists, local authority and advisory support services, and professionals from health, social services and the voluntary sector. Throughout these materials, the term 'staff' is used to refer to all those concerned with the education of these pupils.

What is in the guidance?

The guidance contains:

- support on developing and planning the curriculum
- support on developing skills across the curriculum
- subject materials on planning, teaching and assessing each national curriculum subject; religious education (RE); and personal, social and health education (PSHE) and citizenship. These include descriptions of pupils' attainment showing progress up to level 1 of the national curriculum, which can be used to recognise attainment and structure teaching.

What are the subject materials?

The subject materials support staff in planning appropriate learning opportunities. The materials do not represent a separate curriculum for pupils with learning difficulties or an alternative to the national curriculum. They demonstrate a process for developing access to the national curriculum and support staff in developing their own curriculum to respond to the needs of their pupils at each key stage. The materials offer one approach to meeting this challenge. Schools may already have effective structures or may wish to adopt different approaches.

The materials identify learning opportunities relevant to each subject. They demonstrate appropriate learning across the scope of the national curriculum from the earliest levels. They are intended to increase schools' confidence in their capacity to provide appropriate access to the national curriculum.

A common framework for these materials has been used. In each subject, appropriate learning for pupils with diverse needs at each key stage has been identified. Those aspects of the programmes of study that may create particular difficulties are also discussed, as well as aspects that may be unsuitable at a particular key stage. The suggested activities can be used to develop ideas for relevant, accessible and challenging experiences in curriculum plans.

Responding to pupils' needs when teaching design and technology

The importance of design and technology to pupils with learning difficulties

Design and technology (D&T) provides practical learning experiences which make it accessible to all pupils. Pupils use knowledge and understanding from across the curriculum and apply and consolidate them in practical activities. Designing and making real products that can be used can give pupils a sense of achievement and improve their self-esteem. They benefit from seeing their own progress and taking greater responsibility for their own learning as they begin to evaluate the quality of their work. Pupils' personal involvement with tasks often improves their attention span, patience, persistence and commitment.

In particular, D&T offers pupils with learning difficulties opportunities to:

- make choices and be involved in sensory and communication activities within a practical learning experience
- consider the needs and preferences of others, as well as themselves, so helping to develop their social awareness
- focus on design problems that are meaningful to them
- work on personally motivated design tasks where they take ownership of their work and of their own learning
- communicate using a range of methods avoiding over-reliance on the written word
- carry out practical tasks in which they all can make a contribution to the development of individual or group projects, rather than working to predetermined goals
- work within a flexible range of contexts and topics that can be adapted to suit individual interests and motivations
- use information and communication technology (ICT) to realise, develop and enhance their work
- work at their own pace and level, with appropriate staff support and intervention
- negotiate individual targets with staff that can be reviewed as required. Pupils who need to work at a slower pace can do so, and those who work more quickly can be further challenged to develop their work with activities which extend and enrich their experience.

In response to these opportunities, pupils can make progress in D&T by:

- extending the breadth and depth of experience gained
- working on smaller to larger tasks
- studying the familiar to the less familiar, *for example, exploring familiar to less familiar products*
- developing understanding, *for example, from the concrete to the abstract.*

Modifying the design and technology programmes of study

The statutory inclusion statement of the national curriculum requires staff to modify the programmes of study to give all pupils relevant and appropriately challenging work at each key stage. Staff should teach knowledge, skills and understanding in ways that match and challenge their pupils' abilities.

Staff can modify the D&T programmes of study for pupils with learning difficulties by:

- choosing elements from earlier key stages
- maintaining, consolidating, reinforcing and generalising previous learning, as well as introducing new knowledge, skills and understanding
- using the programmes of study as a resource or to provide a context in planning learning appropriate to the age and needs of pupils
- focusing on one aspect, or a limited number of aspects, of the age-related programmes of study
- including experiences which let pupils at early stages of learning develop knowledge, skills and understanding as part of their everyday activities
- letting pupils experience D&T for themselves, at first by using the senses to explore familiar materials, tools and products.

