

BUILDINGBULLETIN77

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Designing for Pupils with Special Educational Needs and Disabilities in Schools

Revised and updated 2005

The education of children with special educational needs is a key challenge for the nation. It is vital to the creation of a fully inclusive society in which all members see themselves as valued for the contribution they make. We owe children – whatever their particular needs and circumstances – the opportunity to develop to their full potential, to contribute economically, and to play a full part as active citizens.

David Blunkett, Secretary of State for Education and Employment, *Meeting Special Educational Needs: A Programme of Action*, DfEE, 1998.

Inclusive design:

- *places people at the heart of the design process*
- *acknowledges human diversity and difference*
- *offers choice where a single design solution cannot accommodate all users;*
- *provides for flexibility in use*
- *aims to provide buildings and environments that are convenient, equitable and enjoyable to use by every one, regardless of ability, age and gender*

Centre for Accessible Environments (CAE), 2004.

Audience

This guidance is relevant for all local education authorities, diocesan boards of education, school governing bodies, non-maintained schools, charities or charitable trusts and independent schools.

This information is written mainly for providers, education advisers, architects, designers and building contractors on school-building projects. It may also be of assistance to head teachers and their staff.

Scope

This building bulletin supersedes the previous edition of *Building Bulletin 77: Designing for pupils with special educational needs, Special Schools*. It sets out guidance which applies to all schools in England where there are likely to be pupils who have special educational needs and disabilities. It provides information for those involved in building new school accommodation, or adapting, modifying and/or extending existing premises. Its audience includes:

- all local community schools with or without specialist facilities or with additionally resourced provision (LEA-maintained or voluntary-aided)
- independent schools and academies (state-funded independent schools)
- non-maintained schools, charities or charitable trusts which provide education
- all special schools, day or residential, co-located or stand-alone community special schools, (LEA-maintained or voluntary-aided), as well as non-maintained schools run by charities or charitable trusts and independent special schools

This guidance may also be relevant for the responsible body with oversight for pupil-referral units, learning-support units or education centres.

How to use this document

The introduction sets out the current context for pupils who have special educational needs in all schools.

Part 1 describes the key issues which designers need to understand when commencing a project. It outlines the legal framework and educational context for this.

Part 2 provides general information about the main categories of special educational need and describes the ways in which provision can be made to meet these.

Part 3 covers how LEAs' strategic planning will assist in the decision-making and briefing processes to meet local needs. The different types of educational provision are then discussed more fully.

In **Part 4**, guidance and briefing information is given. It emphasises the need to design accommodation which enhances pupils' access to a broad, balanced and relevant curriculum that is also age-appropriate at each phase of education in all schools. The whole-school approach is adopted for overall school planning and site development. There follows briefing for accommodation, using an elemental

construct. This allows for each element to be used in any setting.

Part 5 gives practical and technical advice to assist in achieving best value.

Part 6 summarises advice on project-planning. It sets out typical model schedules for different types of special school.

Part 7 will contain case studies which show designs for the future (note that these are not included in this consultation document).

The following sections will provide an initial briefing or quick guide to the information contained in this building bulletin:

Introduction: Setting the scene

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The intermediate sections give further information and guidance for detailed reference.

Introduction: Setting the scene

It is essential to provide a high quality of design in learning environments for all pupils, especially for those children and young people who have special educational needs (SEN) and disabilities. When building schools for the future, it is important for designers to understand the Government's strategic vision to provide learning opportunities and challenges that lead to positive outcomes for all pupils. Inclusive design can enable and empower children and young people to participate in life at school and in the wider community.

This document offers guidance on the planning, briefing and designing of school accommodation across all educational settings where there are pupils who have SEN and disabilities. These pupils have rights under the Children Act 2004 and the Disability Discrimination Act 1995 (DDA) as amended by the SEN and Disability Act 2001 (SENDA) (Part 4: Education). These Acts establish the health, safety and welfare of all pupils and entitlement to education as paramount. It is against this background that the current trends can be summarised:

- Approximately 15–20% of all pupils, have some form of SEN or disability, over a given period of time.
- National average figures show that 3% of all pupils have statements of special educational need. This varies across LEAs, however, from less than 0.5% to more than 4.5%.
- Over 50% of all pupils who have statements of special educational need attend their local community mainstream schools.
- Overall, approximately 1% of all pupils who have SEN attend a special school.
- As an outcome of medical advances, a higher percentage of children with profound physical, health or complex needs are surviving and have a much longer life expectancy.
- The development of early-intervention programmes for children may reduce the impact of disability on their educational and life opportunities.
- There is a perceived increase in the number of pupils who have behaviour, emotional and social difficulties and those whose needs fall within the autistic spectrum.

The result is that all schools, but especially special schools, now educate more pupils who have a wide range of complex needs, sometimes conflicting in their nature, in overall inclusive learning environments. Such changes have a significant impact on both the provision made and the design of school buildings. Special schools should therefore be planned to be a part of the whole community of local schools, as they have an important role to play in providing:

- centres of excellence for pupils who have SEN and disabilities
- outreach and training services which will support local community schools
- facilities for pupils, on the roll of the school and in the locality, who would benefit from extended-school activities
- facilities for community use
- bases for multi-agency services to support children and their families

It is for local authorities, with local consultation, to determine the pattern of provision to meet local needs, and it is vital that they ensure all schools achieve a high level of sustainability for their buildings and sites.

1 CONTEXT

1.1 Key issues: understanding SEN and access to learning

It is important to understand the key issues involved in designing to meet a range of special educational needs, so as to ensure that the appropriate provision is made and is fit for purpose. This section outlines the main needs about which designers need to be aware.

1.1.1 Pupils' needs

In all decisions that affect children, the primary considerations must be their best interests in terms of health, welfare and safety. For individuals, these interests may change over time. It is also very important to safeguard all pupils and to ensure that meeting the needs of one group does not disadvantage another. There are occasions when different types of needs have conflicting requirements and where some separate provision may be appropriate. Good design can help to provide appropriate interfaces which buffer and ameliorate difficulties.

School design should aim to meet pupil needs and include for:

- **safety and security** All pupils need to feel safe, secure, free from being stigmatised. They also need, to feel a sense of belonging and to be enabled or supported to participate fully in school life. Design can contribute to this by, for example, creating good sight lines and avoiding re-entrant or hidden spaces.
- **health and well-being** All pupils and staff should benefit from a healthy school environment in which to live, learn and work. Children with medical needs have the right to be treated with dignity and respect. Providing the appropriate facilities, such as hygiene, toilet and changing rooms spread around the school in convenient locations, as well as medical and therapy spaces, will support and promote their health and well-being.
- **communication and interaction** Children who have communication difficulties will benefit from different teaching and support techniques or specialist equipment. Various systems of signs and symbols can be used to help them access the curriculum, as well as visual or tactile materials and 'objects of reference'. Some children, however, will not be able to communicate their needs. Overall, therefore, it is important to design a communication-friendly environment with appropriate signage and a clear, easily understood layout.
- **sensory stimulus and information** Children who have sensory impairments use all of their other senses to compensate in order to understand other people and their environment. Using appropriate materials in response to sensory needs may assist them to access, understand and negotiate their environment. It is essential to provide the appropriate level and type of sensory stimulus so as to inform or calm, and not confuse, overload, or stress.

- **mobility and access** Children who have physical difficulties may use different types of wheelchairs, frames and mobility aids, and should be able to move around the school alongside their friends. There should be sufficient space for circulation and storage of equipment. Some pupils may tire easily and will need a place to rest. Overall, circulation routes should be planned to minimise travel time, whilst maximising how such areas can be used to best effect.
- **behavioural development** Children who have behavioural difficulties may require extra space to move around, or to ensure a comfortable distance between themselves and others. They may need access to a quiet indoor place or a safe, contained, outdoor space reasonably close to the teaching space.
- **activity and expression** Different children have different needs relating to activity, whether for music and movement, physiotherapy or mobility training, a high level of structured activity or space in which to release emotions and calm down. Careful and thoughtful design can provide for both active and passive play in a variety of indoor or outdoor spaces.
- **social awareness and participation** Whatever school setting they are in, children with SEN and disabilities should be able to take part and participate in school life and out-of-school activities along with their peers. Designing age-appropriate environments using furniture, fittings and equipment to reflect pupils' needs is essential.
- **spiritual support** For a child or young person this means having their needs met appropriately, having a sense of belonging and a feeling of comfort, being able to make choices and experience challenges, unconditional acceptance whatever their condition or behaviour, and having a purpose for living and a good quality of life. Designs can support these needs by providing both the appropriate ambience and practical assistance.

1.1.2 Teaching approaches

Generally, pupils with a whole range of needs are taught together wherever possible, supported in the classroom by additional teaching assistants and support staff. There are now increased levels of staffing in schools, especially in special schools. Designers will need to be aware of the need to create buildings and spaces which support teachers in their work.

Aspects which should be considered are:

- **flexibility and adaptability** Teachers have to respond to the changing needs of their pupils on a day-to-day basis for different activities, groupings and annual pupil intakes. They will need to be able to rearrange the layout of teaching and learning spaces and their designated use in response to these changes.
- **teaching and learning** Different teaching approaches and strategies are used by teachers to engage pupils whose needs are diverse. These range from multi-sensory stimulation (for example through sight, smell and touch),

through to the use of interactive communication and language techniques, light and sound, music and movement, or tactile and practical tasks.

- **learning aids and resources** Specialist aids and resources can be used as learning tools to enable access to the curriculum and participation in school life.
- **information and communications technology (ICT)** ICT and different technologies can be used across the curriculum. They help to overcome barriers to learning, facilitate a variety of different teaching and learning styles and can be very empowering.

1.1.3 The learning environment

Creating a positive impact on the learning environment through good design is essential. Understanding the use of space is likewise essential to ensure that designs are fit for purpose.

Aspects and types of provision to be considered include:

- **the user's point of view** There should be enough space to move around and to have everything that may be needed within easy reach. Spaces should be light, airy and warm with comfortable furniture and pleasant colours.
- **effective learning environments** Essential elements to provide are good-quality natural and artificial lighting, good sound insulation and acoustics, adequate ventilation and heating with local adjustable controls, and all necessary support services.
- **small-group rooms** Just off or near to the class base, these spaces can be used for focused individual learning, group work or behaviour support and are a valuable resource for supporting individual pupil needs.
- **quiet space** Pupils may need to withdraw or retreat to a safe place for a break. A quiet place can be calm, still, creating a therapeutic environment or giving a sense of spirituality.
- **low-sensory-stimulus environment** For some pupils, perception of the world around is confusing. Providing low-sensory-stimulus, non-distracting, calming environments can assist focused individual learning.
- **sensory stimulus and sensory rooms** The use of multi-sensory stimulation, using light and sound with interactive training techniques can help pupils with learning difficulties to improve coordination, develop understanding of cause and effect, or promote relaxation.
- **therapy rooms** Therapies make an essential contribution to education, supporting pupils' health, well-being and enabling them to access learning.
- **storage** Good storage is imperative to support effective teaching and learning activities. Each space should be designed to have its own storage space which should be accessible and fit for purpose.

- **outdoor spaces** Connection to and use of outdoor spaces is essential for pupils who have SEN and disabilities. A variety of different types of space are needed in and around the school for the outdoor classroom, sensory stimulation, sheltered or covered play, and social and recreational use.

1.1.4 Extended schools and community use

The development of extended services (including childcare) in all schools and the use of school facilities by the community is greatly encouraged.

Schools can develop as focal points for a range of family, multi- agency and community services. Providing a parents' room, an out-of-hours school club, or extended-school services for out-of-hours use are all possible. Schools are working more closely with parents to offer them support, and are also opening up to a range of community users for sports, arts and lifelong learning.

Schools will have different approaches to these initiatives and school designs should respond creatively and facilitate these needs. The design of schools can incorporate dual or multi-purpose use for many spaces. The main large spaces – the school hall, dining, sports and arts spaces and hydrotherapy pool – along with their ancillary facilities must be planned and located carefully. The design and layout of the school and its site must ensure the health, safety and welfare of all pupils and staff.

1.1.5 Design quality

Taking into account all of the above, it is important to develop a high quality of school design. It is essential that school buildings are attractive, fit for purpose, effective and convenient for everyone to use. Children, young people and adults respond well to aesthetics and appropriate sensory stimuli. They can also be consulted and involved in the design of their school, in an appropriate way. The following considerations are important for all schools in the design of their school buildings and their sites, but particularly so for special schools.

The essential principles for designers to bear in mind are:

- **create an inclusive environment** Design with SEN and disabilities in mind, so that spaces and places can be created which are both fit for purpose and enjoyable for everyone to use
- **promote a positive sense of identity** Create an attractive, welcoming appearance and good first impressions of the school, to reflect a positive identity, give a sense of belonging, promote a sense of ownership, and ensure the school's value and place in the community
- **convey a sense of presence and community relationship** Show a positive relationship between the school and its surroundings, in terms of both the relationship between the school building and its site and the relationship between the school as a cultural expression and the neighbouring community
- **display a positive sense of place** Have a good atmosphere, so that the look and feel of its spaces, in terms of colour, light, space, texture and acoustics,

convey that it is a good place to be and give a sense of pleasure, of being valued and of belonging

- **use appropriate aesthetics** Create a good-looking building which is pleasing to the eye and uplifts the spirit, with well-proportioned spaces of appropriate size and shape to suit the purpose for which they will be used
- **be user-friendly to access** Design a clear, simple approach and layout which is easily understood and uses signage and wayfinding systems with visual contrast and tactile finishes to provide points of interest and landmarks for orientation
- **facilitate ease of movement** Ensure reasonable and convenient travel distances, with ease of movement through the building, and comfortable room relationships, giving a sense of flow through and between the rooms or spaces
- **emphasise the appropriate ambience** Defining the character of the space as well as its function can assist with intuitive wayfinding and can provide context and focus to enrich the learning experience
- **enhance learning experiences** Promote the positive aspect of the learning experience to support engagement, communication, interaction and motivation, and should show the school as a place in which to enjoy learning and working, thereby encouraging creativity, innovation and attainment
- **offer multi-sensory stimuli** Create an appropriate level of multi-sensory stimuli in the design for the type and range of special educational needs involved, and any conflicting needs should be resolved
- **be age-appropriate** Reflect age-appropriate environments with respect for the culture of children from early years to teenage and for young people approaching adulthood
- **promote health and well-being** Provide for the health, welfare, safety and security of all pupils and staff with good-quality personal-care and support facilities at convenient locations around the school
- **offer a therapeutic environment** Aim to increase a sense of well-being, through the sensitive use of light, colour, texture, aroma, sound, or through connecting to nature to stimulate, calm and distract.
- **provide for flexibility and adaptability** allow for sufficient and appropriately generous space, arranged in a loose-fit way to encourage flexibility for day-to-day use and adaptability for the future
- **use attractive, robust materials** Select appropriate materials and finishes which are easily maintained, appropriate to the use and needs of the situation.
- **create a comfortable environment** Provide good-quality lighting, heating acoustics, ventilation and support services with comfortable furniture, providing a user-friendly learning environment for everyone

- **be sustainable** Develop a strategy for sustainability to meet economic, environmental and social requirements in terms of whole-life costs, thereby achieving the best long-term value

2 SPECIAL EDUCATIONAL NEEDS: TYPES AND PROVISION

This part of the building bulletin describes the main categories of special educational need (SEN) and the ways in which provision can be made to meet these in all schools. The impact on design is summarised for each group. The SEN Code of Practice 2001 covers four broad areas identified for the purposes of education:

- Cognition and learning needs
- Behaviour, emotional and social development needs
- Communication and interaction needs
- Sensory and/or physical needs

Data collected through the Pupil-level Annual Schools Census (PLASC) Data Collection by Type of SEN (January 2004) subdivides these categories even further (see Table 2).

Table 2: Categories of special educational need and their abbreviated forms	
<i>Cognition and learning</i>	
Specific learning difficulty	SpLD
Moderate learning difficulty	MLD
Severe learning difficulty	SLD
Profound and multiple learning difficulty	PMLD
<i>Behaviour, emotional and social development</i>	
Behaviour, emotional and social difficulty	BESD
<i>Communication and interaction</i>	
Speech, language and communication needs	SLCN
Autistic-spectrum disorder	ASD
<i>Sensory and/or physical</i>	
Hearing impairment	HI
Visual impairment	VI
Multi-sensory impairment	MSI
Physical disability	PD
<i>Other</i>	<i>OTH</i>
Source: DfES Pupil-level Annual Schools Census (PLASC) Data Collection by Type of SEN (January 2004)	

It must be stressed that these categories are not exact and only identify the principal need for individuals who may also have other needs across a wide spectrum. Any response has to be tailored to the pupil, their circumstances and their quality of life. The essential criteria are the development of the young person's well-being and whether they are valued as an individual.

A holistic approach to design is essential in meeting the needs of children and young people with SEN. Where pupils have more than one need, reference should be made to the different relevant sections. It is essential to understand all categories of need, however, as each will have a significant impact on the design process.

2.1 Cognition and learning

2.1.1 Specific learning difficulty (SpLD)

Pupils with specific learning difficulties have a particular difficulty in learning to read, write and spell (dyslexia) or in manipulating numbers (dyscalculia) or have poor physical coordination (dyspraxia).

Some pupils may have problems with short-term memory or organisational skills. Their performance in these areas is below their performance in other areas. The range and severity of their impairment varies widely. Typical provision to support these may be as follows:

- for dyslexia: practical learning aids, ICT software and laptops
- for dyscalculia: practical learning aids
- for dyspraxia: mobility training or PE exercises

Most pupils will be in mainstream schools (although there are some independent special schools for SpLD).

Therapies to support learning can be specialist dyslexia support, speech and language therapy and/or occupational therapy.

2.1.2 Moderate learning difficulty (MLD)

Pupils with moderate learning difficulties have attainments significantly below expected levels in most areas of the curriculum. Their needs may not always be met through differentiation and the flexibilities permitted in delivering the National Curriculum. They often have greater difficulty with basic literacy and numeracy skills and in understanding concepts, especially those relating to mathematics and science. (Some pupils may be operating on P scales at primary phase and others at National Curriculum Levels 1–2 at secondary phase).

Some pupils may also have associated speech and language delay, mobility, hearing or visual impairment, low levels of concentration, low confidence and under-developed social skills. Others may also exhibit or have associated behaviour difficulty or be emotionally vulnerable.

Most pupils with SpLD or MLD attend mainstream school and are included in general classes and tutor groups. For some subjects, however, they may be in smaller teaching groups or appropriate sets.

Some pupils who have MLD with complex needs (also referred to as complex learning difficulties) can attend a local community mainstream school with resourced provision or a community special school, depending on their individual needs.

Provision for pupils with SpLD/MLD and its impact on design

Specialist SEN facility

Learning and behaviour support may be provided to suit individual needs within mainstream classes and designated SEN resource bases. Therapy support may be provided by sensory-impairment services or speech and language therapists or occupational therapists, who can be accommodated in the class base or in small-group rooms, a SEN resource base or a therapy base. This kind of input will affect the number and size of spaces to be provided. Some pupils with MLD may need access to a dedicated facility, for example, for pastoral support.

Resourced provision

Some pupils with additional needs such as SpLD or MLD may need access, on a timetabled basis, to resourced provision. Typically, different learning areas within a resourced provision will be grouped around a social space. If required, an additionally resourced provision could comprise a couple of general-teaching class bases (55–65 m²) with ancillary accommodation, for example:

- a small group room (10 m²) for learning support, calming, respite or one-to-one work
- a small group room (16 m²) for discussions or role play and in which a small group can be taught

Where such a suite of different learning spaces is provided, these can also be grouped around a social space. Specialist subject bases will vary in size from approximately 30–65 m², according to pupil groups.

Impact on design

Generally, pupils with SpLD/MLD will require careful positioning in the class base, with adequate workspace for any learning aids and specialist ICT, and allowing for a good seating posture and a clear view of the teacher and the whiteboard.

Pupils attending both mainstream and special schools may receive learning and behaviour support from teaching staff or specialists working on a one-to-one basis, either in the class base or in a small-group room nearby. Adequate provision must also be made for storage and preparation of multi-sensory materials. Provision of sufficient space for all of these needs is vital. Clear signage will also assist them finding their way around the school.

2.1.3 Severe learning difficulty (SLD)

Pupils with severe learning difficulties have significant intellectual or cognitive impairment and will need support in all areas of the curriculum. They may also have mobility, coordination, communication and perception difficulties; some may use signs and symbols. Many pupils require help to develop social and self-help skills.

A percentage of pupils with SLD may be non-ambulant, have sensory impairments,

or have needs which fall within the autistic spectrum. Other pupils may have demanding or challenging behaviour. Across the ages and phases their learning may range from P scales (P4–P8) to National Curriculum Level 1.

Multi-sensory teaching and practical work with specialist learning aids and ICT across the curriculum will take place in small groups with learning and behaviour support provided.

Most pupils will attend a special school although some may attend a mainstream school with support, while others still may be on roll at both a mainstream and a special school.

2.1.4 Profound and multiple learning difficulty (PMLD)

Pupils with profound and multiple learning difficulties may have physical difficulties, sensory impairments or a severe medical condition. Nearly all pupils require a high level of resources and adult support in order to help them access the curriculum and to assist with their personal care and medical needs.

At least half of pupils will have sensory impairments such as VI, HI or MSI. They are likely to need sensory stimulation so as to have access to a curriculum, which will be broken down into very small learning steps. Some pupils communicate by gesture, eye-pointing or using symbols, others by very simple language. Pupils may have a variety of learning programmes throughout the day, including short intensive sessions of one-to-one communication and interaction.

Nearly all will be accessing the P scales (P1–P4). In some cases, pupils with PMLD can be included in a local mainstream school with specialist support; however, most pupils attend a special school.

Provision for pupils with SLD/PMLD and its impact on design

Provision for these pupils' needs is usually met in special schools although sometimes specialist facilities and additionally resourced provision can be made in a mainstream school, depending on the local situation.

The ratio of pupils with SLD or PMLD varies, but nationally it ranges from (on average) two-thirds SLD and one-third PMLD, to one-third SLD and two-thirds PMLD. The local profile must be established in order to meet pupil needs and to provide sufficient space for all relevant activities to be undertaken.

Accommodation in all types of school should provide access to a broad, balanced and relevant curriculum, whatever the setting. Well-designed indoor and outdoor spaces are vital for learning, for sensory and mobility training, for behaviour support and for social development. Indoor spaces will include general and specialist class bases as well as small-group rooms for learning and behaviour support. It is essential that there be adequate space for the increased level of staffing required.

Therapies such as sensory services, speech and language therapy, occupational therapy, physiotherapy and hydrotherapy require a range of specially designed accommodation, which may be provided in mainstream as well as in special schools.

In addition to the provision made for pupils who have SLD, sensory stimulation including communication boards, soundbeam or resonance boards are often used. Additional space in the class base or specialist spaces should therefore be provided, in inclusive, age-appropriate settings so that all pupils can participate in school life.

There must be provision to meet medical needs, as well as convenient toilet and changing facilities throughout the school. Inclusion in school activities and in the wider community is essential. Buildings should therefore enable mobility, sensory and independence skills to be developed in communication-friendly environments.

It is essential that means of escape and evacuation procedures are developed in consultation with the local fire authority and building-control officers, so as to ensure the safety of pupils and incorporate their needs.

The design process should also include briefing for provision to support inclusion, extended schools, and outreach links with local schools and the wider community.

3 STRATEGIC PLANNING FOR REGIONAL AND LOCAL NEEDS

3.1 Policy and planning

3.1.1 Policy

This section sets out the context for how LEAs and schools plan provision for pupils' SEN and disabilities at regional and local levels. Designers need to have good background knowledge of both the strategic and local context and how provision for SEN is made. This knowledge will inform specific provision for SEN and disabilities and its brief.

As a matter of principle, LEAs must plan strategically to meet local SEN needs, for both current and foreseeable future situations. LEAs and schools have to plan to increase accessibility to schools for disabled pupils, by increasing access to information, the curriculum and the physical environment. This is to ensure that pupils with disabilities are not substantially disadvantaged. LEAs should have accessibility strategies and school governors should have accessibility plans in place.¹

The 1997 Green Paper, *Excellence for All Children: Meeting Special Educational Needs*, highlighted the need to improve the consistency of services and provision throughout the country. Thereafter, 11 SEN Regional Partnerships were set up in England, which aim to achieve minimum standards and encourage collaborative working between LEAs for coordinated provision in each area, especially in cross-border situations. Since 1998, responsibility for special school re-organisation has been devolved to local authorities, and approval has been given by the local Schools Organisation Committees.

Removing Barriers to Achievement (2004) sets out the Government's vision for giving children with SEN and disabilities the opportunity to succeed, and puts forward planned improvements at both national and local level.

Generally, over 50% of pupils with statements for SEN attend mainstream schools alongside their peers. The most common needs of pupils are SpLD, SLCN, BESD, MLD, of which MLD is the largest group, but too often their needs may be overlooked. The number of pupils with ASD and BESD is increasing. Overcoming speech, language and communication difficulties is also crucial to enabling children to access the whole curriculum.

Data from the Pupil-level Annual Census (PLASC) for 2003 shows that:

- 1.1% of pupils are in special schools (but this varies across LEAs from 0.1% - 4.5%)
- 94,000 pupils attend special schools, 2,000 of whom are dual-registered

¹ Provided for in the Education Act 1996, as amended, and the DDA 1995 as amended by SENDA 2001. See also *Accessible Schools Guidance Note* (DfES 2002), *Special Educational Needs Code of Practice* (DfES, 2001). For more information, see Appendix A and References.

- 6,224 are boarders at maintained and non-maintained schools and 2,766 board at independent schools
- 68% of pupils are boys, 32% are girls
- 35% of children in special schools are eligible for free school meals
- nearly two-thirds of children in special schools are of secondary-school age

Local authorities have an important strategic role to play in planning the spectrum of provision needed to meet children's needs within their area, and they should take account of the following considerations:

- The proportion of pupils in special schools should fall over time as mainstream schools grow in their skills and capacity to meet a wider range of needs.
- Children with less significant needs – including those with moderate learning difficulties and less severe behaviour, emotional and social needs – should be able to have their needs met in a mainstream environment.
- Successful special schools have an important contribution to make in preparing mainstream schools to support inclusion.
- A small number of pupils with severe and complex needs will continue to require special provision.
- Reorganisations need to be carefully planned, involving active consultation with parents. It is critical to ensure that a high-quality provision is available locally before special schools are reduced.
- Co-locating special and mainstream schools, the development of resourced provision and specialist facilities in mainstream settings and dual registration can all help children to move between special and mainstream schools and support transition to mainstream education, as can use of effective SEN support services.

