Choosing children's play equipment

DLF Factsheet
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INTRODUCTION

The aim of this factsheet is to provide first stop information on what type of play equipment is available to help with specific difficulties, and details about the useful features of some of the more popular toys.

For up-to-date product and supplier information, please contact our equipment helpline, open daily from 10am to 1pm - Tel: 0845 130 9177 or if you use a Textphone: 020 7432 8009.

Alternatively, you may wish to write to our letter enquiry service. In order to help us, please can you provide us with as much detail as possible about the difficulties you are experiencing and perhaps an idea of the type of equipment you are looking for. This will help us to send you a concise and informative reply.

WHAT IS PLAY?

Play is the way that all children learn about themselves, other people and their environment. If children are unable to move to explore toys and their environment then these need to be brought to them.

Play can be active, passive, solitary, independent, assisted, social, exploratory, educational or just for fun. It is usually a multi-sensory experience involving sensations of seeing, hearing and touching, as well as carrying out activities requiring expansive or delicate movements.

Play is a good medium for the development of speech; either by practising sounds and words, or through relevant muscle stimulation activities such as blowing bubbles and musical instruments. It also enables the child to learn choosing, sharing, co-operation and how to take turns. Pretend or imaginative play with dolls, dressing up, tea sets, toy soldiers etc allows children to use their imagination creatively, to practise relevant words and language, as well as to enact role play situations and domestic activities.

Children with physical and/or sensory disabilities may need toys and activities to encourage the use of their other skills. Appropriate positioning of the child and the toy or activity are crucial if the child with a physical disability is to feel sufficiently safe and supported to want to play and to be able to interact effectively to achieve the desired result with the particular toy. Supportive seating or positioning equipment may be necessary to give the child the physical ability to play.

Children with severe learning disabilities take much longer to learn basic concepts through play with educational or manipulative toys and have difficulty generalising skills. They will benefit from having access to a wide range of toys.
which offer them the opportunity to repeat the same skills in different and interesting ways. Toys need to be motivating and rewarding to encourage a child with severe learning disabilities to play. They will need time to respond, assistance to succeed and may want to repeat the activity beyond the boredom threshold of the adult playing with them!

Other skills can be developed in play e.g. attention and concentration, size, shape, colour, positional concepts, matching, sorting, selecting and naming, number and time. However, toys involving more than one basic concept, e.g. colour and shape, may cause confusion and therefore each concept is best taught separately before combining them.

Messy play is an important activity for children with all types of disabilities as they are less likely to enjoy the tactile experience of getting themselves into messy situations in everyday life.

Finger paints, gluing collage materials, cornflour mixed to a paste with cold water, play dough, aerosol cream and shaving foam, jelly, instant puddings, and cooking etc can all be used to provide messy play activities in which children with physical disabilities can be assisted to participate.

Protecting the children with waterproof aprons/overalls and the floor/work surface with newspaper or plastic sheets and providing bowls of water, flannels and towels to wash everyone down afterwards are useful precautions.

**CHOOSING TOYS AND PLAY ACTIVITIES**

Because there are so many toys available in high street shops and specialist catalogues, parents need to take care when choosing to ensure they are not wasting their money.

Remember that children need access to fun toys as well as therapeutic and educational toys. However, parents can be creative in their use of household objects and scrap materials, as well as with bought toys, so that as many stimulating and fun activities can be achieved from each toy by using them in ways other than the purpose for which they were designed.

Toys from high street shops, markets, charity shops and jumble sales can be just as useful as the very expensive toys available from specialist catalogues. However, care must always be taken to ensure that a toy is safe for any child and that its use is supervised, wherever it is purchased.

Toys are most useful if they provide a range of skills to be learnt by the child, over a period of time, as their abilities progress.

Children with severe learning disabilities and/or autistic features may sometimes
engage in repetitive self stimulating movement activities e.g. rocking, jumping, hopping up and down, hitting themselves or bumping into people, spinning around etc. During these periods the child will be self absorbed and unable to participate in other activities or to learn from them and may injure themselves. If the child is difficult to distract with another interesting activity, it may be possible to provide him/her with a more acceptable activity which gives the same sensory input they are seeking, e.g. trampoline, rocking equipment, ballpool, swing. It may also be useful to get advice from a clinical psychologist to incorporate a behaviour modification programme.