D&T involves the complex interplay of four important aspects:

- exploring and clarifying the task
- generating, developing and communicating ideas or proposals
- testing, evaluating and modifying
- planning and making.

The interplay of these four aspects can make D&T particularly demanding, but it can also greatly enrich pupils' learning experiences. When planning, care should be taken to avoid activities where the teacher prescribes the design and the outcome step by step and the pupils follow the prescription. Such lessons are inaccurate interpretations of D&T and reduce the opportunities for pupils to develop capability.

Pupils may have strengths in relation to a particular process, around which it is possible to devise activities, *for example, with some pupils, a D&T activity might centre on the process of making, with the other three important aspects incorporated as the task progresses.*

Improving access to the design and technology curriculum

Careful planning of the kinds of activities pupils will take part in, and how they will be expected to approach their work, is important to ensure full access to the breadth of the D&T curriculum.

Product evaluation activities can help to develop pupils' evaluation skills by encouraging them to evaluate other designers' work and other people's products. These activities help pupils to develop knowledge, skills and understanding that they can use when designing and making their own products. Pupils can be helped to access this aspect of D&T through:

- looking at a limited range of products at any one time
- looking at a mixture of familiar and less familiar products
- using worksheet pro forma (in text or symbols) for recording responses
- discussing, examining and tasting products as part of a group, rather than relying on individual written accounts
- evaluating different products through non-visual means, *for example, with tactile responses to products*
- using non-visual or non-aural ways to get information when researching products or providing contexts in which to generate new ideas.

Staff can also use focused practical tasks to help pupils practise and consolidate particular skills and knowledge. Through such tasks, staff can ensure particular opportunities and emphases in one or more of the aspects of D&T.

Design and make assignments (DMAs) give pupils the chance to put their knowledge and skills to the test and to meet challenges that address needs and wants. Such assignments can help pupils to develop

confidence and their ability to apply design ideas and concepts in concrete, practical ways. Dependent on pupils' needs, it may be necessary to give some pupils more time.

Teaching structured or limited assignments in familiar contexts may be more effective for some pupils to develop particular knowledge, skills and understanding. *For example, to develop pupils' modelling and making skills, staff may choose to engage them only in those aspects of the design process by providing the research for a DMA.*

As when teaching D&T to any pupils, it is important for staff to avoid repetitious tasks and teaching approaches, and to provide pupils with a range and breadth of teaching both within and across the key stages. Pupils' access to the D&T curriculum will be enhanced by providing them with opportunities to:

- work on shorter, more focused DMAs, rather than longer, open ones. Doing so can provide pupils with incremental elements of success, and regular motivation and reward
- choose DMAs where success is guaranteed and pupils can be proud of what they have designed and made. Doing so can enhance pupils' confidence and self-esteem, and encourage them to take risks with their designing and making
- work in a wide range of materials and contexts over a key stage but with fewer opportunities to revisit them
- experience combining more than one material in a single DMA, *for example, working in wood, plastic and with food when designing and making a vacuum-formed mould for a food product*
- undertake DMAs in contexts related to their own strengths, interests and hobbies
- adapt, make improvements or add a new feature to the design of an existing product rather than inventing a whole new product
- design a product having been given a range of alternative solutions where there is an opportunity for real designing
- take part in DMAs in which certain aspects are restricted but where there are still opportunities for some designing, *for example, designing a simple puzzle to be contained in a box of limited size and shape*
- use modelling, role play, audio recordings, video and photographs to communicate, develop and record their ideas

- describe their design ideas for others to record or to translate into a drawing, while retaining control of the design idea and the modifications
- explore and try out ideas with similar materials, *for example, using an existing recipe to make a prototype, then suggesting adaptations and adding their own ideas to the basic product*
- use computer-aided design (CAD) and computer-aided manufacturing (CAM) to produce quality products, particularly if they cannot finely manipulate tools, equipment or materials
- use ICT applications, *such as specialist software*, to help sequencing and following instructions during practical work.

