



North

Yorkshire County Council

Supporting Children and Young People with Co-ordination Difficulties



Children and Young People's Service

A responsive County Council providing excellent and efficient local services

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Foreword

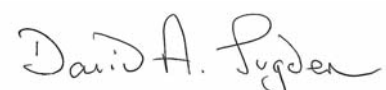
David Sugden

Professor of Special Needs in Education, University of Leeds

I am very pleased to find a Local Authority developing resource materials for children/young people with co-ordination difficulties, a group of children/young people who until recently have not been given the attention they deserve. Now with this resource the teachers, teaching assistants and other professionals in North Yorkshire can have confidence in working with these children/young people. If one takes the daily life of any individual it is hard to think of any part of it that does not involve some form of movement activity. From getting up in the morning and the self-care skills that go along with preparing for the day-washing, dressing, feeding, to the organisation of materials for school, through to writing and other manual activities in the classroom and recreational activities in the gym, in the playground and outside of school, the whole day is filled with movement. Thus a child/young person who has co-ordination difficulties enough to interfere with these activities is at an acute disadvantage.

This resource package is very well-designed and filled with good practical activities. It links with Every Child Matters and has the laudable aims of increasing schools' capacity to work with children/young people showing co-ordination difficulties, supporting staff in the identification, assessment and intervention process and presenting a viable structure in which these processes can be based. The division of the levels of approach into Waves is founded on good research in the movement domain with the levels of intervention starting with Quality First Teaching, moving through to Catch-Up Programme and finally Additional and Different. This type of approach also has strong research foundations in other areas such as reading with the Response to Intervention approach, involving three tiers or levels of intervention being very popular in the USA. It is not only logical in the sense of starting with quality teaching and moving up in intensity as the situation demands, it also makes good administrative sense through the efficient use of resources with specialists only being brought in if and when required.

Children/young people with co-ordination difficulties obviously have movement problems as the core area to be addressed and this resource examines and provides for this in detail. However, it is also well-known that they also have a number of co-occurring difficulties in the language, attention, behaviour, self-concept and cognitive domains and it is pleasing to see these addressed in this resource. One has only to work with two children/young people with co-ordination difficulties: one with an associated attention problem and one without, to realise the practical implications of these co-occurring problems. This resource addresses these co-occurring difficulties thus ensuring that the whole child/young person is being addressed not just one part. It does this by providing strong practical advice for face-to-face teaching and also for the organisation of the school to ensure that it is inclusive for all children/young people. Finally, we know that in order to achieve success in working with any child/young person showing difficulties, it is essential to work with parents and families and the children/young people themselves and it is good to see relevant sections in the resource devoted to this.





Introduction

Inclusive education is a key strategic aim of North Yorkshire County Council Local Authority. The LA is committed to ensuring that all pupils, regardless of their circumstances, are given equal opportunity to achieve essential life skills and the five statutory well-being outcomes defined in Every Child Matters (2003). To enable pupils to acquire these necessary skills: being able to communicate effectively, solve problems and learn collaboratively, for example, they need access to quality education, care and support.

Removing the barriers created by a learning difficulty or disability and ensuring that good practice is embedded within all educational establishments, requires strong collaborative work and understanding between the providers of educational and social opportunities. The NYCC 'Motor Co-ordination Difficulties Action Group', incorporating staff from the NHS Health Trusts, Access and Inclusion and schools/settings representing all age groups, have produced this guidance to highlight the needs of a potentially vulnerable group of pupils; those with co-ordination difficulties. This is taken broadly to include all those pupils whose motor co-ordination skills are below the level that might be expected for their age, and which cannot be accounted for by illness or injury.

The document incorporates the requirements of the Code of Practice for Special Educational Needs (2001) and the Disability Discrimination Act (2005), outlining for example, the 'reasonable adjustments that can be made for pupils with DCD'. It also takes into account the findings of the Leeds Consensus Statement (2006) which was based on the growing research into pupils with co-ordination difficulties.

It is hoped that this guidance will provide a framework to help schools and parents support pupils who show signs of co-ordination difficulties and provide an insight into high quality teaching and learning for all pupils.

“Inclusion is concerned with the identification and removal of barriers to the ‘presence, participation and achievement of all children and young people’” (NYCC 2007).



Rationale

The aims of the document 'Supporting Children and Young People with Co-ordination Difficulties' are:

1. To promote the learning, achievement and well-being of children and young people with co-ordination difficulties so that all pupils attain the five statutory outcomes outlined in 'Every Child Matters (2003)' i.e. be safe, be healthy, enjoy and achieve, make a positive contribution and achieve economic well-being.
2. To enhance the capacity of schools and settings across North Yorkshire for pupils with co-ordination difficulties and to promote greater consistency of approach.
3. To further develop the awareness, expertise and confidence of staff when working with pupils who have co-ordination difficulties.

"Every child has a right to early identification and timely intervention to improve functional performance and prevent secondary and tertiary problems."

Polatajko et al
(1995)

The document aims to support this by providing information about:

- The identification and assessment of co-ordination difficulties.
- How to create a school or setting that is inclusive for those with co-ordination difficulties through identifying potential barriers to learning and illustrating how these could be addressed and overcome.
- Approaches, materials and resources (using the Wave model) which increase curriculum access and enable staff in schools or settings to support pupils with co-ordination difficulties to reach their potential.
- The North Yorkshire referral procedure for schools and settings to use in order to seek additional advice and support for pupils with co-ordination difficulties.

The Leeds Consensus Statement (2006) stated that intervention approaches should:

- *Contain functional activities that are relevant to daily living and meaningful to the child, parent, teachers and others. These should be based on accurate assessment and aim to improve the child's motor functions plus other attributes such as self-esteem and confidence.*
- *Involve the child's wishes as key parts of the intervention process. This will usually include identifying functional tasks, choosing priorities, establishing targets for success and engaging in monitoring their own progress.*
- *Involve a number of individuals who can contribute - parents, teachers, health professionals, coaches and other family members - to enhance generalisation and application in the context of everyday life.*
- *Accommodate the contextual life of the family taking into account family circumstances such as routines, siblings, finance etc.*
- *Be evidence-based and grounded in theories that are applicable to understanding children with DCD. These theories should take into account the nature of the learning process in the developing child, the structure of the task and the environmental conditions that support skill acquisition.*

The children/young people referred to in this document have a wide range of co-ordination difficulties, they could include children with a diagnosis of developmental co-ordination disorder.

The London (Ontario) Consensus Statement - Polatajko et al (1995) was written with the aim of highlighting the existence of Developmental Co-ordination Disorder (DCD), providing a clear picture of the disorder and contributing to the standardisation of published research.

The Leeds Consensus Statement (2006) provided the opportunity to revisit, revise and produce a new consensus statement. The information in this document takes into account the findings of the consensus and is based on an awareness of the growing research into this condition.

Section 1

Definitions and Common Characteristics



'It is important for teachers, when they observe behavioural difficulties in children, to also observe for possible movement difficulties. Through classroom observations and communication of concerns regarding both motor and behavioural problems, teachers can ensure that the needs of children are recognized and addressed.'

Rivard, Missiuna, Hanna and Wishart (2007)

Definitions

Co-ordination Difficulties

This term is used when a child/young person has difficulty with co-ordination - for example, often bumping into things, tripping, dropping or breaking items, or struggling with learning new or complex skills such as handwriting, bike-riding and managing fastenings, scissors and so on. There is a very wide variation in the normal range of physical ability with athletic people at one end of the spectrum and those with co-ordination difficulties at the other end. Many people have difficulties with co-ordination - especially when tired or anxious. Children/young people have been noticed to have more difficulties after a growth spurt or during adolescence. It is often preferable to use this term to indicate that a child/young person may need special consideration or help in certain areas than to label the difficulties.

“Movement is a fundamental component of human life with the ability to make precise and controlled movements being so much part of daily living.”
Chambers and Sugden
(2006)

Developmental Co-ordination Disorder

A child/young person shows evidence of Developmental Co-ordination Disorder (DCD) when they lack the motor co-ordination necessary to perform tasks that are considered to be appropriate for his/her age, given normal intellectual ability and the absence of other neurological disorders (American Psychiatric Association, 1994). A child/young person may demonstrate significant difficulty with self-care tasks (e.g. dressing, using utensils); with academic tasks (e.g. handwriting, organising class work, P.E.); with leisure activities (e.g. sports, playground activities, social interaction); or with a combination of the above. Any diagnosis is made by a doctor, usually a paediatrician, but this rarely occurs before the child is 5 years of age.

Verbal Dyspraxia

Children/young people with developmental verbal dyspraxia have difficulty in making and co-ordinating the precise movements required for the production of clear speech, but there is no evidence of damage to nerves or muscles. They have difficulty in producing individual speech sounds and in sequencing sounds together in words.

Definitions (Continued)

Hypermobility Syndrome

Hypermobility is also sometimes known as 'ligamentous laxity'. Ligaments are the fibrous bands that hold our joints together, and if they are lax the person has an above-average amount of movement in the affected joints. This can cause difficulties. For example, lax joints in the feet, ankles and/or knees can cause a child to frequently trip up, to have difficulties with balance or standing still. If the joints of the hands and fingers or thumb are affected, it may be difficult to grasp and control a pencil well enough to write.

Gross Motor Skills Difficulties

A motor skill is an action that involves the movement of muscles in your body. Gross motor skills are larger movements involving the arm, leg, or feet muscles or the entire body - things like crawling, running, and jumping are gross motor skills.

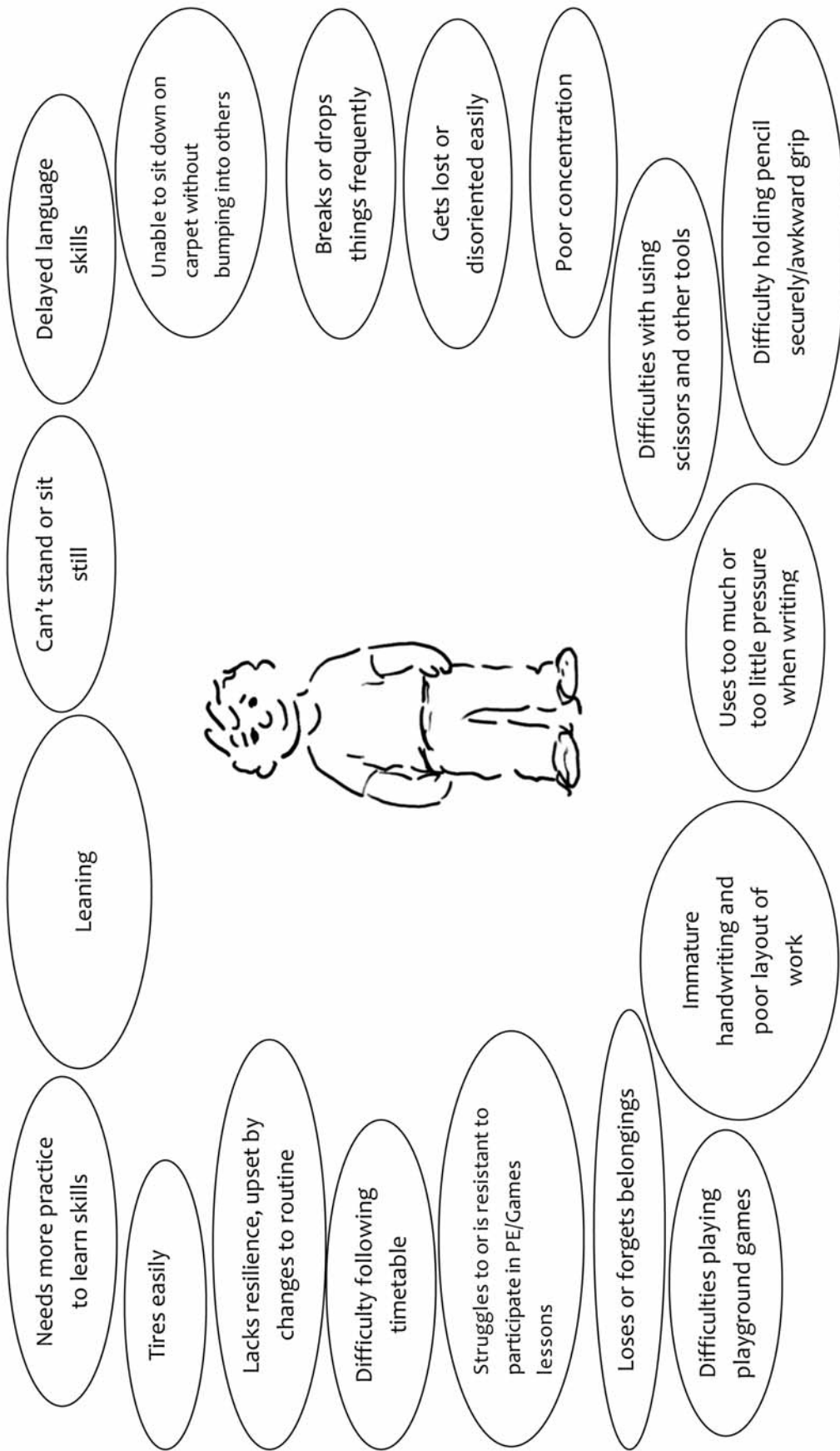
Fine Motor Skills Difficulties

Fine motor skills involve the small muscles of the body. They are important in most school activities as well as in life in general. Weaknesses in fine motor skills can affect a child/young person's ability to eat, write legibly, use a computer, turn pages in a book, and perform personal care tasks such as dressing.