**PROVISION OF DEVELOPMENT AND PLAY EQUIPMENT**

Toys for development and play are unlikely to be provided by either by the health service or social services.

A paediatric occupational therapist should be able to advise on suitable toys and activities to develop the cognitive, fine and gross motor and visual perceptual skills of a child. He/she may also know of local toy libraries or parent support groups where toys can be loaned to try out with a child before purchase, or for access to a wide range of toys, some of which may only be available from specialist suppliers.

Other sources of supply or information may include:

- REMAP engineers may be able to make one-off toys to a specific design to enable a child to develop a particular skill;
- voluntary groups of retired people may be able to knit, sew or make DIY toys for specific children with disabilities or a special needs nursery or school. However, remember that DIY toys need to be designed and constructed from safe materials, especially if children put the toys in their mouths and/or have physical and sensory impairments and severe learning disabilities;
- some Disabled Living Centres may have a small selection of toys and/or leisure equipment for children on display. They can provide advice and information on what may be most suitable. For details of your nearest centre contact Disabled Living Centres Council (see Useful Organisations at the end of this factsheet);
- parents who belong to relevant voluntary organisations for the particular condition of their child or to parent support groups may be able to arrange informal swapping of toys between themselves to provide variety and a range of stimulating activities;
- books about DIY toys are available, e.g. Play helps and More play helps by Roma Lear, and may be obtained through public libraries.
FOR CHILDREN WHO NEED HELP TO IMPROVE THEIR SENSE OF BALANCE

This equipment is often used for therapy purposes to develop the balance and posture of the child in different positions. Children should be supervised whilst using this type of equipment, and additional safety precautions may be needed, e.g. safety helmets.

VESTIBULAR BOARDS AND SWINGS

Vestibular boards have wooden curved rocker sides that allow side to side or forward/backward movement. They are used to develop a sense of balance for the child and their position in space. They can be used whilst sitting, kneeling, standing or lying down on the board.

Vestibular swings come in a variety of shapes and sizes e.g. platform, bolster, flexion T-bar, hammock, inner tube. They can be used from either a ceiling-fixed suspension point or an A frame gantry which may be portable and/or dismantle for storage. Ceiling-fixed suspension points need to be checked by a surveyor to establish their maximum load bearing before use to ensure they will take the strain and the weight of at least two adults swinging on it.

These swings provide balance stimulation in a linear, circular or rotational plane. However, specialist knowledge is required to prevent over stimulation.

Padded wall and floor mats, safety helmets and padding around the gantry frame are essential for the safety of the child.

BALANCE BEAMS

These are useful for children who need to develop their standing and walking balance skills. Again, they are mainly used in gym sessions or by physiotherapists in therapy sessions.

THERAPY BALLS, BOLSTERS AND CYLINDERS

These are available in a range of sizes and materials and are either made of foam or have to inflate with a pump. The dimensions of the ball or bolster need to be appropriate to the height and weight of the child.

When they are partially inflated they wrap around the child and provide more support for less physically able children. They are used by therapists to increase/decrease muscle tone in a variety of positions and for developing sitting balance etc.
ROCKING EQUIPMENT

Rocking boats
Foam, plastic or wooden shapes are available to allow the child to rock whilst sitting in a supported position. Two children are usually needed to maintain the rocking movement.

The children need to have good sitting balance and sustained hand grip to hold on while rocking, otherwise they may fall out sideways or bump themselves on the sides of the rocking boat or handgrips.

Rocking horses
These are useful for children whose legs push tightly together and also for developing sitting balance, posture and head control.

FOR CHILDREN WHO NEED LARGE SUPPORTIVE PLAY STRUCTURES

BALL POOLS
These can be any shape or size and consist of vinyl covered foam wedges or blocks, some of which have wooden reinforcements. Additional sections are often available if the pool needs to be extended. They can be part of a soft play area or multi-sensory environment.