Access to the curriculum will also be improved through staff:

- using technological aids to provide specific support in some practical activities, *for example, posture aids, specialist apparatus such as talking weighing-scales*
- using the support of others to help pupils take part safely in practical work, *for example, the assistance of adults or other pupils to help them to hold or manipulate tools, or to carry out activities according to instructions*. It is important that the pupils should retain control of the making process and be the decision makers.

D&T can help pupils develop their broader communication and literacy skills through encouraging interaction with other pupils as well as staff. With some pupils, communication and literacy skills will develop through using a range of visual, written and tactile materials, *for example, large print, symbols and symbol text*. These skills also develop as pupils use ICT and other technological aids. Other pupils' skills develop as they use alternative and augmentative communication, *for example, body movements, eye gaze, facial expressions and gestures including pointing and signing*. There is no requirement to teach D&T at key stage 4. However, for many pupils, D&T offers satisfying challenges both as a subject in its own right and as a way of developing skills in many other areas of the curriculum.

Opportunities and activities at key stage 1

Much of the D&T programme of study at key stage 1 is relevant to pupils with learning difficulties. With modification, it can provide stimulating and challenging learning opportunities.

The focus of teaching D&T at key stage 1 may be on giving pupils opportunities to:

- work with basic tools, equipment, materials and components to make simple products in a range of materials, including food, items that can be put together to make products and textiles
- explore common materials and components and investigate the sensory qualities and properties of those materials and products
- investigate familiar products and communicate likes and dislikes.

Given these opportunities in D&T at key stage 1:

all pupils with learning difficulties (including those with the most profound disabilities)	respond to a range of sensory experiences and observe, explore and experience a range of common materials and tools. They observe and explore familiar products and how things work.
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most pupils with learning difficulties (including those with severe difficulties in learning) who will develop further skills, knowledge and understanding in most aspects of the subject	explore the qualities of materials by playing and experimenting. They begin to communicate likes and dislikes.
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a few pupils with learning difficulties who will develop further aspects of knowledge, skills and understanding in the subject	communicate what they like and dislike. They make choices, choosing a product or elements of a design. They may draw or model their ideas. They may plan by indicating what to do next.
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Some parts of the key stage 1 programme of study may be too demanding for some pupils. These parts may be:

- generating ideas by drawing on their own and others' experiences
- planning, by suggesting what to do next, as their ideas develop
- communicating their ideas using a variety of methods including drawing and making models
- identifying what they could have done differently or how they could improve their work in the future.

Such parts may become less demanding as pupils get older, but it may not be appropriate to teach these parts to some pupils during this key stage. It may be more appropriate to draw on materials from *Practice guidance for the early years foundation stage* (DCSF00266-2008BKT-EN). The following activities show how this can be done and provide examples of approaches staff can take with units of work in D&T.

Eat more fruit and vegetables

Pupils investigate familiar products and explore materials

They may:

- observe, touch, smell and taste different fruits and fruit juices and respond to them
- record, as a class, how many pieces of fruit they eat each day.

Pupils carry out focused practical tasks

They may:

- with help, wash, clean, peel, cut, slice, grate, squeeze and mix different fruits and fruit juices
- observe fruit growing
- observe, touch, smell and taste ready-made fruit products, for example, *canned fruit salad, chilled fruit salad*, and respond to those products
- observe and explore changes in fruit, for example, *a raw apple and a cooked apple*.

Pupils work on a DMA where they bring together what they have learned to design and make a fruit salad or a fruit drink

They may:

- choose from a selection of fruit provided by the teacher
- choose how to prepare and cut the fruit.