Removing Barriers to Achievement² sets out four key areas supported by a programme of action;

- Early intervention – to ensure that children who have difficulties learning receive the help they need as soon as possible and that parents of children with SEN and disabilities have access to suitable childcare
- Removing barriers to learning – embedding inclusive practice in every school and early years setting
- Raising expectations and achievement – by developing teachers skills and strategies for meeting the needs of children with SEN and sharpening our focus on the progress that children make
- Delivering improvements in partnerships – taking a hands-on approach to improvement so that parents can be confident that their child will get the education they need

² (DfES, 2004)

It encourages various strategies which include:

- early intervention in early years settings
- dual registration and pupils moving between schools
- local communities of schools, with special schools participating with mainstream schools in federations, clusters, twinning arrangements; including non-maintained and independent schools
- develop inclusive practice to help schools become more effective at responding to needs of individual pupils and implementing good practice, initially focussing on ASD, BESD SLCN MLD
- development of vocational training for 14–19 provision
- improved opportunities and transition beyond compulsory education

DfES programmes aim to create a wider community of schools. Using capital-funding strategies including the Building Schools for the Future (BSF) programme, special and mainstream schools can be brought together, including co-locations. Such schemes could also involve non-maintained and independent schools.

The effect of duties under the Children Act 2004 will also have to be considered. This may involve, for example, children's centres, children's trusts and extended schools, joining up health and social services with education provision.

3.1.2 LEA strategic planning

Liaison and joint working between different local-authority and LEA departments and other agencies will be required to support the process of providing joined-up full-services provision for children and young people.

Nevertheless, local authorities have an important strategic role to play in planning the spectrum of provision needed to meet children's and young people's needs within their area. It is essential that the LEA's strategy ensures different types of provision for pupils with SEN and disabilities at each phase of education and across all settings. Various factors will influence the planning process, to a greater or lesser degree, some of which are listed below.

Strategic factors

Local planning factors:

- LEA accessibility strategy and plans
- geographical and demographic context
- historical designation of special schools
- political considerations

Consultations and approvals factors:

- outcome of public consultation
- parent and pupil views
- liaison with local schools
- schools willing to accept co-location
- school reorganisation approvals

Factors regarding local needs and services:

- SEN, its incidence and distribution
- adequacy of SEN provision
- transport and travel time for pupils
- development of local-area services to reduce out-of-area placements
- the need for residential or respite provision

Factors governing resources for facilities:

- availability of specialist SEN staff
- Primary Care Trusts: local healthcare provision in relation to joint planning

Buildings-provision factors:

- site area, availability of suitable sites and accessible school buildings
- continuity of education service
- adequacy of LEA resources

Developing provision to meet local needs can result in quite different arrangements being made in each part of the country, so no one simple design template will fit all circumstances. Examples of typical patterns are set out below:

- A high proportion of pupils with SpLD, SCLN or MLD can have their needs met in mainstream schools. As such, plans must be made for dispersed facilities and support services provided by a sufficient number of readily available and qualified staff with an appropriate level of resources.
- Where there is a low incidence of pupils who have a severe sensory impairment or physical difficulty, staff with expertise will be required to meet their needs. Provision for 10–12 pupils may be made in a sub-regional or central location by means of an additionally resourced provision in a mainstream school.
- Where there is a cohort of pupils with a broad range of more complex or severe special educational needs, a special school may be provided. The school's location will be considered in relation to a local catchment area and to the travel arrangements for pupils. There needs to be a 'critical mass' of provision required to run an effective service and to attract and retain suitably qualified specialist staff.

Ideally, synergy and symbiosis will be reflected in the ongoing integrated planning of all specialist services for children, including through the LEA's education planning, its Accessibility Strategy and through School Accessibility Plans.

3.2 Different types of provision

The different types of provision for pupil placements are listed below and further information is available in Appendix E.

LEA-maintained schools can be:

- local community mainstream schools, which may or may not have specialist facilities or additionally resourced provision
- local community special schools, which may be phased provision or all-age, co-located or stand-alone
- residential special schools

LEAs also maintain pupil referral units.

In addition, there are non-maintained and independent special schools, with day pupils or including residential settings (see Appendix E).

In mainstream schools, specialist facilities and additionally resourced provision can be provided to support pupils who have SEN and disabilities, according to local needs. The net capacity of the school can be reviewed and changed if pupils with SEN are taken on to the roll. A reduction in planned school places can be made in order to meet SEN needs where pupils are fully included in mainstream.

Where pupils needs cannot be met in mainstream schools, then pupils may attend special schools.

Planning and provision of dual-roll placements for pupils, so that pupils may attend both a mainstream and a special school, may take place where this is part of the LEA policy.

Provision of training and outreach services between mainstream and special schools will require appropriate accommodation to support it.

A summary description of the provision which can be made for pupils with SEN and disabilities in both community mainstream and community special schools is set out below.

3.2.1 Mainstream inclusive schools

Many pupils who have SEN and disabilities can be included alongside their peers in mainstream class bases, with additional support which may include any or all of the following:

- learning and behaviour support with teaching assistants and other specialists
- therapy with specialist staff as a means of ensuring improved access to learning
- personal-care facilities for independent or assisted access
- medical and social-care support for pupils' health and well-being, managed by appropriate responsible staff

When planning a mainstream school, it is important that brief-writers and designers know the composition of the school population so as to ensure that appropriate provision to meet pupils' needs is identified in the brief for the school accommodation. The numbers of pupils at school action/school action plus or with statements of special educational need and their likely needs should be identified, as well as the provision required to meet these.

It is also essential to plan for anticipated needs, so that there is flexibility and adaptability to ensure access to learning for all pupils now and in the future. Summary guidance notes are set out below.

In mainstream class bases, there needs to be sufficient space for about 30 pupils, a teacher and between one and three teaching assistants, as well as space for specialist equipment, personal belongings, mobility equipment, the use of learning aids, the delivery of the curriculum and storage, whilst ensuring health and safety requirements are met.

It is recommended that at least one teaching space for each subject be larger in order to provide sufficient space for access to learning, accessible workspaces for pupils who use wheelchairs, or to accommodate a large number of pupils with SEN.

A general-teaching class base may have an area of 60–65 m². Practical specialist spaces may need to be larger and should have accessible workstations.

Where there are small existing class bases such as in a school where refurbishment is planned, the following should be considered:

- the number, age and type of pupils, and the range of their needs that can be safely and appropriately accommodated in the size of class base
- the equipment and resources needed
- the number of staff

It may be necessary to consider having smaller pupil groupings, but the consequences of this should be understood. For example, smaller groupings of 26 pupils may increase the number of spaces and staffing numbers required, depending on the situation and the capacity of the school.

Mainstream inclusion and the phases of education

This section sets out the provision which can typically be made for pupils who have SEN and disabilities at each phase of education in inclusive mainstream schools. It summarises matters to be considered for inclusion and identifies specialist facilities which can be provided.

Early years

Generally, provision for younger children with SEN and disabilities is integrated into local community settings such as neighbourhood nurseries and nursery classes at local community primary or community special schools.³

³ Reference can also be made to *Building for Sure Start* (DfES, 2004) and, for settings that provide childcare, the *National Standards for Under-eights Day Care and Childminding*.

Early screening and intervention enables appropriate provision to be made to meet medical needs and needs associated with more severe disability. LEAs, schools and other agencies will need to provide specialist advice for the brief, as appropriate.

Typical accommodation needs are described below.

Nurseries have large class bases with a large open space for arranging different layouts according to areas of experience. Facilities and areas may comprise:

- smaller scale furniture and fittings, toys, play equipment, furnishings, curtains and cushions, bearing in mind the children's needs
- small bays for practical areas or learning resources in trays or on trolleys
- computers for early years
- views out at low level for children who spend a lot of time near to or on the floor
- wet and dry spaces for different activities
- ample storage for play equipment, buggies and prams
- space for mobility equipment
- safe, clean, non-abrasive and non-slip sheet flooring or carpet according to the activities being undertaken
- adjacent kitchen areas (gated off as necessary), toilet and staff facilities
- direct access to a sheltered outdoor play area, a separate dedicated external play area and also some covered outdoor play space
- a range of different outdoor spaces to meet pupil needs
- the appropriate scale and volume of spaces for early years, remembering that scaling down rooms could make them constricting and inflexible. For some children a large space can be confusing, whilst for others it gives a sense of freedom

For children with SEN the following should also be considered:

- sufficient area in the class base for assistants and therapists to work
- small places for withdrawal for one-to-one or sensory work
- a quiet area or semi-enclosed space for learning and behaviour support
- a sensory room
- a soft-play area (shared with primary, if part of a primary school)
- a medical room with safe storage for drugs, tubes for feeding, oxygen packs, medical goods and provision for the disposal of clinical waste

- toilet and changing areas with small-scale fittings and cubicles at a lower height, to allow for both privacy and passive supervision. Space both sides of toilets and showers with hoist provided for manual handling by carers, if required
- a multi-purpose therapy room
- a medical/therapy office
- a case conference/meeting room
- a parents' room

Primary

Children with SEN and disabilities are usually integrated into local community mainstream or special-school settings.

Children are grouped into classes and are taught most if not all subjects by their class teacher. As well as the daily literacy hour and numeracy lesson, there will be general teaching of specialist subjects such as history and geography as well as imaginative and constructive play and practical activities undertaken through art, science, music, food technology and design and technology. Sometimes, these activities have specialist spaces. Group activities such as drama and movement and Physical education may take place in the hall, dining area, or a large-group room or drama studio.

Other accommodation is required for:

- staff non-contact time
- outreach
- training
- school administration
- catering
- cleaning
- maintenance.

Typical accommodation needs are described below. It is important to provide a sufficient number of class bases and a large enough area in the class bases for:

- supporting the full curriculum
- accommodating the numbers of pupils and their types of need
- accommodating additional staff
- different pupil groupings (sitting in a circle or arc arrangement, working around a table or in individual work space)
- a range of activities taking place at the same time, some of which will need large pieces of equipment
- provision of water and space for practical technology work, as well as art,

music, science and food-technology activities, as appropriate to age and need

- storage for resources in cupboards or moveable trolleys

There should be:

- views out at low level for small children nearer the floor
- the appropriate scale and ambience for the age of the children
- places for relatively quiet and more noisy activities
- shaded outdoor space directly off the class base for outdoor learning and recreation
- a range of different outdoor spaces to meet pupil needs
- a library and resources area for use by the whole school
- ICT workstations in the class base and as an ICT bay

When designing for children with SEN and disabilities in teaching spaces, consideration should be made for:

- a suitable physical environment to support a range of learning styles, including for those who have learning, behaviour, interaction, sensory or physical needs
- sufficient space in the class base for assistants and therapists
- a quiet or semi-enclosed area for learning and behaviour support
- minimum fixed furniture so staff can arrange furniture or fittings flexibly
- sinks at adjustable height or at different heights for pupils and staff
- space for large play equipment, mobility equipment, learning aids and resources on trolleys, with suitable storage
- areas for individual-learning aids, access technology, ICT and workstations with associated services and storage
- small-group rooms or resource bases adjacent or near the class base to support pupil needs
- a medical/therapy room and offices
- a case-conference/meeting room
- non-abrasive, non-slip sheet flooring with a soft carpet area
- toilet and changing areas with small-scale fittings, cubicles at a lower height for privacy and passive supervision, space for carers, and the provision of hoists, as required

- sensory rooms
- a soft-play room
- therapy rooms
- hydrotherapy for pupils with significant physical or profound needs

Secondary

Typical accommodation needs at this phase are outlined below. Some teaching spaces are used as both general teaching and learning spaces and specialist subject spaces, for example for history and geography. Specialist subject lessons are taught by specialist teachers in a specialist spaces. This allows for the collection of specialist resources and the establishment of a subject ethos through display. Teaching and learning spaces are usually arranged in subject departments with storage, staff offices, computer hubs, resource rooms and small-group rooms.

Specialist practical spaces occupy designated accommodation for science, food technology and design and technology, with appropriate storage, preparation rooms and staff facilities. For health and safety reasons such spaces are not used for tutor groups. These areas can allow facilities for the vocational curriculum to be developed.

The library and resources area is provided for use by the whole school. ICT workstations will be provided in the class base and/or within an ICT suite. Physical education, sport, gym, dance, music and drama can be undertaken in the assembly hall which is also used for examinations and performances in small schools.

Pupils need to have their own class bases, which may also be used as general teaching spaces, to register and for pastoral or tutor-group work periods. They also need a place to store personal belongings and learning materials and a place to give a sense of ownership, belonging and stability.

When designing for children with SEN and disabilities there should be:

- an adequate area at the front of the class base for access to the teacher and whiteboard, and for access and egress
- clear visibility of the whiteboard without glare (low-glare lighting and provision of blinds or curtains)
- clear visibility and audibility of the teacher (good-quality acoustic finishes)
- suitable demonstration facilities to enable visual learning
- a suitable physical environment to support a range of learning styles and types of activity
- sufficient circulation area for pupils who use wheelchairs, and room for them to access the curriculum within the space
- sufficient area in the class base for teaching assistants and therapists to work

alongside pupils

- sufficient workspace for use of learning aids, specialist computers and links for radio aids
- spaces for temporary storage of mobility equipment
- storage for learning aids and other mobility, technical and educational equipment
- space for storage of pupils' coats and bags
- permanent storage for teaching and learning resources and aids
- space for adjustable-height furniture, for use when required
- space for suitable robust ergonomic furniture for a range of pupil ages and sizes and types of need
- support spaces for independent access and assisted toilets and hygienic care suites
- space for parents and carers to meet staff
- parking bays and storage space for mobility equipment
- small-group rooms (1 per 6 class bases)
- a SEN resource base
- a SENCO office
- a medical/therapy room
- a case-conference/meeting room
- specialist facilities
- resourced provision
- a range of outdoor spaces accessible for all pupils

Post-16 level

Where pupils are able to learn alongside their peers in local community schools, they will work towards obtaining nationally recognised, externally accredited qualifications. A student may attend mainstream school as well as another accessible education setting, such as a local further-education (FE) college or sixth-form college. These will have their own resourced provision, funded by the Learning and Skills Council (LSC). Some special schools have their own tertiary section or are co-located with a mainstream school or FE College.

Whichever educational setting applies, ample specialist accommodation is required to enable relevant courses to be taught, although some learning may still take place

in the main school. The accommodation provided should be significantly different and separate from the rest of the school, in order to reflect the approaching adult status of the young people and their contemporary culture.

There should also be a student common room with spaces for working in a more independent way and in a relaxed social setting. Here, separate activities can be carried out at the same time by different groups, students' achievements can be displayed, and students can make their own drinks or food.

In addition to the considerations listed for secondary schools in the previous section, the design of the learning environment for post-16 students should be age-appropriate, demonstrate respect for individuals and their dignity, enable participation and inclusion in student life and give access to inclusive opportunities in the wider community.

3.2.2 Specialist facilities in mainstream schools

In mainstream schools, some spaces are allocated to support pupils with additional needs or SEN. Additional specialist facilities can also be provided for learning and behaviour support. These facilities may comprise a combination of spaces (for more details on supplementary net area, see BB98). Such facilities may be located in a central part of the school or in dispersed locations around the school.

Where particular needs have been identified or there is a high number of pupils who are identified as school action plus or who have statements of SEN, additional specialist accommodation should be provided to support pupils' needs.

Typically, in addition to the SEN resource base, a one- or two-form entry (1FE or 2FE) primary school may need a small-group room for shared use by each year group and a 3FE or 4FE primary school may need 2 small group rooms per year group.

Table 3: Typical spaces to support pupils with SEN in mainstream schools

(These will vary with the size of the school, as required)

<i>Primary</i>	<i>area m²</i>
1–2 two small group rooms	7
1 small-group room for pupil support and use by a SENCO	12
1 accessible hygiene room	7–10
Source: Draft BB99: <i>Briefing Framework for Primary School Projects</i> (2004)	
<i>Secondary</i>	<i>area m²</i>
1 SEN resource base	20
1–2 small-group rooms	16
1 SENCO office	8
SENCO/wheelchair/appliance space	12
medical room (priority for MI and first aid)	18
Source: BB98: <i>Briefing Framework for Secondary-school Projects</i> (2004)	

Table 4: Additional spaces which can support pupil needs in mainstream schools

(These will vary with the size of the school and type of need)

Space	Area m ²
SEN resource base	25–54
Small-group room	25–30
Hygiene room	15–30
Technician's room	10–20
Wheelchair-appliance store	8–10
SEN central store	5–8
SENCO's office	6–10
Sensory room	12–20
Soft-play area	10–30
Medical-inspection room	10–15
Physiotherapy room	16–20
Warm-water pool	70–150
Laundry	5–8
Source: BB94: <i>Inclusive School Design</i> (2001)	

This bulletin recommends that in addition to the accommodation identified above, the spaces shown in Table 5 should be provided, as appropriate, to meet the needs of pupils with SEN in mainstream schools.

Table 5: Typical specialist facilities to support pupils with SEN

(A number different type of spaces should be provided to support the current and anticipated needs of the pupils)

Spaces	Area m ²
Storage for small items (HI aids)	4
Storage for resources (general)	6–10
Technical preparation room	6–10
Technical preparation room (VI)	16–20
Mobility storage per bay (PD)	10
Sensory room	12
Hygiene room	18–20
Small-group rooms / support spaces These may have a specific designated use or be multi-purpose, used for the following: - learning / behaviour support - quiet room for calming or respite - sensory-service support - speech and language therapy	10 -12
Small-group rooms / support spaces These may have a specific designated use	16

or be multi-purpose, used for the following: - learning / behaviour support - sensory-service support - speech and language therapy - role play/discussions	
Resource base / support space The following functions can be provided in a specific designated room of this size: - social-skills training base - pastoral-support base - nurture-group base - a multi-purpose therapy room - nurse's office - first-aid/rest room - parents' room - case-conference room	20–30
SEN resource/class base	30–60
Visual-impairment learning resource and mobility training	45–60

Resourced provision in mainstream schools

Some pupils may not be able to cope on their own in mainstream settings without a resourced provision. This may support a small group of pupils, (usually 10–12 individuals), and can be planned as an integral part of a mainstream school.

Provision is usually made for a particular type and range of special educational needs, and reference should be made to Part 2, 'Needs and means', for specific requirements for each type of special educational need. Outreach and training to support other local schools may also be provided.

Typically, a resourced provision can consist of one or more class bases (of 45–65 m²) for timetabled use with fewer pupils (10–12 individuals) and space for specialist learning aids and resources. Generally, it is beneficial for the provision to be near other, well-used facilities to reduce travel time around the school and to aid natural social interaction.

Most pupils will be registered in tutor group and attend lessons with their peers, only attending the resource base for timetabled sessions of learning or behaviour support to suit their individual needs. However, for a minority of pupils, it may be beneficial to receive more support in the resource base. In these circumstances, a suite of accommodation to support most curriculum delivery may be grouped around its own dedicated social space.

It may be beneficial for this suite to be sited in a quieter part of the school (though it should not be remote or isolated), off a main circulation area, and with a safe, contained outdoor space or courtyard, or a separate larger outdoor learning or play space.

This bulletin recommended a typical additionally resourced provision be comprised of the accommodation in Table 6.

Table 6: Accommodation for a resourced provision (area m²)	
Resource base: 10–12 pupils	55–65
Resource base: 8–10 pupils	45–54
Small-group room for learning support or respite	10
Small-group room for discussions and role play	16
Practical specialist-subject spaces (pupil numbers vary)	50–65

3.2.3 Special schools

In special schools the same range of subjects is taught as in mainstream schools, but appropriate specially equipped practical spaces will be required, suited to age, phase and special educational needs. Medical, therapy and support spaces will also be needed. In addition, there must be a centre for outreach and training to support pupil needs in mainstream schools, a parents' room and multi-agency working spaces. Extended-school activities and community use for the school are beneficial, so facilities must lend themselves to such functions.

Where groups of pupils from mainstream schools attend the special school part-time, planning to meet their needs must be considered early on, especially if more space is required.

Where special schools are small, it may be possible to provide some of the specialist accommodation off-site by using the facilities of a local secondary school or other setting. This may be a suitable arrangement where the special school is co-located on the same campus as a secondary school.

It is also extremely important to note that if an all-age school is built, due to local needs, it should be able to provide age-appropriate environments.

The same requirements apply for:

- maintained co-located and stand-alone schools
- non-maintained independent schools and day-residential schools

See Appendix B for more information.

Co-location of a mainstream and a special school

A special school and a mainstream school can be co-located on the same site or as part of a learning campus, but retaining their separate identities. Different arrangements can include:

- separate identities and separate buildings

- both separate and shared accommodation and resources
- a fully integrated school

It is recommended that co-location is by phase, so that for example a primary special school is co-located with a primary mainstream school, and a secondary special school is co-located with a secondary mainstream school.

Some points to consider are set out below:

- Positive joint working arrangements between head teachers and governors should be in place, so that the schools have a mutually supportive relationship, with shared staff facilities as appropriate.
- The balance of the different schools' pupil populations and their respective needs should be planned and designed for carefully.
- The special school provides facilities which the mainstream pupils can use to encourage an inclusive whole-school approach.
- All joint-use spaces and shared accessible facilities in the mainstream school should provide good-quality accommodation of sufficient size, with accessible workstations and adequate storage so that pupils with SEN and disabilities can benefit from curriculum activities.
- The mainstream school should have specialist facilities and/or a resourced provision for their pupils who have SEN and disabilities, the use of which can be shared with the special school.
- Planning should ensure that travel time and distance are reasonable, that internal and external circulation routes are accessible, and that access, egress and security arrangements are safe, avoiding conflict of routes between different pupil groups, mini-buses and car parking.
- There should be both planned and informal opportunities for social inclusion whether through assemblies, tutor groups, dining, or outside school activities.
- Inclusive dining arrangements should accommodate the different patterns of dining which will support pupils' social development and medical needs.
- Further support facilities may be required for pupils with more complex needs in mainstream settings.

Pupils from the special school may find the large numbers of mainstream pupils a daunting experience, although such situations can be advantageous to help pupils understand social and cultural diversity. Designs can assist inclusion by:

- providing passing bays or incidental spaces off circulation spaces
- allowing space just inside a class base for pupils to orientate themselves
- including small-group rooms
- segregating noisy and quiet areas

- planning quiet spaces or joint-use spaces as links or buffer spaces
- providing a range of outdoor spaces to meet different pupil needs, e.g. for more sheltered, quieter or contained spaces

All-age special school for a broad range of SEN

The following points should be considered:

- Buildings should provide progression throughout the school with age-appropriate environments to suit pupil needs at every stage.
- Separate entrances or identities can be designed to show progression.
- The distinct needs of pupils of different ages should be thought through, understood and provided for in the design.
- Accommodation for PE, music and drama may be shared between the primary and secondary phases if it is considered that each group will have sufficient timetabled access.
- Options for joint or separate use of halls and dining spaces will also need careful consideration in relation to age-appropriate environments and curriculum delivery.
- Opportunities for economies of scale must not be at the expense of access to the curriculum. There is, however, the potential to maximise learning opportunities and develop specialist facilities or spaces for different learning experiences, such as music and drama.

Residential schools

Pupils attend residential schools for many different reasons. They can be an essential part of their educational programme, or assist families in resolving social issues, or provide respite.

The design and provision of the school accommodation should comply with BB77 recommendations wherever possible.

Residential accommodation has separate standards and is often preferred in a separate building or part of a building.

Opportunities for multi-purpose use or community use should have very careful consideration in relation to health, safety and welfare of pupils.

Residential special schools are distinct from respite accommodation, other boarding schools and children's homes. They can be maintained, non-maintained or independent schools (see Appendix B).

Summary notes for Parts 1, 2 and 3

The following summary of the main principles and key points from the first three parts of this document can form a useful checklist at the start of a project or briefing process.

Principles

Initially, the following four main aspects and their interrelationships should be considered.

1. The Planning Duties under the DDA, the LEA Accessibility Strategy, the School Accessibility Plan and the five outcomes under the Children Act 2004.
2. The *aspirational and educational vision* of the school, which will need to be set out in a way which enables it to be translated into practical reality and realised (see Part 4 for more detail).
3. The context of the LEA's provision for special schools and SEN resourced provision, and the symbiosis between these if there are to be shared arrangements.
4. The provision to be made for all pupils, including those who have medical and/or mental health needs, disabilities, and complex and special educational needs. This assessment should be made in the light of both current and anticipated needs.

Summary checklist

On the basis of these principles, the points set out below will assist with the more detailed preparation of a brief for a school. Collaboration and consultation between all parties will be necessary:

Regional and local factors

- LEA and school-level planning for accessibility and inclusion to meet regional and local needs under DDA and SENDA
- age-appropriate provision for each phase of education by type of special educational need
- the range and type of pupils' special educational needs (whether needs are identified that are generic, associated with particular groups or specific to individuals)
- what provision is required by phase of education across a range of settings for each identified group of needs

Teaching and learning factors

- the likely and anticipated number of pupils and their needs
- the general provision which is fit for purpose and which meets a broad range of need
- how to provide for requirements which are additional to, or different from the

current mainstream provision

- the typical learning and behaviour support required for different groups of pupils
- the suitable type, level and mode of curriculum delivery and the teaching and learning resources likely for different groups of pupils
- the provision to be made for general teaching, practical specialist subjects, ICT, other learning resources and storage
- the ICT and access technologies which will be required to enable pupils to access the curriculum
- requirements for teaching in small groups or one-to-one working
- the ways in which flexibility and adaptability can be provided for the future
- the potential for extending teaching spaces
- provision of outdoor curriculum spaces
- the means by which safe indoor and outdoor spaces are provided for withdrawal, learning and behaviour support, social interaction and recreation
- the medical healthcare and therapies required to give pupils access to learning
- the practical, vocational work, or independent living spaces required
- staff facilities and support accommodation
- the building services, facilities management and maintenance accommodation required
- provision of residential accommodation, its status, operational needs and requirements (including its interface with any other accommodation and services)

Individual pupil needs

- the individual learning needs of the pupils (sensory, mobility, activity, communication, social, behavioural)
- the means by which any conflicting needs are to be resolved
- a comfortable learning environment for all pupils
- provision for medical, therapy and personal care
- the outcome of health and safety risk assessments, which must provide for safety and security for both pupils and staff

Community aspects

- provision for outreach or training services and inclusive links to other local schools, in terms of both inreach and outreach
- facilities for multi-agency working and services (independent or joint-use facilities, associated services with their requirements, any additional accommodation needed and its funding)
- provision for extended-school use (independent or joint-use facilities, associated services with their requirements, any additional accommodation needed and its funding)
- provision for community use (independent or joint-use facilities, associated services with their requirements, any additional accommodation needed and its funding)
- provision on-site for residential or respite accommodation (see Appendix 000) and any potential for multi-purpose or shared use should be assessed very carefully
- the appropriate means for realising a sustainable strategy to meet economic, environmental and social needs
- the means for ensuring that a high standard of design, construction and maintenance is achieved for all school buildings, their sites and surroundings

4 BRIEFING INFORMATION AND GUIDANCE

4.1 Project briefing

This part of the guidance acts as a briefing guide. It has been prepared for use by designers and those involved in writing the brief or undertaking feasibility work on projects where provision for pupils with SEN and disabilities is to be made.