The balls are available in different diameters - the larger size for adults or able-bodied children; the smaller size for children. They provide the child with support and deep pressure stimulation and may enable him/her to move more freely. The deep pressure sensation can have a calming effect on over active children.

Some very physically disabled children may not enjoy the sensation and become scared if they begin to be submerged into the balls and feel themselves to be drowning.

Children should not be left unsupervised as throwing the balls around can be painful and dangerous to other children and adults.

The balls may become unhygienic if used by children who dribble and are incontinent. They can be put into large net bags and washed in disinfectant solution in the bath and allowed to dry in the net bags.

The deep sides of the pools may make it difficult for physically disabled children who are unable to walk/crawl up the foam steps/ramp into the ball pool to get in and out. A slope inside the pool may make it easier.

A portable hoist is not usually suitable as the walls of the ball pool rest on the floor so that the base of the hoist cannot be wheeled underneath. A gantry, overhead hoist or wall-fixed hoist may be a possible
Individual ball pools for immobile children can be made from a large cardboard box filled with balls to give an increased feeling of security.

LARGE INFLATABLE PLAY STRUCTURES
These can help more physically able and ambulant children to develop balance and saving reactions. However, care must be taken as boisterous children may injure themselves or others by landing awkwardly or falling onto other children. Shoes should not be worn in case they cause a puncture! Bare feet are preferable as socks can be slippery.

A powered air compressor is usually required to inflate the structures, and this can be a time consuming and noisy process. The structures are heavy and cumbersome to handle and store when deflated.

MATTRESSES - INFLATABLE, FOAM AND WATER
These are suitable for group play and therapy activities. The inflatable mattresses can be inflated to various air pressures depending on use; when partially inflated they provide a more supportive and contouring surface for a child with limited movements. An immobile child should not be positioned on his/her front unless he/she is able to easily turn the head to the side to prevent suffocation.

Mattresses can be used to encourage movement and also to develop listening skills as sound is transmitted through the air in the mattress when it is tapped on etc.

FOAM PLAYING SHAPES
These are available either as geometric shapes or, for example as animals and vehicles. They are usually covered in shiny PVC material which is water and urine resistant. However, when playing on them, children should remove their shoes and socks to prevent damage to the PVC covers and to prevent them from slipping over.

They are useful for developing creative and imaginative play as well as gross motor skills. They may form part of a large soft play environment, but can also be used individually for positioning, e.g. rolls and wedges.
**SOFT PLAY ENVIRONMENTS**

These are usually designed for a specific room or area and purchased as modular units to meet the needs of the children using it. They usually consist of a ball pool, foam/air mattresses, foam playing shapes and wall mats. Some of the foam playing shapes can be joined together into structures by Velcro fastenings. All the pieces are covered with a washable, urine resistant PVC cover; some may be removable.

They provide a relatively safe area for ambulant children to explore movement in a creative environment. Children require adult supervision for their own safety to prevent accidents from dangerous behaviour, e.g. jumping from a height onto peers, throwing large foam shapes at other children etc. Once again, children should not wear shoes or socks whilst playing on them to prevent damage to the PVC covers and to prevent them sliding over on the shiny plastic material.

**INDOOR MODULAR PLAY ENVIRONMENTS**

These are durable plastic or wooden play units that can be assembled in groups to create a large structure to provide different activity areas whose exploration requires a variety of motor skills. They provide the opportunity for creative activities and can be added to over time to suit the needs of the children using them. They are often found in nurseries, play groups and junior schools and are used in movement and free play sessions and during wet playtimes.

Floor mats placed under and around the activities may reduce injuries from falls.

During play sessions children, and especially children with learning difficulties and/or poor co-ordination, should be supervised by adults as they may try to do things that are beyond their physical/visual perceptual abilities. It is preferable for children of similar ability levels to play together to ensure that the physical safety of more vulnerable children is not put at risk.
FOR CHILDREN WHO NEED ADAPTED OUTDOOR PLAYGROUND EQUIPMENT

ADVENTURE AND MODULAR PLAYGROUND EQUIPMENT

Equipment which combines activity areas with ladders, frames, tunnels, theme houses and interchangeable activity panels is available.