"It is not the label which informs practice, but an understanding of the factors that have led to the diagnosis, and the strategies which can be used to help meet the needs of the child."
Kirby (1999)

Common Characteristics

Characteristics You May Observe At School



EACH INDIVIDUAL HAS A UNIQUE PROFILE OF STRENGTHS AND WEAKNESSES - NO TWO INDIVIDUALS PRESENT WITH THE SAME SIGNS

Characteristics of Children and Young People with Co-ordination Difficulties

Co-ordination difficulties may be displayed in some or all the following areas:

- gross motor skills;
- fine motor skills;
- motor organisation;
- visual perception;
- auditory perception;
- speech and language (articulation and organisation);
- learning and memory;
- emotion, behaviour and social.

Not all characteristics will be found in every child, each child will have their own individual profile.
Addy (2003)

These can result in the following:

- Weak PE/Games skills e.g. difficulty throwing or catching a ball, stands out as different in PE.
- Poor handwriting skills (letter formation/word spacing/colouring).
- Difficulties with scissors and other school equipment.
- Difficulties with dressing, tying shoe laces, buttons.
- Organisational difficulties (time, possessions).
- Difficulties with directions, right and left.
- Planning and layout of work may be poor.
- Difficulty recalling and remembering a short sequence of instructions.
- Low self-esteem and confidence.
- Difficulties 'sitting/standing still' and moving around the classroom.

Section 2

Frequently Asked Questions



Children with movement problems identified at an early age may benefit from intervention that includes the education of teachers and parents about how to make tasks easier for them.

Missiuna, Rivard, & Pollock (2004)

Frequently Asked Questions

Frequently Asked Questions (FAQs)	Answers	Relevant sections in this document
<p>What is the difference between Dyspraxia and DCD?</p>	<p>The reclassification of Dyspraxia as Developmental Co-ordination Disorder (DCD) in 1987 by the American Psychiatric Association (APA), (1987, 1994) in a bid to provide a common term for researchers to use. Developmental Co-ordination Disorder (DCD) is the preferred diagnostic term endorsed by International Consensus Statement, London Ontario (1995), and the Leeds Consensus Statement (2006) http://www.dcd-uk.org/</p> <p>The term Dyspraxia is still in common usage.</p> <p>The children/young people referred to in this document have a wide range of co-ordination difficulties, they could include children with a diagnosis of Developmental Co-ordination Disorder (DCD).</p>	<p>Section 1 Definitions and Common Characteristics p11-14</p>
<p>How many children/young people are affected by DCD?</p>	<p>Developmental Co-ordination Disorder affects 6-10% (DSM-IV-TR) in the 5-11 years age range, although more recent research has given a higher figure of 5-15 % (Wilson, 2005). DCD is recognised across culture, race, socio-economic status and gender; however more boys have the condition in the ratio of 3:1 (Sugden & Henderson, 1994).</p>	
<p>Can it occur with other conditions?</p>	<p>DCD tends to be a dimensional difficulty with children and young people having associated conditions. Researchers have shown DCD co-occurring with dyslexia, ADHD, specific language impairments, autism, and joint hyper-mobility.</p>	<p>Section 1 Definitions Common characteristics p11-14</p>
<p>How would one recognise a child with co-ordination difficulties?</p>	<p>It is important to recognise that children/young people with co-ordination difficulties are a very mixed group. Some may experience difficulties in a variety of areas while others may have problems only in specific activities.</p>	<p>Section 1 Common characteristics p13-14</p> <p>Section 4 Quality First Teaching p29</p>

Frequently Asked Questions

Frequently Asked Questions (FAQs)	Answers	Relevant sections in this document
<p>What are the physical characteristics of a child/young person with co-ordination difficulties?</p>	<p>May appear to be clumsy or awkward in his/her movements. S/he may bump into, spill, or knock things over and have problems with balance. S/he may experience difficulty with gross motor (whole body) or fine motor (use of hands) skills, or both.</p> <p>May be delayed in attaining skills such as dressing or riding a bicycle and new motor skills may be difficult to learn. There may be a particular difficulty with skills that require the co-ordinated use of both sides of the body, such as cutting with scissors, using a knife and fork, and tying shoelaces. There may also be difficulty with organising the movements of parts of the body that he/she cannot see such as co-ordinating their legs when swimming.</p> <p>Very likely to have difficulty with handwriting. This skill involves continually interpreting feedback about the movements of the hand while planning new movements, and is a very difficult task for most with co-ordination difficulties.</p>	<p>Section 1 Common characteristics p13-14</p> <p>Section 4 Quality First Teaching p29-59</p>
<p>Are there any emotional/behavioural characteristics?</p>	<p>Because motor skills can be very difficult and require more effort for a child/young person with co-ordination difficulties, repeated failure is experienced, and they may tire because of the effort needed. This may cause them to avoid participating in motor tasks. They may also experience low self-esteem and become frustrated easily.</p> <p>The child/young person may avoid socialising with peers, particularly on the playground. Some will seek out younger children to play with while others will go off on their own. This may be due to decreased self-confidence or avoidance of physical activities.</p> <p>The child/young person may be resistant to changes in his/her routine or in the environment. If they have to expend a lot of effort to plan a task, then even a small change in how it is to be performed may present a large problem.</p>	<p>Section 1 Common characteristics p13-14</p> <p>Section 4 Communication Social and Emotional Difficulties p51-52</p>

Frequently Asked Questions

Frequently Asked Questions (FAQs)	Answers	Relevant sections in this document
<p>Are there any emotional/ behavioural characteristics? <i>continued</i></p>	<p>Pupils may have difficulty with writing legibly, or at an acceptable speed, so that they do not show their true understanding of a subject. Organisation may be a difficulty. This can affect their whole life and may include factors such as placing work appropriately on a page, remembering their PE kit, writing down homework before the end of the lesson.</p>	
<p>What is the best way to support those with co-ordination difficulties?</p>	<p>Research suggests that those with co-ordination difficulties not only warrant intervention, but when given the right intervention, can greatly benefit from it. Mandich et al (2003) point out that when children/young people get treatment they can gain competence in important everyday activities and their co-ordination difficulties can begin to be reversed.</p> <p>Mandich et al (2001) also found that there is currently little evidence to support the use of one treatment over another. However, some research has indicated good results from process-orientated treatments (Wilson 2005) where the main objectives are focused on skills acquisition.</p> <p>Neimeijer et al (2003) found that a combination of sharing knowledge and providing and asking for feedback helped children understand how to move their bodies successfully.</p>	<p>Section 3 Effective provision</p> <p>Section 4 Quality First Teaching</p> <p>Section 6 Wave 3 Goal Directed learning using C.S. p67-68</p>
<p>How does co-ordination difficulties affect self-esteem?</p>	<p>Children/young people with co-ordination difficulties often put a great deal of effort into a task but may still achieve an unsatisfactory result. When this happens repeatedly and their difficulties are not understood, it can lead to low self-esteem (Dixon & Addy 2004). In a small study carried out by Watson & Knott (2006) it was found that those with co-ordination difficulties did not have lower global self-esteem than a comparison group of typically developing children/young people, but there were differences in their copying strategies in that they tended to be more passive and avoidant of tasks they perceived as difficult.</p>	<p>Section 4 Quality First Teaching p29-59</p> <p>Section 9 Self-esteem p87-91</p>

Frequently Asked Questions

Frequently Asked Questions (FAQs)	Answers	Relevant sections in this document
<p>What role can schools play in supporting children/young people with co-ordination difficulties?</p>	<p>A number of researchers, e.g. Kirby (1999) highlighted the importance of the partnership between health professionals, school and the family. Stafford (2000) focuses on the importance of the school's role in assessing providing intervention for children's inefficient motor performance. Sugden & Chambers (2003) highlighted the role of parents and teachers in the intervention of children/young people with co-ordination difficulties. In their study they concluded that both teachers and parents were able to provide effective intervention for the majority of these individuals.</p>	<p>Section 3 p19-27 Effective Provision Inclusive Schools Section 4 Wave 1 Section 10 Managing Transitions p93-95 Appendix 2 School Audit p137</p>
<p>Do children/young people with co-ordination difficulties need an individual assessment?</p>	<p>Because co-ordination difficulties can cause difficulties in a variety of areas, and may occur with other conditions, it is necessary for each child/young person to have an individual assessment. A doctor will assess the child/young person first to rule out other conditions that may initially appear similar to co-ordination difficulties.</p>	<p>Section 3 Outline Procedure p19 Section 7 Specialist and Individual p71-72</p>
<p>How soon does a child/young person need to be assessed by an Occupational Therapist?</p>	<p>There may be reasons why a child/young person has problems with motor activities. They may lack experience with certain tasks, they may have opted out of some activities because of their temperament or they may even have problems with their eyesight. Once a child/young person has been shown how to achieve skills according to their learning style and has been given time to practice activities but still experiences difficulties, then it is appropriate for them to be assessed by an O.T.</p>	<p>Section 3 Outline Procedure p19 Wave Model of Provision p23-25</p>

Section 3

Effective Provision and The Inclusive School

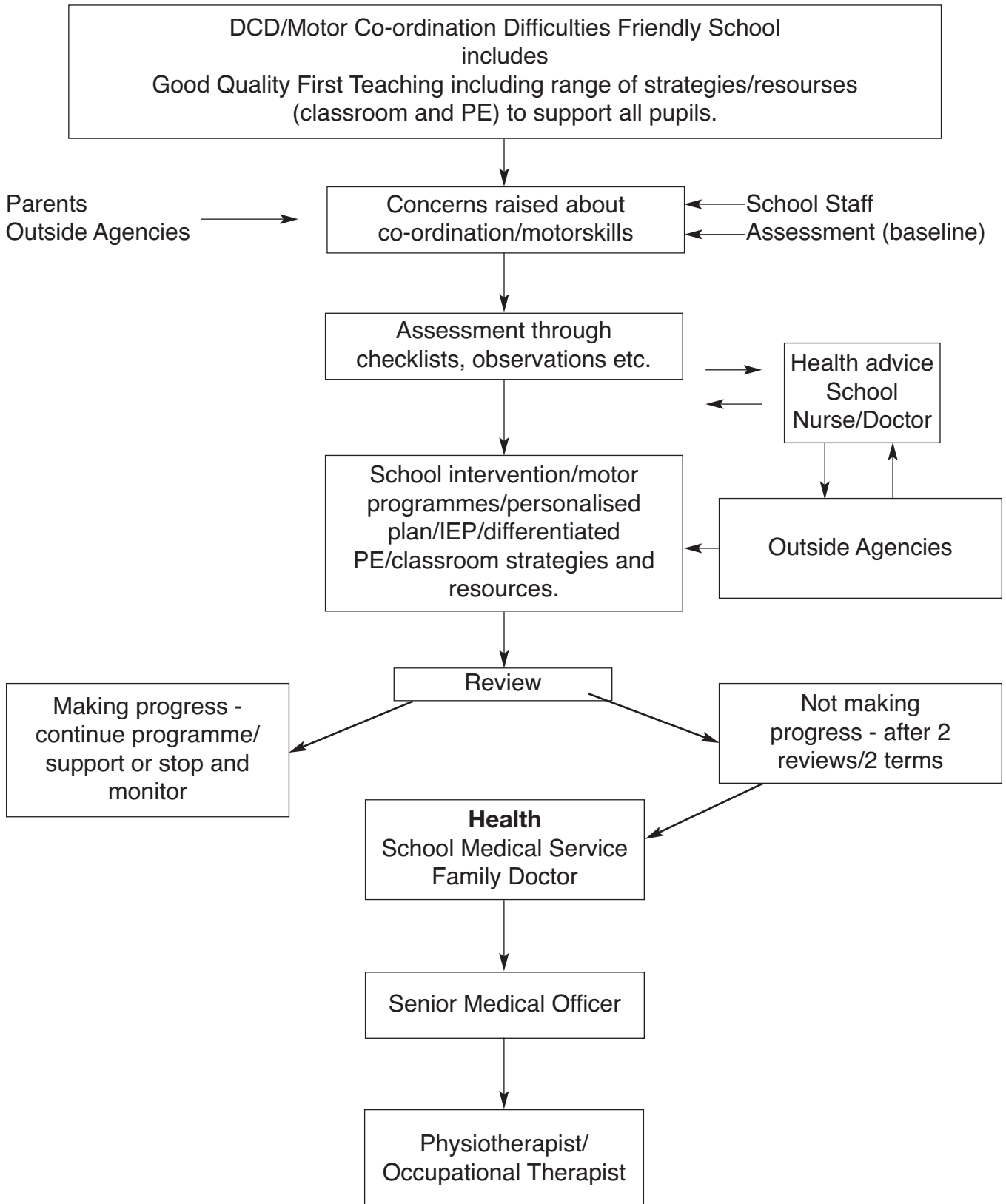


If schools are concerned with the development of 'the whole child'..... children's movement skills should be assessed on entry to school and be monitored at regular intervals thereafter.