To begin with, a whole-school approach sets out particular issues relevant to SEN. Thereafter, an elemental approach to briefing has been adopted, which enables the user to select those items which are relevant to meeting local needs and applicable to their own circumstances. These elements and their subdivisions for spaces comprise:

- whole-school approach
- arrival, departure and circulation
- teaching and learning spaces
- general teaching spaces
- practical specialist spaces
- large spaces
- learning-resource areas
- outside spaces
- medical, therapy and multi-agency
- dining and kitchen areas
- staff areas including outreach
- storage
- pupil toilets and changing areas

Each section commences with an overarching guiding principle and a design-quality statement. These are followed by a suggested approach to designing for purpose with the main relevant issues and design guidance notes for consideration. Reference should also be made to the specialist sections in Part 5, as appropriate. Once all of the information is gathered, a school-accommodation schedule can be drawn up and reference can be made to Part 6, 'Project planning'.

Altogether, the above will direct the design, providing a map for developing and implementing the overall whole-school provision.

4.1.1 The briefing process

The briefing process is described below. Initially, the LEA may outline its *strategic brief*⁴ which describes the main requirements and the constraints of the project. These can be developed into the *project brief*⁵ which defines the scope of the project in detail; it is often produced by the project team for LEA approval. More details can be found online at www.nbseducator.co.uk/briefs.

The project team

Education specialists, architects and engineering consultants are appointed, and

⁴ See the *RIBA Job Book* (RIBA Publications 2000).

⁵ Ibid A-B/CM *statement of need* D/CM2 *Project brief, final checklist*

often contribute to the briefing process. It is fundamental that they have a good level of understanding and preferably also appropriate relevant experience of designing for SEN and disabilities. It is essential to ensure that every project has a brief which defines its scope and characteristics, and from which the design will grow and be realised.

Consultation

It is recommended that consultation takes place and that the outcomes be used to inform the briefing and design processes. School staff will have valuable insights and expertise regarding the effectiveness and quality of provision to be made and they are therefore a good source of information.

Parents of children who attend or who will be attending the establishment can have their views canvassed. Pupils who have SEN and disabilities can also be involved in the design of the school, as appropriate.

There will also be other education, health and social-care professionals who may need to be consulted. The LEA will identify such personnel as part of their multi-agency joint-working procedures, as well as seeking advice from disability organisations and access officers. Local needs, however, may affect the brief and so must be taken into consideration.

During the life of the school building, differences in curriculum development, teaching and learning methods, and in school management and school staff will occur (especially because of the different approaches head teachers take to school organisation).

Overall, the LEA is responsible for ensuring that all the necessary requirements can be met. Therefore, they should inform designers of any immediate or short-term changes.

Designers should also be cautioned about adopting a design approach which is too personalised, or fixed, which might compromise new or different approaches in the future. Ideally, there should be an overall long-term strategy within which change is allowed to take place, so that flexibility and adaptability can be developed and agreed by all parties.

Procedures and processes

Briefing is an iterative process, which involves the testing and re-testing of ideas. Therefore, the brief should be set out in a way which enables its progress to be reviewed at critical stages. It is recommended that a record be kept of the key decisions made, so that an audit trail can be established for future reference. It is also important for architects to understand the remit of their work.

Briefing involves setting out information, giving instructions and defining the essential characteristics and requirements for the school buildings. It will be necessary to describe both quantitative and qualitative attributes, which may be thought of as comprising two aspects:

- the *aspirational brief*, which describes the vision for the school in terms of its ambience, sense of place and the potential for use of spaces, reflecting its educational aims and values
- the *practical brief*, which describes the physical needs of the school, its

impact on its environment, the accommodation requirements, spatial relationships, room data sheets and performance specifications

Inevitably, economics may mean that choices have to be made, necessities and preferences identified, priorities set and different options evaluated. Discussing the impact of having, or not having, an item or facility may assist this process.

The lines of enquiry which are set out enable the brief writer to facilitate discussions with local authorities and schools. Their outcomes provide a basis for compiling the brief, giving pointers which will assist the designer during the outline and detailed design stages.

All school buildings, as a minimum, must be fit for purpose and comply with current regulations. Often, in order to meet the needs of pupils with SEN, it is necessary to provide more than the minimum that is required under the current regulations.

The brief may also set out requirements for performance or outcomes to be used for quality control at later stages of the project. These must be realised in the school building and are crucial for the desired educational outcomes and improved pupil attainment.

4.3 Arrival, departure and circulation

All schools should be designed, as far as possible, to be fully accessible and inclusive for a wide range of pupils' needs, in order to promote equality of opportunity for everybody.

The brief should contain a description of the LEA and school strategy for accessibility and inclusion.

The outcomes of access statements and audits in relation to the needs and participation of all users may require that a high standard of provision be made, exceeding that which is currently required under statutory regulations and guidance, such as the DfES *Constructional Standards, Building Regulations Approved Document M (ADM): Access to and use of buildings* and *BS8300: Design of buildings and their approaches to meet the needs of disabled people*.

Designers need to decide how to provide for a wide range of needs in an inclusive design, whilst resolving any potential for conflicting issues. The following general guidance notes summarise some of the main considerations to be made for the access and inclusion of all users.

Organisation

There will be many different people using the site for different reasons at different times of the day. Safe access, egress and circulation is essential for all users, whilst maintaining security and allowing means of escape. The type and range of users are described below, along with the various issues which may have to be addressed.

Users

Most pupils with SEN and disabilities (including pupils with BESD) will be transported to their schools, or resourced provision, either by taxi, by school bus, by their parents, or by private arrangement. These various modes of transport will have a significant impact on site design and layout.

Many adults will also visit the school site, including parents, transport escorts, permanent full-time and part-time staff, and visiting professionals. There will also be visits from the school-building manager, kitchen and maintenance staff as well as deliveries from outside agencies.

With large numbers of visiting staff, parents, visitors and community users at different times of the day, there is a high need for short- and long-term car parking.

Adults may also have SEN and disabilities which will have to be considered early on in the design stage.

Some users will have no other contact with the school, and will therefore need to be given clear directions about how to access and use designated facilities in a responsible manner.

Thus, the design of the physical environment of the school and its site needs a carefully thought-out approach in order to create a supportive environment for all users.

The school day

Each school will have its own timetable and routine for the whole school day which will reflect its individual educational ethos.

Generally, however, pupils will arrive in the morning at between 8 and 9 a.m. and leave at between 3 and 4 p.m. There may also be extended school use, for example, for pre-school breakfast clubs or after-school groups.

Pupils will generally undertake different activities during the morning and afternoon, with breaks for refreshments and play in the morning and afternoon, and with lunch around midday.

The exact details of the typical school day should be ascertained by the designers from the LEA and the school. All other users throughout the school day and out of hours should be considered use, as should their roles.

It should be borne in mind, however, that such arrangements and school-management issues will also vary during the life of the school building, with different head teachers over time, and should not be too personalised to one approach only.

4.3.1 External circulation

Access and approach

The first impressions of the school are important for attracting pupils, parents and staff. The visual impact of the school, its buildings and site should be discussed and expressed in a design statement. There should be an accessible approach and an entrance which is safe and secure, easily identifiable, attractive, welcoming and which has a positive presence in the community.

Generally, an easily accessible level or ramped approach and access should be provided. Similarly, well-designed access should be provided around the school grounds to enable participation in all school activities. There should be a simple, clear, well-organised and easily understood layout, with clear signage giving directions to the relevant locations, so that users of the school site can find their way easily.

Wayfinding

This is a term used to describe how people intuitively find their way in the environment, orientating themselves, and planning and making journeys.

It is an essential life skill and the design of external and internal circulation spaces, as well as the overall design, must help this learning process.

'Wayfinding schemes' can enable inclusion for all pupils, by creating trails or using cues of colour, texture and sound. Where these are adopted, they should:

- be planned according to the anticipated type and range of SEN and disabilities
- be reviewed in relation to changing needs, the long-term use of the building and the permanence of such installations

- provide continuity throughout the whole school building and site

Wayfinding can be significantly enhanced by appropriately sited and well-designed signage.

Signage

Clear, easily understood signage can assist with route-finding and orientation, and give identity or focus. Signage should have appropriately sized lettering, with visual contrast to the background, installed at an appropriate height and distance where it is clearly visible to all users.

Suitable signage may assist those with sensory impairments and those with communication and language difficulties, and should assist the development of independence skills by:

- using easily understood signs, symbols and objects of references
- incorporating Braille or tactile elements
- being voice-activated or including speech directions

Safety

It is essential to ensure safe external access and circulation for pedestrians of all ages in relation to the overall volume of vehicular use. Therefore, a clear strategy is essential to minimise the risk of accidents and should cover:

- site capacity, allowing for sufficient space for the planned number of vehicles arriving and departing simultaneously in the morning and afternoon, in variable circumstances
- safe separation of pedestrians, wheelchair users and vehicles
- giving pedestrians precedence over vehicles within the school site
- pupils who are less mobile, less aware of risk and danger, or who are wheelchair-users with independent or assisted access
- safe arrangements for pupils being transported by bus or arriving on foot or by bicycle, wheelchair or buggy
- avoidance of projections and obstructions which could cause a hazard
- clear identification of hazards for the visually and hearing-impaired where these are unavoidable, such as vehicles

Vehicular circulation

Safe circulation, provision for parking, appropriate pedestrian/vehicular segregation and associated activities for all users should be considered early on in the design. Transport provision where assistance is required should be established at the outset, because this will have a significant impact on the site layout. The main points to consider are:

- the provision of adequate and safe car parking for staff and visitors, including designated larger parking spaces for those with disabilities, with guidance from the Planning Authority about the acceptable numbers of car spaces and the production of a 'Green Travel Plan'
- that transport provision will need to be made for assisted pupil arrival and drop-off by coach, bus, mini-bus, taxi and car. There should be sufficient safe space for disembarking to the pavement directly outside and on the same side as the

appropriate entrance. Vehicles should also be able to arrive, draw-up and wait in turn

- vehicle circulation and flow for set-down and drop-off, avoiding congestion by using one-way, in-out, or roundabout traffic-flow systems as appropriate
- the use of clearly marked crossings and speed-reducing measures for vehicles, in consultation with the local highways department and as appropriate for accessibility
- provision for access by bicycle and alternative forms of travel or transport, and bicycle storage
- access for fire engines, and the application of the fire-fighting strategy for the whole site, including access to water supplies with the required pressure
- access for emergency services, such as ambulances, allowing for ease of movement to appropriate areas of the school buildings and sites, such as first aid, medical-inspection or sports areas
- access for large vehicles for collection of waste and refuse and transport to safe storage areas, or for infection and vermin control, should be arranged with the local authority's environmental-health and refuse-removal departments
- access for large vehicles for unloading bulk supplies, especially for kitchen and maintenance functions, with safe, approved approach, entry, parking and turning areas. These should, as far as possible, be positioned away from the main entrance so as to ensure safety and avoid negative impact

The impact of the providing for the functional aspects of transport and external circulation should be carefully integrated with the design of soft and hard landscaping to give the school an attractive welcoming appearance. Appropriate planting can soften some of the harder aspects of roads, footpaths, fencing, car parking and street lighting so that, for example, the hard landscape for car parking does not dominate over the school site and arrival/departure routes are attractive.

Arrival and departure

The beginning and end of the day, when all pupils are arriving or leaving school, can be stressful for both pupils and staff. Creating an appropriate place with sufficient space for the required number of people to gather and wait can help to settle or calm pupils and can assist with this process, allowing for the safe grouping and appropriate dispersal of pupils. Some points to consider are set out below:

- Arrival and departure processes take time and resources which require operational planning to guarantee pupils' health and safety.
- Where there is a possibility that children may try to run out of school it will be necessary to provide appropriate safe and secure environments.
- The transfer of pupils in wheelchairs with assistance from the rear or side of a vehicle is a slow process and takes place in all weathers, so is best done under cover.
- Pupils with disabilities are encouraged to develop independent skills for access, orientation and wayfinding as part of their education, as this enables them to access the wider community.
- Providing an over-protective environment can be a dull and unstimulating, so it will be necessary to balance safety alongside allowing suitable challenges to prepare pupils for the uncertainties of everyday living.
- When designing for co-located schools it is necessary avoid conflict of pupil routes, especially at peak times.

Pupils may access the school through the main entrance, or alternative separate

pupil entrances according to age and Key Stages. Access will depend on the school's individual approach, its site, management and staffing arrangements. Likewise, the handover of responsibility for pupils between transport escorts and the school will vary. Whatever the individual school circumstances, the design of these entrances should be, age-appropriate and give a sense of identity.

Older pupils may make their own way, with passive supervision, whereas younger pupils need more supervision. For younger pupils there may need to be access through gated or low-fenced areas, sheltered access and waiting areas and sufficient space to receive parents with siblings, buggies and wheelchairs. An equipment store near the early-years or reception entrance spaces may be needed.

Typically, these entrances may have accessible manually operated doors (with a hold-open facility, if required) or automatically operated sliding doors. Security controls and/or an accessible security and draught lobby with outer and inner doors to suit may also be provided, but entrances should always be welcoming and convenient to use.

Approach and entrances

There should be some form of covered or sheltered access to the entrance in order to provide:

- waiting spaces for parents with other children, if appropriate
- weather protection for pupils transferring to or from buses or taxis
- weather protection for an entrance with a level threshold

Provision of an attractive canopy or covered access to the pavement for pupils' arrival is recommended. It can be problematic, however, if there are a large number of vehicles arriving together or if the site is constricted.

4.3.3 Internal circulation

Main entrance and reception

The main entrance and reception space should be easily identifiable, attractive, user-friendly and welcoming.

There should also be a readily accessible, well-lit and visible means for obtaining assistance, if required, communicating with reception and/or for door operation. An integrated design, using clear visual and tactile signage, intercom or telephone, sounder bell, or voice-activated messaging, is needed.

The main entrance and reception have several important functions characterised by:

- pupil arrival and departure
- arrival and departure of staff if there is no separate entrance
- arrival of visiting staff, therapists and outreach workers
- visitors' arrival and booking-in
- parents' arrival for appointments and enquiries

There should be ramped and/or level access and main entrance doors with automatic operation for ease of access.

It is recommended that a secure lobby be provided at the entrance to give reception staff greater control over access and egress. This can also act as a draught lobby. Typically, it may have automatic sliding doors on the outside and on the inside, controlled by reception (or with a swipe card or other facility for approved card-holders).

The security function should not detract from the character and quality of the school entrance. It is often advantageous for the reception office to have a window overlooking the entrance and approach for passive supervision (in addition to CCTV cameras which are provided).

Where doors to the main and all other entrances have a large area of glazing, then manifestations should be used to make them visible to those with visual impairment.

The reception area should have a counter facing onto the secure lobby with a sliding window or glazed screen, at an accessible height with a lowered-height counter section and a knee recess on both sides for use by a wheelchair user, if required, on either side (refer to BS8300). It may also be necessary to provide tactile signage and/or a wall or floor wayfinding trail for those who have a visual impairment.

There should be good-quality natural and artificial lighting, avoiding down-lighting which casts shadows on the face of the receptionist and makes lip reading difficult. An induction loop should be provided for those who have hearing impairments.

Once a person has passed through the secure lobby, there may be another larger, open and accessible reception counter (with suitable provision, as above, for wheelchair-users, and those with visual or hearing impairment). A tactile map of the school site and layout can also be provided.

There should be a welcoming seating area for visitors, allowing space for those in wheelchairs or with buggies. There may be a display area and the parents' room will often be located nearby.

There may also need to be an easily accessible storage space for mobility equipment in a discreet, unobtrusive place nearby, with provision for battery charging.

Design quality of circulation spaces

Every effort should be made to introduce daylight wherever possible, in order to create pleasant spaces, reduce energy consumption and allow borrowed light from other spaces (provided there is solar and glare control). Good-quality lighting is essential for accessibility, and artificially lit circulation areas must not be dull and oppressive.

The design quality of circulation spaces makes a significant contribution to the ambience of the school as a whole. It can affect the morale of all users, as these spaces link the teaching and learning spaces together with all other spaces.

Internal circulation

Circulation spaces should be both pleasant and practical to use, affording a means of moving around the building with ease, convenience and efficiency.

There should be a simple, clear, easily understood internal layout with signage and

wayfinding for both visitors and pupils, as appropriate. All circulation spaces should be given detailed consideration during the briefing and design process.

Circulation spaces should be designed to support the effective functional arrangement and management of the school for teaching and learning, and so as not to cause interference or conflict. For example, a layout with one classroom opening off another without a separate corridor will cause disruption of lessons and is not acceptable. For this reason, spaces are usually divided into class bases or specialist spaces for teaching and learning, and corridors or other separate spaces for circulation.

If there are to be any open-plan teaching and learning spaces in or adjacent to circulation spaces, these should be designed with great care and caution. This is especially important for pupils with SEN and disabilities, many of whom are easily distracted.

For pupils with SEN and disabilities, it is essential that the arrangement of circulation space is both effective and efficient, because of the impact of travel time and its potential for erosion of curriculum access.

The design of the school can influence social behaviour in a positive way. The opportunity to design circulation spaces as social spaces which minimise confusion, congestion and disruption should always be taken.

Layout and room relationships

The design approach can be assisted by generating a schematic diagram showing the desired links between teaching and non-teaching spaces, and preferred room relationships.

Relationships between rooms should be designed bearing in mind arrival and departure, routes to class bases, access to specialist spaces, egress to and access from external areas and relationships to the entrance. From this diagram, it should be possible to establish the important links between teaching and other spaces, and to identify the priorities which determine their proximity.

Thinking through the whole school day is an important element of the design process as this will highlight issues of day-to-day school life and management.

Function and size

Corridors will serve different functions and will vary according to type and frequency of use, occupancy and volume of traffic. All designs should, as far as possible, allow sufficient space for wheelchair accessibility for pupils, staff and visitors.

A hierarchy of circulation spaces exists, each with its own function and character. Typically, these are the main entrance, major and minor corridors, other social spaces, service corridors and maintenance access.

Generally, it is recommended that approximately 25% of the total internal floor area will be given over to circulation. The circulation space for a school should be of sufficient area to serve its purpose. The layout of the floor plan and width of corridors will dictate the overall area given to circulation.

An assessment of the size of the corridors can be carried out in relation to the

occupancy of the school, and the following factors should be considered in each location:

- the number of pupils, along with their age and their type and range of SEN
- the number of staff
- volume of traffic at peak times
- the different functions it serves
- frequency of use

Circulation spaces should be sufficient and fit for their purpose in terms of size, number and type. Such spaces should be of a suitable shape in relation to their width, length and height, and care must be taken in their layout and detail.

Occupancy

In mainstream schools, there may be a large population (700–2000) of able-bodied pupils (25–30 per class) in large groups, and possibly a small number of pupils who may be independent wheelchair users with self-propelled or motorised wheelchairs or mobility aids.

If there is a resourced provision or co-located school, there may be a percentage of pupils who need assisted access and have support workers. For integrated or inclusive or co-located mainstream-school situations, the organisation of the circulation may be assisted by planning for noisier and busier, and quieter and less occupied routes and spaces, in order to allow for the co-existence of different pupils and their different behaviours.

In special schools, there will be a higher proportion of pupils who may use independent self-propelled or motorised wheelchairs, or who may be assisted by support workers, and so ease of movement and corridor widths are more critical.

Pupils will be learning how to move and manoeuvre equipment or use mobility aids. Some may need a member of staff to walk beside them, such as a pupil who has visual impairment supported by a sighted guide, or a pupil who has a physical disability requiring assisted mobility. Some pupils may move along the floor or may need the support of a handrail.

The movement and travel of pupils from their class base to other areas is a learning process for many pupils who are developing independence skills, and some pupils may need a high level of support and assistance in this setting. Other pupils may need space to express themselves. For example, pupils who have hearing impairment sign and gesticulate while walking. Other pupils may be more lively and narrow corridors have a funnelling effect, causing congestion which can encourage poor behaviour. Such factors should be considered in the design process.

Horizontal circulation

Circulation is usually considered in terms of its horizontal and vertical elements.

For horizontal circulation (i.e. circulation on a single level in the building), the following points should be considered:

- The shape of circulation spaces should vary in width along their length, to

allow for volume of traffic and confluence at the most important and frequently used parts of the school. The width should increase so as to avoid congestion, confusion and disruption, especially at arrival and departure areas, and it is essential to avoid 'pinch-points'.

- Corridors should be of sufficient width, length and height, and of suitable layout and shape to fulfil all of the varied functions which they serve.
- The clear width for means of escape should be maintained at all times.
- There should be good sight lines for passive supervision spaces, and re-entrant areas should be avoided.
- A simple logical and legible manner which relates to the movement patterns dictated by the curriculum activities is essential.
- Travel distance should be minimised: it can result in loss of curriculum time and make supervision more difficult.
- Opening up the corridors can create social spaces and incidental places for respite or calming.
- Very wide corridors can appear institutional or be confusing to some pupils, as well as being inefficient to heat and maintain.
- Seating should be provided at intervals in circulation spaces to allow users who get tired to rest.
- Light, airy spaces give a generous feeling of volume and are important for creating an appropriate ambience for a school (if ceilings are too low it will feel oppressive). High-pitched ceilings may allow natural light and ventilation.
- Long, narrow, monotonous corridors tend to funnel pupils, encouraging running and poor behaviour and are to be avoided, however, regulations governing means of escape will also limit travel distances and dead ends.
- Ensure accessibility by avoiding columns that cause an obstruction or hazard.
- A services strategy that ensures that the positioning of radiators does not obstruct the clear width required in corridors should be adopted.
- Direct access to outdoors from the corridors should be ensured, taking into account the range and type of SEN, the need for active and passive supervision, safety, security and the means of escape.
- Mobility equipment and aids are often stored in bays or stores sited off circulation areas.
- Pupils' belongings should be stored in lockers located to avoid congestion in corridors, as well as to be convenient for the classroom (fire prevention may require fire-resistant materials to be used).
- Displays of pupils' work can enliven the reception area and other circulation spaces, giving a sense of place and showing pupil achievements. However, this must be well organised to avoid visual clutter and not pose a hazard or fire risk.

A summary of recommendations for the width of corridors is given in the Table 7 below.

Table 7: Corridors - minimum or preferred width (structural dimension mm)	
Corridor minimum width for where there are two people in wheelchairs passing and with handrails on both sides of the corridor. (e.g. broad range special school or PD resourced provision)	2400mm preferred 2200mm minimum
Corridor minimum width for where there are few pupils, if any, with physical disabilities and use wheelchairs (e.g. special school for pupils with BESD)	2000 mm minimum 2200 mm preferred including for wall protection at dado or corners
Building Regulations ADM 2005 minimum standard (for reference) in mainstream schools	
Corridor minimum width where there are lockers (lockers may need to be fire resisting construction)	2700mm preferred
Corridor minimum width in mainstream schools	1800 mm minimum 2000mm preferred
Corridor where a toilet door opens out	1800 mm minimum
General purpose corridor minimum width	1200 mm with 1800mm passing bays at regular intervals

Doors

The correct selection and specification of all doors in circulation spaces is critical.

The following points should be considered for the current and anticipated occupants of schools in relation to the clear width of corridors and door openings in horizontal circulation routes.

Doors should be easy to identify and user-friendly to operate, with good visibility maintained on both sides of the door.

Designs should allow for full wheelchair accessibility, with space for approach and operation of the doors, with at least one single door leaf to be wide enough to allow access for wheelchair users and their assistants, if required.

Manoeuvring heavy doors and the use of door closers can often be problematic, especially for those with disabilities and support workers. These are best avoided if at all possible.

It is recommended that designers plan for the minimum number of doors and limit the need for door closers on doors throughout the school but this must be supported with the with the appropriate fire strategy.

It is best if fire doors are held open on electro-magnetic door releases connected to the fire alarm system, as part of an agreed fire strategy, (i.e. only to close in the event of a fire). This will assist greatly in enabling free movement and accessibility for everyone, but especially for those with disabilities.

Doors should have an effective clear opening width to suit all relevant users and must be easily operable, especially by those in wheelchairs, independently, or with assistance by their support workers. This will depend upon the type of school, its occupancy and anticipated visitor use, and public access.

Designers will need to be aware that it is very difficult for pupils in some self propelled or electrically propelled wheelchairs to get through a clear opening width of 775 or 800mm, (requiring a door leaf of 800mm or 826mm wide with a self closer) and damage to the door or frame occurs.

Generally, for use of wheelchairs, trolleys or frames, even for small children of early years, a clear opening width of 900mm is needed. Therefore, the door leaf 926mm wide will be required. For further information on spaces required for wheelchair users and the space required for their movement refer to FF&E 5.1 - Equipment 5.1.5.

Designers will need to ascertain the current and anticipated school population and likely public access and visitor/community use in relation to the LEA accessibility strategy and school accessibility plan. The likelihood of people with physical disabilities attending the school now and in the future will determine the need for a larger requirement.

The specification of doors in mainstream schools, for instance, should provide so that either all doors or a number of doors can be 926mm door leaf (or alternatively, a one and a half door leaf with 800mm clear width to the main leaf). These doors can, then, be strategically located to larger teaching spaces for the range of curriculum delivery from a suitable number and location teaching spaces.

Where there is a cohort of pupils with physical disabilities, such as in a resourced provision for pupils with physical difficulties or, especially, in a broad range special schools, it is essential that all doors must have a clear opening width of 900mm as a functional minimum and a door leaf of 926mm wide. All such doors will be heavier and the correct selection and maintenance of self closing devices is critical.

An assessment should also be made for larger requirements in relation to extra large wheelchairs such as sports wheelchairs.