Adult supervision is required, especially when children with different levels of physical abilities are playing together. Children who are wheelchair users or who have limited mobility will probably require assistance to get on/off pieces of playground equipment. Some of the items are made double width, e.g. slide, ramps, bridges, so that the child can be accompanied by a helper to facilitate him/her to use the playground equipment and to provide physical support. Only limited sections of the playground will be available to children in wheelchairs, compared with the more physically able children.

SAFETY SURFACES

To minimise injuries, it is advisable that the areas where children may be at risk of falling/landing on the floor should be covered with a resilient safety surface material or foam floor mats.

A safety surface is a continuous surface of absorbent resilient rubber chippings bonded onto the under surface. It must be installed by a professional, especially if the ground needs to be levelled first.

If using bags of loose bark chippings the depth and density of the chippings needs to be checked frequently to ensure adequate thickness is maintained to minimise injury from falls. Regular raking with a rake which has widely spaced tines is necessary.

Tiles or mats may be more effective if secured in place in strategic areas of risk, e.g. at the end of the slide and under swings.

SWINGS

Swings with seats and swings for children who use wheelchairs are available.

Consider the following:

- if a child is unable to hold on reliably he/she will need a harness comprising shoulder, waist and crutch straps to ensure their safety;
- children low muscle tone/poor head control will need a high backed chair with a headrest to prevent whiplash occurring;
- an adjustable foot support will enable more physically disabled children to be comfortable and supported in the swing seat, especially if they tend to go into extension when excited;
• seats with an adjustable backrest angle and seat to backrest angle will enable the seat to be adjusted to suit the individual needs of the child;

• an adjustable height swing may make transfers easier and less of a back care risk for carers.

• immobile and multiply disabled children may need to be acclimatised to the experience of movement through the air by starting with short periods of slow gentle swinging. Carers must be quick to recognise the distress signals of non-verbal children if they cannot enjoy/tolerate longer periods of more vigorous swinging;

• swings for children in wheelchairs require an adult to secure the wheelchair safely. The additional weight of the wheelchair may make it physically too difficult for the child to propel the swing independently with a pull rope and an adult will need to assist them to swing.

SLIDES
Adult assistance may be needed to help less physically able children to sit down on the top platform and to get up from the end of the slide. Double width slides enable a helper to provide safely and support by going down beside the child.

A child using mobility aids/crawling will find it easier to use a slide with a ramp access.

ROUNDABOUTS
It should be possible for a roundabout to be rotated in both directions to reduce dizziness and also to encourage children with asymmetrical muscle tone in their upper limbs to use both arms to operate it. Children with cerebral palsy may not be able to grip the operating handles adequately and may find the effort required to operate the roundabout increases their tone and reduces their ability to play independently.

A roundabout is available which can be enjoyed by wheelchair users and by seated and standing children together.

Some children may find the sensation of being rotated less pleasant than other children on the roundabout with them. Therefore, non-verbal children especially will need to be watched for signs of distress and the roundabout stopped if they are unhappy.

SEESAWS/SPRINGERS
Because of the vertical movement involved in using seesaws/springers such equipment is mainly suitable for physically able children with good muscle tone and head support and reliable hand grip to hold onto the handlebars. Vigorous vertical bouncing can cause hyperactive children to become over-excited if it is allowed to continue for long periods of time.
FOR CHILDREN WHO NEED TOYS TO DEVELOP MANIPULATION AND CO-ORDINATION SKILLS

By the age of three years most children will have developed the full range of hand grips and manipulation skills, with later development taking only the form of increases in speed and combinations of complexity.

The acquisition of these skills by many disabled children will be delayed, and they will also be limited by the range of hand movements they are able to perform effectively.

To use his/her hands precisely, the child needs good shoulder and upper arm strength and stability to hold and position his/her hands, both close to and away from the body and at different height levels.

In order to grip an object with precision the hand muscles need to be sufficiently developed to enable the palm and fingers to move around the object and to sustain and adjust the grip as necessary. Children with abnormal tone, neurological conditions and learning difficulties will experience difficulties with this type of precision task.