Stafford, (2000)

Outline Procedure

OUTLINE PROCEDURE FOR SUPPORTING PUPILS IN SCHOOL WHO ARE PRESENTING WITH MOTOR SKILL DIFFICULTIES including DEVELOPMENTAL CO-ORDINATION DISORDER (DCD)



Effective Provision

Early and detailed assessment of co-ordination problems enables children/young people to be given support and appropriate intervention. Practice in North Yorkshire schools has shown that appropriate interventions based on detailed assessment allows them to gain new skills and reduce the impact co-ordination difficulties have on their everyday lives.

Assessments allow practitioners to look at specific skills and abilities in a structured way and this helps to identify areas where a child/young person needs support to develop. Pupil, parent and teacher questionnaires provide additional information that can be used to plan effective provision.

The Outline Procedure diagram on page 19 outlines the recommended processes involved in supporting a pupil with co-ordination difficulties in North Yorkshire. What follows is an overview of the process identifying key assessments and interventions with links to other parts of the document.

“For intervention to be effective children need to be accurately and consistently identified and assessed.”
Chambers and Sugden
(2006)

Most children/young people needs should be addressed through Quality First Teaching which would include differentiation within the classroom and P.E. as well as adaptations to the environment. However, for a few pupils who have more significant difficulties this outline procedure provides the steps by which schools, parents and outside agencies can ensure appropriate provision for individuals.

The Inclusive School

The North Yorkshire Inclusion Mark (2007) describes an inclusive school as being one where all children/young people should learn together regardless of any 'difficulties or differences'. Focusing on 'presence, participation and achievement,' it goes on to state that those with special needs should be accommodated within a child-centred pedagogy that is capable of meeting their needs. Groom and Rose (2005) identified the following as being key features of an inclusive school:

- a positive school ethos;
- an enriched curriculum;
- involvement of parents/carers at different levels;
- an understanding of the needs of the child/young person;
- engendering a belief that children/young people have the capacity to change;
- setting realistic targets for achievement;
- celebrating success.

Effective schools are educationally inclusive schools. This shows, not only in their performance, but also in their ethos and their willingness to offer new opportunities to pupils who may have experienced previous difficulties. This does not mean treating all pupils in the same way. Rather it involves taking account of pupils' varied life experiences and needs.
Ofsted (2001)

An Inclusive school supports all children and young people including those with co-ordination difficulties by:

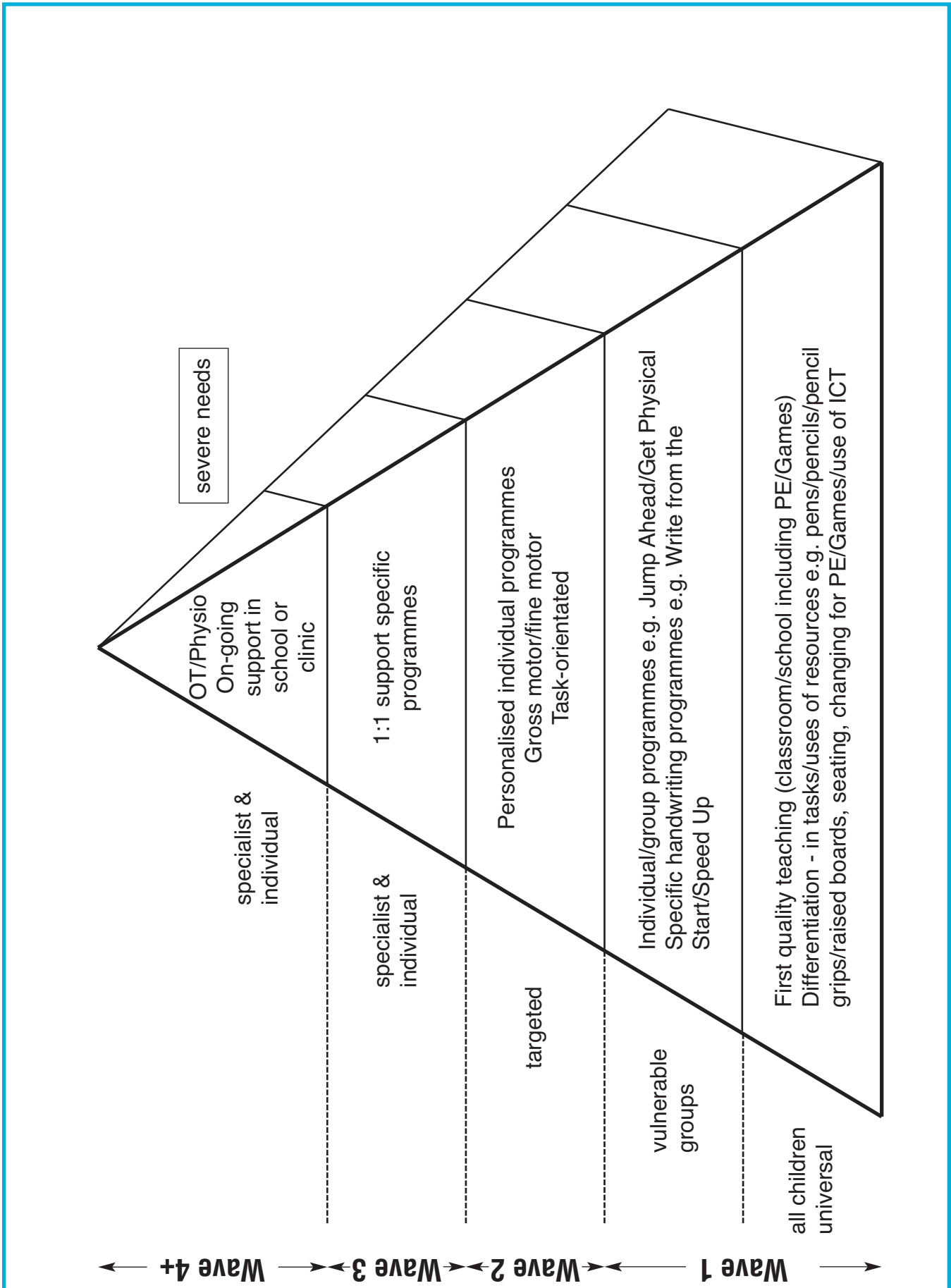
1. Transferring the school's SEN policy into practice in all curriculum areas and through its development plans.
2. Adapting the learning environment to meet the individual needs of all.
3. Providing all school staff with appropriate training to raise their awareness and understanding of the needs of all.
4. Provision that ensures all pupils have opportunities to develop and consolidate co-ordination skills through Wave 1 Quality First Teaching, availability of Wave 2 or Wave 3 provision as appropriate, and the availability of Extended School activities.

The Inclusive School *(Continued)*

5. Promoting self-esteem and self-motivation by identifying opportunities to listen to an individual's perspectives on aspects of their learning and development. Involving pupils in discussions about their own short- and long-term goals, and reflecting on the most effective strategies.
6. Developing parent/carer involvement through fostering common dialogue and understanding.
7. Providing optimum provision through collaboration with outside agencies.

“ Even the most pedagogically advanced methods are likely to be ineffective in the hands of those who implicitly or explicitly subscribe to a belief system that regards some students, at best as disadvantaged and in need of fixing, or at worse, as deficient and therefore beyond fixing.”
Ainscow (2002)

Wave Model Of Provision



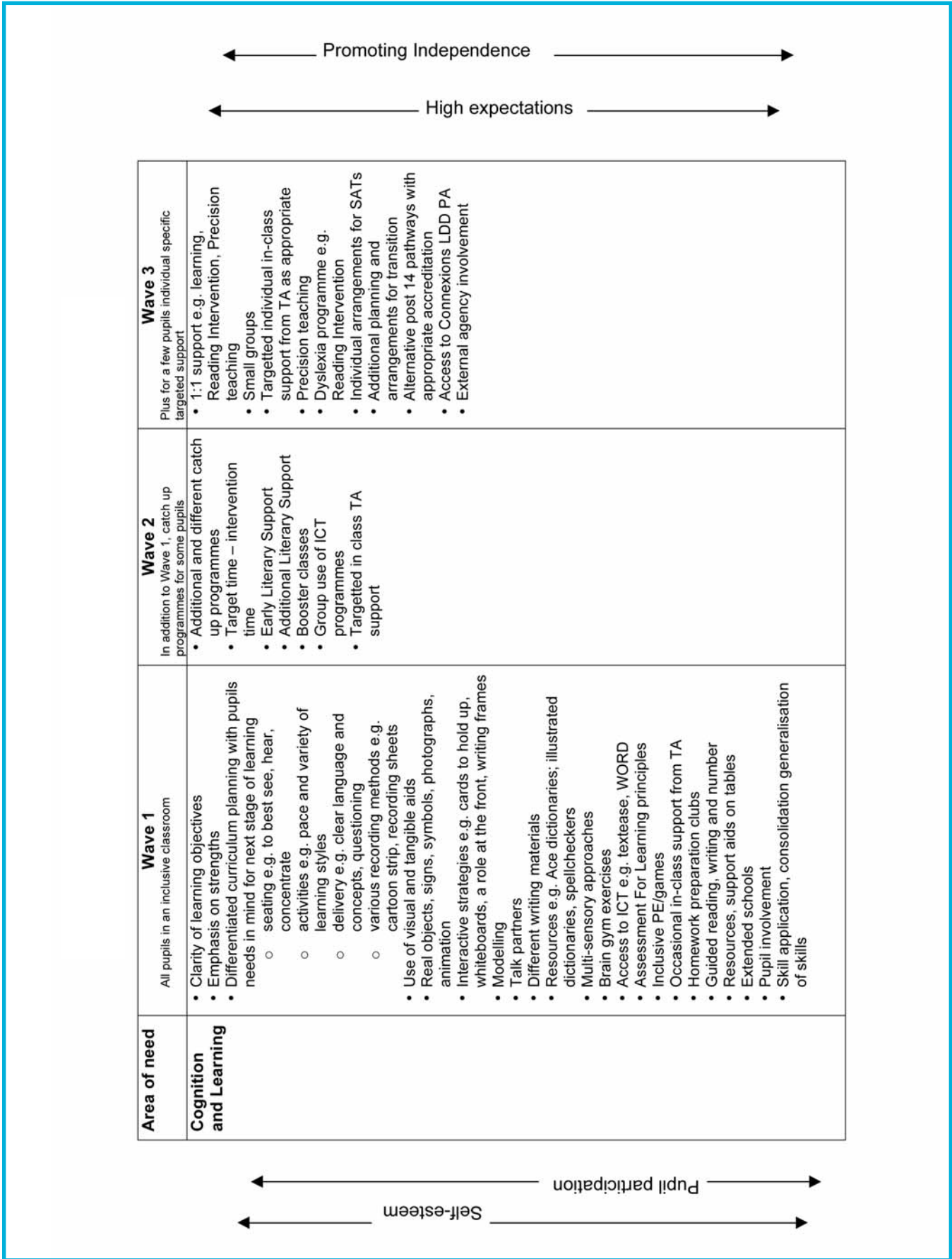
Wave Model Of Provision *(Continued)*

<u>Wave 1 - Quality First Teaching Action</u>	<u>Supported by - interventions and assessments</u>
School develops an inclusive ethos and follows inclusive principles. Classrooms are adapted to take account of any co-ordination issues e.g. classroom furniture is of an appropriate size.	The SEN Code of Practice (2001)
	The Children Act (2004)
	The North Yorkshire Inclusion Mark (2007)
	Supporting Children and Young People with Co-ordination Difficulties
School completes an audit of their ability to include pupils with co-ordination difficulties.	Supporting Children and Young People with Co-ordination Difficulties Effective Provision & The Incl. School p11
All pupils are provided with activities that support and develop their co-ordination skills.	Wave 1 p29
	Wave 1 p29
Pupils with co-ordination difficulties are identified and monitored.	Characteristics you may observe p13-14
If after two terms of support through Quality First Teaching (Wave 1) the pupil shows continuing difficulty move to stage 2.	
<u>Wave 2 - Catch Up Programmes Action</u>	<u>Supported by</u>
The pupil's class teacher recognises that problems with co-ordination skills are adversely affecting the individual's ability to access the curriculum. Those with difficulties who need additional 'catch up' support are assessed to find specific needs.	The SEN Code of Practice (2001) Wave 2 p61 Checklist 1 p97 Checklist 2 p98
The problem is then discussed with the school SENCo, the pupil's parents and the pupil. The interventions could be included in an Individual Education Plan (IEP).	Pupils, Parents and Carers p73
Following on from the general checklist specific assessments may be carried out pre and post intervention.	Motor Skills Assessments p105