Table 8 sets out information on clear openings for doors:

Table 8: Door openings - minimum clear opening width (structural dimension in mm)		
Guidance	minimum clear opening width	Door leaf width
Sport England advice for	1100 mm sports wheelchairs	1126
BB77	1000mm where an assessment is made for stated reasons that this is required to meet individual pupil needs	1026
BB77	900 mm suitable for most situations in a broad range special school for most types of wheelchairs and mobility equipment	926
Building Regulations		
ADM after May 2004	800 mm (accessible for some wheelchair users only)	826
ADM up to May 2004 Under the regulations the door does not require altering if built within last 10 years	775mm (BB77 recommends opening width increased for accessibility for pupils with physical disabilities for access to physical environment and curriculum under DDA).	800

Vertical Circulation

Site levels and multi storey schools

Special schools and resource provision on more than one level will be a more common building solution for where sites are small, split level and for reasons of energy efficiency. Two-storey buildings can offer learning opportunities for pupils moving around the building. They can work well provided that sufficient care is taken to deal with the relevant issues for such arrangements. A school with many levels will require extra effort from the designer to satisfy all requirements. Staff are also encouraged to make site visits to familiarise themselves with any issues that may affect the brief for their school design.

The following points should be considered:

- the opportunity to use movement via stairs and lifts can be seen as a positive learning experience in a multi storey school
- it may be sensible to group class bases by age or key stage on different levels e.g. specialist subjects, secondary, or post 16 on an upper level
- good space planning to minimise travel distance and time
- where there are stairs and lifts these must be planned with great care to avoid congestion, conflict and unnecessary travel and waiting times.
- a clear fire strategy is imperative from the outset and detailed discussion with the fire authority should be held to give early confidence in the solutions proposed
- the correct siting of large evacuation lifts and accessible stairs provided with refuges and safe emergency evacuation procedures agreed with the local fire authority is essential
- a split level site can be advantageous by giving access to an external ground level from both the upper and lower floors
- double height open spaces need careful design so that large changes in level have the appropriate guardings and safety installations, especially in relation to pupils who have special educational needs.
- the outcome of health and safety risk assessments should be incorporated into both the brief and the design.

Provision of suitable design in relation to vertical circulation is essential.

The following are examples for consideration in relation to all users:

- ramps - as part of the general circulation
- handrails - at two heights for smaller and larger pupils
- balustrades - raised to higher level than normal, such as 1200mm
- guardings or protective screening - of appropriate design

These should be attractive, easy-to-use by everyone and enhance the school design. It is essential that an assessment should be made for the current and anticipated school population, levels of occupancy and pupils, staff or visitors needs.

Ramps, stairs and lifts

Ramps, stairs and lifts must be planned with great care to avoid congestion, conflict and unnecessary travel and waiting times. All stairs must be designed to the appropriate current regulations.

For all school premises, ramps and stairs should have shallower gradients and pitch, respectively, which are more suitable for children. (see *DfES Constructional Standards for Schools* 1997).

Pupils with physical disabilities often tire easily and the number of risers should be limited to 12, with landings provided as places to rest. Many disabled pupils are anxious about how they exit a building safely in an emergency and about being left behind or put at risk. It is essential that a suitable means of escape strategy is developed at the outset in consultation with the school, LEA and local fire authority.

All stairs must be designed to the appropriate current regulations. The outcome of health and safety risk assessments should be incorporated, as required.

DfES Constructional Standards for Schools 1997 exist for all school premises and are subsumed into Approved document M of the Building regulations. Ramps and stairs should have a shallower gradients and pitch, respectively, which are more suitable for children. Steps and stairs should have contrasting nosings and risers (ADM 2004). Provision of suitable handrails, guarding and balustrades should be attractive and easy to use by everyone. Provision of safe refuges and evacuation procedures are essential.

A summary of information on vertical circulation is set out in Table 9.

Table 9: Summary information for vertical circulation	
<u>Ramps: BB77 recommendation</u>	
Where there is a cohort of pupils with physical disabilities a ramp with a gradient of 1 in 20 is preferred, especially for younger pupils.	
A ramp with a 1 in 20 gradient is accessible for all self propelled wheelchair users A ramp with a 1 in 15 or 1 in 12 gradient is accessible for a electrically propelled wheelchair user	
* Ref: Muscular Dystrophy Association	
Preferred standard in schools*	
1 in 12	2 m going
1 in 14	4 m going
1 in 15	5 m going
1 in 16	9 m going
1 in 20	10 m going
* Ref: BS8300 ramps recommended gradients interpolated as appropriate	

Minimum standard for all schools**		
1 in 12 3m going 1 in 16 6m going 1 in 20 10m going		
* **Ref: DfES Constructional Standards for Schools override Part K ramps steps & handrails and are subsumed into Part M of the Building Regulations.		
Steps:		
Location	Maximum rise	Minimum going
External steps	150 mm	280 mm
Internal steps	170 mm	280 mm preferred 250 mm min
Refuges: In multi-storey buildings refuges should be provided at all stairways, on each upper level, and the width of the stairway should allow for wheelchair evacuation unless a special lift for evacuating disabled people is provided. Refer also to BS5588 and Building Bulletin 7 (to be BB101 2005)		
Handrails: In schools with pupils aged 12 years and younger, consideration should be given to the provision of a second handrail at a lower level. For infants the lower handrail height should be 600mm.		

Lifts

Provision of evacuation lifts is both desirable and necessary for multi-level schools. An assessment should be made for the anticipated population, density and needs of people with disabilities in the school.

An assessment should be made for the anticipated population, occupancy, frequency of use including for peak times of use for the needs of pupils, staff and visitors with disabilities.

Where there are a number of users with physical disabilities, lifts should have sufficiently large lift car sizes. Significantly larger size lifts are essential for groups of pupils in wheelchairs moving around alongside their peers. There should be a sufficient number of lifts with wide doors, sufficiently large lift-car sizes, accessible controls and speech announcements.

There should be sufficient number of lifts to allow for maintenance work or a policy to deal with the eventuality of breakdowns.

Lifts which are used as a means of escape should be fire hardened and have a separate electrical supply.

Lifts should be user friendly with accessible controls at the correct height. BS8300 or with swipe card or key operated access, visual contrast, speech announcements. Larger doors will be required with a 900-1100mm mm clear width.

Lifts should be designed to meet designed to meet current British Standards and

European Norm. Regulations (ADM & BS8300 & BS5588).
Table 10 sets on summary information on lifts.

Table 10 : Summary information on lifts		
ADM: Minimum lift size to all storeys must be evacuation standard	1100 x 1400 mm 900 mm wide door suitable for primary school	access for a wheelchair user and a support worker
BS8300	1400 x 2000 mm 1100mm wide door suitable for secondary school wheelchair	Wheelchair user can turn 180 degrees and can include another wheelchair user or person with mobility aids
Refer to BS558 Pt 5&8: suggests one evacuation lift for each designated evacuation stair		
* Refer to ADM and BS8300 for accessible controls and tactile signs and symbols		
<p><u>Platform lifts:</u></p> <p>These can be used if no other suitable alternative means available but they should not reduce the effective width of corridors or stairs. Refer to BS6440</p>		

4.4 Teaching and learning spaces

This section sets out overarching principal considerations which apply to all teaching and learning spaces used by pupils with SEN and disabilities.

The main priority for a school design is to ensure that pupils' full entitlement to a broad, balanced and relevant curriculum is met, under the law and in line with Government policies and guidance.

Current Government policy requires an inclusive approach to design to ensure that, as far as possible, pupils with a range of needs can join in school activities and participate in school life along with their peers.

This requirement will inform briefs for special schools, resourced provision or any other educational setting which supports provision for SEN and disabilities.

The main focus of the guidance is therefore, initially, on spaces for:

- general teaching
- practical specialist subjects

Examples of teaching and learning in other settings include:

- learning-resource areas such as small-group rooms, libraries and ICT areas
- therapy spaces for hydrotherapy, physiotherapy and sensory stimulation
- large spaces for assembly, physical education, sport, music, drama and movement, and performance
- dining spaces for health and well-being, the development of social skills and progress to independence

Procedure

A definitive or prescriptive approach to design is not considered appropriate, because of the constantly changing and emerging special educational needs of pupils, the evolution of educational provision for the twenty-first century and the varying local needs throughout the country.

Thus, this guidance constitutes a working method which, along with reference to the earlier sections, can be used to prepare a brief for school accommodation.

Teaching and learning spaces and their use must be considered carefully so that they satisfy the demands made on them now and in the future. Planning for flexibility and adaptability is essential as set out below.

When designing teaching and learning spaces, it is recommended that consideration be given to the following attributes:

- 1 Provision for SEN
- 2 The number and type of teaching spaces
- 3 The size of teaching spaces
- 4 The shape of teaching spaces
- 5 Relationship with the outside
- 6 Links with other teaching spaces

- 7 Links with non-teaching spaces
- 8 Storage
- 9 Fittings, furniture and equipment
- 10 ICT
- 11 Environmental services and technical support
12. Building Materials
- 13 Design Quality

These attributes can be considered in detail in relation to all teaching and learning spaces (for ease of reading, these are henceforth referred to as teaching spaces).

4.4.1 Provision for SEN

It is important to ensure that a range of special educational needs can be met in all teaching spaces for access to curriculum. The design approach will involve consideration of the aspects below.

Changing trends for the future

LEAs and schools should plan to meet the needs of all pupils, including those with SEN and disabilities. Local authorities and schools will provide information about current needs, changing trends and the anticipated intake of pupils in the locality and how their needs will be met.

This information will inform and guide the type of provision required in a school and the accommodation should support this. A strategy for flexibility and adaptability for the future can be developed simultaneously. For example:

- A broad-range special school may now have pupils with complex needs (MLD/SLD) or autism but the likely future intake may include increasing numbers of pupils with PMLD or severe ASD, or with behaviour that challenges.
- A special school for pupils with behaviour difficulties may now have pupils with BESD but the likely future intake may include increasing numbers of pupils who also have medical or mental-health needs.

Age-appropriate accommodation

All accommodation should be appropriate for the age of the pupils, their curriculum and phase of education (early years, primary, secondary and/or post-16).

Designers should provide school accommodation which is *age-appropriate* in order that the space:

- has a size, scale and fitness for purpose appropriate for each phase
- provides the most suitable context for age, culture, behaviour and the range of activities which will occur
- creates a setting which supports the nature and character of teaching and learning at each stage
- assists in engaging pupils in learning and promotes their interest in the subjects offered
- encourages development of appropriate social behaviour
- enables pupils to enjoy using the space and prepares them to use similar

spaces appropriately in the wider community

A brief description of each phase of education is given below for information (see also Appendix B).

Early years

In early years, children are grouped together in one larger class base for full-time or part-time sessions. The Foundation Curriculum supports learning through play and practical activities, both of which require sufficient space.

Specialist facilities for pupils with SEN and for early intervention may be required and advice from SEN, healthcare and social-services specialists should be obtained accordingly.

Primary

In primary special schools, children are taught most of their subjects by one teacher in one teaching space, with teaching assistants and support workers. Therefore, there must be sufficient space for the delivery of all subjects and activities, some of which will occur concurrently. The design of these spaces should reflect the needs of pupils and staff and be sufficient for the specialist equipment, teaching resources and subject display required for the subjects offered.

Practical specialist subjects, such as food technology and practical work, are usually taught in small groups of pupils with one or two staff, according to pupils' needs. For these, separate specially equipped spaces are now recommended, in separate bays or enclosed spaces. These are then available for shared timetabled use by all class groups

In the event that the above is not possible for established or stated reasons, then, such activities may take place in the general teaching class base, provided that all relevant health and safety requirements are to be met.

Secondary

In secondary special schools, pupils will have their own *tutor bases* for registration and for their tutor-group work. These spaces will also serve as general-teaching spaces (e.g. for English or Mathematics) or specialist-subject teaching spaces (for example, for Geography, History or Modern Foreign Languages). The design of these spaces will reflect the needs of pupils and staff and be sufficient for specialist equipment, teaching resources and subject display for the subjects offered.

A range of *specialist provision* is essential. Teaching of *practical specialist subjects* takes place in separate, specially equipped and designed accessible spaces. Usually, accommodation is provided for Science, Design and Technology (including food technology), Art, Music, Drama and Physical Education (including movement and sport). Practical specialist spaces should not be used for tutor groups.

As far as possible, though, pupils should move around different teaching spaces for all subjects, as this assists with the development of social learning and independence skills. This is a general characteristic at secondary phase, compatible with similar practice in mainstream schools; it thus enables inclusion in the local school and wider school community.

Post-16

Accommodation for post-16 provision should be significantly different and separate from that for statutory years. It should allow for activities which reflect the students' approaching adult status and their preparation for access into the wider community.

Access to practical specialist subjects will usually include vocational options for which there may be provision at a local sixth-form college or FE college. For this reason, such specialist provision is rarely made in the special school.

Co-located or off-site facilities can be used if this is part of the LEA's inclusive strategy. For example, where post-16 accommodation is co-located with an inclusive sixth form or an FE college, then fully accessible facilities and access for learning must be ensured in all cases.

How provision for SEN is met and integrated within the school

Consultation with the LEA and the school is essential as it is important that designers learn to understand the needs of the pupils and staff for whom they are designing. It is also necessary to have a holistic view, encompassing both the main types of SEN as well as any other associated needs, so that their impact on design is understood. This will ensure that the appropriate provision is made. Planning for flexibility and adaptability for the future should also be part of the design process.

It is imperative that sufficient space is provided in terms of floor area to adequately support and meet the needs of the age, type and range of pupils concerned, as well as any groupings which will need to be accommodated within a single space.

Teaching, learning and the curriculum

LEAs and schools will be able to give the design team further information about:

- the age of the children
- their particular educational requirements
- the type and range of subjects to be offered
- the type of curriculum which will be taught, the mode of its delivery and the degree of differentiation involved
- the type and range of activities which take place in each space
- teaching and learning resources
- the various teaching methods used
- the range of activities undertaken
- advances in the design and use of technology

The requirements for all teaching spaces should be described in detail in the brief for the designer so as to ensure that the accommodation provided is fit for purpose.

Such information will form the basis of the schedule of accommodation and will affect decisions which are made about the fitness for purpose and functional layout of the teaching spaces, and the provision of fittings, furnishings and equipment.

The type of curriculum offered will be differentiated to meet a range of pupil needs, providing access to a wide range of learning opportunities. The degree of curriculum differentiation will vary and its impact on the accommodation should be set out in detail.

In some instances, it may help the briefing process to consider how the activities take place and what provision may be additional to or different from mainstream schools (many spaces may differ significantly from a traditional mainstream model).

Typically, pupils who have BESD, HI, VI, MLD, SpLD, SLCN and 'mild' ASD (Asperger's Syndrome) will have a wide range of ability. At secondary age, general, specialist and practical specialist subjects will usually be delivered in a differentiated age-appropriate way (with similar provision to mainstream spaces but smaller spaces for practical specialist subjects).

For pupils who have SLD, PMLD and those with severe ASD with cognition and learning needs, there will need to be a higher degree of curriculum differentiation to suit pupils' needs, which must be reflected in the design.

The teaching methods employed may also impact on accommodation required. Some pupils may need to be grouped together whilst others may be taught in separate classes for some of the time. For example, pupils with SLD/PMLD may be taught for some of the time separately from pupils with ASD.

Designers will need to consider the different specialist activities to be undertaken in each context, firstly in relation to the pupils' needs and then in terms of how the design can help to promote effective teaching and learning within each teaching space.

The method of learning support and behaviour management may impact on the requirements for each teaching space and its room relationships.

Usually support and therapy is provided in the teaching space, however some pupils may need to have access to specialist resources such as therapy spaces on a timetabled basis.

If there are conflicting pupil needs, these may require considerable attention in relation to the design. Awareness of these issues should be raised early on in the process so such issues can be resolved via the design.

If any additional or modified provision is to be made for a particular type of special educational need, e.g. BESD or ASD, then the rationale should be shared with the designer so that any particular learning needs and/or safety or security issues are considered very early on.

4.4.2 The number and type of teaching spaces

The teaching spaces provided should be sufficient in number and type. Provision will vary according to the age of pupils, type and range of SEN and the phase of education. These should all be ascertained to help establish the number and type of teaching spaces needed.

In order to determine the total number of teaching spaces in a school, the following factors must be considered.

Current and anticipated numbers on roll

The LEA's plans or strategies for SEN and disabilities, now and in the foreseeable future, in relation to local needs and consultations, will inform the brief. When needs

are established, a strategy should be developed which describes in detail how the needs identified will be met.

The number of class groups in each year

Ascertaining the likely number of groups in each year and the number of pupils in each group is essential in order to assess the requirement for teaching spaces and tutor bases. Generally, pupil numbers per class are much smaller than in mainstream provision.

In early years, groups tend to be about 9–12 children with 3–5 staff. In some cases, however, there can be one-to-one working in order to meet individual pupil needs.

In primary and secondary schools, there may be between 5–10 pupils with one teacher, with 1–2 teaching assistants and support workers deployed to meet the needs of the pupils. Where a higher level of support is needed, there may be fewer pupils and more staff assistants.

The number of pupils in a group should be based on the current teacher pupil-ratios for best practice.

Table 11: Typical occupancy levels for staff and pupil groups

Type of SEN	Pupil number in a class for one teacher
BESD	6 – 8
PD	6 – 8
VI	6–10
HI	6–10
SLCN	6–10
MLD/complex needs	6–10
SLD	6–8
ASD	1–8
MSI	5–7
PMLD	5–7

Source: DfES Circular 11/90 Staffing for pupils with special educational needs 13 December 1990

Typically, for a school of about 100 pupils, providing two class bases per year group will enable flexible teaching and learning arrangements in response to changing needs.

The number of practical specialist-subject spaces

Generally, it is good practice to have one specially equipped space for each practical specialist subject in the curriculum. This will avoid conflict between different curricular activities.

Again, ascertaining the type and range of pupil groupings is essential. Different pupil groupings are made according to pupil needs, the mode of curriculum delivery and

variations in activity. The use of whole-class, half-class or one-to-one teaching will affect the number and size of class bases. For example, sometimes two groups join together for activities such as music, drama or movement, in order to support and enhance learning experiences. Spaces should be able to accommodate the maximum number of pupils and staff, now and in the longer term. Reference should be made to Table 6 for typical pupil groupings.

The number of small groups proposed

In order to accommodate any special educational needs which are identified as conflicting, separate spaces or specialist resources should be identified at the outset. For example, the method of flexible use of small-group rooms can assist in meeting conflicting needs and such requirements will impact on the design and its layout.

4.4.3 The size of teaching spaces

There should be sufficient space to include pupils with a broad range of special educational needs for all ages and at each phase. It is imperative to accommodate curricular, physical or resource needs, whilst maintaining health and safety in the teaching and learning environment. The size of the teaching space will be determined by the key drivers below.

Level of occupancy of pupils and adults

It will be necessary for the design to:

- identify the number and age of pupils in the group to be accommodated (full or half groups), the type and range of special educational needs and whether there will be additional pupils joining from other groups or schools
- identify the number of adults employed, their roles and deployment, including visiting specialists or therapists who may work in the teaching space

Refer to Table 11 and the current teacher pupil ratios for best practice (see DfES Circular 11/90 Staffing for pupils with special educational needs 13 December 1990).

Age, range and type of special educational need for each phase of education

Younger children will need more space to move around and for play activities. They may have large items of play equipment, so that the area of the space must increase to reflect this.

Although secondary-age pupils are larger, and some are more sedentary, they may require more space to move around and for the transfer and use of mobility equipment. Some may be of adult size and require sufficient space for their physical-care needs to be managed, as well as for learning and behaviour support.

Typically, there must be sufficient space to accommodate:

- pupils who are physically disabled, including some pupils who have profound and multiple learning difficulties, and who may have three or more items of mobility equipment, e.g. a wheelchair or wheelchairs, and a standing frame or side frame. These can be bulky, awkward and take up a great deal of space when in use

- pupils whose needs fall within the range of autistic spectrum disorder who may require individual screened work stations
- pupils with behavioural, emotional and social difficulties who often require more space to express themselves without causing disturbance to others
- pupils with a visual impairment who may use large print, Moon or Braille learning resources, or need specialist lighting conditions or tactile materials: these all require additional space
- pupils who have hearing impairment and who may need provision for radio battery (personal FM) or sound-field systems and who may require special adaptations in specialist subjects

Teaching and learning activities taking place

Sufficient area will be required for:

- the number and type of different interactions and activities; their nature and variety occurring separately or simultaneously; the type, range and variety of teaching methods for different learning styles
- the size, range and complexity of teaching and learning aids. Subject-display equipment and resources will also require more space, as will fixed or loose furniture, fittings, equipment and pupil belongings
- the maximum number of pupils and adults required, the appropriate number of pupils viable for certain tasks, the mode of curriculum delivery, and specialist furniture and equipment, whilst maintaining safe clearances and adequate circulation for health and safety reasons

Flexibility and adaptability

Consideration of flexible everyday use of the space as well as its adaptability for the foreseeable future is essential.

Teachers will need to rearrange furniture for groups on a task-by-task or day-to-day basis. A strategy to accommodate such variety should be developed and agreed as part of the design approach.

Circulation space

The safe and positive movement of children or adults, especially those with physical, motor or sensory disabilities, is imperative.

Mobility equipment may also be as large for younger children as it is for some older pupils, with use of wheelchairs, classroom chairs and mobile frames for standing and lying prone.

Space for adjustable-height accessible workstations will be required, as well as for the circulation associated with them, and for a teaching assistant.

Ergonomic space-planning is essential, especially when planning for the use of portable or ceiling-mounted hoists for the transfer of pupils and safe manual handling. (See section 5.1 FF&E 5.1.5 equipment Table 21).

There should be adequate space for:

- safe access, egress and circulation
- safe clearances, allowing room to open doors and move around furniture for general circulation
- safe supervision of all users in all areas for health and safety reasons
- safe use of large equipment (fixed) or machinery used in practical specialist-subject areas, with its associated circulation and clearance distances

Recommended areas for teaching and learning spaces

Taking all of the above factors into account, the recommended areas for general teaching bases and practical specialist spaces are set out in Tables 12 and 13 below. These will suit most situations provided that occupancy levels and numbers fall within the ranges shown in Table 11. (Note that the areas given exclude resource and mobility equipment storage).

Table 12: Recommended areas for general-teaching class bases		
Phase	Pupil numbers	Area m ²
Special school (MLD/complex needs/SLD/ASD PMLD)		
Early years	varies	75
Primary	6–8	65
Secondary	6–8	65
Special school – BESD		
Primary KS 1	6–8	65
Primary KS 2	6–8	55
Secondary	6–8	55

(Note: in KS 1 there may be a need for play activities due to developmental delay).

Table 13: Recommended sizes for practical specialist spaces		
Subject	Pupil numbers	Area m ²
Primary		
Food Technology Practical	up to 6	25
	up to 8	25
Music and Drama	Varies	65
Physical Education	Varies	120–180
Secondary		
Science	6–8	65
Food Technology Design and Technology	up to 6	65
	up to 8	65
Music and Drama	Varies	65–80
Science	up to 8	65
Art	up to 8	65
Physical Education	Varies	140–180

Table 14 sets out recommendations for the size of learning-resource areas.

Table 14: Learning-resource areas
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Resource area	Pupil numbers	Area m ²
Primary		
Group room	Varies	12
Social-skills base	varies	20
Library	varies	15–30
ICT	varies	15
Secondary		
Group room	varies	15
Social-skills base	varies	30
Library	varies	15–30
ICT	up to 6	15
Kiln	staff only	4–6
CADCAM		10
Prep./store	staff	15
Recording room	varies	15
Post-16		
Group room	varies	15
Common room	varies	80

Table 15 sets out Sport England recommended sizes for sports halls

Table 15: Area of sports halls: Sport England recommendations	
w x d x h internal floor	Area m ²
10 x 10 x 3.5 m	100 m ²
10 x 14 x 4.5 m	140 m ²
10 x 18 x 6.1 m	180 m ²
17 x 18 x 6.1–7.6 m	306 m ²
33 x 18 x 7.6 m	594 m ²

4.4.4 The shape of teaching spaces

The shape of the teaching space should help to support flexible curriculum arrangements and the creative configuration of furniture and resources, whilst maintaining safe supervision and contributing to a comfortable environment for teaching and learning.

The shape may enhance the effectiveness of curriculum delivery and facilitate access to improved learning opportunities. It may also help to define the space's character and its sense of place, providing cues and associations for wayfinding and identifying what learning experiences are available. These are all important for pupils with SEN.

Designers should consider the most appropriate shape in relation to the space.

The type of activities which take place and fitness for purpose

In a teaching space, a variety of teaching and learning styles will need to be accommodated effectively within the chosen shape. Activities will reflect pupils' age, the type of their needs, interactions and play. They may include individual or group work (with wet or dry activities), quiet work, one-to-one sessions, projection, or the use of whiteboards, computers and specialist equipment, some of which is bulky.

The shape should support the use of ICT in learning, so that whatever the layout, the pupil and teacher should be able to see each other, the visual display or whiteboard and the demonstration area.

In practical specialist spaces, the balance of practical and theoretical work in one room, or the provision of different areas for wet or dry activities, may influence the shape of the space required.

Access to all areas of the teaching and learning space for pupils with physical, motor or sensory difficulties is imperative. Consequently, the shape of a space must allow pupils' unrestricted movement and access to learning.

Minimising effective circulation routes in the class base will maximise the remaining space available for flexible teaching and learning arrangements, whilst ensuring accessibility to all areas.

Providing the maximum unbroken length of wall will enable flexibility for projection purposes, and for the display of work and resource material.

The shape should allow effective levels of supervision, ensuring safe access and egress; safety and security for pupils, teachers and assistants must be maintained. Health and safety requirements for supervision of pupils undertaking specialist activities necessitate good sight lines, especially if these activities involve risks. Ensuring clear sight lines for both active and passive supervision is essential.

Room dimensions and proportions

The shape should provide the appropriate scale, volume and proportion, taking into account the range of activities taking place. To ensure the safest and most appropriate ergonomic dimensions across the room, a minimum suitable dimension must be established. This will vary according to the size, proportions and use of the space. General recommendations are:

- for smaller spaces (10 m²), a minimum width of 3 m for accessibility
- for teaching space of 55–65 m², a proportion between 9:7 and square is preferred as effective for teaching and learning with a minimum width of 6 m, (an example might be a 63 m² class base of 9x7 m with a 2.8 m ceiling)
- for larger spaces, for example, of 90 m², a proportion of between 1:0.8 and 1:1.1 with a minimum depth of 8.5–9.0 m

Some aspects of shape are described below.