To be motivating and enjoyable, toys need to be appropriate for the age and skills of the child so that he/she can succeed with minimal assistance. Toys with large operating buttons will be easier for children with all types of disabilities to use.

Dycem mats are useful to stabilise toys for visually impaired and/or physically disabled children and keep them within reach.

Toys which incorporate clothes fastenings are only able to teach a manipulation skill in isolation from the real situation of un/dressing. This may make the task harder for children with visual and/or learning difficulties, who often learn the skill more easily in a realistic context. Using dressing up clothes, fastening waistcoats or ordinary clothes with large simple fastenings are often more effective teaching methods.

Construction toys teach spatial skills in three dimensions. Larger sized pieces are easier to grip and fit together initially. Interlocking pieces will be more difficult than magnetic or Velcro attachments to fit together and pull apart.

Scissors used by children should have blades with rounded tips, be made of quality stainless steel and, preferably, be capable of being used effectively by both left- and right-handed children.

Children’s scissors should have rounded tips to the blades and be made of quality stainless steel and preferably be able to be used equally effectively by both left and right handed children.
Children with limited/no use of one hand may be able to do some cutting with table top scissors with flat handles on which they can push down to produce a cutting action.

FOR CHILDREN WHO NEED TOYS TO DEVELOP AUDIO, VISUAL AND TACTILE SKILLS

Most local education departments have teachers who specialise in working with children with visual and/or hearing impairments.

For children with severe learning difficulties, physical disabilities and hearing and/or visual impairments, more specialised advice and assessment is available through SENSE and the RNIB.

Using reflective toys and illuminating toys in a darkened room can assist children to use their residual vision.

Children need to learn to focus on objects and to track/scan horizontally, vertically and in a circular movement.

Some children with particular visual impairments may only be able to use peripheral vision to see a toy in a particular position; this will limit their interaction with it if they also have physical disabilities and require supportive positioning.

The development of fine and gross motor skills in children with visual impairment will be delayed, even if they have no additional cognitive, physical or sensory impairments. Toys can be used to motivate them to explore their environment and develop independent mobility.

Children with hearing impairments will have varying levels of residual hearing and respond to different tones/types sounds, so a variety of sound making toys should be tried and the response of the child noted.

The size of the room and its wall, ceiling and floor surfaces will affect the quality of the sounds heard by a hearing impaired child. Echoes may be confusing for children with additional visual and learning disabilities.

A small room with soft furnishings and carpet will allow the child to localise the sounds from toys.

Children should use only toys with plastic, mirrored surfaces even though the quality of the reflected image is less clear than it would be in a glass mirror.

SAND AND WATER PLAY

Sand and water play activities are useful sensory experiences for children with visual impairments and tactile hypersensitivity and encourage two-handed play involving pouring and filling containers.
The play table or tray needs to have height adjustable legs and clear access underneath if it is to be used by children in supportive chairs, wheelchairs and standing frames. An adequate range of heights will be necessary to suit all situations and sizes of children.

Consider the following:

- if the sand/water tray is too deep, small children will be unable to get their arms over the rim to play from a sitting position with their knees underneath the bottom of the tray;
- a sand/water tray with built-in moulded play activities may not be useful/accessible to children with limited hand skills and upper limb/shoulder movements;
- a table-top lid is useful to enable the sand/water tray to be used as a work surface at other times.

MULTI SENSORY ENVIRONMENTS

These are often known as white rooms. They are usually customised rooms or areas fitted with floor mats/cushions/beds and computerised and automated lighting and music and aroma systems etc of varying complexity. They are used primarily for children and adults with learning disabilities and often have a calming and relaxing effect on the parents or staff who assist them!

Simple switch operation is available for most of the individual pieces of multi-sensory equipment, e.g. bubble tubes, fibre optic lights and vibrating mattresses. This allows the child to alter the environment to suit his/her taste or mood and to have individual control over the sensations he/she receives.

REWARD TOYS

These are used to stimulate the concept of action and reaction, and to encourage the repetition of an action/vocalisation/movement sequence in children who have severe learning disabilities and/or sensory impairments and/or physical disabilities.