Winding up

Pupils investigate familiar products and explore materials

They may:

- observe and explore simple winding mechanisms in a range of toys
- observe how the mechanism works and respond to the movement of the mechanism
- become aware of the different parts, *such as wheels, axles, winders, pulleys and gears.*

Pupils carry out focused practical tasks

They may:

- with help, build a winding mechanism using construction kit parts
- practise controlling the mechanism and become aware of cause and effect, *for example, if they turn the winder, the pulley winds the cord around it and the hook rises*
- explore ways of picking up items, *for example, a bucket, magnet or hook*
- with help, measure and cut small sections of timber or dowel
- with help, assemble parts, *for example, joining axles to bases, and wheels to axles.*

Pupils work on a DMA where they bring together what they have learned to design and make a winding mechanism out of reclaimed materials for a children's story, such as 'Jack and Jill' or 'Incy Wincy Spider'

They may:

- work as a class to choose a story, each pupil making a specified part of the design, *for example, spider, sun or rain*, with appropriate help
- use a template, a choice of designs provided by the staff, or design their own parts, according to their individual needs.

Opportunities and activities at key stage 2

Much of the D&T programme of study at key stage 2 is relevant to pupils with learning difficulties. With modification, it can provide stimulating and challenging learning opportunities.

The focus of teaching D&T at key stage 2 may be on giving pupils opportunities to:

- work with basic tools, equipment, materials and components to make simple products in a wider range of materials, including food, mouldable materials, stiff and flexible sheet materials and textiles
- explore the sensory qualities of common materials and components and how to use them
- investigate familiar products and think about who will use them and how they work
- understand how mechanisms can be used to make things move in different ways
- begin planning what they have to do.

Given these opportunities in D&T at key stage 2:

all pupils with learning difficulties (including those with the most profound disabilities)	make choices in response to sensory experiences. They observe, explore and experience a range of common materials and tools. They observe and explore familiar products and find out how things work.
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most pupils with learning difficulties (including those with severe difficulties in learning) who will develop further skills, knowledge and understanding in most aspects of the subject	communicate what they like and dislike. They make choices, choosing a product or elements of a design. They try out ideas by shaping materials and putting components together.
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a few pupils with learning difficulties who will develop further aspects of knowledge, skills and understanding in the subject make products on the basis of preferences expressed by others. They think about what products are used for and the needs of people who use them, and identify what works well. They select tools and materials from a range suggested by the teacher.

Some parts of the key stage 2 programme of study may be too demanding for some pupils. These parts may be:

- developing and communicating ideas
- evaluating processes and products
- using a range of equipment, including an ICT control program.

Such parts may become less demanding as pupils get older, but it may not be appropriate to teach these parts to some pupils during this key stage. It may be more appropriate to teach the more demanding parts of the programme of study for key stage 1. Throughout key stage 2, staff can maintain and reinforce the knowledge, skills and understanding introduced during key stage 1 by applying these in different areas, and introduce new learning. The following activities show how this can be done and provide examples of approaches staff can take within units of work in D&T.

Musical instruments

Pupils investigate familiar products and explore materials

They may:

- make sounds or respond to sounds made by different musical instruments
- feel the different materials that are used to make the musical instruments
- become aware of the different parts of existing musical instruments, *for example, box, arm, stem, board, string.*

Pupils carry out focused practical tasks

They may:

- experiment with making sounds, *for example, with shakers (margarine pots with rice, gravel or sand); scrapers (plastic bottles*

with ridges, doweling and glass paper); drums (food containers, biscuit tins, materials stretched over the top of boxes); stringed instruments (food containers, elastic bands, string)

- investigate which part makes the noise, become aware of how to control the noise, and make different sounds or notes.

Pupils work on a DMA where they bring together what they have learned to design and make a musical instrument to go with a piece of music or for sound effects for a story as a class

They may:

- with help, choose the story or sound effects and an appropriate instrument
- use a template and a plan to make a specified instrument
- choose elements of the design, *for example, different bottles, different fillings for a shaker, different beaters or different colours,* or design their own instruments within a given range of materials and tools.

Slippers

Pupils investigate familiar products and explore materials

They may:

- explore a collection of slippers, *such as slip-on towelling slippers, knitted sock slippers, embroidered slippers, furry slippers, novelty animal slippers, moccasin fleecy slippers and traditional 'granddad' slippers.* They observe, touch and put on the slippers and respond to the different types of materials used
- take apart, or observe someone taking apart, a slipper into its component parts, *for example, the lining, the sole, the upper and the edging.*

Pupils carry out focused practical tasks

They may:

- with help, draw around their feet or make prints of their feet and use this to make a template for a slipper
- with help, use paper and tape to make a model of one slipper to try out the template.