Width

A wide frontage and shallow plan will enable better natural-daylight penetration and passive ventilation. The most suitable minimum dimension across the room should be determined in relation to the type and range of activities.

Long, narrow longitudinal shapes, which restrict use for curriculum activities, effective teaching and supervision, should be avoided. This is especially the case for practical specialist-subject spaces.

Depth

It is best to avoid a narrow frontage and deep plan because these do not function well for teaching and learning.

Daylight penetration may be effective up to about 5–6 m depth. Beyond this, borrowed light, clerestory lights or rooflights may need to be introduced. Otherwise, deep-plan spaces will suffer from poor natural light and ventilation.

Height

A minimum ceiling height of about 2.7–3.0 m is recommended for daylight penetration and passive ventilation. The appropriate height needs to be established for each teaching space

Detailed investigation may be required in relation to the use of hoists, physiotherapy equipment, ICT or CCTV projection equipment, clearance around specialist equipment, provision of ducting services at high level, ceiling fittings, mobiles which are commonly used, and especially, the use of portable or ceiling-mounted hoists. (See Part 5 for more information).

Scale

The appropriate scale of space will be needed to suit both the age of the pupil and the activities to take place. For some, a large volume space can be confusing, whilst for others it gives a sense of freedom. Scaling down rooms, however, can be constricting and inflexible.

General aspects

- A simple rectangular plan allows for flexibility of layout and enables good supervision and sight lines.
- A square plan or thereabouts may be beneficial and enable effective teacher–pupil relationships and teaching and learning styles to be established.
- In a teaching space, bays or alcoves either side of the main rectangular space can be used for a wet area, or individual workstations.
- An L-shaped space may impede or inhibit good observation and supervision or may allow a discreet independence space for students. Use should be agreed early on to ensure the design is fit for purpose.
- Curved shapes for performance spaces should be considered carefully because fan shapes may assist acoustics whereas circular spaces create problems. Curved shapes may result in the need for purpose-built components or furniture and value for money should be assessed.
- Acute angles, re-entrant corners or hidden spaces which are impractical, inaccessible, and impede supervision should be avoided.

Room relationships

Spaces should be of complementary shapes, providing a harmonious ambience across the school and giving a feel of positive room relationships.

Flexibility and adaptability

The shape of the space can facilitate a number of different uses now and in the future, giving a 'loose-fit' arrangement. Adjacent spaces must be compatible and inter-relate (allowing, for example, flexible use by means of sliding folding doors).

Sustainable approach

The shape should support a sustainable approach for providing comfortable learning environments, with technical services supplied and located conveniently.

4.4.5 Relationship with the outside

Maximum benefit from a range of outdoor experiences, and social and learning opportunities, can be derived by the direct relationship of the teaching space to the immediate external environment. The need for direct access to external areas will depend on curriculum activities, as well as on the type and range of special educational needs.

The outdoor space should therefore be integrated into the whole design. Consideration should be given to the points below.

The rationale and purpose for direct access to the outside

Experience of the external environment is an essential part of the curriculum. Class bases opening directly onto an external area are beneficial for pupils in the Foundation Stage and Key Stage 1.

There is less of a need at secondary phase for direct external access, except as a specialist resource or to support a practical specialist subject. Where this is required, an appropriate rationale for the linking of an indoor to outdoor space should be set out.

Linking with the outside can have a positive impact on learning for a range of practical specialist subjects. The content of the subject and its delivery may require direct or indirect access to the outdoor spaces. Reference should be made to the 'Practical specialist-subject spaces' and 'Outside spaces' sections below with respect to this. These requirements should be ascertained early on and set out in the brief.

The type of outdoor provision

Enhancing the connection to external spaces, with appropriate views from the inside to outside, can help to facilitate the delivery of the outdoor curriculum.

A covered outdoor space, 2.5 m deep, can become a positive extension to the class base. Alternatively, a suitably designed external space of 55–65 m² will be sufficient space for a range of curricula and social recreational activities. Outdoor spaces for physical education, socialising and recreational activities are described in Section 4.9, 'Outside spaces'.

The need to manage behaviour

Direct external access from the teaching space may cause a distraction for some pupils (e.g. those who have BESD). For other pupils, access to the outside is a necessity to help them release emotions, calm down and assist staff management of the teaching situation (e.g. pupils with ASD behaviour that challenges). Access via a lobby to an appropriately designed safe outdoor space can help these pupils.

Safeguards and security

Safety is paramount for all pupils and all fixtures and landscape elements will need to be carefully considered and detailed.

Age-appropriate provision

A good-quality design will reflect the most suitable context for age, culture, behaviour and the range of activities. It can encourage development of appropriate social behaviour and enable pupils to enjoy using the space, as well as prepare them to use similar space in the wider community appropriately.

Deliveries and supplies

Appropriate provision and planning for safe delivery access for each practical specialist subject and for school-maintenance operations should be made. Consideration of the size, weight, volume and storage location of multi-media resources for and large bulky materials is essential.

Means of escape

Direct access to the outside may be required for emergency escape from practical specialist-subject spaces, performance spaces and halls. Having a means of escape is of great concern to those with SEN and disabilities and these requirements should be established early on and set out in the brief.

4.4.6 Links between teaching spaces

It is important to maximise access to the curriculum and enhance inter-related learning opportunities for all pupils. The design should provide optimum links between spaces for:

- **the curriculum and its delivery** Effective relationships between teaching spaces can support the inter-relatedness of subjects and the mode of curriculum delivery. For example, links may be made between Mathematics and Science, Art and Design and Technology
- **links between teaching spaces and learning resources** Group rooms can serve two or more teaching spaces to enable flexible use and assist with learning and behaviour support. The library and ICT resources should be optimally located so as to benefit the maximum number of pupils
- **separation of noisy and quiet activities** Separation and careful siting of noisy and quieter activities is critical. Pupils who are more sensitive to distractions, or who have hearing impairments, should not be disadvantaged

in their learning

- **the proximity of practical specialist-subject spaces to other teaching spaces** In primary schools, if provision is made in a bay off a circulation space, then it should be easily identified, accessible from teaching spaces and sited so as not to impede circulation, distract pupils or enable them to wander away. If such provision is made in a self-contained room, then it should be accessible from all teaching spaces. Careful siting can facilitate good timetable management and minimise travel time. Providing effective links between specialist-subject and/or general-teaching and/or therapy spaces (e.g. by means of sensory spaces) can enhance pupils' learning experiences

4.4.7 Links with non-teaching spaces

The designer's goal should provide an efficient and effective environment for social learning and personal care whilst maintaining an age-appropriate ethos, according dignity, respect, and privacy to individuals, and safeguarding all aspects of health and safety.

Generating a schematic diagram showing the desired links between teaching spaces and non-teaching spaces, such as dining or changing areas and toilets, will greatly assist the design process.

Consulting with the LEA and the school about relevant school-management issues and priorities is essential. Consideration of the points below should be made.

Optimum room relationships

A rationale for the inter-relationship of teaching spaces, their proximity and associated travel distances is essential. Age-appropriate independent travel is good for social learning but is difficult and tiring for some. Reasonable and convenient travel distances from the teaching spaces to the locations for dining, assembly, specialist therapy and respite are therefore required.

Ease of access and egress is essential. Teaching spaces should also be positioned to avoid congestion which can occur during arrival and departure times.

The location of toilet and hygiene facilities

Pupils who have SEN may also have physical disabilities, medical needs or a low level of immunity to infections. Meeting health and safety requirements is crucial for infection control and maintaining hygienic procedures and practices. Therefore, consideration of these needs should be integrated into the design in a way which is sensitive and appropriate to the needs of all users. This involves:

- designing facilities which are age-appropriate, with respect to pupils' needs to ensure that dignity is maintained. Assisting progress towards independence in this way also supports social learning
- providing convenient travel distances from all spaces to facilities for wheelchair-users for independent access, or for assisted access with support from staff, for whom the health and safety requirements are as important
- ensuring convenient access to toilet, hygiene or changing provisions in close juxtaposition to all teaching spaces, especially practical specialist spaces, thereby supporting pupils in their access to learning

4.4.8 Storage

For effective teaching and learning, curriculum delivery and the management of resources, sufficient suitable storage is essential.

Sufficient storage should be provided in every teaching space for general needs, for specialist resources, security needs, mobility or specialist equipment and for personal belongings. The points below should be considered.

The type and range of special educational needs

Storage should be provided for pupils' personal belongings and provision for SEN should be clarified. Sufficient accessible storage should be provided for the appropriate type and range of special educational needs. For example, pupils' mobility equipment may be stored in the teaching space, in long shallow bays or stores (see Section 4.13, 'Storage').

The size of storage

Sufficiently large storage should be provided to suit its purpose. Storage may be needed for:

- large materials, equipment, loose furniture or mobility equipment, play equipment, manually moveable apparatus and manual handling bulky items
- specialist equipment, apparatus, small and large materials for practical specialist subjects
- pupils' work in progress

The shape of storage

An appropriate shape for the store is necessary for practicality, safety, fitness for purpose and accessibility for all staff, some of whom may have disabilities. For example, long shallow spaces are more effective than narrow deep stores.

Safety and security

Safe, secure storage of vulnerable equipment and resources; or dangerous materials or chemicals, must be provided in accordance with all current regulations. Safe and secure storage for large or bulky materials requiring careful manual handling should be considered.

Location and links

Convenient locations for storage with appropriate linkage to the teaching spaces which they serve is essential.

4.4.9 Fittings, furniture and equipment

It is essential to ensure that the maximum access to learning and social opportunities through the appropriate specialist resources, furniture, fittings and equipment is achieved.

Consultation with the LEA, school and specialists or therapists will greatly assist in devising a plan which provides maximum benefit for end users.

It is essential to draw up a full schedule of the anticipated loose and fixed fittings, furniture and equipment. The rationale for their use, location in the space, space planning and room layouts should be determined. The teaching and learning styles employed in relation to curriculum delivery of all subjects will also impact on the choice and layout of fixed or loose furniture and specialist equipment.

The following considerations should be made for furniture and fittings in relation to the type and range of special educational needs to be catered for:

- subject needs in relation to curriculum delivery, teaching and learning styles
- the use of learning aids and mobility equipment (their type, size, shape and manoeuvrability) and their impact
- the type, range and size of specialist equipment, learning resources and subject display for all subjects
- the type and location of two- and three-dimensional display
- the appropriateness of fixed furniture
- where and when loose furniture will be required
- the type and location of adjustable-height furniture
- the use of adjustable height furniture and accessible workspaces with sufficient space for circulation and for a teaching assistant, as required
- the rationale and impact of providing ceiling mounted or portable hoists
- the need for enclosures for sensitive equipment or pupil safety
- the need for flexible arrangements of furniture for specialist-subject curriculum delivery
- the provision, quantity, location and safe clearance of specialist equipment
- health and safety requirements for specialist equipment
- input and advice from specialists and therapists where appropriate
- input and advice from suppliers

4.4.10 ICT

The effective use of ICT and advanced technologies can maximise social and learning opportunities by promoting individual attainment.

Current and future needs in relation to ICT

There is increasing use of ICT in all teaching and learning spaces. Therefore the requirements for different interfaces, access technology or specialist equipment in relation to the type and range of special educational needs and disabilities of the pupils must be established.

The use of ICT should be considered and, as with all subjects, layouts should be prepared to show that all pupils' needs can be accommodated.

Consideration of ergonomics and space requirements should ensure that the use of computers in relation to adjustable height furniture, and by those who use

wheelchairs and standing frames are all possible.

Position of whiteboards

Whiteboards should be positioned carefully so as to enhance communication and interaction in relation to the size and shape of class bases. This is of particular importance for those pupils who may rely more on their visual sense. The pupils and teacher should be able to see each other and the whiteboard clearly and with ease.

The view of the whiteboard should not be impaired by glare, shadowing or silhouettes, or obstructed by equipment or building structure.

Environmental services and conditions for ICT

Appropriate good-quality lighting, blinds and positioning are essential. Computers should all be sited so as to ensure non-glare conditions.

The use and location of ICT should be separated appropriately from water.

The ICT provider should be involved throughout the design process, so that cable-ways or wireless installations can be anticipated and planned to allow flexibility for the future.

Services distribution must be planned to allow for flexible use of computers within the whole space (not just on one wall or at its perimeter). Ensuring that all environmental conditions are suitable for ICT use is essential.

ICT requirements, likely changes in the future, and requirements for different interfaces and any specialist equipment should be identified. In some cases, CAD/CAM may be used for design and technology. In other cases, video links can be made to the sensory room to deliver programmes relating to specialist subjects. ICT links to other parts of the school may also be made. For more detail, see Section 5.2, 'Information and communication technology'.

4.4.11 Environmental services and technical support

It is essential to provide a comfortable learning environment whilst maintaining a coherent sustainable whole-school approach designed to meet a range of special educational needs.

Designers will need to develop strategies in relation to the type and range of special educational needs and disabilities, which may vary enormously.

The following key issues can act as a checklist for all spaces:

- natural daylighting and orientation with glare and solar control preferred
- good-quality artificial lighting and the most appropriate type(s) of controls
- the means of natural ventilation, its operation and control preferred
- the need for and type of mechanical ventilation and controls
- the means and type of heating and cooling with adjustable local controls
- acoustic quality and the level of sound insulation, absorption or noise control
- water supply and drainage services for hot and cold water to sinks, waste pipes and drainage or sprinkler systems

- health and safety, security, means of escape
- wired services for electrical or electronic power or data communications and alarm systems (for telephone, public address, staff alarms, fire alarms, fire/smoke detection, door alarms and controls, security alarms and detection), electronic ICT services for delivery of curriculum and for SEN
In addition to the above, the following specific issues should be considered for practical specialist subjects.
- higher levels of illuminance are required for detailed work, with a flexible range of provision for daylighting, artificial non-glare luminaires and appropriate task lighting
- rapid extract ventilation of unwanted smells, fumes, heat and dust may be needed, as well as ventilation through opening windows, which should not be fouled by blackout or dim-out material or blinds
- appropriate acoustic quality and sound insulation for specialist spaces, e.g. in design and technology, music and drama spaces and halls for physical education (specialist provision for hearing impairment may be required)
- technical-support services of hot and cold water, gas and electrical services with sufficient power outlets, rapid-extract ventilation and rapid access to emergency power and gas services for cut-off
- for health and safety reasons, ease of access and adequate clearance space for the operation of alarms, fire-prevention and detection devices and for maintenance and emergency work

4.4.12 Building elements – materials and finishes

It is important to provide an appropriate and enriching sensory environment to meet the type and range of special educational needs in terms of fitness for purpose.

Appropriate specifications, careful use of materials, specialist functional details and good-quality construction are all essential. Consideration of sustainability, robustness and durability should be made, as well as of practical maintenance and whole-life costs.

Designers will need advice from LEA or school SEN specialists in relation to the outcome of risk assessments for:

- security measures to protect particular pupil groups or individual needs
- health and safety requirements to be met in practical specialist-subject spaces

It is essential that building elements are appropriate and fit for purpose. For each teaching space this will involve decisions about:

- window type – size, glazing, operation, view out, blinds or blackout
- door type – size, glazing, operation, ironmongery, protection and signage, internal fixed or opening, glazed window or screen, type, size, view
- glazing and acoustic requirements
- general ironmongery – handrails, guarding, protection corners

Designing for accessibility and inclusion is essential for all spaces. This involves careful consideration of materials and finishes as well as of design quality. The

following aspects should be considered in relation to these:

- providing well-organised, wide, clear circulation with routes that are easily identified, understood and accessed, through changes in floor texture and orientation landmarks, clear signage and wayfinding
- allowing sufficient space for circulation for wheelchair users and their support workers or carers, as well as for people with buggies, pushchairs and prams
- avoiding glare from natural and artificial light sources and providing good-quality lighting and blinds suitable for users
- enhancing visual clarity by avoiding visual clutter and using colour and tonal contrast between surfaces (especially for door openings, doors and door handles) as well as to warn and define clearly all surfaces at changes in level or surface, and for equipment, utensils or tools for pupils who have visual impairment
- designing with an awareness of acoustics, and planning for noisy and quiet spaces. Reducing background noise, and understanding the relative need for sound insulation and sound-absorbing or reflecting materials
- using ceiling or soffit surfaces with good light reflectance, acoustic and maintenance qualities
- using smooth, non-abrasive, impact-resistant, easily maintained wall finishes with acoustic absorption at high level and protection corners if required
- using floor surfaces which are hard wearing and easy to maintain, and which have suitable slip resistance and acoustic backing, if required. Avoiding visually confusing highly polished patterned floors

4.4.13 Design quality

It is important to provide appropriate design so as to promote a positive atmosphere for teaching and learning and the active participation of all pupils in school life.

The design should reflect an ambience and character for each space, relating to its purpose and use. A pupil's access to the curriculum is enhanced by the design of buildings. Posing questions such as the following can test whether all criteria are met:

- Does the building help deliver the curriculum or does it get in the way?
- How does the design affect the quality of what goes on in the classroom?
- Is there a 'barrier-free' environment which gives access to each learning environment?
- How easily can pupils get around the school?
- Are there therapy spaces which help to maximise pupils' capacity to learn?
- Does the design suit a variety of needs?
- Does the design give a sensory landscape which 'feels good' and is creative and effective for teaching and learning?

The designer will need to evaluate how to design to meet a wide range of needs, giving a good-quality general provision which is flexible and adaptable and which enables others to adapt and modify the environment if required, to suit their individual needs.

4.5 General teaching spaces

The design of all general teaching spaces will reflect pupils' age-appropriate needs for the relevant teaching and learning activities. The space will need to be divided up with moveable screens, shelving or storage units, loose furniture, fittings and equipment. The choice of these items will convey the appropriate ambience for teaching and learning activities. Any fixed fittings and furniture should be provided at the appropriate scale and fixed at the appropriate height for the age and physical size of the pupils. The teaching space should be accessible for all users including those who use wheelchairs. Minimising fixed furniture, fittings and equipment will maximise the available space for flexible use. Typically, there will be:

- loose tables and chairs to suit a variety of heights and which can be rearranged
- wall-display boards according to the pupils' needs
- a fixed or mobile interactive whiteboard may be provided at an appropriate height, or a whiteboard with overhead or floor-mounted CCTV
- at least 2 computers, ideally for use in any location in the room
- loose furniture to suit a range of pupil needs of an appropriate scale for different pupils and staff
- a range of worktops at different heights, allowing cupboard storage below (either fixed, wall mounted or made up of loose tables or fittings)
- sheet flooring of suitable slip resistance
- sufficient space for temporary and permanent storage of mobility equipment to suit pupils' needs

Primary

The general teaching space should have a clear open area without obstructions. It will not be dissimilar to mainstream early-years and primary bases. Spaces will be used in a flexible way by staff for a variety of teaching and learning activities. Typically there will be:

- a bench and a range of coat hooks at the appropriate height near to the door, as well as a place to store bags and belongings safely
- a wet area with one or two sinks at different heights or with at least one height-adjustable sink, along with suitable slip-resistant sheet flooring locally, as a minimum
- a 'soft area' with carpet, beanbags, cushions and possibly a wall mirror at low level, etc. (carpet squares, cushions and the like can be placed on sheet flooring to suit)
- ways to hang mobiles or textiles from the ceiling without fouling other installations such as light fittings or ceiling-mounted hoists

Secondary

General-teaching class bases will reflect both the older status of pupils, and their use as both tutor bases and specialist-subject teaching spaces for some curricular subjects. (They should reflect mainstream secondary and not primary class bases.) In addition to the above, there may be:

- specialist-subject teaching resources, two- or three-dimensional display, specialist equipment, teaching resources and subject display which will be

differentiated to suit the type and mode of curriculum offered

- a safe place to store belongings
- a worktop range for snack making facilities, if required, with space for a kettle and small fridge, and storage units with knee space for wheelchair users

4.9 Outside spaces

School grounds can provide a valuable range of experiences for learning as well as for recreation. Imaginative planning and design of these areas can greatly enrich the learning environment as well as improve the external appearance of the school and the way it is perceived by visitors and the community.

For pupils with SEN, school grounds can support and enhance all aspects of their curriculum by extending the range of practical activities, providing sensory stimulation and opening up opportunities for developing mobility and independence.

Most outdoor learning is experiential which can be very different from the work inside the classroom. The more school grounds are developed, the greater the opportunity for children to learn and play there.

4.9.1 Curriculum

It is important to ensure pupils' entitlement to a broad, balanced and relevant curriculum. Therefore, a whole-school approach is needed when planning the outdoor curriculum spaces. Consultation with the school will assist in developing well-planned outdoor spaces which enrich the teaching and learning experiences for all pupils. Good-quality design and management of the school environment are, as a result, essential. It is recommended that the designer draws up a comprehensive plan of the school, its site and considers the following:

- the location, configuration, layout and servicing of the school buildings
- the creative, effective use of outdoor space
- the interrelationship of indoor and outdoor spaces
- the effect of different building locations
- the changing pattern of demands through the seasons
- the long-term development plan for the future of the school

Flexibility of use and layout enables the school to accommodate these needs in multi-purpose spaces so that the same outdoor facilities will often serve for both 'lessons' and 'play'.

The design and layout of the school site should aim to meet the demands of:

- **the formal curriculum** providing explicit provision during lesson time for National Curriculum subjects including PE
- **the informal curriculum** creating a wide range of opportunities for play, recreation and social activities, before and after school, and during break and lunchtimes
- **the hidden curriculum** designing the appearance and layout of the school grounds to convey 'positive messages' about the school and its ethos which influence the pupils, staff and visitors who 'read' them

The formal curriculum

The rationale for teaching in school grounds has been provided by the National Curriculum (HMSO, 1995).

School grounds can provide habitat areas, informal social areas and outdoor playing fields which support learning for the various subjects, as outlined below.

English

Working outdoors can help to develop oral and language skills, imagination, reading, writing and learning through stories, poetry or drama. Natural slopes and semi circular arenas or amphitheatre of 10–20 m diameter can be used for performances.

Mathematics

Tasks involving numbers, space, shape, scale measurements and data in the school grounds give a real context for developing mathematical skills. Pupils enjoy and benefit from this practical application. Playground markings used for games can also improve such skills.

Science

Outdoor Science offers multi-sensory experiences in a reactive environment for studying topics such as growth, materials, forces, body, plant and animal life. Features such as ponds, vegetable plots, orchards, copses, herb gardens, wild-flower meadows, bird tables, animal enclosures and compost heaps all give learning opportunities.

History

Exploring the school's past through the grounds can help pupils' understand their heritage, by constructing timelines in the grounds depicting key moments of history.

Geography

Following directions, mapping and fieldwork out of doors provide real contexts for learning. Maps marked on the ground or on walls, signposts, orienteering courses, weather stations, ponds, streams, earth mounds, gardens, heath land and trees all assist study.

Art and Design

Art offers an exciting way of surveying the grounds in a visual way. Opportunities for stimulus for creative work and experiment with different artistic techniques outdoors are all valuable.

Music

Awareness of different sounds can be developed in the external environment. Music can be played out of doors as part of movement, play and recreation or as a sensory stimulus, for example, with musical sensory gardens.

Design and Technology

Outdoor projects can be developed using a range of materials, making different structures as well as providing scope for pupils and staff to work with landscape designers.

Environmental education

Pupils can learn first-hand about the environment and sustainable development. Features, such as ponds, mazes and trees can serve different aspects of environmental study.

Physical Education

Pupils may have few opportunities to engage in physical activities near to where they live. A range of outdoor activities can develop physical competence, social and personal skills.

Outdoor playing fields and hard courts can provide for team games, whilst habitat areas such as nature trails can help to develop independent movement.

The informal curriculum

The generic term 'informal curriculum' is now widely used to describe both the times of day when children are not being taught, i.e. play and break times, and what they do at those times.

School grounds form a significant part of pupils' experience and the informal curriculum can make a significant contribution to social learning. Children today have less freedom and independent mobility than previous generations. They can, however, have regular access to school grounds, which can be a safe haven and offer a range of opportunities, experiences and activities.

It is common to find that the informal curriculum may absorb one-third of the day for nursery-aged children and infants, one-quarter of the day for juniors and one-fifth of the day for secondary pupils.

A clear rationale should be developed by the school which guides the development of informal spaces. In all schools, the pupils should be provided with age-appropriate areas, but it is equally important to be mindful of the range and type of environment which will support the school's learning objectives.

The design should indicate a variety of areas for different types of play and so enable pupils to make choices and engage in different activities at break times. This may include places to move, run, gather or sit, and so spaces for these activities should be designed and integrated into any landscaping.

For example, terraces in hard-surfaced materials or wide steps beside hard play areas can encourage social groups and spectators but can also serve for curriculum use.

Social areas can be provided in spaces around the building. Carefully positioned

furniture in the school garden or outdoor classroom can assist the development of social skills. A quiet sitting area, with or without shade, can be valuable for those pupils needing peace and solitude, for example.

Strategies for encouraging good behaviour and discouraging unacceptable behaviour may need to be considered with the school during the design process.

Any potentially conflicting needs, where one activity can inconvenience others, should be discussed early on in the planning stage so that they can be resolved through the design.

There may be an additional need to allow for separation of the more vulnerable from those pursuing boisterous activities. Boisterous activities may conflict with the need for quiet places, for personal space, for solitude and reflection. Providing quiet bays, however, beside the large area for more boisterous play can enable separate activities to take place without isolation.

Safe, contained social spaces may be essential as situations arise when pupils need time to calm down without being a risk to themselves or others. The space immediately outside of the classroom can be useful in these circumstances though it would probably need to be enclosed with higher fencing. Such enclosures, however, would need to be designed with care and sensitive landscaping to avoid the feeling of caging and containment.

The hidden curriculum

School grounds, through their design and by the way they are managed, communicate messages and meanings which influence children's behaviour and attitude in a variety of ways. The design quality of the external areas will reflect the schools' aims and ethos, which should encourage engagement in learning as an enjoyable activity.⁶

4.9.2 Provision for the range of SEN

Pupils with SEN and disabilities, whether in mainstream or special schools, should be offered the same opportunities as their peers, not only to practise their mobility, social and independence skills, but to take part in school life and the wider community by way of supported, self-motivated, self-directed learning opportunities, as part of healthy development.

All areas must be accessible to all pupils. Access for those with disabilities should enable them to engage in all group activities in the grounds, using the same routes as others. Space should also be provided around activity areas for wheelchairs to manoeuvre. This includes the design of threshold paving to suit wheelchairs, the textures of different areas and the spaces between equipment. Particular aspects to consider are the height of equipment and such features as garden boxes, raised planting beds or ponds.