Wave Model Of Provision *(Continued)*

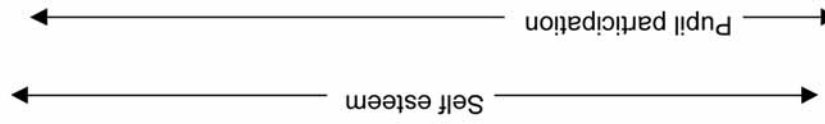
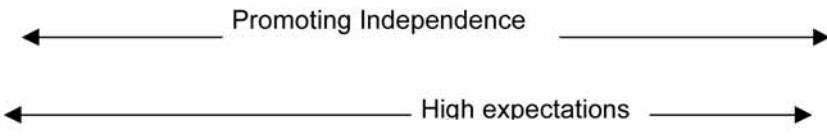
<u>Wave 3 - Additional and Different Action</u>	<u>Supported by</u>
<p>The School Action Plus stage of the referral process follows if the problems persist or worsen.</p>	
<p>Any checklists and details of interventions are shared with external support agencies who may carry out a further assessment.</p> <p>Detailed assessments of a pupil's Fine and Gross Motor Skills and Visual Perception are made using Wave 3 assessments.</p>	<p>Motor Skills Assessments</p>
<p>Schools and outside support agencies devise an individual personal programme that focuses on both skill acquisition and the development of fine and gross motor skills.</p>	<p>Appendix 3 A Motor Skills Programme p147</p>
<p>Where there is limited progress within two terms, the pupil will then be referred to the Occupational Therapy and Physiotherapy Service at a clinic or Child Development Centre.</p>	
<p>An Occupational Therapist and/or a Physiotherapist will make a detailed assessment of the child's functional motor skills.</p>	<p>Specialist and Individual p71-72</p>
<p>If, following the assessment, the Occupational Therapist and Physiotherapist feel that there are significant motor skills difficulties they will visit or contact school and advise on the management of the individual's motor difficulties within the school environment.</p>	<p>Occupational Therapy and Physiotherapy Services for Children with DCD p71-72</p>

Overview of Interventions for Pupils with Co-ordination Difficulties



Overview of Interventions for Pupils with Co-ordination Difficulties *(Continued)*

	Wave 1	Wave 2	Wave 3
Area of need	All pupils in an inclusive classroom	In addition to Wave 1, catch up programmes for some pupils	Plus for a few pupils individual specific targeted support
Communication and Interaction	<ul style="list-style-type: none"> • Clear succinct instructions • Key words • Visual timetables • Structured school and class routines • Different ways of explaining tasks • Opportunities to prompt and rehearse 	<ul style="list-style-type: none"> • In-class support with focus on supporting speech and language • ICT – Clicker 5, Wordbar • Communication Skills 	<ul style="list-style-type: none"> • Input from Outreach networks e.g. ASC, SLD • Speech and Language support • Alternative forms of communication e.g. Makaton • Visual organiser • ICT - writing with symbols • Communication aids • Access to Connexions LDD PA • External agency involvement
Emotional, Social, Behavioural	<ul style="list-style-type: none"> • Whole school behaviour policy • Whole school/class rules • PSHCE curriculum • Circle time • Buddy system • SEAL • Timed support e.g. <ul style="list-style-type: none"> ○ moving a marker to show time is going ○ setting short targets to be completed within a time 	<ul style="list-style-type: none"> • Specific support structures across the school • Small group work <ul style="list-style-type: none"> ○ Circle time ○ Self-esteem ○ Social skills training ○ Anger management • SEAL nurture groups 	<ul style="list-style-type: none"> • Learning mentor • Home-school record • Peer mentoring • Silver SEAL • Increasingly personalised curriculum (particularly at KS4) • External agency involvement
Sensory and Physical	<ul style="list-style-type: none"> • Staff aware of characteristics and appropriate support • Access to appropriate equipment e.g. writing slopes, pencil grips • Use of technology • Medical support/advice implemented 	<ul style="list-style-type: none"> • Keyboard skills training group • Additional fine motor skills practise e.g. handwriting • Programmes e.g. Write from the Start • Regional LEA guidance booklet 	<ul style="list-style-type: none"> • 'Lets Get Physical' • Individual support in class, during PE and lunchtime • Physiotherapy programme • Access to PC with switch • 1:1 support • Teaching specific skills individually • Liaison with outside agencies e.g. re-seating, moving





Section 4

Wave 1 – Quality First Teaching



Intervention is not just about additional out-of-class provision. It also includes reviewing what happens in class to make sure it is appropriately tailored to the needs of the children.

DfES (2006)

Wave One - Quality First Teaching

This section aims to provide strategies and ideas that create an environment in which all pupils can fully participate and achieve. Wave 1 - is a basic entitlement for all pupils and is Quality First Teaching.

Factors that form good Wave 1 Provision

Ethos

- There are high expectations of every pupil.
- SEAL is embedded in the curriculum.
- There is a consistency of approach throughout the school.
- Staff have a good understanding of pupils' strengths and weaknesses and use a problem-solving approach to support them.

There are several reasons why in the new millennium we need to be developing and researching models of intervention that do not presume to create change in the child, but, instead, focus solely on changing the environment.
Missiuna (2006)

Environment

- Classrooms are organised and tidy.
- All have a clear view of the board and working walls.
- There are opportunities in all classrooms to access quiet and less stimulating areas.

Equipment

- Resources are stored so they are easily accessible to all - labelled carefully with colour-coding.
- Resources for different curriculum areas including P.E. are varied and appropriate for all pupils.
- Furniture is of an appropriate size and height.
- Furniture is positioned to allow free flow and easy access.

Teaching Approaches

Children are more likely to learn successfully if they:

- *have their basic physical needs met;*
- *feel unthreatened, secure, safe and valued;*
- *feel a sense of belonging to the group;*
- *are engaged and motivated;*
- *can see the relevance of what they are doing;*
- *know what outcome is intended;*
- *can link what they are doing to other experiences;*
- *understand the task;*
- *have the physical space and the tools needed;*
- *have access to the necessary materials;*
- *are not disrupted or distracted by others;*
- *can work with others or on their own, depending on the task;*
- *are guided, taught or helped in appropriate ways at appropriate times;*
- *can practise;*
- *can apply the learning in both familiar and new contexts;*
- *can persevere when learning is hard;*
- *can manage their emotions if things are not going well;*
- *recognise that all learners make mistakes and mistakes can help us improve.*

DfES (2004)

- Assessment for Learning principles are embedded in practice.
- Work is differentiated and tasks are modified to allow all to experience success.
- All pupils have the opportunity to record their ideas in a variety of ways.
- Teaching is multi-sensory and takes into account a variety of learning styles including visual, auditory and kinaesthetic.
- Additional adult support within the classroom is used to promote independent working.
- Centred on personalised learning.

The strategies are linked to observable features of pupils with co-ordination difficulties under the main categories of:

- independence;
- movement/mobility;
- numeracy;
- reading/recording;
- communication and social and emotional difficulties;
- sensory regulation.

The supporting strategies are based on a strategy called MATCH which was devised in Canada by Cheryl Missiuna (www.canchild.ca) and resulted from work with parents, health professionals and teachers.

Early Years Support Strategies

Supporting Pupils in the Early Years	
What you might see	Teaching Strategies to Support
Messy Eater	<p>Try different textures of food.</p> <p>Teach licking 100s and 1000s around mouth on lollies.</p> <p>Lip printing.</p> <p>Imitation of mouth movements, pull faces.</p> <p>Blowing sucking exercises, blowing ping-pong balls, blowing paint feathers, tissue paper, bubbles, candles etc.</p> <p>Imitation of environmental sounds/animal noises.</p> <p>Experiment with different types of cutlery.</p> <p>Prompting to look at what they hold.</p>
Difficulty drinking:	
<ul style="list-style-type: none"> • through straw; • open cups. 	<p>Use wider straw, use longer/shorter straws.</p> <p>Alter size of cup, use cup with handles. Vary amount of liquid in cup.</p>
Dribbles	As messy eater.
Lack of range of vocal sounds	<p>Copy symbolic sounds – animal sounds, vehicle sounds. Play sounds.</p> <p>Copy pupil's sounds, join in to make a conversation.</p> <p>See Letters and Sounds for more ideas</p>
Doesn't like messy activities	<p>Provide lots of different activities.</p> <p>Provide tools so they can play without getting messy, gradually introduce more mess on hands.</p> <p>Add toys they really like to activity e.g. make tyre tracks by putting cars in the paint.</p> <p>Introduce messy food activities.</p>
Doesn't like mark making	Provide mark making on both horizontal and vertical surfaces.
Moves like a younger pupil	<p>Look at specific skills on checklist.</p> <p>Provide opportunities to crawl, roll, balance, change from one type of movement to another e.g. obstacle course, using tunnels. Running avoiding obstacles, stopping, starting and changing direction. Squeezing between obstacles.</p> <p>Parachute games. Carrying things of differing weights.</p> <p>Pushing and pulling games.</p> <p>Developmental Dance Programme e.g. Jabadao.</p>

Early Years Support Strategies (Continued)

What you might see	Teaching Strategies to Support
<p>Misjudges distances when picking up or putting down objects.</p>	<p>Prompt looking. Practice taking things off, rather than on e.g. pegs off a line. Use bigger objects. Throwing games with bean bag and container, starting with dropping into a very close container and moving on to throwing up to 1 metre. Use balls with bells in so they can be heard as well as seen.</p>
<p>Walks through groups of pupils/over obstacles rather than around.</p>	<p>Obstacle course. Materials to crawl under/over. Walking through the rungs of a ladder/from tyre to tyre. Carpet square/hoop to define own space when sitting.</p>
<p>Tires quickly.</p>	<p>Vary pace and difficulty of activities. Make sure activities are varied so that there is a selection of sitting/moving activities. Be understanding, allow child personal space, they may need to chill out time or time run around. They will need times when they are not directed. Keep tasks short so they are able to finish at the same time as peers or allow extra time but make sure they don't miss out on the fun activities.</p>
<p>Leans on others when sitting</p>	<p>Sit next to a wall or furniture. Allow them to lie down.</p>
<p>Difficulties in sequencing routine tasks, e.g. putting coat and shoes on, toilet etc.</p>	<p>Break each activity down into small tasks. Use backward chaining, see www.canchild.ca Take a set of photographs to illustrate the steps needed, display in the right sequence so the child can follow them as they complete the task. Have a full-length mirror so they can see themselves.</p>
<p>Difficulties getting on to ride-on toys, climbing equipment.</p>	<p>Practice each step so they know what it feels like before linking steps together.</p>

Promoting Independence Skills

Independence Skills		
What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Is disorganised and has difficulty prioritizing tasks.</p>	<p>Work with parents to increase independence skills setting realistic targets with a consistent approach.</p>	<p>Parents/Carers as Partners p82 Questionnaire p83-86</p>
	<p>Daily checklist to prepare school bag. Pupil should be involved in generating the list.</p>	<p>Organisational skills in the Secondary School p141</p>
	<p>Explicitly teach organisational skills to the class and follow up with individual as needed.</p>	<p>The Learning Challenge p141</p>
	<p>Teach pupil to use homework book/planner effectively. Provide a model of how to prioritise.</p>	<p>Questionnaire p142-144</p>
	<p>Teach all pupils order of dressing/undressing e.g. through rhyme or song.</p>	
	<p>Label or provide visual cues for front/back, left/right. Point out how to use labels, logos or other markers on clothes to orient them correctly.</p>	<p>Overview of Interventions WAVE 1 p29-59</p>
<p>Last to get ready for PE/playtime.</p>	<p>Provide enough space to dress. Pair with a more able pupil for help.</p>	
	<p>Use backward/forward chaining strategy. Enable success by helping pupil who is struggling with some steps, except the one or two they can do. Discuss fastening of clothes and shoes with parents e.g. Velcro shoes. At a quiet time, show how buttons and other fastenings work.</p>	<p>Pupils, Parents and Carers p82-86</p>