Pupils work on a DMA where they bring together what they have learned to design and make simple slippers for their own feet, using a design and plan provided by staff

They may:

- choose the fabric, *for example, felt or towelling*
- choose the colour
- choose the decoration, *for example, glue on fabric pieces or use fabric pens with help.*

Opportunities and activities at key stage 3

Much of the D&T programme of study at key stage 3 is relevant to pupils with learning difficulties. With modification, it can provide stimulating and challenging learning opportunities.

The focus of teaching D&T at key stage 3 may be on giving pupils opportunities to:

- suggest outline plans for designing and making
- communicate design proposals
- select and use tools, equipment and processes, including CAD/CAM to shape and form materials safely and accurately and finish them appropriately
- explore the properties of a range of contrasting materials, including resistant materials, compliant materials and/or food
- analyse products and judge the quality of other people's products.

Given these opportunities in D&T at key stage 3:

all pupils with learning difficulties (including those with the most profound disabilities)

make choices about a product or aspects of its design. They observe, explore and experience a range of materials and tools.

most pupils with learning difficulties (including those with severe difficulties in learning) who will develop further skills, knowledge and understanding in most aspects of the subject

suggest next steps when planning. They select and use a variety of tools, equipment and processes. They communicate design proposals in a variety of ways.

a few pupils with learning difficulties who will develop further aspects of knowledge, skills and understanding in the subject develop their ideas by taking into account how their products will be used and who will use them. They judge the quality of other people's products.

Some parts of the key stage 3 programme of study may be too demanding for some pupils. These parts may be:

- generating design proposals
- prioritising actions and reconciling decisions as a project develops
- considering the physical and chemical qualities of materials
- understanding systems and control or structures.

Such parts may become less demanding as pupils get older, but it may not be appropriate to teach these parts to some pupils during this key stage. It may be more appropriate to teach the more demanding parts of the programme of study for the earlier key stages. Throughout key stage 3, staff can maintain and reinforce the knowledge, skills and understanding introduced during the earlier key stages by applying these in different areas, and introduce new learning. The following activities show how this can be done and provide examples of approaches staff can take with units of work in D&T.

Controlling a display

This is a project on the theme of using a control mechanism to control a display.

Pupils investigate familiar products and explore materials

They may:

- observe point-of-sale shop displays at a local shopping centre
- examine existing products that include control, *for example, electronic greetings cards, pop-up cards and books*, to identify technical components and materials used.

Pupils work on focused practical tasks

They may:

- practise different ways of creating lettering, *for example, using stencils, a computer*
- practise assembling the components, *for example, using glue sticks or a glue gun*
- with help, assemble simple circuits using motors and/or lights.

Pupils work on a DMA where, as a class, they bring together what they have learned to make a display for use in a local shop

They may:

- discuss the purpose of the display and what they wish to attract people to, *for example, a new promotion*
- choose the text and pictures to be used in the display
- choose the ways in which they wish the display to move or be lit.

Puzzle in a box

Pupils are set the task of designing and making a decorative box that could contain a gift or puzzle.

Pupils investigate familiar products and explore materials

They may:

- examine and express their opinions on a number of gift boxes or decorative boxes.

Pupils work on focused practical tasks

They may:

- practise a range of cutting, joining, shaping and forming processes
- practise a variety of decorative techniques to improve the appearance of the boxes
- use cardboard to model the pieces of a puzzle or a gift.

Pupils work on a DMA where they bring together what they have learned to make a box to a design and size provided by staff

They may:

- design what puzzle or gift they will put in their box
- decorate the box to suit the design of the gift, *for example, choose the colour or apply decoration.*

Opportunities and activities at key stage 4

Much of the D&T programme of study at key stage 4 is relevant to pupils with learning difficulties. With modification, it can provide stimulating and challenging learning opportunities.