Providing safe simulations of hazards that pupils might meet outside school can be beneficial to encourage them to develop greater independence. (Grounds for Sharing: a guide to developing school sites LTL). It should also be considered that electrically powered wheelchairs can be a hazard if pupils are still learning to manoeuvre them

⁶ See BB85, *School Grounds* and also *Special Places; Special People – Hidden Curriculum of School Grounds* (WWF, 1994) / LTL.

and they can be driven at speeds which may be dangerous to surrounding pupils. Helping schools plan for such matters will be part of the design process.

Sensory impairment requires greater reliance on the senses unaffected. For those with visual impairment, colour, texture, smell and sound have increased importance as they move around the school environment, and so this must always be kept in mind. In all cases, the use of different materials to touch with hands, feet and head, to see and hear, and the use of contrasting colour, planting, changes in level and other measures can give signals to those pupils with sensory impairment. They can act as warnings, where there are hazards, but also provide signs to help with wayfinding.

Importantly, however, they also bring pleasure and act as a focus for communication between teacher and pupil, a fundamental element of the curriculum.

The specifics may include the use of tactile paving and chimes for those with visual impairment and of other sound generators for those with hearing difficulties. Planted areas and sensory gardens with plants selected for their smell and feel can also be beneficial.

Whilst it is important for all external areas to maximise the potential for sensory stimulation, there may be exceptions to this, for example, pupils with severe ASD where over-stimulation can be a problem. Therefore, some division of spaces or the creation of smaller courtyards will probably still be required for such pupils.

By contrast, pupils with BESD, who need space for self-expression and activity, may need large open spaces and sports facilities, as in the mainstream, as a number excel in physical education.

For some special school populations, appropriate outdoor provision will be similar to that for pupils of the same age in mainstream schools (for example, pupils who have BESD, HI or MLD); but, whatever the type of school, most pupils (including pupils who have SLD or PMLD), will either be able to participate in small team games, races and boisterous games, whether on foot or in wheelchairs, or participate in alternative activities such as archery.

The quality of the design process can be improved significantly by involving pupil participation. This will ensure relevant provision is made to enhance their experience of the outdoors and help them to gain a sense of belonging and ownership.

4.9.3 Age-appropriate provision

Typically, the following outdoor provision is made for the different pupil age groups at each phase of education.

Early years

For nursery or early years, a separate outside space with a secure perimeter, of appropriate scale with low fencing and gates, is required. Provision should be made for a range of experiences, such as planting schemes, which allow for appropriate physical and sensory activities to take place. There should be both hard and soft surfaces, with sufficient space for bulky loose and fixed play equipment. Sand and water play are common, though hygiene and safety will always be major issues with permanent sand pits and pools. The design can help overcome safety problems by,

for example, installing safety surfaces, as necessary, under play equipment.

It is important to understand that adult perceptions can easily be out of tune with those of children, especially for those with SEN and disabilities. Contrasts in scale and minor changes in level can seem more prominent, a wide-open space can be intimidating, and objects are perceived differently. Sensitive watching and listening to children can help to bridge this difference in understanding, through appropriate design.

Primary

For primary pupils, outdoor activities can be adventurous and can support their skill-based learning and enjoyment of play activities. At Key Stage 1, the need for play equipment with safety surfaces for soft landings is essential. At Key Stage 2, the provision of courts or pitches for mini-games and including simplified versions of recognised games for developing the basic skills of throwing, catching and jumping, is invaluable.

In primary special schools, there would normally be direct access from the classroom to the outside. Such areas would combine play equipment with safety surfaces, fixed seating and other fixed features. These could be divided into areas by low fencing and gates, appropriately scaled, to bring variety, though these should not impede supervision (see Section 4.4, 'Teaching and learning spaces').

Secondary

In a secondary school, there would be less play equipment and larger, more open areas. Activities which support and reinforce teaching and learning for National Curriculum subjects offered will benefit from landscaping which reinforces learning objectives. For example, PE should be taught through the six possible programmes of study: games, swimming, gymnastics, dance, athletics, and outdoor and adventurous activities. As such, access to outdoors is required.

Social and recreational spaces should be suitable for the pupils' age and should be appropriate in layout and appearance. A range of different spaces supporting a range of needs and types of activity should be provided.

4.14 Pupils' toilets, hygiene and changing areas

This section covers toilet provision, hygiene areas, and changing rooms. The guidance will be equally applicable wherever pupils with SEN and disabilities are educated.

Proper toilet, hygiene and changing accommodation, in age-appropriate effective environments is vital for supporting health- and social-care strategies, promoting and improving personal-care standards, with dignity, respect and privacy for individuals safeguarded.

Toilet, hygiene and changing areas should be designed to be fit for purpose and located within clean, healthy and safe environments. By using light and colour appropriately, a light airy atmosphere and pleasant ambience can be created for pupils. These can help to promote a sense of self-respect and a feeling of well-being. Staff should also have an efficient, effective, convenient and attractive environment in which to work.

It is essential for the designer to understand the school's approach to managing toileting and hygiene arrangements, in order to establish the correct balance of the different types of provision in relation to the needs for which the school is catering.

Appropriate types of toilet and changing provision should be made for the pupils' age, range and type of SEN and disabilities and the supervision requirements which will vary widely.

A careful analysis of the range and type of current and anticipated needs will have to be made, and provision planned as required under the planning duties prescribed in the DDA.

It will be necessary to plan flexibly to meet such needs. For example, in mainstream schools, planning a store next to a wheelchair-accessible toilet may enable it to be converted into hygiene room in the future, if required.

These should be ascertained by the LEA, the school and the architect and established in the brief.

Careful briefing is therefore needed to determine the extent of provision which will be required to assist pupils' progress towards independence, wayfinding and social awareness. It is recommended that designers and clients visit other schools to assess the impact and usefulness of different layouts. The information gathered will help the team decide what would best to suit their purpose

Detailed plans and elevations of each toilet and changing space will need to be drawn up, showing all items accurately and indicating that from all angles they are accessible. These drawings will need to be thoroughly checked by all parties, including those with responsibility for accessibility. Designers cannot get it right on their own, and specialist advice should be obtained, as appropriate.

As a checklist, the design for the whole school layout will be informed by considering the following factors:

- conveniently located, accessible and safe toilet and hygiene areas which minimise travel distances and loss of curriculum time

- clean, hygienic, well-ventilated facilities designed to contribute significantly to infection control
- appropriate range of facilities to meet the type and age of those with SEN and/or disabilities
- effective configuration of the facilities within the space
- space and layout suitable to ensure that supervision and support by staff is possible
- appropriate accessible arrangements covering independent to fully assisted facilities
- ambience of the design, which should encourage positive behaviour and promote pupils' well-being
- wayfinding to meet the needs of all pupils
- how the environment can assist as a cue to communicate and prepare pupils for the appropriate activities which take place in the space
- models to encourage independence skills and social learning in the wider community

The main issues discussed below should be considered as part of the design approach.

4.14.1 Provision for SEN

It is good practice for both mainstream and special schools to provide different types of general facility, informed by the school's accessibility plan, to cater for pupils, staff and visitors with a wide range of needs,.

The needs of the following individuals and groups of pupils should be considered when designing toileting and hygiene or changing facilities:

- pupils who have SEN or disabilities but who are ambulant and require independent access but may need passive supervision
- pupils who are non-ambulant and disabled, including wheelchair users, who are independent but may need passive supervision or occasional assistance from trained support workers
- pupils with more severe physical disabilities, or those with profound and multiple disabilities, who are entirely dependent upon assistance by trained support workers

Generally, provision of facilities for independent and assisted disabled users should be available, grouped alongside other toilet facilities for all pupils, staff and visitors wherever they may be. These will include toilets, changing rooms, showers and hygiene rooms for pupils, as well as separate toilets, changing rooms and showers for staff and/or visitors (in certain circumstances, there is dual use of facilities for

pupils and adults with disabilities, however, the appropriate management of such facilities are a school responsibility).

Pupils who are ambulant and have SEN (SpLD, HI, VI SLCN, ASD, MLD/complex needs, SLD and BESD) can normally access the same type of facilities as their peers. Modifications, adaptations and specially designed facilities will be required for pupils who have SLD/mobility impairment, PD, PMLD, MSI and in some instances VI (see Section 3.2, 'Different types of provision').

There may be pupils, with medical needs across the range, who will require access to a facility for changing appliances. This may be located within a part of a medical treatment area, where adequate privacy can be provided together with assistance and training. For pupils able to care for themselves, facilities can be conveniently provided in larger wheelchair-accessible wc compartments, or as part of a changing area. The essential requirements are for drainage, sterilisation, storage of tubes and bags and the storage of dressings and toiletries. These requirements for the above should be described in the brief to be provided in the design.

Pupils who have physical, or profound and multiple disabilities (PD/PMLD), will require assisted toileting and changing areas in hygiene rooms.

In such cases, it is essential that sufficient space is allowed to ensure the appropriate manual handling and moving procedures can be made, using mobile aids such as portable or ceiling-mounted hoists.

Good ergonomic design is essential to allow for sequences of activities and manual handling and for varied appropriate transfer arrangements. Reference should be made to HSE's *Health and Safety Matters for SEN: Moving and Handling*, to be published in 2005.

The balance between the sexes of pupils varies in individual special schools, with a predominance of boys in most cases. Careful consideration of the location and type of provision for girls should be made, especially where they may be in a minority. In special schools for BESD, a minority of girls may be of particular significance.

Careful consideration will need to be given to separation of boys and girls, provision with clear sight lines which enhance supervision without reducing privacy, and adequate layout and space to avoid the perception of confinement. Re-entrant spaces off lobbies, where inappropriate behaviour can occur, must be avoided.

The specification and use of robust materials is essential for this type of special educational need.

4.14.2 The age of the pupils

It is essential to design an environment which is age-appropriate, suitable for the phase of education and allows progress towards independence. This should be reflected in scale, layout, choice of fittings, fixtures, furnishings and décor.

The type of facilities, their location and links to other spaces will reflect the age and type of pupil needs.

Early-years class bases will have toilets and changing areas directly off the classroom, regardless of the type of special needs of the pupils.

Thereafter, for primary and secondary accommodation it is recommended that toilet and hygiene accommodation should not be situated so it can be accessed directly off the class base. This is because hygiene, infection control and the potential risk of cross-contamination is a concern, especially if pupils have medical needs or compromised immune system. Additionally, social skills and progress to independence are facilitated by toilets and hygiene accommodation sited to develop these skills and encourage social learning for inclusion in the wider community.

Generally, therefore, access to facilities should be from circulation spaces outside of the class base, nearby, across or along the corridor. Where high levels of assistance and/or supervision are required for the pupils, then toilets and changing areas should not be remote from, but nearby, the teaching spaces.

Wherever a pupil is in the school there must be toilet and hygiene provision within a reasonable travel distance to avoid loss of curriculum time in the class base.

In a special school or resourced provision, the length of travel distance that is reasonable will depend on the type and range of SEN and/or disabilities of the pupils.

Routes should be easy to navigate and 'barrier free'. Pupils should not have to navigate long distances and make awkward journeys if at all possible. The latter is especially important as support staff may have to guide wheelchairs and trolleys, as well as negotiate doors and changes in direction or level.

Generally, the Building Regulations ADM 2004 recommends that any wheelchair user should not have to travel a distance of more than 40 metres – (clause 5.10).

For those with severe physical difficulties, however, a travel distance of not more than 20 metres is suggested, as a guide, with clear lines of sight from the classroom door to the toilet although, preferably, the accommodation will be as close as reasonably possible.

4.14.3 The phase of education

An assessment of the impact on design of the above proposals should be made early on in the design process.

Early Years

For early years, boys and girls may share toilet and changing provision. Usually, toilet cubicles and changing and hygiene areas for younger pupils are a part of a planned suite: they are directly off the nursery or early years class base area, with an external circulation corridor regardless of the type of special needs of the pupils. Sometimes, shared provision between two class bases is efficient and makes supervision easier. It is essential, however, to ensure that good hygienic practices are in place and that these are supported in the design of the physical environment.

For younger pupils, a difference in WC heights is desirable. Smaller-scale children's cubicles with half-height doors allow privacy and passive supervision. Space for toilet training aids, potties and chairs is needed either side of the WC pan, as well as space for one adult and a hoist, if required. It should be noted that the space needed for a portable mobile hoist is significantly greater (2300 mm turning circle) than that

for a ceiling-mounted hoist.

Where there is need for hoisting, sufficient space should be allowed for both the support worker with a child on a changing bed and the hoist when it is not in use. This is of particular importance where portable mobile hoists are used, due to their size. If outward-opening wide cubicle doors to cubicles are used, these must not cause an obstruction in the circulation space. In some cases, consideration of use of plastic-coated coloured curtains across an open doorway to the cubicle for changing/hygiene may enable both privacy and ease of accessibility.

There should be a large enough area in the centre of the suite of accommodation to allow for transfer from wheelchairs to portable or overhead hoists. It is also essential to avoid conflict between cubicle doors, framework, curtains and overhead hoists.

A larger cubicle, or a screened space or curtained area can contain a small adjustable-height changing bed in the corner against a wall for nappy-changing. A disposal bin and, if required, a wash-hand basin should be provided. Sometimes a changing bed, shower tray and hose attachment is also provided.

In addition, readily accessible storage for personal belongings, clean clothes, plastic gloves, proprietary wipes, creams or lotions and bulky items such as nappies, should also be provided in convenient places within the suite of accommodation.

Other hygiene fittings may be required for changing and cleaning younger children, such as a height-adjustable fixed or folding table with a guard rail, wall-mounted drop-down shower table or a smaller-scale height-adjustable shower beds and sluice. These must be ascertained early on.

An assessment should be made on the suitability of these in relation to both the needs of the child and those of staff to ensure that health and safety requirements are met.

For hygiene for younger children, a deep cleaning sink which is connected to foul drainage can be provided.

Deep sinks should be sited suitably. It would be inappropriate for a deep sink intended for washing soiled children, however young, to be in a classroom or any other communal area. The bodies responsible should decide what degree of privacy is appropriate.

Arrangements for transfer of soiled clothes (for example, in plastic bags) to laundry should also be considered. A clinical wash-hand basin with lever taps for support staff should be provided.

Primary

Boys and girls may share toilet and changing provision up to the age of 8 years old (see below - The Education School Premises Regulations 1999).

There will be some features for primary provision which will be the same as for early years. For younger pupils, however, toilet and hygiene accommodation is generally sited close to the class base. For example, provision between two class bases with access from just outside of the class base is sometimes efficient and makes supervision easier. Alternatively, access to toilets just across the corridor or a short distance along a corridor, may provide progression in the development of mobility

independence skills.

Some pupils are uncomfortable and have experienced discomfort being enclosed in a large room (i.e. a feeling of 'being shut in'). Smaller, scaled-down cubicles with half-height doors and lower, smaller WC pans can be provided as these will allow for privacy, as well as passive supervision. Standard packages of fittings for wheelchair-accessible toilets are available, but where these are for smaller children, their needs should be made clear when specifying these products.

Nevertheless, sufficient space should be retained for toilet-training aids, mobile equipment and assistance by the support worker (see above).

At junior level, some schools may want a mixture of child- and adult-sized sanitary ware, also to serve as part of a life-skills-learning programme. Provision of showers for pupils under 11 is also often desirable.

Secondary

It is essential that pupils are trained to progress with independence and social awareness and to adopt patterns of behaviour which will encourage inclusion in the wider community. For older pupils, the location of the provision will be much more dependent on the particular special needs of the pupils.

Inclusion will always require disabled and assisted provision, with change facilities to be available close to the class base but grouped with other toilet and changing accommodation.

If there is a specialist resource base, for example, for pupils who have PMLD, then proximity to hygiene facilities will be very important.

Where a high percentage of the school population requires assistance, such as in special schools, the location, layout and design of hygiene rooms is crucial to support the inclusion of pupils with PD and PMLD with their age-related peers. As a result of this, such hygiene, care or changing facilities will be required at more frequent intervals.

For pupils in special schools for BESD, the design and layout of the toilets and changing accommodation should be conveniently located, not remote and clear sight lines should ensure good supervision. The layout and design should be attractive, robust, safe and secure to encourage positive, responsible behaviour and also allow good passive supervision.

Clear lines of sight from the class base door to the toilet door can assist with supervision for those gaining independence skills, or those who may wander away.

The number and type of facilities required is described in more detail, as set out below.

4.14.4 Numbers of toilets and changing areas

For the health, safety and well-being of all pupils, there must be enough sanitary facilities, hygiene, shower and changing areas to ensure easy access, convenience and independence, wherever possible.

The Education (School Premises) Regulations 1999 set out the basic minimum statutory standards for local-education-authority-maintained mainstream, special schools, boarding schools and independent schools.

In addition, Guidance Note 'Standards for School Premises' (DfEE 0029/2000) clarifies these requirements with additional guidance. These are summarised below:

Washrooms for pupils must have a basic number of sanitary fittings. For mainstream schools, the number should be equivalent to 10% of the number of pupils who are under 5, plus the number equivalent to 5% of the number of pupils who are 5 and over. For special schools, the number should be equivalent to 10% of the number of pupils whatever their ages

In all cases, the result of these calculations should be rounded up to the nearest whole even number. The basic number of sanitary fittings may include those contained in a washroom provided for persons using the premises who are disabled, if they are also provided for pupils.

The Guidance Note also requires that:

- In the case of pupils who have not attained 5 years, at least one shower, bath or deep sink shall be provided for every 40 pupils
- For all children of 8 years and older there must be separate male and female accommodation
- Changing accommodation, including showers, should be provided for pupils who have attained the age of 11 years and who are in receipt of physical education, and that accommodation shall be readily accessible from school grounds and from any other accommodation for PE within the school buildings.

Compliance with the Building Regulations ADM 2004 will also need to be considered and will affect the numbers of toilets and the intervals of 40 m at which they should be provided.

Additional provision for pupils with disabilities will often be necessary in order to meet pupil needs, however, as the health, safety and well-being of the pupils are paramount. Further details are set out below in order to assist designers in making the appropriate provision. The numbers of toilets will need to be worked out, with the school taking all of the above factors into account.

4.14.5 Sizes of toilet, hygiene and changing spaces

In all cases, there should be sufficient space for the individual users, support staff, all necessary fittings, equipment, hygiene materials and disposal bins.

Reference can be made to the Building Regulations ADM 2004 and BS8300 for standard layouts for accessible toilet cubicles. These are designed based on survey study information of mainly adults and very few children, therefore, they will be appropriate for secondary-school pupils and staff. It is not recommended to scale down the ADM 2004 standard WC layout for primary-school-age children because they may be larger than the average for their age due to their medical condition or disability.

Consideration should also be made that the use of standard-sized rooms for some compartments may assist with long-term flexibility and adaptability in the life of the building.

4.14.6 Shape of toilet and hygiene spaces

The shape of the toilet and hygiene and changing accommodation should be large enough to enable all activities to take place, incorporating suitable accessibility and functional layouts for adequate supervision.

Space-planning layouts should be developed so that the ergonomic arrangement of spaces to carry out individual tasks and sequences of tasks can be assured.

Well-proportioned spaces will improve functional operations and performance for staff and enable pupils to feel comfortable and contribute to a positive ambience. Long, narrow spaces with awkward inaccessible corners or shapes may be difficult not only for supervision but also for keeping clean and so these should be avoided.

The choice of ceiling height will be critical for the installation of hoists (generally 2.6–2.8 m is preferred and 2.4 m is a minimum, however it is imperative to check with individual manufacturers for their requirements). Regular, compatible shapes will enable adaptability and flexibility for the future

4.14.7 The different types of toilet and changing provision

The appropriate range of toilet and changing facilities should be provided to meet the needs of all pupils. Therefore, the designer should establish, with the LEA and school, each relevant group of pupils and the type and range of accommodation required to meet their needs.

Overall, the types of provision include toilet facilities, hygiene rooms and changing areas directly off a circulation area. These can be accommodated by using any, or all, of the following:

- single rooms, for individual use, directly off a circulation area
- a range of different individual cubicles, for use by a group of pupils as part of a suite of accommodation, directly off a circulation area
- a designated room for that purpose directly off a circulation area

4.14.8 Toilet facilities: WC fittings, cubicles and compartments

The spatial and functional requirements for the fixtures and fittings for these facilities will be quite different, depending upon the different user needs, which fall into the following three categories and are discussed in more detail below:

- **independent use by ambulant pupils** standard toilet cubicles, as for mainstream schools, are appropriate for independent ambulant pupils with SEN and disabilities.

- **ambulant disabled pupils** who need independent access with passive supervision. Typically, a compartment with door opening outwards is 800 mm wide and 1500 mm long, with grab rails internally and a door opening outwards (see BS8300, Figure 55).
- **non-ambulant people with disabilities** who are wheelchair users need independent access to facilities (although space for assistance is required, for example in the event that the panic alarm is used). Typically, a compartment for a unisex accessible corner WC layout is 1500 x 2200 mm with alternative left-hand and right-hand layouts provided allowing different directions of approach by the user (see ADM 2004, Figure 55).

Assisted access will be needed by some pupils, both ambulant and wheelchair users, including young children. Staff assisting will need sufficient space for full access around the toilet pan and space should be allowed and provision for a ceiling-mounted or mobile hoist which may be needed.

Typically, unisex, accessible and self-contained rooms with a peninsular WC pan for assisted use can be provided in a space 2400 x 2200 mm (see BS8300, Figure 59).

Alternatively, a toilet cubicle 2000 x 2000 mm, with a centrally positioned WC pan, will provide sufficient space for assistance in most cases.

In other cases, side-transfer arrangements from the wheelchair requires there to be a space between the back of the WC pan and the wall behind. Some pupils with poor head and trunk control may need additional proprietary support aids or chair commodes. These should be located to ensure privacy and be adjacent to changing/disposal facilities.

For all of the above, however, accommodation modifications and adaptations may be provided, which include:

- wider, outward-opening doors and larger cubicles for those needing assistance
- visual contrast, tactile signs or cues and mobility training facilities for those who have sensory impairment
- adequate lighting and light fittings
- floor and other surfaces which are glare-free, non-slip and easy to clean

4.14.9 Hygiene rooms

Such provision can be made in a designated room, or as part of a hygiene room or changing room. An assessment should be made for the required level of provision for the appropriate facilities around the school, within reasonable travel distances, so as to ensure accessibility of the whole school.

In all cases, the location, size, layout and fixtures of facilities to meet special needs demands careful and detailed consideration. Hygiene and changing rooms for older pupils and adults will vary from those described above.

Hygiene provision can be classified by type for all phases of education:

General facility for users with disabilities

This facility for users with disabilities may be provided for staff, visitors or pupils, for example in a mainstream school where no other facilities are provided. It will cater for use by only one person using the facility at any a time, although adult helpers may be in attendance.

It must lock from the inside, and open onto a circulation space other than the stairs. It will have an accessible toilet, a wash-hand basin with lever taps and a shower with a seat.

The space must be designed for the needs of the person who is disabled. Needs should be anticipated as far as is practicable and reasonable, but the requirement for assistance and provision of hoisting may vary. For example, sometimes a deep sink is provided in such a room instead of a shower or sluice. For this type of facility, the standard that washrooms for staff and visitors must be separate from those of pupils does not apply, however the appropriate management of such facilities are the responsibility of the school.

Typically, this may be 2.5 m x 2.4 m (see ADM 2004, Diagram 24) or 2500 mm x 3100 mm (BS8300) for independent use with a ceiling-mounted hoist. A hygiene room with a space of 3400 mm x 3400 mm will facilitate a variety of layouts for either a corner WC and shower layout for assisted layout peninsular WC and shower layouts with a ceiling-mounted hoist and space for a changing bed.⁷

Hygiene room for wheelchair users

This provision is required for pupils who are wheelchair users and need access to a shower bed connected to a sluice directly to foul drainage. For this type of provision there will be a ceiling-mounted or mobile hoist and a clinical wash-hand basin with lever taps. There should be space for one or two adult support workers. The school may need a mobile height-adjustable trolley in which a pupil may sit for showering and which allows helpers to assist from both sides. Allowing room for more than one adult helper and bulky lifting equipment pays dividends. Mobile height-adjustable trolleys suitable for both showering and changing can be safer for both pupils and staff than fixed-height changing tables and can discharge directly over a sluice into the foul drainage system.

Typically, a space of 3.5 m x 3.5 m, or 4 m x 4 m will suffice.

Hygiene rooms for wheelchair users with disabilities

This type of room is required for pupils who are wheelchair users and who require a provision which is a combination of the two examples described above. This will comprise a self-contained suite of accommodation, with a corner or assisted WC pan, a wash-hand basin, a mobile changing shower bed with sluice and a changing bed. Such spaces would be suited to a variety of provision for independent and assisted use, learning and training. It also provides an environment which reflects a similar model to domestic or general public facilities, as opposed to hospital clinical areas.

A separate, lockable, enclosed hygiene room of sufficient size is the preferred arrangement. In other cases, where hygiene and toilet accommodation is part of a

⁷ Hampshire County Council School Inclusion Brief, 2004.

suite with controlled access, there should be a cubicle, or an area which is curtained off (use of temporary screens positioned around the door entrance for privacy, could also be made, if appropriate).

An area of about 20 m² and typical dimensions and room sizes which enable accessibility are:

- 3.7 x 5.0 = 19 m² / 4 x 4.8 = 19 m²
- 3.7 x 5.4 = 20 m² / 4.5 x 4.5 = 20 m²

There should be sufficient area which allows for transfer by mobile or ceiling-mounted hoists and temporary storage of a wheelchair and adequate space for two support workers. Careful planning should ensure that there is no clash between curtains, cubicle framing and hoists (see 'Hoists' in Section 5.1.5).

Generally, hygiene/changing spaces can be unisex, i.e. used for a male or female pupil on separate occasions, provided that there is suitable privacy, access and appropriate school management procedures to ensure proper use.

Hygiene rooms should be self-contained and general circulation routes must not pass through such areas.

Some schools may want a bath in the changing areas as part of developing life skills and the requirements should be stated in the brief.

4.14.10 Wash hand basins and personal care for pupils

Facilities for washing hands should be in close proximity to WCs and should allow for supervision and training of pupils to develop good habits of self-care. Specially designed wash-hand basins at a fixed height for accessibility of adjustable-height wash-hand basins can be provided according to the range of pupil needs.

The location of soap dispensers and paper towel dispensers should be set out (alternative means of hand drying will need to be discussed if there is a risk of pupils blocking toilets with paper towels). Warm-air hand driers can be used but cross-infection risks should be assessed.