Promoting Independence Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
Last to get ready for PE/playtime. (Continued)	<p>Practise on larger, looser types of clothing first, in a position where they are easy to reach and to see.</p> <p>Allow more time for changing. Complete routine prior to going home to avoid 'panic'. Keep end of day routines consistent.</p>	Inclusive P.E. p57 Wave 1 p29
Takes a long time to eat lunch.	<p>Suggest that parents provide easy open containers e.g. plastic juice containers with pull up straw, and discuss appropriate type and amount of food in lunch boxes.</p> <p>Seat in a position with fewer distractions (quieter area away from thoroughfares).</p> <p>Ensure proper seating (feet flat on floor, chair pulled up to table).</p> <p>Ensure all staff are aware of the support the pupil may need.</p>	<p>Movement and Mobility p47-49</p> <p>The Inclusive School p21-22</p>
Messy/untidy appearance	Liaise with parents re: routines at home etc.	The Inclusive School p21-22
Rushes through tasks or is unusually slow. Gives up easily doesn't complete tasks.	<p>Ensure that the task is set at an appropriate level for completing in the time given.</p> <p>Ensure the task is understood by cueing pupil in and repeat instructions or give one at a time.</p> <p>Ensure expectations of the task are well understood.</p>	<p>WAVE 1 p29-59</p> <p>Recording P37-42</p> <p>Keyboard Skills p139</p>
Exhibit adult dependency – 'learnt helplessness'.	<p>Encourage self- evaluation, both of product and process.</p> <p>Encourage strategies to support independence - self-help skills.</p>	<p>Pupil Questionnaire p76-81</p> <p>Pupil Participation p73-75</p>

Promoting Independence Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Exhibit adult dependency – ‘learnt helplessness’. (Continued)</p>	<p>Appropriate use of TAs other adults in the classroom.</p> <p>Use of visual and written prompts e.g. visual timetables, social stories.</p> <p>Appropriate storage of classroom equipment. Resources well-labeled and colour-coded.</p> <p>Use of activity analysis approach to break down tasks into easy stages. Provide written or visual steps.</p> <p>Encourage peer mentoring and paired working.</p> <p>Talk Partners.</p> <p>Plan work that takes into account different learning styles including visual, auditory and kinaesthetic.</p>	<p>Overview of Interventions p26-27</p> <p>Overview of Interventions p26-27 Social Stories p140</p> <p>Quality First Teaching p29-59</p> <p>Pupil Participation p73-75</p> <p>Positive Talk p87-91</p>
<p>Difficulty in activities such as tying laces, using cutlery. Difficulty in generalising i.e. adapting one learned movement to another situation.</p>	<p>Activities to develop bi-lateral integration Skill-based teaching of specific skills.</p>	<p>Pupil and Parent questionnaires p76-86 Goal Directed Teaching p67-68 Bi-lateral Integration p152</p>
<p>Can't find objects looked for</p>	<p>Where possible, store objects in labelled containers and train users to always return them. Devise a plan for personal belongings so they can be found easily. Avoid clutter in work area. Encourage habits that develop an organised approach to tasks.</p>	



Reading and Recording Skills

Reading and Recording Skills		
What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Avoids colouring or pre-writing activities. Immature drawings. Drawings lack detail.</p> <p>Difficulty crossing the body mid-line with pencil? Swaps hands in the middle?</p>	Provide different sizes/ thicknesses of pencils/felt tips.	Classroom Resources p185-186
	Try to use pencil grips to assist with grasp. Let the pupil experiment with different ones.	Classroom Resources p185-186
	Use alternative media e.g. paintbrush and water, individual whiteboards, sand trays and gel boards etc.	Classroom Resources p185-186
	Encourage drawings based on personal interests. Lots of pre-writing pencil control activities: colouring-in, mazes, dot-to-dot, visual discrimination worksheets, use of various art materials, dough, construction materials, observation games.	Visual Perception Assessment p109-122 Visual Perception Activities p149
	Copying each other's drawings through turn-taking games, gradually introducing child to more mature methods of drawing.	Encourage Peer Support
	Use magazine photos and/or a large mirror to aid awareness of relative size of limbs etc. Body awareness games. Observation games.	
	Create a quiet area with minimal auditory distraction/disruption for your writing area. Use privacy boards.	Activities and resources to support Fine Motor Skills p124-136
	Practise fine and gross activities that involve crossing the mid-line.	Bi-lateral integration activities p152

Reading and Recording Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Difficulty crossing the body mid-line with pencil? Swaps hands in the middle? (Continued)</p>	<p>Practise visually following a moving object across the mid-line e.g. a puppet, or a bean bag tossed from one hand to the other.</p>	<p>Bi-lateral integration activities p152</p>
<p>Avoids arts/crafts cutting, pasting activities.</p>	<p>Forward or backward chain tasks to help child understand what they have to do.</p> <p>Provide good quality or adapted scissors and glue sticks. Provide left-handers with appropriate equipment.</p> <p>Focus on, and encourage, fun, enjoyment and creativity rather than the end product.</p> <p>Partner with another who can help with cutting/pasting.</p> <p>Pre-cut/paste parts.</p>	<p>Promoting Independence Skills p33-35</p> <p>Fine Motor Skills resources and activities p124-136</p> <p>Self-Esteem p87-91</p>
<p>Performs poorly in spelling tests – can't finish writing a word before the next word given in dictation.</p>	<p>Use prepared sheets when possible e.g. spelling tests with the rest of the sentence written.</p> <p>Use oral spelling dictations instead of written. Only write the spelling word, not the whole sentence.</p> <p>Avoid unnecessary writing e.g. date and/or learning objective.</p> <p>Ensure expectations of the task are well understood.</p>	<p>Teaching Strategies p29-30</p> <p>Overview of Interventions p26-27</p>
<p>Slow to finish written work.</p>	<p>Provide child with writing scaffolds and visual reminders.</p> <p>Provide visual cues or labels to assist with planning and setting out work.</p> <p>Teach self-evaluation.</p>	<p>Handwriting Resources p161-173</p>
<p>Work is messy</p>	<p>Handwriting Resources p161-173</p>	<p>Improving Handwriting - checklist p165</p> <p>Handwriting Reminders p168</p>

Reading and Recording Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Difficulty learning cursive writing and written work is illegible.</p>	<p>Explicitly teach handwriting using a multi-sensory approach and allow time for practice and consolidation. Focus on correct letter formation, legibility and speed.</p>	<p>WAVE 2 p61 Beginning to Teach Handwriting p161-163</p>
	<p>Use 'tram lines' (double writing lines), with the top one indicating the starting point for the short letters and a short distance above it as the starting point for ascenders, and descenders finishing below the second line. Try using special handwriting paper with raised lines.</p>	<p>Handwriting Resources p187</p>
	<p>Practise fine and gross activities that involve crossing the mid-line. Practise visually following a moving object across the mid-line, e.g. a puppet, or a bean bag tossed from one hand to the other.</p>	<p>Bi-lateral Activities p152</p>
	<p>Allow the individual to express him/herself using oral, pictorial, diagrammatic means as alternatives to written.</p>	<p>Alternative Ways of Recording Reading and Recording Skills p37-42</p>
	<p>Use worksheets which require oblique lines to complete them. Use rulers and stencils to draw oblique lines. Use PE to explore oblique shapes the body makes, and construction materials to explore slopes and angles.</p>	<p>WAVE 2 p61-64</p>
	<p>Angle the writing surface to promote better hand position.</p>	<p>Beginning to Teach Handwriting p161-163</p>
	<p>Try using different types of pencils/pens and grips e.g. roller-ball pens, light-up pens.</p>	<p>Holding the Pen or Pencil p161-163</p>

Reading and Recording Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Difficulty learning cursive writing and written work is illegible. (Continued)</p>	<p>Introduce keyboard skills and allow dedicated time for practice.</p>	<p>Reading and Recording p37-42 Developing Keyboard Skills p139</p>
<p>Performs poorly in maths tests – can't line up maths columns correctly. Performs poorly in academic tests</p>	<p>Photocopy maths questions to allow for pupil to fill in the answers.</p> <p>Evaluate only what is needed to show the pupil has met curriculum expectations.</p> <p>Create a balance between written, oral and pictorial answers.</p>	<p>Supporting Numeracy p45-46 Developing Keyboard Skills p139</p>
<p>When reading jumps lines, misses out words or runs words together.</p>	<p>Use a finger to point under each word in turn, or a ruler to hold under each line and then slide it down to reveal the next one.</p> <p>Use a 'reading window' (commercially available or home-made) to reveal only a few words at a time. Use larger print, change of font, wider line spacing, or pages with fewer words on them. Coloured overlay or coloured paper (to suit the individuals needs).</p> <p>Tracking exercises e.g. from Brain Gym®.</p>	<p>Visual Perception Assessment p109-122 Visual Tracking Activities p149</p>
<p>Directional confusion. Continues to reverse letters, numbers and words despite practice and support. Has difficulties copying from the blackboard</p>	<p>Provide a prompt card on desk top (preferably stuck down) with examples of numerals and easily memorable words for reference. Give lots of praise for using it.</p> <p>Erase (or correct) all incorrectly-oriented letters or numerals in work - if examples of both orientations are frequently seen they will both look 'normal'. A buddy may be able to do this. (Don't make it punitive!)</p>	<p>Bi-lateral Integration p152</p>

Reading and Recording Skills (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Directional confusion. Continues to reverse letters, numbers and words despite practice and support.</p> <p>Has difficulties copying from the blackboard. (Continued)</p>	<p>Teach left-right awareness - e.g. through regular handshaking in class at the start of sessions or wearing a friendship bracelet on a specific wrist.</p> <p>Provide information on pupil's desk.</p> <p>Find a better position in relation to the white board, avoiding need to turn head.</p> <p>Vary colours of pens used on the board.</p> <p>Angled writing board, reducing neck movements.</p> <p>Desktop master of notes to be copied (ruler can be used to identify place).</p> <p>Encourage quiet verbalisation or silent mouthing of words to be copied.</p>	<p>Visual Tracking Activities p149</p> <p>WAVE 1 p29-59</p>
<p>Can't work out where to start writing on a page.</p>	<p>Reinforce spelling skills; have difficult words on desk-top prompt card.</p> <p>Use coloured dots or numbers to identify starting position and where to finish.</p> <p>Provide a frame for the drawing in the middle of the page, a line for subject to 'stand' on, or smaller sized paper.</p>	<p>Visual Perception Assessment p109-122</p> <p>Visual Tracking Activities p149</p>
<p>Difficulty making letters the same size, keeping them on the line and putting spaces between the words.</p>	<p>Provide outline boxes for each word, gradually reducing their size.</p> <p>Use a small thin bright card for a 'Space man' to place between words</p> <p>Use squared paper, emphasising an empty square between each word</p> <p>Provide activities to highlight the spaces between words on sheet of photocopied writing.</p>	

Reading and Recording Skills *(Continued)*

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Difficulty making letters the same size, keeping them on the line and putting spaces between the words. <i>(Continued)</i></p>	<p>Pattern copying games onto grids, including spaces within pattern. Provide outline boxes for each letter in the word, with an empty box for use between words. Add a green star by first box to indicate start place.</p>	

Assistive Technology

Assistive Technology		
What you might see	I.C.T. to Support	Further Information
Limited typing skills/speed of output slow/struggles with use of keyboard	Speedy Keys program First Keys program	Game-based
As above - slow - lacks confidence with typing on keyboard	Ten Thumbs typing Nessy Fingers 2Type English type Junior/Senior www.tuxtype.sourceforge.net/	All computer programs – see suppliers list Free download
Struggles with mouse control.	Trackball/Big Trackball	Require less control
Difficulty discriminating /identifying letters on keyboard.	Keyboard Letter stickers. Big Keys. Range of keyboards e.g. Key Monster Upper and Lower case letter versions. High Visibility (Standard and Monster size).	Support those who struggle with upper case letters. Assistive Technology - see suppliers list
Difficulty discriminating /identifying letters on keyboard.	Virtual Reading Ruler. www.dyslexic.com (Readable). www.clarosoftware.com (Claroview and screen ruler).	Mobile tinted overlay that floats over any Windows application (including Internet) to reduce screen glare.
Struggles to use keyboard/mouse.	Touch screens and monitors	
Struggles with hand position at keyboard/complains of aching/tired forearm.	Wrist/rest support.	