The movements involved are simple; the concepts are basic and the rewards are sensory, e.g. lights, sound, aroma, vibration or air # either singly or in combinations of sensations.

Some of the toys have simple-to-operate switches which children with severely limited movements can operate, using their hand/foot/head/chin or by sucking or blowing

Bright children with severe physical disabilities will quickly become bored with these toys, but they can be used initially to teach them how to use switches, a skill that can be used later to operate more complex communication aids, computerised toys and powered wheelchairs.
FOR CHILDREN WHO NEED TOYS THAT CAN BE ACTIVATED BY A REMOTE SWITCH

Children with learning disabilities and/or sensory impairments will find it difficult to grasp the concept of remote control switch toys. They will need to work with toys with integral switches initially and then, when they have grasped the cause and effect concept, the switch can gradually become more remote.

Battery toy lead adapters are a cheap and easy way to turn toys with small on/off switches into a toy with a remote control switch of varying types, e.g. head/foot/chin/suck-puff, which can be used by a child with limited hand function and physical disabilities.

FOR CHILDREN WHO NEED TOYS WITH ADAPTED SWITCHES

Using joystick switch operated toys is a useful way for a physically disabled child to develop the skills needed for operating a powered wheelchair.

Toys with single or multiple function switches enable a child to develop the skills to operate scanning systems for word processors, environmental control systems, computerised educational systems and sophisticated electronic communication aids.

Switches can be used to encourage a child to learn new movements or utilise purposefully the residual movements he/she has to operate toys for fun/education, e.g. hand/finger controls - squeeze grip, pinch grip, push buttons, mercury tilt switches - or head or arm movement.

FOR CHILDREN WHO NEED TOYS THAT REPRESENT A PARTICULAR DISABILITY

Disability awareness toys

Dolls of various sizes, including miniatures with a variety of obvious disabilities, may be useful for both the peers of children with a disability in an integrated school/nursery and for the children themselves, so that they do not feel so different and isolated in imaginative group play activities. Children with a disabled parent will also find them useful in pretend play situations involving adult role play.

USEFUL ORGANISATIONS

There are several national organisations which will give advice on play and leisure activities for children and adults.

Action for Leisure PO Box 9 West Molesey KT8 1WT Tel: 020 8783 0173 Fax: 020 8783 9267 Contact: Judy Denziloe Email:
A national information resource on play, leisure and recreation for disabled children and adults. Publishes a range of information leaflets and books, and can provide training on play and leisure for disabled people.

Disabled Living Centres Council Regional Disabled Living Centre Redbank House 4 St Chads Street Manchester M8 8QA Tel: 0161 834 1044 Fax: 0161 835 3591 Email: dlcc@dlcc.demon.co.uk Website: www.dlcc.org.uk

Kidsactive - Play and opportunity for disabled children Pryor's Bank Bishop's Park London SW6 3LA Tel: 020 7731 1435 Fax: 020 7731 4426 Textphone: 020 7384 2596 Email: office@kidsactive.org.uk Website: www.kidsactive.org.uk

A national organisation which offers advice, information and resources to individuals and organisations interested in play for disabled children, and to all groups setting up adventure playgrounds.

National Association of Toy and Leisure Libraries 68 Churchway London NW1 1LT Tel: 020 7387 9592 Fax: 020 7383 2714 Email: admin@playmatters.co.uk Website: www.natll.org.uk

Parent organisation for toy libraries in UK which loans toys, often for children with special needs, and for leisure libraries for adults with learning disabilities.

REMAP Hazeldene Ightham Sevenoaks Kent TN15 9AD Tel: 01732 883818 Fax: 01732 886238 Email: info@remap.org.uk Website: www.remap.org.uk

Royal National Institute for the Blind (RNIB) 105 Judd Street London WC1 9NE Tel: 020 7388 1266 Fax: 020 7388 2034 Helpline: 0845766 9999 Email: helpline@rnib.org.uk Website: www.rnib.org.uk

SENSE 11-13 Clifton Terrace Finsbury Park London N4 3SR Tel: 020 7272 7774 Fax: 020 7272 6012 Textphone: 020 7272 9648