4.14.11 Hand-washing for support staff

Provision for clinical wash-hand basins and hand drying for staff should also be made. Facilities for washing hands should be in close proximity to WCs and hygiene areas as a part of infection control and hygienic practice. This should be a clinical washbasin with lever taps. Paper-towel dispensers and disposal bins are all appropriate.

Exceptionally, there may need to be provision of a wash-hand basin in the cubicle, if there is a high risk of transfer of contaminated waste on a person.

The location of soap dispensers, paper-towel dispensers, hand cream, alcohol wipes, alcohol cleansers and plastic gloves should be identified and provided for in the design and all fixtures clearly shown on elevation.

Hygienic arrangements for the storage of clean materials, disposal of soiled

dressings and transfer of clothing to laundry, should be incorporated.

4.14.12 Disposal of waste products

The location of facilities for waste-product disposal should be considered as part of the brief, which should set out requirements for the designer which ensure that hygienic arrangements are made. This will involve the consideration of the disposal of soiled nappies/liners or sanitary products in bins (clinical waste bins are usually inside cubicles) and the transfer of soiled clothing to the laundry (usually in plastic bags).

Designs should incorporate suitable provision for various types of waste disposal containers, suitably identified according to the type of waste and the method of disposal. Disposal bins should not be placed in the transfer area for a wheelchair user.

Where clinical waste accumulates in small quantities daily, suitable disposal containers should be provided. Clinical waste should be properly sealed, labelled and kept secure, before removal as reasonably practicable (and preferably not less than once a week). Designers will need to consult the school and local PCT and ascertain the exact arrangements in each case. (Reference can be made to *Safe Disposal of Clinical Waste*, HSC, 1995)

4.14.13 Laundry

In most special schools, and in some resourced provisions attached to a mainstream school, a self-contained laundry facility will be required. This could be a room of about 6 m² subject to its use.

Provision can be made centrally, or laundry spaces can be incorporated adjacent to, but separate from, each hygiene space. In this case, the arrangement works well where machines fit under a worktop with spare clothes storage in boxes on shelves above. Such a layout will avoid the mixing of clothes that can occur with a central laundry.

4.14.14 Changing areas and showers

Pupils' welfare may be a particular issue when showering and changing, and accommodation needs to balance the need for privacy and supervision as well as be cost effective. Generally pupils' changing rooms should be separate from those for staff and visitors.

Nowadays, general good practice is for individual shower cubicles.

A number of shower facilities should be available for ambulant and non- ambulant users with independent and assisted access, as appropriate. Stringent privacy may be required for some pupils due to exceptional special needs or religious beliefs.

Many pupils with mobility impairments may prefer to use the same facilities as their peers, but with modifications, e.g. clothes hooks at lower level.

Changing and shower areas can be classified by type and purpose as follows:

- dry changing rooms and toilet accommodation for PE or drama with associated shower areas
- separate boys and girls dry changing areas next to the sports/movement hall
- wet changing rooms and toilet accommodation for hydrotherapy with associated shower areas

Some changing rooms and spaces can be designed as unisex provision to be used by either boys or girls on different occasions provided suitable access is built into the design for privacy.

Suitable, accessible hygiene/changing rooms should be provided for both examples described above. Changing areas with an assisted toilet, a shower which is wheelchair-accessible and a bath or shower trolley, are a necessary provision.

4.14.15 Changing rooms for PE or drama

Separate boys and girls changing areas should be provided adjacent or close to the assembly/sports/PE/movement hall, and also within easy travelling distance to outside sports and activity areas.

The changing area will be screened with benching and coat hooks for dry changing for PE or drama. There will also be a separate wet shower area with individual cubicles and benching.

The showers should have centrally controlled thermostatic water so that pupils cannot tamper with controls. Provision for storage for dry and wet towels, and arrangements for their disposal, should be made.

The designer should establish the extent of wheelchair-accessible accommodation which is required and the level of assistance needed. As a general principle, the designer should make the general male/female changing room wheelchair-accessible to provide for choice. Toilet and hygiene accommodation will be provided as part of this, in close proximity to the hall (refer also to Sport England guidance – see References).

4.14.16 Changing rooms for hydrotherapy

Separate boys and girls wet changing areas, which can be accessed from the general circulation corridor with access from the external corridor areas to changing area and then to the pool area, are required. Similar accommodation to that above will be provided between the entrance and the pool area.

In most special schools where pupils need assistance, hoisting to the pool from the changing area will be required, preferably with a ceiling-mounted hoist and for a limited distance in order to preserve the pupil's dignity and respect (this provision will be in addition to a separate poolside hoist which may be used independently or with assistance).

In addition to showers in the changing room, there should be foot showers to the pool

area and, where required, entry poolside showers.

Non-slip tiled floors with visual contrast to the tiled walls should be provided (refer to BS8300).

For the design of any ramped areas, reference should be made to DfES Constructional Standards, BS8300 and current BS or DIN slip-resistance test information in relation to the individual materials and proposed situation.

4.14.17 Fixtures, fittings and finishes

The correct specification and location of fixtures and fittings is crucial but also difficult. Again, the age of the pupil is important to select the appropriate items.

Standard packages are also available for change/shower trolleys, with appropriate foul-drain connections.

Toilets, urinals and handbasins should be selected to reflect the age of the pupils. All levers, handles, dispensers, etc. should be suitable for use, according to the type of need, such as for physical disabilities or for behaviour difficulty, as appropriate.

Proprietary cubicle and ductwork systems designed for children are available and work well. They introduce colour into the space, as well as allowing supervision whilst respecting dignity. They also conceal all pipework whilst providing maintenance access. Shelving for spare clothes and disposables can also be incorporated neatly.

For other fittings, e.g. benching with clothes hooks in wet and dry changing areas, standard items are available.

4.14.18 Infection control

There are five routes of transmission by which infection can spread between people:

- **contact** Direct or indirect contact with an infected person (contaminated door handles and laundry)
- **droplet** Micro-organisms emitted in droplets of liquid when people sneeze or cough
- **airborne** Pathogens carried in the air, droplets which evaporate, or on dust particles
- **common vehicle** Disease carried in water or on food (legionnaire's disease bacteria breed in air-cooling towers and water transmitted in a mist in the building)
- **vector-borne** Transmitted by animals and insects (spaces should be sealed and surfaces cleaned to avoid food sources)

Designing for a clean, safe environment involves having an understanding of the role of infection control in the environment and the 'designed-in' infection control. The following considerations should be made for these issues:

- appropriate design, accessibility and space contribute to ease of cleaning and maintenance (space for bins, access for cleaning)
- design of floors walls, ceilings, doors, windows, interior design, fixtures and fittings for easy access, cleaning and durability
- surfaces that facilitate easy cleaning are smooth, hard and impervious

Materials and finishes should be selected to minimise maintenance and be fit for purpose. All finishes in medical, hygiene and food preparation areas should be chosen with cleaning in mind, so smooth non-porous water-resistant surfaces are required.

Many children in special schools are vulnerable to infection. Key infection control policies should be in place and implemented in the planning of a special school and the design of the building should support these, as appropriate. In particular, school designs should facilitate and support practices for the:

- safe handling and disposal of clinical waste
- housekeeping and cleaning of all pupil areas
- outcome of catering and food-hygiene policies
- outcome of maintenance policies

Managing cross-infection is a complex subject, but there are certain practical measures which will tend to reduce risk. The following relate specifically to environmental and planning issues:

Hygiene, WC, shower areas, cleaners rooms, areas holding soiled clothes or clinical waste and laundries should all be mechanically ventilated and be slightly negatively pressurized relative to adjacent spaces. This is, in any case, desirable for control of odour.

Wash-hand facilities should be provided in areas where soiled materials or spillages will be dealt with, and in all hygiene areas

Food and drink preparation areas should not be combined with laundries or hygiene areas. Dedicated laundries are preferred. Soiled clothing and clinical waste should be held in separate dedicated areas.

Cleaners' stores should be provided dedicated to hygiene areas, as well as general cleaners' stores, so that equipment used in the hygiene areas is not used elsewhere. Cleaners' sinks should be provided in the cleaners' stores.⁸

⁸ See *Infection Control in the Built Environment* (NHS Estates, 2002).

6.1 Project-planning

The design for building a school should maximise learning opportunities, provide curriculum access, improve teaching environments, encourage social and personal communication and give a good sense of purpose and sense of place which enhance pupils' well-being.

From the briefing process, as described in Part 4, there should be a 'good fit' between the designated educational priorities and the accommodation to be provided.

It is essential, therefore, that educational value and fitness for purpose are established as a priority within the brief. As such, there are underlying principles which need to be observed and addressed within the design. A school has to ensure that:

- pupils with SEN can access all areas and aspects of the of the curriculum
- pupils' healthcare and social needs are adequately maintained at school
- pupils experience the benefits of a well-designed school building

With regard to the previous chapters, specific accommodation requirements will have been identified and these will inform the brief. The main priorities for developing the design scheme can be summarised as follows. There should be:

- age-appropriate provision which allows progression through phases of education
- sufficient tutor bases and general teaching class bases for the number of pupil places and the number of groups which are to be established, which are usually much smaller in special schools
- adequate learning resource bases, such as small group rooms, library and ICT sensibly distributed around the school
- sufficient practical specialist subject spaces and ancillary support spaces to maintain the delivery of a broad, balanced and relevant curriculum
- separate accommodation for dining and social use
- sufficient accessible toilets, hygiene and changing areas, suitable for the type and range of special educational needs and disabilities
- suitable medical and therapy facilities to support a range of needs
- appropriate and convenient room relationships for effective teaching and learning, as well as efficient day-to-day management of the school
- appropriate staff accommodation to allow for maximum flexibility of use and accommodate the greater numbers of staff working in special schools
- accommodation to support effective management of, and oversight of, school facilities and their maintenance

- symbiosis between inside and outside which afford opportunities for supporting the formal and informal curriculum
- a balance between security and accessibility for internal and external environments
- due consideration to producing a friendly environment for children and young people with SEN and disabilities
- a simple, easily understood layout so that children can fix a geographical map in their mind, with clear points of reference to make wayfinding easy
- accessible internal and external circulation routes, with reasonable travel time and distance, safe secure access and egress, and planned to avoid conflicting needs.
- consideration of extended school and community use

Size of class bases

Class bases are sized for therapy and specialist support work to take place, in the class base and for the inclusion of pupils who have PMLD.

If there are to be specialist resource bases which support pupils with a particular SEN on a timetabled basis, then the class base can be reduced by 5 m² and a separate base of 60 m² can be made accordingly. There may be, however, some loss of flexibility and adaptability for the future with a smaller class base.

It is recommended, however, that the size of class bases not be reduced below 50 m² for BESD and 60 m² for SLD, PMLD and ASD (this is because smaller class bases do not function well for teaching and learning and are both less flexible and less adaptable for the future).

It should be borne in mind, though, that should class bases be reduced in size, pupil and teacher numbers may also have to be reduced. If smaller groups are required, this will have significant impacts on accommodation, because more spaces may be needed and also flexibility and adaptability for the future may be compromised.

Size of practical specialist spaces

In certain exceptional circumstances, practical specialist subject may have be taught in small groups or half groups (4 pupils), for example in a small special school. In such cases the room size should be no less than 50 m². Alternatively, a space of 65 sq m may be arranged and fitted out to deliver two compatible practical specialist subjects. These options mentioned above will require very careful detailed space planning for accessibility and curriculum delivery as well as health and safety. Any such requirements should be identified at the outset and must be written into the

Where community use of a school facility is other than on the school site, the school may wish to provide the minimum area for PE and movement (120 m² at primary or 140 m² at secondary level),

In such cases, it is suggested that the large group room for music/drama and/or the

dining areas are planned adjacent to the hall with acoustic, sliding, folding doors to allow flexible use facilities and to make available a much larger space when required.

Larger schools

A larger school (100–220 pupils) will have more tutor bases and general teaching spaces if pupil-group sizes remain in the typical standard range (see Part 4 Table 11) and the same basic provision for practical specialist subjects will be required.

The following points should also be considered:

- the size of the dining provision may need to be increased to ameliorate the need for phased dining and any subsequent curriculum time loss
- the number of toilets will need to increase, and there may need to be revision of the hygiene and changing areas, depending the SEN ratios (of ambulant to non-ambulant and independent to assisted pupils)
- a separate drama studio and music space may be required, but the rationale for this should be explicit
- if the school is open for community use, there will be a need to reassess all sizes in relation to the areas that will be required

Where a special school is to be co-located on a primary mainstream school site, the following points must be considered if pupils with more complex needs are to be included in mainstream classes.

Primary co-location

BB99 provides a basis from which those managing co-location can adopt a sliding-scale model, depending upon the number of pupils, group size and classroom size, (i.e. standard class base from 57 m² to 63 m²).

Where there are special and mainstream populations, but with separate identities, in one school building, it may be preferred to reduce the size of the special class base by 5 m² in order to increase the size of the mainstream class bases to support the inclusion of pupils with a wide range of needs, (i.e. standard class base is 62–68 m²).

Practical specialist spaces can be shared and, if appropriate, joined together to support inclusion between the two schools, although to ensure suitable access these must be of sufficient size. For example, a practical specialist space would then be 24 m² (BB99) + 25 m² (BB77) = 49 m².

Accommodation can be shared for PE, music and drama, if the school consider that each group will have sufficient timetabled access.

Secondary co-location

BB98 provides a basis from which those managing co-location can adopt a sliding-scale model, depending upon the number of pupils, group size and classroom size, (i.e. class bases of 56–63 m²).

Where there are secondary special and mainstream populations, but separate

identities, it may be preferred to reduce the size of the special class base by 5 m² in order to increase the size of the mainstream class bases to support the inclusion of pupils with a wide range of needs (i.e. class bases of 61–68 m²):

Shared use of mainstream specialist subject rooms is possible provided that facilities are accessible with suitable workstations, with sufficient size, storage and timetabled curriculum access for pupils (or as an alternative co-located specialist subject rooms divided by sliding, folding, acoustic partitions so as to enable a more inclusive teaching and learning can be considered).

LEA officers and architects/designers should familiarise themselves with the type and range of pupils with SEN and disabilities by visiting the existing special schools and other similar schools which have been co-located in order to gain a better understanding of their essential characteristics.

A coordinated development plan can be prepared which provides a rationale for designing and planning the project and fulfils the requirements set out in the educational vision and the LEA and school strategies.

LEAs and designers will need to review schemes at different stages in the design process, ensuring frequent monitoring during the procurement and construction stages of the school building.

At each stage, a 'signing off' the agreed design scheme should be made, any amendments recorded and the impact monitored. School Specific Design Quality Indicators can be used to brief and evaluate schemes and these can be further developed and adapted for SEN and disabilities.

6.2 Typical model schedules

The following typical schedules can be used as models against which LEAs can develop their own schedules in relation to the identified local needs. The typical model schedules provided are for:

- a primary special school providing for a broad range of special educational needs
- a secondary special school providing for a broad range of special educational needs
- an all-age special school providing for a broad range of special educational needs
- a primary special school providing for pupils who have behaviour, emotional and social difficulties
- a secondary special school providing for pupils who have behaviour, emotional and social difficulties

BR3 BB77 Typical schedule of accommodation for a 2FE Broad Range Primary Special School for 109 pupils who have complex needs SLD/PMLD/ASD, including a 13 place nursery. March 05

This model is intended as a guideline, to form a basis from which LEAs will build up their own schedules for schools to suit local needs and, as such, the area per pupil will vary accordingly. The model allows for consideration of entitlement to curriculum, therapy as access to education, extended schools, community use, multi-agency working, school workforce and the increased numbers of adults in schools.

Pupils: The special educational needs which these pupils have will cover a wide range from MLD/complex needs and SLD to PMLD or severe ASD. Most of the children will have sensory impairments, multiple disabilities including physical difficulties and learning difficulties with different and sometimes conflicting needs. These pupils should be accommodated in the learning environment within an overall inclusive educational setting. In the future it is anticipated that pupils with MLD/complex needs may have resourced provision in mainstream schools and that only those with statements for the most severe SEN will be in special schools, which will function actively as part of the wider local community of schools.

Staff: headteacher, deputy head, 13 teachers, 13 teaching assistants, 4 learning mentors, 6 statemented support workers, various numbers of visiting professionals, part time school nurse, numerous SMAs, part time technician, premises manager, 3-4 kitchen staff, cleaner; overall 90-100 staff, many of whom are part time or visiting specialists.

Schedules: This typical schedule allows for outreach and training, extended school use and some community use. The school has a nursery as part of early intervention. There are two classbases for each year to allow for a variety of different pupil groupings or teaching methods according to pupil needs and local needs. Therapy as access to education takes place in the classbases, small group rooms and specialist therapy rooms. If there is a high % of pupils who have PMLD or severe ASD specialist accommodation needs will have to be reflect this. In some cases, in order to meet particular needs of pupils, classbases may be reduced in size by 5m2 and this provision used to form additional specialist bases, however, this may have the effect of decreasing the flexibility and adaptability of the main classbases.

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Nursery					
Class base	75	13 fte	1		75
Small group room	8		1		8
Kitchen	8		1		8
Teaching resource store	4		1		4
Mobility equipment/ buggy store	4		1		4
Pupil toilets	24		1	Includes hygiene	24
Staff toilets/change	4		1		4
Visitor/disabled toilet	4		1		4
Laundry	6		1	Infection control and medical needs	6
Clean store	2		1	Infection control and medical needs	2
Dirty store	2		1	Infection control and medical needs	2
Cleaners store	2		1		2
External store	9		1		9
Subtotal					152
General teaching spaces					
2 Classbases each year general teaching KS1 Y1 & 2	65	8	4	All activities in classbase with computers, quiet corner, play, lockers coats and bags. This allows for full or partial inclusion of pupils with ASD or PMLD.	260
Classbases general teaching KS2 Y3 4 5 6	65	8	8	As above with practical bases	520
Practical and performance teaching spaces and group rooms					
KS2 Food Tech	25	4	1	Room between classbases for concurrent use, safety and hygiene.	25
KS2 Practical/multi-purpose	25	4	1	Room between classbases for concurrent use, safety and hygiene.	25

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Music drama/large group room	65	16	1	Drama music and extended school use are possible with sliding folding doors to the hall.	65
Hall	120	96 + 13 + local school inclusion	1	Assembly PE sport movement. Use for dining inhibits curriculum use. If sliding folding doors to dining then the combined hall/dining enables Sport England 180 sq m sports hall 1 badminton court standard if height is 6.1m, if this type of community use is desired.	120
Small group room 1 per 2 class bases/ min 2 per keystone	12	2-3	6	Focussed learning, behaviour management and respite	72
Learning resource area					
Library/ICT	15	4	2	Separate spaces or combined interactive learning	30
Dining, social and meeting areas					
Dining	100	96+	1	assuming higher % PMLD. Separate space to allow for more curriculum use of the hall and for social skills training. Also enables school clubs, extended school use and sport community use in conjunction with hall possible.	100
Kitchen	40		1		40
Servery	10		1		10
Kitchen office/store	6		1		6
Kitchen toilet/change	6		1		6
Kitchen cleaner	2		1		2
Therapy spaces, including communication and medical					
Medical Inspection	20		1	First aid and rest room.	20
school nurses room	30		1	nurses room needed if high % PMLD.	20
Physiotherapy and other therapies	30		1		30
Sensory room	24		1	Or 2 rooms white and dark at 12 sq m	24
Soft play	30		1		30
Hydrotherapy	85		1	24 sq m actual pool with 2-2.5m wide surround. For community use 72 sq m pool 144 sq m pool hall	85
Storage for teachers and pupils					
General teaching resources storage	6		12		72
Food tech resources store	4		1		4
Practical/multi purpose resources store	4		1		4
Library store	4		1		4
ICT store	4		1		4
File server	4		1		4
Drama/music store	8		1		8
Chair store	8		1		8
PE store	10		1		10
Community use store	10		1		10
Kitchen food store	6		1		6
Kitchen refuse store	6		1		6
Physiotherapy store	4		1		4
medical store	4		1		4
oxygen cylinder store	6		1		6
Visiting Professionals store	2		1		2

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Meeting/training room store	2		1		2
Clean store - laundry	1		4		4
Dirty store - laundry	1		4		4
Pool store	6		1		6
equipment store	20		1		20
Mobility equipment storage bays	10		8		80
Admin store	4		2	Stationery and secure records	8
Teaching resources store	20		1		20
Premises store/technician	10		1	Includes SEN technical aids	10
Cleaners store	2		2		4
General stores	10		2	Bulk items	20
External store	10		1	Sports and play equipment	10
Exetrnal maintenance store	10		1		10
Pupils toilets and changing areas					
Pupil changing (dry) - Hall	12		2	May need to be larger if community use	24
Pupil Toilets	20		8		160
Pupil Hygiene	20		4		80
Laundry	4		4		16
Pupil changing (wet) shower toilets lockers - Pool	30		2		60
Staff areas including facilities for inreach and outreach work					
Visiting Professionals Office	15		1		15
Meeting/training room	25		1	Multi-purpose	25
Parents room	15		1		15
Staff change and lockers	10		2		20
Staff change - Hall	4		2		8
Staff change - Pool	4		2		8
Disabled toilets	4		2	additional may be required to meet Building Regulations Part M depending on layout	8
General office	25		1		25
Head teacher	15		1		15
Deputy	10		1		10
Staff room	50		1		50
Staff preparation room	25		1	Could combine with teaching resources	25
Staff Toilets	4		4		16
Premises manager	10		1		10
Other					
Secure lobby	8		1	Area included in circulation	0
Reception - welcome area	10		1	Welcome and display area of pupils' work. Area included in circulation.	0
Pool plant	20		1		20
Plant	50		1		50
Subtotal					2656
Circulation	25%			As % of gross area	922
Partitions	3%			As % of gross area	111
Gross internal floor area					3689
Gross internal floor area per pupil					33.8
Subtotal excluding nursey					2504
Circulation	25%			As % of gross area	869
Partitions	3%			As % of gross area	104
Gross internal floor area					3478
Gross internal floor area per pupil					36.2

BR6 BB77 Typical Schedule of Accommodation for a 2FE broad range Secondary Special School for 80 pupils who have complex needs/SLD/PMLD/severe ASD. This includes an option for Post 16 provision for 32 pupils Version 10C March 05					
<p>This model is intended as a guideline, to form a basis from which LEAs will build up their own schedules for schools to suit local needs and, as such, the area per pupil will vary accordingly. The model allows for consideration of entitlement to curriculum, therapy as access to education, extended schools, community use, multi-agency working, school workforce and the increased numbers of adults in schools.</p>					
<p>Pupils: The special educational needs which these pupils have will cover a wide range from complex needs and SLD to PMLD and severe ASD. Most of the pupils will have sensory impairments, multiple disabilities, including physical difficulties and learning difficulties with different and sometimes conflicting needs. These pupils must be accommodated in the learning environment within an overall inclusive setting. In the future it is anticipated that pupils with MLD/complex needs can have their needs met in resourced provision in mainstream schools and that only those with statements for the most severe SEN will be in special schools, functioning actively as part of the wider community of schools. The secondary model of specialist subject teaching tutor bases with pupils moving around the school is envisaged for most pupils. Specialist practical classbases will be designed to meet the appropriate type of curriculum for a variety of pupils, to suit whole or half groups. Some pupils will need more stability to meet their particular needs, but will still access specialist teaching or practical bases and participate inclusively in school life.</p>					
<p>Staff: head teacher, deputy head, 10-12 teachers, 10-12 teaching assistants, 4 learning mentors, 6 statemented support assistants, visiting professionals/specialists, part time school nurse/doctor, SMAs, technician, premises manager, 3-4 kitchen staff, cleaners, groundsmen. Overall there may be 90-100 staff, with many of them part time or visiting professionals.</p>					
<p>Schedules: This typical schedule allows for outreach and training, extended school and community use. There are two classbases for each year to allow for a variety of different pupil groupings or teaching methods, according to pupil needs and local needs. Therapy as access to education takes place within the classbase, small group rooms, and specialist therapy rooms. If mainstream and special schools are co-located, then consideration needs to be given to the shared or joint use of halls, inclusive dining, learning resources library and ICT and specialist subjects. As part of 14-19 transforming secondary education, Post 16 provision is included as an option with tertiary tutor base and common room facilities. Some pupils will attend an FE college or work placement, learn vocational skills and access community facilities or learn independent living skills and access school facilities and such accommodation could be co-located for Post 16 pupils if this is part of the LEA strategy. If this accommodation is on another site, additional support facilities toilets and hygiene rooms will be needed accordingly and shared use accommodation should be investigated.</p>					
<p>If there is a high % of pupils who have PMLD or severe ASD accommodation needs to be varied to reflect this accordingly. In some cases, in order to meet the particular needs of pupils, classbases may be reduced in size by 5 m² and this provision used to form additional specialist classbases, however, this may have the effect of decreasing the flexibility and adaptability of the main classbases.</p>					
Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
General teaching spaces					
2 Classbases each year general teaching KS3 Y7 8 9	65	8 max	6	Secondary model subject/tutor bases with classbases having 2 computers, quiet corner for Maths English Geography History MFL PSHE/careers.	390
Classbases general teaching KS4 Y10 11	65	8 max	4		260
Practical and performance teaching spaces and group rooms					
Food Tech	65	4/8	1	whole class or half group	65
Science	65	4/8	1	whole class or half group	65
Art 2D-3D	65	4/8	1	whole class or half group	65
Kiln room	4		1		4
Design tech	65	4/8	1	whole class or half group	65
Music drama	80	4/8	1	This can have optional use and could also support a music room 65 sq m and recording room 15 sq m or could include acoustic sliding folding doors to hall	80