Assistive Technology (Continued)

What you might see	I.C.T. to Support	Further Information
Organisational difficulties – struggles to remember timetable/equipment/books etc.	<p>www.mycorkboard.com</p> <p>www.positit.com</p> <p>www.do2learn.com</p>	<p>Free download.</p> <p>Post it notes can be downloaded from this site.</p> <p>Useful timetables/picture cards/games to play.</p>
Difficulties with sequencing/organising thoughts when planning written work.	<p>Kidspiration 3</p> <p>Inspiration 8</p> <p>Mindfull</p> <p>2Create</p> <p>Sparkspace</p> <p>Thinking in Pictures</p>	<p>Includes new numeracy activities.</p> <p>All these programs support planning and mind mapping with speech.</p>
Difficulty writing at speed when faaced with long pieces of text.	<p>Digital Recorder</p> <p>Dictaphone - e.g. Olympus DS330.</p>	<p>Other recording devices such as recordable pens on key rings also available.</p>
As above.	<p>Dragon naturally Speaking</p> <p>Version 10</p> <p>Nuance</p>	<p>Speech-activated technology</p> <p>Requires high quality headset and high spec. computers.</p>

Supporting Numeracy

Supporting Numeracy	
What you might see	Teaching Strategies to Support
Difficulty manipulating small objects. Counting one to one.	<ul style="list-style-type: none"> • Use unifix etc that clip together. • Numicon. • Cuisenaire Rods. • Abacus. • Use a ruler with a handle. • Use pre-drawn tables. • Focus on main objective (don't let difficulty with fine motor tasks affect maths learning).
Difficulty laying out sums on page.	<ul style="list-style-type: none"> • Use squared paper. • Highlighter pens. • Reduce the number of sums on a page. • Card window. • Use unifix etc that clip together. • Pre-teach vocabulary.
Difficulty organising objects for counting.	
Confusion of numbers e.g. 2 & 5. Reversal of digits e.g. reads/writes 21 instead of 12.	<ul style="list-style-type: none"> • Avoid teaching numbers that can be confused at the same time e.g. 2 and 5, 6 and 9. • Use number formation guidance sheet.
Linking written sum to additional information (table, picture etc).	<ul style="list-style-type: none"> • Use squared paper. • Reduce the number of sums on a page. • Leave clear space between problems or provide separate sums on separate pages.
Difficulty learning tables, counting forwards and especially backwards.	<ul style="list-style-type: none"> • Provide tables squares etc. • Use number lines etc. • Teach structured layout in stages. • Use “story board” layouts. • Promote use of calculator. • Promote use of known facts to workout unknown ones. • Probe sheets (precision teaching as recommended by Dyslexia Action). • ICT – Numbershark etc. and ITP programmes. • Use of board games at school and home.
Remembering the order for solving problems.	

Supporting Numeracy (Continued)

What you might see	Teaching Strategies to Support
<p>Difficulty copying from the board - organising layout and speed.</p>	<p>To reduce the amount of written work use:</p> <ul style="list-style-type: none"> • photocopied sheets; • a scribe; • squared paper; • handouts with spaces for answers; or • let the child just write the answers and not the sum or the working out.
<p>Problems with layout of sums and with order of operations.</p>	<ul style="list-style-type: none"> • Teach methods in a structured and systematic way. • Provide prompt cards, or better still help pupil devise own prompt cards.
<p>Difficulty understanding spatial concepts (under, over etc).</p> <p>Difficulty understanding place value.</p>	<ul style="list-style-type: none"> • Use kinaesthetic activities when learning e.g. sit under the table/on the chair/beside John. • Provide visual clues for reinforcement. • Use concrete apparatus e.g. arrow cards.
<p>Difficulty understanding mathematical language e.g. “difference”.</p>	<ul style="list-style-type: none"> • Pre-teach language, don't assume it is understood or remembered. • Use real situations and concrete materials. • ‘Supporting Children with Gaps in their Mathematical Understanding’ DfES 1164-2005. • Let's Communicate and Let's Target Communication provide further information. • Oxford Maths Trackers.

Movement and Mobility

Movement and Mobility		
What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Hesitates to participate in PE/games. Lacks fundamental skills to take part in P.E./school sports. Low tolerance for motor activities.</p>	<p>Emphasise fun, activity and participation rather than proficiency.</p>	<p>Self-Esteem p87-91</p>
	<p>Use a fun and consistent warm up and cool down routine that the child can master and participate fully in.</p>	<p>Inclusive P.E. p57</p>
	<p>Use a flexible teaching approach - different types of grouping.</p>	
	<p>Break the activity into small parts and teach in sequence. Teach skills components discretely to allow success.</p>	<p>Goal-Directed Learning using cognitive strategies p67-68</p>
	<p>Use the STEP principle - space task equipment and people.</p>	<p>Inclusive PE p57</p>
	<p>Be aware of safety risks to child with poor co-ordination. Provide objects for support if balancing.</p>	<p>Extended Schools p59</p>
	<p>Encourage involvement in extended schools sports activities.</p>	<p>Extended Schools p59</p>
	<p>Allow pupil to choose non-competitive games e.g. running, swimming. In these activities performance can be measured against self.</p>	<p>Inclusive P.E. p57</p>
	<p>When a new skill can be taught using hand over hand instructions consider using the pupil with co-ordination difficulties to demonstrate to the class. This allows the pupil to 'feel' the movement and receive 1:1 practice.</p>	<p>Goal-Directed Learning using cognitive strategies p67-68</p>

Movement and Mobility (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
Avoids playground equipment and games.	<p>Teach how to use equipment safely and with confidence e.g. rules of games and movements required.</p> <p>Practice using equipment e.g. skipping rope, ball, and allow at times other than playtimes.</p> <p>Be patient if the pupil needs multiple attempts to master a task.</p>	
Trips, walks into things, and has difficulty with steps.	<p>Keep floor areas clear of obstructions.</p> <p>Analyse classroom layout and movement/flow within the classroom. Alter layout appropriately.</p> <p>Use obstacle courses to increase body awareness and spatial awareness.</p> <p>Suggest eye checks if not already done - visual acuity (optician), visual fields and depth perception (orthoptist)</p> <p>Consider the use of a mat or chair during carpet times.</p> <p>Provide areas where pupils can lean and allow individual to do so.</p> <p>Break up longer carpet time activities with songs, low-skill movement activities.</p>	<p>Balance p.146</p> <p>Trunk Stability p.148 - p.149</p> <p>Bi-lateral Integration p.150</p>
Leans on people or objects e.g. during carpet time.	<p>Ensure a well-supported desk position; chair close to the writing surface with feet touching the floor. Check that chair and table are at an appropriate height.</p> <p>Use a seat wedge e.g. Move 'n' Sit LDA catalogue.</p>	<p>Early Years Support Strategies p.23</p> <p>Social Stories p.139</p>
Slumps, leans on tables when writing. Fidgets, doesn't really get a comfortable position. Falls off chair in the classroom.		

Movement and Mobility (Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Slumps, leans on tables when writing. Fidgets, doesn't really get a comfortable position. Falls off chair in the classroom. <i>(Continued)</i></p>	<p>Opportunities for activities that develop core stability and body awareness. Ensure drinking water is available. Use teacher-led activity breaks e.g. Activate and Brain Gym®.</p>	<p>Trunk Stability p.148 Handwriting Exercises p.163 - p.164</p>
<p>May break things or hit too hard because their body does not tell them how much force they are exerting.</p>	<p>Opportunities for activities that improve body awareness.</p>	<p>Sensory Processing and Sensory Modulation p.176 - p.178</p>
<p>Difficulty in planning motor sequences. Difficulty in generalising i.e. adapting one learned movement to another situation.</p>	<p>GOAL directed teaching. Assist in setting long range goals by breaking goals into realistic parts. Use a cognitive strategy to support the pupil to reach attainable goal. Make targets SMART.</p>	<p>WAVE 3 - Goal Directed Learning p67</p>
<p>Throwing and catching difficulties</p>	<p>Use balloons, soft balls and bean bags. Alter size of ball, distance thrown and introduce bounce.</p>	<p>Visual Perception p.180</p>
<p>Frequently gets lost when moving about school</p>	<p>Escorted journeys during quiet times to orient the pupil or young person, pointing out 'landmarks' to look for - use mnemonics, stories or rhymes to learn the order of these.</p>	



Communication, Social & Emotional Difficulties

Communication, Social and Emotional Difficulties		
What you might see	Teaching Strategies to Support	More Information Within This Document
Muscle weakness in tongue and lips may lead to speech difficulties.	Specific activities to develop muscles in mouth, tongue and lips.	Activities to Support Verbal Dyspraxia p160
Dislikes outdoor play in sand, mud etc.	Identify ways to reduce sensory stimulation. Increase sensory stimulation in other settings e.g. temperature of mud.	Sensory Regulation Difficulties p53-55 Sensory Processing p178-180
Lack of confidence. Low self-esteem.	Develop strategies to develop self esteem.	Self-Esteem p87-91
	Reassure the pupil when he/she has difficulty. Provide lots of positive reinforcement when the pupil attempts new activities. Ensure work is differentiated and at an appropriate level.	Self-Esteem p87-91
Difficulty establishing relationship with friends. Plays alone at playtime; avoids playground equipment and games.	Develop an ethos of care and understanding in the classroom through SEAL work, circle time, peer work.	
	Teach how to use playground equipment e.g. skipping rope, ball at times other than playtimes. Develop a bank of equipment that pupil is comfortable using. Consider playtime buddies, friendship bench.	Self-Esteem p87-91
May appear immature. Fiddles and lacks concentration.	Allow pupil to play with an agreed object e.g. stress ball, Blu Tak, Koosh Ball. Use Move 'n' Sit Cushion.	WAVE 3 p65-69
Behaves inappropriately including work avoidance.	Modeling appropriate behaviour.	
	Provide firm, clear boundaries and expectations.	Social Stories p140

Communication, Social & Emotional Difficulties

(Continued)

What you might see	Teaching Strategies to Support	More Information Within This Document
<p>Behaves inappropriately including work avoidance. <i>(Continued)</i></p>	<p>Peer support.</p> <p>Consistency of expectations and sanctions.</p> <p>Clear and positive instructions.</p>	
<p>Confusion from non-verbal cues (misreads body language etc.)</p>	<p>Directly teach what non-verbal cues mean.</p> <p>Model and have pupil practice reading cues in a safe setting.</p>	<p>Social Stories p140</p> <p>Social Stories p140</p>

Sensory Regulation Difficulties

Sensory Regulation Difficulties			
Sensory System	Examples of activity likely to raise arousal levels	Examples of activity likely to lower arousal levels	Examples of activities to organise nervous system
Vestibular Hyposensitivity: Rocks, spins, bounces; Poor balance. Hypersensitivity: Fear of heights; dislikes sudden movement; travel sickness.	<ul style="list-style-type: none"> Bending down to low cupboards and drawers. Running, trampolining, jumping, hopping, climbing apparatus or stairs. Spinning, twisting or dodging and changing direction (e.g. team games, tig). Bouncing on a therapy ball Move 'in' Sit cushion. 	<ul style="list-style-type: none"> Sitting still or lying down. Slow, gentle swinging. 	<ul style="list-style-type: none"> Gentle neck rolling. Slow, steady rocking (e.g. rocking chair or horse).
Tactile Hyposensitivity: High pain threshold; needs to fiddle; unaware of temperature. Hypersensitivity: Pulls away from touch; dislikes clothes labels.	<ul style="list-style-type: none"> Fiddling with items, light touch (e.g. handling paper, paper clips, Koosh balls, or light objects). Tickling, irritation from clothing or hair. Being jostled in a queue or by passers-by. 	<ul style="list-style-type: none"> Slow, rhythmic stroking with medium pressure. Palmar grasp of some items (e.g. comfort toy). A safe place to escape to. Hugging a large soft toy or cushion. 	<ul style="list-style-type: none"> Deep sustained touch, as with downward pressure on the shoulders, sitting with hands under the thighs. Slow and steady 'log-rolling' along gym mats. Modelling clay.
Proprioceptive Hyposensitivity: Unable to keep still; sleeping difficulties. Hypersensitivity: Tires easily; moves slowly; dislikes rough play.	<ul style="list-style-type: none"> Foot tapping. Shifting weight and position (if sitting or standing). Getting up from a chair and walking (e.g. find legitimate reasons to do this in class). Repeatedly kicking a football against a wall. 	<ul style="list-style-type: none"> Inactivity. Sitting down, leaning back against support. 	<ul style="list-style-type: none"> Heavy muscle work, including: pushing and pulling, carrying heavy books, wearing a weighted back-pack, standing and pushing down onto a steady table through the palms of the hands, isometric exercise, holding heavy doors open.