The focus of teaching D&T at key stage 4 may be on giving pupils opportunities to:

- use graphic techniques and ICT, including CAD, to generate, develop, model and communicate design proposals
- select and use tools, equipment and processes effectively and safely to make products that match a specification
- understand how materials can be combined and processed to create more useful properties
- understand a variety of finishing processes
- ensure that their products are of a suitable quality for intended users and suggest modifications.

Given these opportunities in D&T at key stage 4:

all pupils with learning difficulties (including those with the most profound disabilities)	contribute to design and make projects that are linked to their own interests. They observe, explore and use a range of materials and tools. They combine and process materials.
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most pupils with learning difficulties (including those with severe difficulties in learning) who will develop further skills, knowledge and understanding in most aspects of the subject	communicate their ideas in different ways. They design and make products suitable for the user.
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a few pupils with learning difficulties who will develop further aspects of knowledge, skills and understanding in the subject take part in projects that are linked to their own interests, industrial practice and the community.

Some parts of the D&T programmes of study at key stage 4 may be too demanding for some pupils. Such parts may be:

- using design briefs, detailed specifications and criteria
- using a range of industrial applications
- checking design proposals against design criteria
- understanding how to achieve the optimum use of materials and components
- demonstrating a knowledge of systems and control.

Such parts may become less demanding as pupils get older, but it may not be appropriate to teach these parts to some pupils during this key stage. It may be more appropriate to teach the more demanding parts of the programme of study for the earlier key stages. Throughout key stage 4, staff can maintain and reinforce the knowledge, skills and understanding introduced during the earlier key stages by applying these in different areas, and introduce new learning. The following activities show how this can be done and provide examples of approaches staff can take with units of work in D&T.

Corporate identity

Pupils are set the task of helping to produce a range of promotional items, including T-shirts and banners, for a special occasion or a client.

Pupils investigate familiar products and explore materials

They may:

- investigate the designs on promotional T-shirts or other items.

Pupils carry out focused practical tasks

They may:

- practise using digital cameras
- produce images using draw or paint computer software
- produce screen printing templates using a printer
- practise using a symbol word processor to produce writing and symbols
- use an on-screen grid to select words and symbols while others use the computer keyboard
- with help, use a computer embroidery machine
- with help, practise screen printing and use of fabric paints/pens.

Pupils take part in a DMA where they bring together what they have learned to design and make a promotional T-shirt or banner for a client

They may:

- choose an appropriate image and text to be used
- choose the colours
- choose the method of transferring the image and text onto the T-shirt or banner.

Pasta production

Pupils are asked to design and make a pasta dish that could be made in quantity.

Pupils investigate familiar products and explore materials

They may:

- taste commercially available pasta meals
- identify different shapes of dried or fresh pasta
- taste different types of pasta sauce.

Pupils carry out focused practical tasks

They may:

- practise cooking pasta and making simple sauces
- practise chopping ingredients and combining them.

Pupils carry out a DMA where they bring together what they have learned to make a pasta dish for a particular client group

They may:

- determine likes and dislikes of the client group by carrying out a survey based on types of pasta dish suggested by the class
- test responses to packet and freshly made pasta
- make a small amount of each and test the recipe by giving tastings to a group of people, and develop a final design
- set up a production line as a team to make the pasta dish in quantity and check that each dish comes out the same.

Performance descriptions

These performance descriptions outline early learning and attainment before level 1 in eight levels, from P1 to P8.

The performance descriptions can be used by teachers in the same way as the national curriculum level descriptions to:

- decide which description best fits a pupil's performance over a period of time and in different contexts
- develop or support more focused day-to-day approaches to ongoing teacher assessment by using the descriptions to refine and develop long-, medium- and short-term planning
- track linear progress towards attainment at national curriculum level 1
- identify lateral progress by looking for related skills at similar levels across subjects
- record pupils' overall development and achievement, for example, at the end of a year or a key stage.

The performance descriptions for P1 to P3 are common across all subjects. They outline the types and range of general performance that some pupils with learning difficulties might characteristically demonstrate. Subject-focused examples are included to illustrate some of the ways in which staff might identify attainment in different subject contexts.