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Hall	180	112 + local school inclusion	1	Assembly PE sport movement. Use for dining inhibits curriculum use. (If sliding folding doors to dining then the combined hall/dining enables 306 sq m Sport England sports hall 2 badminton court standard if height is 6.1m if that type of community use is desired).	180
Small group room 1 per 2 class bases/ min 2 per keystone	15		5	focussed learning, behaviour management and respite	75
Learning resource area					
Library/ICT	30	4/8	2	separate spaces or combined interactive learning	60
Dining, social and meeting areas					
Dining	100	80+	1	Dining and extended school use with sliding folding doors to hall and kitchen adjacent	100
kitchen	40		1		40
servery	10		1		10
kitchen office/store	6		1		6
kitchen toilet/change	6		1		6
kitchen cleaner	2		1		2
Therapy spaces, including communication and medical					
Medical Inspection	20		1	First aid and rest room. Additional medical store, oxygen store and nurses room may be needed if high % PMLD.	20
school nurse	20		1		20
Physiotherapy	30		1		30
Sensory room	24		1	Or 2 rooms white and dark at 12 sq m	24
Hydrotherapy	85		1	24 sq m actual pool with 2-2.5m wide surround. For community use 72 sq m pool 144 sq m pool hall	85
Storage for teachers and pupils					
General teaching resources storage	6		10		60
Food store	4		1		4
Food tech resources store	4		1		4
Science prep room & store	12		1		12
Art resources store	4		1		4
Art work in progress store	6		1		6
Library store	4		1		4
ICT store	4		1		4
File server	4		1		4
DT resources store	4		1		4
DT work in progress store	6		1		6
Drama/music store	8		1		8
Chair store	8		1		8
PE store	10		1		10
Community use store	10		1		10
Kitchen food store	6		1		6
Kitchen refuse store	6		1		6
medical store	4		1		4
cylinder store	6		1		6
Physiotherapy store	4		1		4
Visiting Professionals store	2		1		2
Meeting/training room store	2		1		2
Clean store - laundry	1		4		4
Dirty store - laundry	1		4		4
Pool store	6		1		6
equipment store	20		1		20
Mobility equipment storage/locker bays	10		8		80
Admin store	4		2	Stationery and secure records	8
Teaching resources store	20		1		20

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Premises store/technician	15		1	Includes SEN technical aids	15
Cleaners store	2		2		4
General stores	10		2	Bulk items	20
External store	10		1	Sports and play equipment	10
Exetrnal maintenance store	10		1		10
Pupils toilets and changing areas					
Pupil changing (dry) - Hall	12		2	May need to be larger for community use	24
Pupil Toilets	20		8		160
Pupil Hygiene	20		4		80
Laundry	4		4		16
Pupil changing (wet) toilets shower lockers - Pool	30		2		60
Staff areas including facilities for inreach and outreach work					
Visiting Professionals Office	15		1		15
Meeting/training room	25		1		25
Parents room	15		1		15
Staff Change and lockers	10		2		20
Staff change - Hall	4		2		8
Staff change - Pool	4		2		8
Disabled toilets	4		2	Additional may be required to meet Building Regulations Part M depending on layout	8
General office	25		1		25
Head teacher	15		1		15
Deputy	10		1		10
Staff room	50		1		50
Staff preparation room	25		1	Could combine with teaching resources	25
Staff Toilets	4		4		16
Premises manager	10		1		10
Other					
Secure lobby	8		1	Area included in circulation	0
Reception - welcome area	10		1	Welcome and display area of pupils' work - area included in circulation	0
Pool plant	20		1		20
Plant	50		1	Allowance for plant	50
Subtotal					2691
Circulation	25%			As % of gross area	934
Partitions	3%			As % of gross area	112
Gross internal floor area					3738
Gross internal floor area per pupil					46.7
Post 16 option					
Post 16 (14-19) Y12 13 'separate and significantly different' age-appropriate	65	8 max or 16 if combined	4	Tutor bases - could combine for flexible use spaces including reception office business use/ PSHE careers/ independence wellbeing self care/ non ambulant resources.	260
Post 16 teaching resources storage	4		2	More teaching off site requires less storage	8
Post 16 group rooms	15		2	focussed learning, behaviour management and respite	30
Post 16 common room	80		1		80
e/o dining	20		1		20
Common room store	4		1		4
Hygiene/toilets	20		2		40
staff room	12		1		12
straft prep	12		1		12
Staff toilets	4		2		8
Total of these areas only				other additional areas may be needed to support this accommodation depending on the local situation	474
Circulation	25%			As % of gross area	165
Partitions	3%			As % of gross area	20
subtotal					658
Gross internal floor area					4396
Gross internal floor area per pupil					39.2

BB77 BR8 AA2 Typical Schedule of Accommodation for an 2FE All Age Broad range Special School for 221 pupils who have complex needs/SLD/PMLD/severe ASD. This includes 13 place nursery, 96 primary pupils, 80 secondary pupils and 32 Post 16 students. Version 3 March 05 (189 pupils without post 16)					
This model is intended as a guideline, to form a basis from which LEAs can build up their own schedules for schools to suit local needs. The area per pupil will vary accordingly. The model supports entitlement to curriculum, therapy as access to education, extended schools, community use, multi-agency working, school workforce and the increased numbers of adults in schools.					
Pupils: The special educational needs which these pupils have will cover a wide range from complex needs and SLD to PMLD and severe ASD. Pupils will have sensory impairments, multiple disabilities, including physical difficulties and learning difficulties with different and sometimes conflicting needs. These pupils must be accommodated in the learning environment within an overall inclusive setting. In the future it is anticipated that pupils with MLD/complex needs can have their needs met in resourced provision in mainstream schools and that only those with statements for complex and severe SEN will be in special schools, functioning actively as part of the wider community of schools. The secondary model of specialist subject teaching / tutor bases with pupils moving around the school is envisaged. Practical specialist classbases will be designed to meet the appropriate type of curriculum for a variety of pupils, to suit whole or half groups. Some pupils will need more stability and specialist resource bases to meet their particular needs, but will still access specialist practical bases and participate inclusively in school life.					
Staff: head teacher, deputy head, 26-28 teachers, 25 teaching assistants, 8 learning mentors, 12 statemented support assistants, visiting professionals/specialists, part time school nurse/doctor, SMAs, technician, premises manager, 4-6 kitchen staff, cleaners, groundsmen. Overall there may be 150-180 staff, with many part time or visiting professionals.					
Schedules: The typical schedules allow for outreach and training, extended school and community use. There are two classbases for each year to allow for a variety of different pupil groupings or teaching methods, according to pupil needs and local needs. Therapy as access to education takes place within the classbase, small group rooms, and specialist therapy rooms. If there is a high % of pupils who have PMLD or severe ASD accommodation needs to be varied to reflect this accordingly. If schools are co-located, then consideration needs to be given to the shared or joint use of halls, inclusive dining, learning resources library and ICT and specialist subjects. As part of 14-19 transforming secondary education, Post 16 provision is included with tertiary tutor base and common room facilities as an option. Although some pupils may well attend an FE college or work placement, others will learn vocational skills, independent living skills. This accommodation could be provided at the school or co-located with a sixth form college or FE college with shared use accommodation.					
Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Nursery					
Class base	75	13 fte	1		75
Small group room	8		1		8
Kitchen	8		1		8
Teaching resource store	4		1		4
Mobility equipment/ buggy store	4		1		4
Pupil toilets	24		1	Includes hygiene	24
Staff toilets/change	4		1		4
Visitor/disabled toilet	3		1		3
Laundry	6		1	Infection control and medical needs	6
Clean store	2		1	Infection control and medical needs	2
Dirty store	2		1	Infection control and medical needs	2
Cleaners store	2		1		2
External store	9		1		9
Subtotal					151
General teaching spaces - primary					
2 Classbases each year general teaching KS1 Y1 & 2	65	8 max	4	All activities in classbase with computers, quiet corner, play, lockers coats and bags. Assumes full or partial inclusion of pupils with ASD or PMLD.	260
2 Classbases each year general teaching KS2 Y3 4 5 6	65	8 max	8	As above with practical bases	520
General teaching spaces - secondary and post16					
2 Classbases each year general teaching KS3 Y7 8 9	65	8 max	6	Secondary model subject/tutor bases with classbases having 2 computers, quiet corner for Maths English Geography History MFL PSHE/careers.	390
2 Classbases each year general teaching KS4 Y10 11	65	8 max	4		260
Practical and performance teaching spaces and group rooms - primary					
KS2 Food Tech	25	4	1	Room between classbases for concurrent use, safety and hygiene.	25
KS2 Practical/multi-purpose	25	4	1	Room between classbases for concurrent use, safety	25
Music and drama (small groups)	65	4	1	music drama	65
Small Hall - Assembly movement dance drama music - larger groups	100	96 + local school inclusion	1	Assembly movement dance drama music. Use for dining inhibits curriculum use. If sliding folding doors to large hall then the combined halls enables community use	100

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Small group room 1 per 2 class bases/ min 2 per keystone	12	2-3	6	Focussed learning, behaviour management and respite	72
Practical and performance teaching spaces and group rooms - secondary					
Food Tech	65	4/8	1	whole class or half group	65
Science	65	4/8	1	whole class or half group	65
Art 2D-3D	65	4/8	1	whole class or half group	65
Kiln room	4		1		4
Design tech	65	4/8	1	whole class or half group	65
Music (drama - small groups)	80	4/8	1	music/drama 65 + recording room 15	80
Large Hall - Assembly PE sport movement.	180	112 + local school inclusion	1	Assembly PE sport movement. Use for dining inhibits curriculum use.	180
Small group room 1 per 2 class bases/ min 2 per keystone	15		5	focussed learning, behaviour management and respite	75
Learning resource area					
Library/ICT - primary	15	4	2	Separate spaces or combined interactive learning	30
Library/ICT - secondary	30	4/8	2	separate spaces or combined interactive learning	60
Dining, social and meeting areas					
Dining - primary - separate space or with sliding folding doors adjacent to secondary or combined as one large space	80	96+	1	Separate space to allow for more curriculum use of the hall and for social skills training. Also enables school clubs, extended school use and sport community use.	80
Dining - secondary -separate space or with sliding folding doors adjacent to primary or combined as one large space	100	80+	1	Separate space to allow for more curriculum use of the hall and for social skills training. Also enables school clubs, extended school use and sport community use.	100
kitchen	40		1		40
servery	10		1		10
kitchen office/store	6		1		6
kitchen toilet/change	4		1		4
kitchen cleaner	2		1		2
Therapy spaces, including communication and medical					
Medical Inspection	20		1	First aid and rest room. Additional medical store, oxygen store and nurses room may be needed if high % PMLD.	20
school nurse	20		1		20
Therapy including physiotherapy	30		1		30
Other therapy room	20		1		20
Sensory room	24		1	Or 2 rooms white and dark at 12 sq m	24
Soft play	30		1		30
Hydrotherapy	85		1	24 sqm actual pool with 2-2.5m wide surround. For community use 72 sqm pool 144sqm pool hall	85
Storage for teachers and pupils					
General teaching resources storage	6		22		132
Food store	4		1		4
Food tech resources store	4		2		8
Practical/multi purpose resources store	4		1		4
Science prep room & store	12		1		12
Art resources store	4		1		4
Art work in progress store	6		1		6
Library store	4		2		8
ICT store	4		2		8
File server	4		1		4
DT resources store	4		1		4
DT work in progress store	6		1		6
Drama/music store	8		2		16
Chair store	8		2		16
PE store	10		2		20
Community use store	10		2		20
Kitchen food store	6		1		6
Kitchen refuse store	6		1		6
medical store	4		1		4
cylinder store	6		1		6
Therapy store	4		2		8
Visiting Professionals store	2		1		2
Meeting/training room store	2		1		2
Clean store	1		4		4
Dirty store	1		4		4

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Pool store	6		1		6
edquipment store	20		1		20
Mobility equipment storage/locker bays	10		16		160
Admin store	4		2	Stationery and secure records	8
Teaching resources store	20		2		40
Premises store/technician	15		1	Includes SEN technical aids	15
Cleaners store	2		3		6
General stores	10		3	Bulk items	30
External store	10		2	Sports and play equipment	20
External maintenance store	10		1		10
Pupils toilets and changing areas					
Hall dry changing	12		4	May need to be larger for community use	48
Toilets	20		16		320
Hygiene	20		8	varies according to pupil needs	160
Laundry	4		6		24
Pool changing, toilets, shower, lockers	30		2		60
Staff areas including facilities for inreach and outreach work					
Visiting Professionals Office	15		1		15
Meeting/training room	25		1		25
Parents room	15		1		15
Change and lockers	20		2		40
Hall change	4		2		8
Pool change	4		2		8
Disabled toilets	4		4	To meet Building Regulations Part M	16
General office	50		1	could be two separate spaces of 25sqm	50
Head teacher	16		1		16
Deputy	10		2		20
Staff room	80		1	could be two separate spaces of 40sqm	80
Staff preparation room	40		1	could be two separate spaces of 20sqm	40
Toilets	4		6		24
Premises manager	10		1		10
Other					
Secure lobby	8		1	Area included in circulation	0
Reception	10		1	Includes display.If separate two entrances this may double, but area included in circulation.	0
Pool plant	20		1		20
Plant	100		1		100
Subtotal					4907
Circulation	25%			As % of gross area	1704
Partitions	3%			As % of gross area	204
Gross internal floor area					6815
Gross internal floor area per pupil					36.1
Post 16 option					
Post 16 (14-19) Y12 13 'separate and significantly different' age-appropriate 50% time off site e.g at FE college or work placement	65	16	4	tutor bases - could combine for flexible use spaces including reception office business use/ PSHE careers/ independence wellbeing self care/ non ambulant resources.	260
Post 16 teaching resources storage	4		2	More teaching off site requires less storage	8
group rooms	15		2	focussed learning, behaviour management and respite	30
Post 16 common room	80		1		80
dining	20		1	extra over to dining room	20
Common room store	4		1		4
Hygiene/toilets	20		2		40
staff prep	12		1		12
staff room	12		1		12
Staff toilets	4		2		8
subtotal					474
circulation 25%					165
partitions 3%					20
					658
				other additional areas may be needed to support this accommodation depending on the local situation	7474
Gross internal floor area per pupil					34

**BESD 1 BB77 Typical Schedule of Accommodation for a 1FE Primary School 48 pupils who have BESD.
Version 8 March 05**

This model is intended as a guideline, to form a basis from which LEAs will build up their own schedules for schools to suit local needs and, as such, the area per pupil will vary accordingly. The model allows for consideration of entitlement to curriculum, therapy as access to education, extended schools, community use, multi-agency working, school workforce and the increased numbers of adults in schools.

Pupils: Pupils are referred due to behaviour emotional and social difficulty as their main SEN and the majority are boys. Whilst some may also have another special educational need or learning difficulty and need support for this, there is a wide range of cognitive ability. Some pupils will be able to be re-admitted to mainstream school, others will continue to secondary BESD school. There may be outreach programmes with local schools or links with a local pupil referral unit. Pupils are entitled to access to the full curriculum. They are active, rarely have physical disability, have short attention spans, need more space around them, when interacting with others, can be reactive and need to learn social skills. (Often, pupils are from disadvantaged family backgrounds and may be vulnerable). These pupils need non-distraction, safe secure learning environments reflecting a positive image. There is a high need for passive supervision, safety and security.

Staff: Headteacher, deputy head teacher, 6 teachers, 6 teaching assistants, 3 learning mentors, 2 support staff, visiting professionals educational psychologist/ home-school worker/ learning support specialist, 2 administration staff, premises officer, 1-2 cleaners, 3-4 kitchen staff, groundsmen.

Schedules: The typical schedules allow for outreach programmes with local schools, extended school use, staff preparation, which involves flexible multi-purpose use of spaces. It may also be appropriate to consider the possibility of co-location or inreach programmes with local schools, inclusion with a local primary school or pupil referral unit for more efficient use of local resources. There is a high need for storage for safety, security and to minimise distractions in class, but items of equipment are less bulky than other special schools.

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
General teaching spaces					
Classbases general teaching KS1 Y1&2	65	8 max	2	Larger than KS2 because all activities in classbase including computers, quiet corner, play activities if development delay. Consider access to own external play area.	130
Classbases general teaching KS2 Y3 4 5 6	55	8 max	4	Most activities in classbase except for specialist rooms. Freedom of access to external area directly from classbase may involve fire exit safety and security issues which need careful consideration.	220
Practical and performance teaching spaces and group rooms					
KS2 Food Tech	20	3 max	1	Separate space for hygiene and safety as a room between classbases allowing for concurrent use with small groups.	20
KS2 Practical/multi-purpose	20	3	1	Room between classbases for concurrent use, safety	20
Social skills/ 'home' base. 1 per keystage	20		2	Family living room' / nurture group room to teach social skills and which can be used in conjunction with food tech.	40
Music drama/large group room	65		1	Multi-purpose use for drama music and other social or group activities assumed.Space for BESD needs required. Option of sliding folding doors to hall or dining for flexible curriculum use /extended schools/community use.	65

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Hall	100		1	Assembly PE sport movement performances and other activities for pupils who have BESD who need more space. Hall shared with dining limits curriculum use and is not recommended for this pupil group. Option to combine space with adjacent dining using sliding folding doors to increase to 180 for Sport England community use.	100
Small group room 1 per 2 class bases/ min 2 per keystage	12	2-3	3	Focussed learning, behaviour management and respite	36
Learning resource area					
Library/ICT	15	4	2	Separate spaces or combined interactive learning	30
Dining, social and meeting areas					
Dining	80	48+ adults	1	Separate dining important for social skills training. Extended school use for breakfast/after school clubs. Option for sliding folding doors to hall recommended.	80
Kitchen	40		1		40
Servery	10		1		10
Kitchen office/store	6		1		6
Kitchen toilet/change	6		1		6
Kitchen cleaner	2		1		2
Therapy spaces, including communication and medical					
Medical Inspection	15		1	First aid and rest room.	15
Storage for teachers and pupils					
General teaching resources storage KS1	5		2	Bulky items for play to store	10
General teaching resources storage KS2	4		4	Items not as bulky as KS1	16
Coat cupboards in class bases	1.5		6		6
Food tech resources store	3		1		3
Practical/multi purpose resources store	3		1		3
Social skills store	2		2		4
Library store	4		1		4
ICT store	4		1		4
File server	4		1		4
Drama/music store	8		1		8
Chair store	8		1		8
PE store	10		1		10
Community use store	10		1		10
Kitchen food store	6		1		6
Kitchen refuse store	6		1		6
Visiting Professionals store	2		1		2
Meeting/training room store	2		1		2
Admin store	4		2	Stationery and secure records	8
Teaching resources store	15		1		15
Premises store/technician	10		1		10
Cleaners store	2		2		4

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
General stores	10		2	Bulk items	20
External store	10		1	Sports and play equipment	10
External maintenance store	10		1		10
Pupils toilets and changing areas					
Pupil changing (dry) - Hall	15		2	May need to be larger for community use	30
Pupil Toilets	12		4	Ratio of boys to girls to be considered	48
Staff areas including facilities for inreach and outreach work					
Visiting Professionals Office	12		1		12
Meeting/training room	25		1	Multi-purpose	25
Parents room	15		1		15
Staff change and lockers	8		2		16
Hall change	4		2		8
Disabled toilets	4		2	Additional toilets may be required to meet Building Regulations Part M depending on layout	8
General office	20		1		20
Head teacher	15		1		15
Deputy	10		1		10
Staff room	40		1	Frequent meetings for day to day progress	40
Staff preparation room	20		1	Could combine with teaching resources	20
Staff Toilets	4		2		8
Premises manager	10		1		10
Other					
Secure lobby	8		1	Area included in circulation	0
Reception - welcome area	10		1	Welcome and display area of pupils' work - area included in circulation	0
Plant	40		1		40
Subtotal					1328
Circulation	25%			As % of gross area	461
Partitions	3%			As % of gross area	55
Gross internal floor area					1844
Gross internal floor area per pupil					38.4

BESD 3 BB77 Typical Schedule of Accommodation for 2FE BESD Secondary Special School with 64 pupils Y7-Y11 including two class bases for inreach and an option with 32 pupils in Y12 -13 Post 16 provision. Version 10C March 05

This model is intended as a guideline, to form a basis from which LEAs will build up their own schedules for schools to suit local needs and, as such, the area per pupil will vary accordingly. The model allows for consideration of entitlement to curriculum, therapy as access to education, extended schools, community use, multi-agency working, school workforce and the increased numbers of adults in schools.

Pupils: Pupils are referred due to their behaviour emotional and social difficulty as their main SEN, and the majority are boys. Whilst some may also have another special educational need or learning difficulty which needs support, there is a wide range of cognitive ability. Pupils are entitled to and need access to the full curriculum. They are active, rarely have physical disability, have short attention spans, need more space around them, when interacting with others, can be reactive and need to learn social skills. (Often, pupils are from disadvantaged family backgrounds and may be vulnerable). These pupils need non-distraction, safe secure learning environments reflecting a positive image. There is a high need for passive supervision, safety, security and storage to minimise distractions in class, also for sports and developing practical and vocational skills.

Staff: Headteacher, deputy head teacher, 12 teachers, 12 teaching assistants, 6 learning mentors, 4 support staff, visiting professionals educational psychologist/ home-school worker/ learning support specialist, 4 administration staff, premises officer, 1-2 cleaners, 3-4 kitchen staff, groundsman.

Schedules: This typical schedule allows for accommodation for outreach with local schools, extended school use and staff preparation, which involves flexible multi-purpose use of spaces. It may also be appropriate to consider the possibility of co-location or inreach with a local secondary school or pupil referral unit for more efficient use of local resources. Traditionally, most pupils will stay in school for their secondary education and will not go to a mainstream school, but may attend FE college or take up a work placement. There are, however, pupils who will attain GCSEs.

For Post -16 provision, LEAs need to plan, review and provide suitable provision to meet the needs of pupils, in conjunction with LSC and other bodies in their area. An option for Post 16 accommodation as part of 14-19 transforming secondary education has been provided with a common room and tutor bases as support at the special school for transition to other Post 16 provision in the local area or FE college for vocational skills and work placements. This accommodation could be provided at the school, or co-located with separate Post 16 provision or FE college.

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
General teaching spaces					
Inreach classbases	65	8 max	2	For programmes for part time attendance from local schools	130
Classbases KS3 2FEY7/Y8/Y9	55	8 max	6	Secondary model subject/tutor bases with classbases having 2 computers, quiet corner for Maths English Geography History MFL PSHE/careers.	330
Classbases KS4 2FE Y10-11	55	8 max	2	As above	110
Practical and performance teaching spaces and group rooms					
Food Tech	65	8 max	1	Consider fire exite supervision and	65
Science	65	8 max	1		65
Art 2D-3D	65	8 max	1		65
Kiln room	4		1		4
Design tech	65	8 max	1	Supervised and secure	65
CAD/CAM	10		1	Adjacent to art and DT	10
Social skills base 1 per keystone	30		2	PSHE/careers/social skills	60
Music drama	80		1	More space for BESD needs required for storage of drum kits etc (Possible music/drama room 60 sqm recording/control room 15sqm) Option for sliding folding doors to dining.	80
Hall	594		1	Assembly PE movement sport -activity needs important for BESD, also for teamwork social skills training - space for 5 a side football and basketball	594

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Small group room	15		4	Behaviour management and learning support interviews	60
Learning resource area					
Library/ICT	65	8 max	1	Separate spaces 25+30 or combined interactive learning	65
Dining, social and meeting areas					
Dining	100		1	Pupils with BESD need space and social skills training. Consider extended school use and option for sliding folding doors to music/drama.	100
kitchen	40		1		40
servery	10		1		10
kitchen office/store	6		1		6
kitchen toilet/change	4		1		4
kitchen cleaner	2		1		2
Therapy spaces, including communication and medical					
Medical Inspection	15		1	First aid and rest room.	15
Storage for teachers and pupils					
General teaching resources storage	4		8	high need for storage to minimise distractions in classbase and for security	32
Inreach resources storage	4		2		8
Social skills base store	2		2		4
Lockers	4		8	Normally in bays off circulation, 1 area per classbase.	32
Food store	4		1		4
Food tech resources store	4		1		4
Science prep room & store	15		1		15
Art resources store	7		1		7
Art work in progress store	6		1	minimise damage to pupils' work	6
Library store	4		1		4
ICT store	4		1		4
File server	4		1		4
DT resources store	7		1		7
DT work in progress store	6		1	minimise damage to pupils' work	6
Drama/music store	8		1		8
Chair store	8		1		8
PE store	10		1		10
Community use store	10		1		10
Kitchen food store	6		1		6
Kitchen refuse store	6		1		6
Visiting Professionals store	2		1		2
Meeting/training room store	2		1		2
Clean store - Laundry	1		1	sports needs	1
Dirty store - Laundry	1		1	sports needs	1
Admin store	4		2	Stationery and secure records	8
Teaching resources store	15		1		15
Premises store/technician	15		1	including technical aids (e.g.for SpLD SLCN)	15
Cleaners store	2		2		4
General stores	10		2	Bulk items	20
External store	10		1	Sports and play equipment	10
Exetrnal maintenance store	10		1		10
Pupils toilets and changing areas					
Pupil changing/showers - Sports Hall	20		2	Ratio of boys to girls and community use to be considered. Accommodation for visiting teams, accessible changing rooms and community use may increase requirements.	40
Pupil Toilets	12		4	Ratio of boys to girls to be considered	48
Laundry	4		1		4
Staff areas including facilities for inreach and outreach work					

Spaces	Area sq m	No. of pupils	No. of rooms	Options / Comments	Gross internal floor area
Visiting Professionals Office	12		1		12
Meeting/training room	25		1	Multi purpose, outreach, post 16	25
Interview room	12		1	Multi purpose, outreach, post 16	12
Parents room	15		1		15
Staff Change and lockers	10		2	Central provision	20
Staff change - Sports Hall	6		2	Accessible provision to be considered for Part M and community use	12
Disabled toilets	4		2	additional provision may be needed to meet Building Regulations Part M depending on layout	8
General office	25		1		25
Head teacher	15		1		15
Deputy	10		1		10
Staff room	65		1	Frequent meetings for day to day progress	65
Staff preparation room	35		1	Could combine with teaching resources	35
Toilets	4		2	Normally centralised to avoid misuse	8
Premises manager	10		1		10
Other					
Secure lobby	8		1	Area included in circulation	0
Reception	10		1	Includes display. Area included in circulation.	0
Plant	50		1		50
Subtotal					2437
Circulation	25%			As % of gross area	846
Partitions	3%			As % of gross area	102
Gross internal floor area					3385
Gross internal floor area per pupil					52.9
Post 16 option with additional inreach bases for KS3/4					
Post 16 2FE/Y12-13 separate and significantly different	55	8 max	4	tutor bases - could combine for flexible use spaces including reception office business use/ PSHE careers.	220
Post 16 teaching resources storage	4		2		8
Post 16 group rooms	15		2	Behaviour management and learning support interviews	30
Post 16 common room	80		1	Social base with café/snack facilities. Consider BESD needs for space.	80
Common room storage	4		1		4
Pupil toilets	8		2		16
staff prep	12		1		12
staff room	12		1		12
Staff	4		2		8
Total of this accommodation only				other additional areas may be needed to support this accommodation depending on the local situation	390
Circulation	25%			As % of gross area	135
Partitions	3%			As % of gross area	16
					542
Gross internal floor area					3926
Gross internal floor area per pupil					40.9