Sensory Regulation Difficulties (Continued)

Sensory System	Examples of activity likely to raise arousal levels	Examples of activity likely to lower arousal levels	Examples of activities to organise nervous system
Proprioceptive (Continued)	<ul style="list-style-type: none"> Bright lights, bright colours, untidy work areas. Movement in the visual fields, particularly when of several objects or people, in random directions, or at fast or changing speeds. Videos with fast action, (more so if associated with sudden, loud or high-pitched noises). 	<ul style="list-style-type: none"> Dim lights, muted colours. Tidy work areas. Slow gentle, rhythmic movement (e.g. watching an oil and water toy or lava lamp). Reading or studying a picture and looking for details. 	<ul style="list-style-type: none"> Stretching arms and trunk up and stamping feet on the floor (a good pre-writing exercise). A heavy bean bag or 'Lap pet' on lap or shoulders (NB: Heavy muscle work can reduce the excitatory effects of vestibular stimulation when they are combined)
Visual Hyposensitivity: Rubs eyes hard; flaps fingers in front of face; inappropriate staring; like shiny objects. Hypersensitivity: Child covers eyes; avoids bright light; prefers dark areas.	<ul style="list-style-type: none"> Bright lights, bright colours, untidy work areas. Movement in the visual fields, particularly when of several objects or people, in random directions, or at fast or changing speeds. Videos with fast action, (more so if associated with sudden, loud or high-pitched noises). 	<ul style="list-style-type: none"> Dim lights, muted colours. Tidy work areas. Slow gentle, rhythmic movement (e.g. watching an oil and water toy or lava lamp). Reading or studying a picture and looking for details. 	<ul style="list-style-type: none"> Improving strategies for visual perception, if this is a problem. Clear, uncluttered environments. Familiar environments, more so if associated with safety and comfort.
Auditory Hyposensitivity: Shouts, talks out loud; sings/talks inappropriately; difficulty recalling/repeating. Hypersensitivity: Doesn't like loud noises; puts fingers in ears; hides under the table.	<ul style="list-style-type: none"> Sudden, loud or high-pitched noises. Music with an uneven, strong or rapid beat. Unidentified noises (e.g. due to poor auditory perception or unfamiliarity). 	<ul style="list-style-type: none"> Near silence, or quiet background noises (e.g. use ear defenders). Music with a gentle, slow and steady beat. Ambient music (e.g. ocean sounds). 	<ul style="list-style-type: none"> Quiet self-talking through a sequence of actions

Sensory Regulation Difficulties (Continued)

Sensory System	Examples of activity likely to raise arousal levels	Examples of activity likely to lower arousal levels	Examples of activities to organise nervous system
Olfactory Hyposensitivity: Smells people and objects Hypersensitivity: Covers nose; refuses certain food.	<ul style="list-style-type: none"> • Citrus, mint, spices. • Smells associated with frightening, worrying or exciting situations. 	<ul style="list-style-type: none"> • Smells associated with relaxation and comfort. • Floral smells. 	<ul style="list-style-type: none"> • (NB: The olfactory sense is strongly linked to memory and emotion, and therefore smells can have very different effects on each individual).
Oro-motor and gustatory Hyposensitivity: Likes to chew pencils or fingers, teeth grinding. Hypersensitivity: Dislikes fizzy drinks, avoids crunchy food; dislikes chewing.	<ul style="list-style-type: none"> • Crunchy or crispy foods. • Spicy, savoury or sour foods. • Cold foods or drink (e.g. ice cream). • Mixed food textures (e.g. mince, soup with chunky bits in it). • Fizzy drinks. 	<ul style="list-style-type: none"> • Sucking (e.g. through a straw or sports water bottle with narrow opening). • Drinking warm milky drinks. 	<ul style="list-style-type: none"> • Chewing (e.g. dried fruit, double quantity of chewing gum, liquorice, or biting on a cotton hanky or another safe item). • Strong sucking (e.g. on a sugar-free boiled sweet, lolly, or drinking a thick drink through a straw).



Inclusive P.E.

The STEP Framework

Space

- Adapt playing area - increase or decrease size of playing area.
- Use zoned areas to create safe playing areas or where pupils can be matched on ability.
- Allow pupils to start at different times or from different areas.
- Put targets nearer or further away.

Task

- Harder - introduce more rules.
- Rotate roles.
- Change rules to aid inclusion.
- Be flexible.
- Try different ways of taking part e.g. seated, standing.
- Use differentiated targets in group.

Equipment

- Size.
- Shape.
- Weight.
- Colour.
- Texture.
- Playing surface.
- Indoor/outdoor.

People

- Independently.
- In groups.
- In teams.
- With friends.
- Plan mixed ability groups.

Enabling all young people to have some sort of success when taking part in PE or school sport is vital if they are going to enjoy it and feel good about themselves and participating.

The STEP framework has been designed to assist deliverers in changing activities if they are too difficult or indeed too easy, to maintain a young person's interest.

*Space
Task
Equipment
People*



Extended Schools

Extended provision for children/young people, both at school and in the community is an area that those with motor co-ordination difficulties may find difficult to access. Such services may include:

- Breakfast clubs.
- Lunchtime clubs.
- After school clubs.
- Sports clubs.
- Youth clubs.
- Brownies, Guides, Cubs, Scouts.

As practitioners, it is important to recognise individual needs and put strategies into place to create a fully accessible service. Some ideas to assist with co-ordination difficulties are as follows.

Information pack for school-based activity to include:

- List of relevant children/young people.
- Name of school contact.
- List of settings who have DCD friendly clubs with contact numbers.
- Aide memoire for pupils needing support - to record messages, dates, kit etc.
- A4 cards appropriate to the setting and activities to outline possible 'problem areas' and how to include members with co-ordination difficulties.

Information pack for community settings to include:

- A named school contact for further support.
- List of relevant children/young people.
- Information cards detailing necessary actions for individuals.
- Details of training available.

Children/Young People with Co-ordination Difficulties at a Breakfast Club may need:

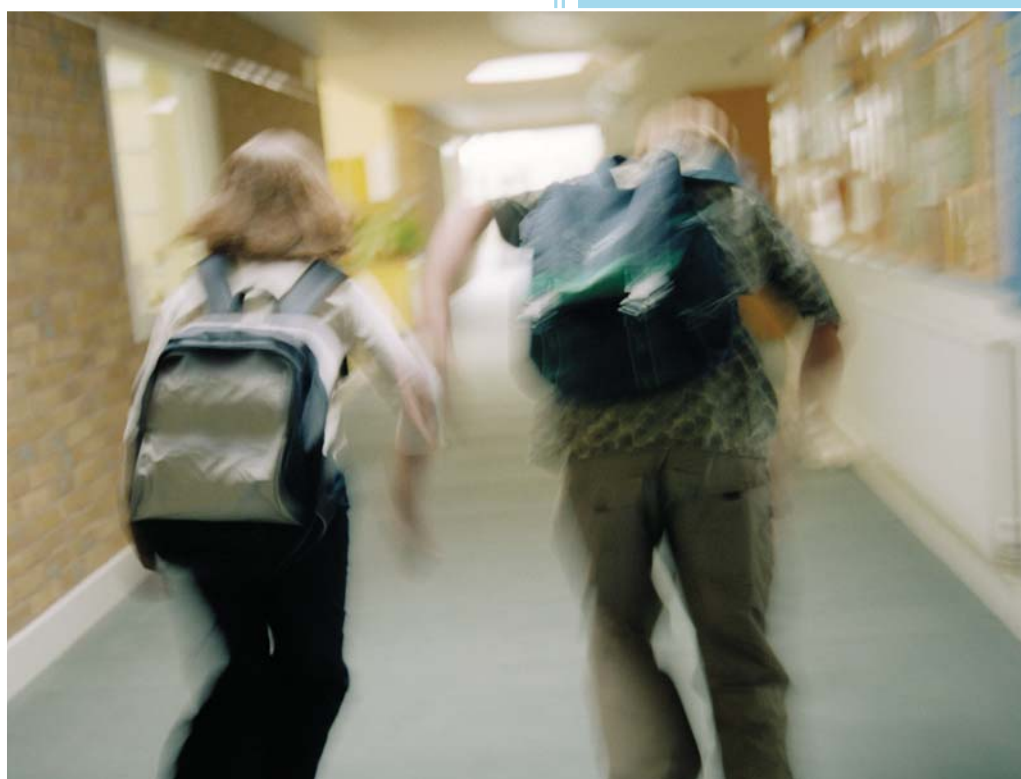
- Extra space at the table.
- Extra time to collect and clear away.
- Assistance with managing cutlery.
- Help with served food (carrying drinks or trays selecting or carrying cutlery).
- Reminders about when school starts and extra time to finish.

As in the case of settings and schools extended provision is required to recognise and support the individual needs of all children/young people.



Section 5

Wave 2 – Catch Up Programmes



Wave 2 intervention is intended to be for a short fixed period using a baseline, measured outcomes and monitored rigorously for effectiveness.

DfES (2006)

Wave Two - Catch Up Programmes

A Wave 2 intervention programme is where a group of targeted pupils follow a programme over a fixed period of time. These programmes are often known as ‘catch-up’ (designed to bring pupils quickly up to the expected standard) programmes.

Wave 2 interventions can be appropriate at any stage of a pupil’s education. As each pupil is developmentally different, individuals may benefit from these programmes at different stages of their school careers. Secondary schools should also consider the use of these programmes to support pupils with co-ordination difficulties.

This section of the document provides an overview of Wave 2 programmes. Wave 2 intervention should only be considered if a pupil shows continuing difficulties despite appropriate support at Wave 1 (Quality First Teaching).

Wave 2 interventions are designed for pupils for whom a well-structured short-term programme, possibly delivered by a teaching assistant working with a teacher, is all that is needed to enable them to make accelerated progress.

My handwriting is perfect now. It is smaller and people can read it, whereas they couldn't before."

Wave 2 Interventions

Wave 2 Interventions			
Name of Intervention	Who is it for?	What does it involve?	Features/Notes
'Speed Up' Lois Addy (LDA)	<p>Suitable for pupils aged 8 and above whose writing is slow and laboured.</p> <p>Pupils whose writing deteriorates as the pressure to write more and more quickly increases.</p> <p>Those who find it hard to get started writing and who rarely complete pieces of written work.</p> <p>Pupils who complain of hand cramps and/or find it difficult to sit still and to write comfortably.</p> <p>Those whose work appears untidy and badly organised.</p>	<p>This is an 8-week programme of 45-60 minutes per week, intended for small groups - ideal number of 3.</p> <p>Includes warm-up exercises and pre- and post-assessments.</p>	<p>Book outlines history and rationale behind the programme. There is information about the skills needed to write well.</p> <p>Clear assessments/observation checklists.</p>
<p>Calliobics - Handwriting Exercises to Music - by Liora Laufer www.calliobics.com</p>	<p>Designed to improve eye-hand co-ordination, fine motor skills, self-esteem and better writing - for ages 7-14.</p>	<p>The programme comprises a workbook and CD with 10 structured sessions. Each session includes two handwriting exercises (one straight lines and angular, one curved and rounded) together with two pieces of music.</p>	<p>The programme may be worth trying with older Key Stage 2 pupils to give them the chance of a different approach, especially where parents may be keen to help at home with the daily practice.</p>

Wave 2 Interventions (Continued)

Name of Intervention	Who is it for?	What does it involve?	What does it involve?
<p>Write from the Start Ion Teodorescu and Lois Addy</p>	<p>A programme of exercises to develop the skills required for good handwriting. Suitable for age 4 to 11 years old but most effective with those in years 1-3.</p>	<p>The books are divided into photo-copiable worksheets which make booklets. At the beginning of each of these are instructions explaining the aim of the exercises, how to carry them out and often additional activities to support the exercises.</p> <p>It should be done at least 3 times a week ideally everyday. (e.g. as a Wave 2 or 3 intervention).</p>	<p>Make sure that the child realises the importance of the activities. Set aside a specific time and stick to it.</p> <p>Make sure hands are clean, pencils sharp, seats the correct height.</p> <p>If possible use sloping desks/boards.</p> <p>Give a choice of pencil thicknesses and grips.</p> <p>Involve the children in the process of assessing improvement in their writing before and after a set period.</p> <p>Encourage them to take a pride in their work.</p> <p>Begin each session with warm-up exercises (See LSS leaflet 'Developing Handwriting Skills').</p>
<p>Jump Ahead West Sussex Inclusion Team</p>	<p>A programme of activities to support the development of motor co-ordination skills. Suitable for KS1 and KS2 pupils. There are 3 stages and Stage 2 and 3 are possibly too challenging for young pupils.</p>	<p>The book contains information on Developmental Co-ordination Disorder and all activities, assessment forms/observation sheets and checklists as well as examples of possible sessions.</p>	<p>Stage 1 could be used as a complete 'motor' programme whereas activities in Stage 2 and 3 could augment a motor programme.</p> <p>There should be an assessment at beginning and end of each stage.</p>