From level P4 to P8, many believe it is possible to describe pupils' performance in a way that indicates the emergence of skills, knowledge and understanding in art and design. The descriptions provide an example of how this can be done.

P1 (i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses, *for example, startling at sudden noises or movements*. Any participation is fully prompted.

P1 (ii) Pupils show emerging awareness of activities and experiences. They may have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects, *for example, pausing over food smells in the room*. They may give intermittent reactions, *for example, sometimes briefly grasping materials placed in their hands*.

P2 (i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences, *for example, turning to a particular food item*. They begin to show interest in people, events

and objects, *for example, briefly focusing on the sound of a making activity*. They accept and engage in coactive exploration, *for example, with staff support, feeling the textures of wood, metal, plastic, fabric and foods*.

P2 (ii) Pupils begin to be proactive in their interactions. They communicate consistent preferences and affective responses, *for example, turning towards a particular food item or colour product*. They recognise familiar people, events and objects, *for example, grasping the handle of a tool*. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time, *for example, lifting and lowering a tool or pressing their fingers into soft dough several times*. They cooperate with shared exploration and supported participation, *for example, working with an adult to apply glue to a surface*.

P3 (i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities, *for example, reaching out towards a particular piece of equipment*. They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways, *for example, tearing, squashing, mixing or bending materials*. They observe the results of their own actions with interest, *for example, after bending sheet materials*. They remember learned responses over more extended periods, *for example, banging with a hammer*.

P3 (ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities, *for example, pushing the spoon into the mixing bowl*. They can remember learned responses over increasing periods of time and may anticipate known events, *for example, covering their ears before a loud sound*. They may respond to options and choices with actions or gestures, *for example, picking up one tool rather than another*. They actively explore objects and events for more extended periods, *for example, banging, scraping, rubbing or pressing tools against a surface*. They apply potential solutions systematically to problems, *for example, pressing materials together*.

P4 With help, pupils begin to assemble components provided for an activity, *for example, placing bricks together*. They contribute to activities by coactively grasping and moving simple tools, *for example, a glue spreader*. They explore options within a limited range of materials, *for example, adding grapes or chopped apple to a fruit salad*.

P5 Pupils use a basic tool, with support, *for example, pushing a roller*. They demonstrate preferences for products, materials and ingredients, *for example, selecting a preferred filling for a sandwich*.

P6 Pupils recognise familiar products and explore the different parts they are made from. They watch others using a basic tool and copy the actions, *for example, preparing a surface with a glass paper block*. They begin to offer responses to making activities, *for example, suggesting the colour or shape of a product*.

P7 Pupils operate familiar products, with support, and explore how they work. They use basic tools or equipment in simple processes, chosen in negotiation with staff, *for example, in cutting or shaping materials*. They begin to communicate preferences in their designing and making, *for example, adding selected felt shapes to fabric*.

P8 Pupils explore familiar products and communicate views about them when prompted. With help, they manipulate a wider range of basic tools in making activities, *for example, joining components together to make their intended product*. They begin to contribute to decisions about what they will do and how, *for example, communicating their approval of certain features of a process*.

About this publication

Who's it for?

This handbook is for all those who work with pupils with learning difficulties. This includes pupils who are often described as having severe, profound and multiple, or moderate learning difficulties. The guidance relates to all pupils aged 5 to 16 who are unlikely to achieve above level 2 at key stage 4.

What's it about?

It provides support materials to schools for planning learning opportunities and activities in design and technology for pupils in each key stage. It includes performance descriptions of early learning and attainment in the national curriculum.

What's it for?

It will be useful in developing an inclusive curriculum. It can be used in mainstream schools, special primary and secondary schools, specialised units and independent schools. It can also support the range of services that work with pupils with learning difficulties.

Related material

This handbook is part of a set of guidance on planning and teaching the curriculum for pupils with learning difficulties. The entire set, which includes general guidance, guidance on developing skills and subject guidance, can be found on the QCA website at www.qca.org.uk/ld.

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