Wave 2 Interventions (Continued)

Name of Intervention	Who is it for?	What does it involve?	What does it involve?
<p>Jump Ahead West Sussex Inclusion Team <i>(Continued)</i></p>			<p>There are 25 activities in each stage i.e. 5 activities for each aspect of co-ordination. The programme should take place at least 3 times a week.</p> <p>In Stage 1 the 5 aspects of co-ordination addressed are body awareness, balance, visual tracking, basic fine motor skills, motor planning.</p> <p>In Stage 2: pencil skills, balance, sensory perception, bilateral integration, eye/hand co-ordination.</p> <p>In Stage 3: visual perception, visual motor, co-operative work, ball skills, sequential memory.</p>
<p>Write Dance More Write Dance Ragnhild Oussoren</p>	<p>Write Dance is appropriate for pupils aged 5-8 years old. Programme can be used with older age group who are struggling to master handwriting skills.</p> <p>More Write Dance is extending the Development of Write Dance for children 4-8 years old.</p> <p>It is a programme to support development of handwriting using music, movement and exercises training both gross and fine motor co-ordination.</p>	<p>The programme is intended for use with a group using a wide range of movement to music.</p> <p>Part One of Write Dance consists of 9 themes which include all the movements the pressure, and the speed that together make up letters.</p> <p>With every theme there is a special piece of music and in addition a specific rhyme.</p>	<p>There is a CD Rom accompanying Write Dance.</p> <p>There is also Write Dance in the Nursery a pre-writing programme for children 3-5 years old.</p>

Section 6

Wave 3 – Additional and Different



'Children can master almost any skill with sufficient application and practice.'

Orton (1937)

Wave 3 - Developing Skills

Recent research has indicated that focusing on a specific 'functional skill' that a child/young person would like to learn e.g. 'tying shoelaces, buttons or scissor skills' can be the most effective way of addressing a pupil's needs.

Some requiring provision at Wave 3 may also benefit from a motor skills programme that is suited to the individual needs of the pupil through carefully assessment of their strengths and difficulties.

Planning Sheet (p147) gives an example of a planning format that can be used for a programme that is delivered for 15/20 minutes three times a week. In addition to exercises that focus on fine or gross motor skills it will include goal-directed teaching which will focus on a particular functional skill.

Sugden, Wright, Chambers and Markee (2002) produced a booklet for parents and teachers focusing on developing an intervention programme for co-ordination difficulties following many years working in Leeds schools. Key features were seen to be:

- **Accurate assessment** - this allows for an accurate picture of strengths and weaknesses to be developed so that an intervention programme can be matched to the needs of the pupil.
- **Little and often** - from a motivational point of view it is easier to get involvement for a short period of time than a long one. Short sessions can also be easily included in everyday routines.
- **Variety of practice** - this allows use of skills in different contexts. Use a range of exercises from a variety of sources.
- **Meaningful and enjoyable** - if progress can be seen, and the pupil sees the point of the activities they are more likely to be working with the person guiding them through the intervention programme.

A multi-level approach to movement assessment and treatment is recommended for treatment of DCD as this provides for motor development at different levels of function – behavioural, neuro-cognitive and emotional.
Wilson (2005)

Wave 3 - Developing Skills *(Continued)*

- ***Adapting and analysing tasks*** - When a pupil can't perform a task it is good practice to analyse a task by breaking it down in order for them to learn it, and if necessary adapting the task to make it easier to perform e.g. changing the size of a ball, changing slope of a writing surface.
- ***Expert scaffolding*** - This is where a more accomplished person helps the pupil by giving support initially so they can perform a task, and then gradually withdraws the support so they take more control.
- ***Knowing and doing*** - The importance of motor planning strategies in carrying out motor skills tasks. What do I have to do before I start to write - position of body on chair, position of paper.

Providing clues on how to perform a task, asking children about a task, and explaining why a movement should be executed in a certain way are related to better movement performance.

Neimeijer, Schoemaker
and Smit-Englesman
(2006)

Wave 3 - Goal-Directed Learning Using Cognitive Strategies

What is goal directed learning?

Goal-directed learning is a ‘top-down’ approach which harnesses motivation to achieve something meaningful in order to develop skills.

In top down approaches, or task-orientated approaches, the interaction between the person, the task and the environment is important and the intervention is focused on task performance, motor control and motor skill acquisition.

The Cognitive Motor Approach (Henderson and Sugden, 1992) Neuromotor Task Training (Schoemaker et al, 2003) and Cognitive Orientation to Daily Occupational Performance (COOP), Miller and Polatajko, (2001) are all examples of a task-orientated approach.

CO-OP is described in the pilot trial by Miller et al, (2001) as originating as a verbal self-guidance treatment strategy where the primary objective of CO-OP is skill acquisition. Pupils involved in the COOP programme identify their Goal - What do I want to do? Plan - How am I going to do it? Do - carry out the task, Check - How well did my plan work? - under the guidance of a therapist.

Cognitive strategies direct the pupil's attention to the method used to carry out a task.

How is the strategy taught?

Pupils are asked to follow a simple formula:



Goal - 'What I want to do'

A goal should always be absolutely clear to the pupil and adult concerned. It should be clear stated in positive language, realistic, and it should be something that strongly motivates them to achieve. Try to keep it to something uncomplicated at first, to increase the likelihood of success without need for a lengthy session at this stage, and to build confidence in the use of the strategy. If the child chooses a complex skill to learn, help them break it down into smaller objectives and understand why they need to tackle them in order. State the goal clearly, so there is no misunderstanding about the desired result.

Wave 3 - Goal-Directed Learning Using Cognitive Strategies *(Continued)*

Plan - *'How I'm going to do it'*

The plan also needs to be clear and stated in positive language. It is essential that the pupil has actively contributed to the plan in order for them to learn the links between the plan, the action and the end result.

Do - *'Doing the plan'*

Remember, most pupils with co-ordination difficulties cannot do something and listen to advice or analyse what they are doing at the same time. During the sessions, it will probably be appropriate to keep this part short, especially if you can see it isn't working well. If it is successful, keep it going so the pupil can gain the maximum from it.

Check - *'Did I do the plan, and did it work?'*

Encourage the pupil to notice what they did - get him/her to check for visual, auditory, and kinaesthetic feedback. Now is the time to get the child to analyse whether they did carry out the plan, whether it worked, and to make the all-important connections between what they did and what happened as a result.

- Was I sitting/standing in the best position?
- Did I use both my 'doing' hand and my 'helping' hand?
- Did I focus on what I was doing?

Prepare a written prompt card with GOAL – PLAN – DO – CHECK on it. Make it more memorable and appealing by adding in an element that relates to their age and interests.

Children with co-ordination difficulties find generalizing skills difficult. Cognitive strategies can help them with a wide range of activities including self-care, leisure and practical school-based tasks.

Examination Access Arrangements

Key Stage 2 and Key Stage 4

Access arrangements are put in place for those who experience a learning difficulty or disability which will impact on their ability to successfully take an exam - given that they have the required level of skill and knowledge to be appropriately entered for the exam.

Access arrangements should not give unfair advantage or compromise the skills being assessed.

The following examples of arrangements might be helpful to consider for pupils experiencing learning or co-ordination difficulties:

- use of a word processor;
- 25% additional time;
- supervised rest breaks;
- a transcript;
- access to a scribe;
- a reader.

At Key Stage 2 access arrangements can be put in place for the national curriculum assessments at the end of Key Stage 2 in Y6. School staff can make some access arrangements at their own discretion e.g. access to a reader or a *scribe* or provision of a *transcript* or a *word processor*.

Applications must be made on-line to the Local Authority however, for the *early opening* of papers or for *additional time*. Pupils will only be considered eligible for access arrangements if they meet the criteria specified in the guidance.

At Key Stage 4 The Joint Council for Qualifications provide criteria against which applications are considered. Evidence and assessment by a specialist teacher is required regarding the pupil's:

- history of need and additional provision;
- normal way of working;
- current levels of functioning.

For Key Stage 2 guidance regarding access arrangements can be found in 'Key Stage 2 Assessment and Reporting Arrangements' which is published each year by the Qualifications and Curriculum Authority (QCA).

For Key Stage 4 guidance is issued each school year (1st September) by the Joint Council for Qualifications – please refer to the website www.jcq.org.uk Applications must now be made on-line – see website www.naa.org.uk/ao



Section 7

Specialist and Individual



An occupational therapist and physiotherapist will make a detailed assessment of the child's functional motor skills.

Specialist Services

Occupational Therapy and Physiotherapy Services

Specialist occupational therapists (OTs) and physiotherapists (PTs) treat children and young people with physical disorders affecting their development. Referrals are made by a doctor when there is some evidence that the child or young person meets the criteria for Developmental Co-ordination Disorder (see definitions p 3). Different services will have differing routes for referrals and criteria for diagnosis. A rough guide used is when a child or young person's functional skills fall into the lowest 5th percentile of the population.

The Developmental Co-ordination Questionnaire (DCDQ) and the Movement Assessment Battery for Children Checklist (MABC Checklist) are commonly used as part of gathering information regarding the young person's skill level. An important consideration to take into account is whether the difficulties are due primarily to motor difficulties or to another cause, such as emotional and behavioural difficulties, learning difficulties or lack of opportunities to develop motor skills. This may require assessment by other professionals to eliminate any other underlying difficulties.

It is recommended that the advice of the OT or PT is sought if a child/young person with significant motor co-ordination difficulties fails to make satisfactory progress after two terms of school intervention programmes with input from outside agencies.

Both OTs and PTs will usually carry out an initial assessment at a clinic or Child Development Centre. School visits may be carried out to give advice on the management of the child/young person's motor difficulties along with ideas for inclusion in school activities and access the curriculum. Long-term involvement with children with co-ordination difficulties is not usual, as it is the expectation that needs will be met within the services available in the local community (including the school community).

OT's work with children who predominantly have difficulties in the area of fine motor skills and visual perception.

PT's work with children who predominantly have difficulties in the area of gross motor skills, including core stability, balance and mobility

Specialist Assessments

A referral will be made to health services if concerns are still apparent following the implementation of any school programmes. Specialist assessments by occupational therapy and physiotherapy services can include any of the following:

Standardised

- Movement Assessment Battery for Children - 2nd edition.
- Developmental Test of Visual Perception - 2nd edition.
- Draw a Person.
- Test of Visual Perceptual Skills (non motor) - Revised.
- Perceived Efficacy and Goal-Setting System (PEGS).
- Beery Buktenica Visual Motor Integration test.
- Miller Function and Participation Scales (M-FUN).
- Sensory Profile.
- School Function Assessment.
- Handwriting checklist (LDA).

Some therapy services may offer group activities, including cycling and swimming. Where possible, the groups are linked into the local community settings

Non-standardised

- Clinical observations.
- Developmental assessment.
- Functional assessment, including independence skills, such as dressing and use of cutlery.
- Classroom observations.
- Assessment in the home setting.
- Scissor skills.
- Areas of concern identified by the child or family.

Physiotherapists may also look at core stability, muscle tone and gait.

Section 8

Pupils, Parents and Carers



The views of the child should be sought and taken into account'

The Special Educational Needs Code of Practice (2001)

Pupil Participation

This document encourages practitioners to identify opportunities to listen to pupils' perspectives on aspects of their learning and development. One of the principles of The Special Educational Needs Code of Practice (2001) is that 'the views of the child should be sought and taken into account' and The Every Child Matters agenda (2003) encourages practitioners and parents/carers to take time to listen to pupils' perspectives. The Primary Review (2007) also concluded that 'pupil voice' should be embedded more successfully in daily teaching and learning practices.

Pupils can often highlight factors that are affecting their inclusion, as they can often see things that others looking from the outside can't see. Messiou (2002) refers to inclusive education as a puzzle, and talks about how children often hold a big part of the puzzle's pieces due to the individuality of each child.

Reasons for finding the pupil's perspective

Pupil participation involves giving children and young people a voice in the planning and evaluation of what they are learning. We all learn best when we know what we are trying to achieve, how much time is available and who is available to offer help. This provides a degree of control. In the same way, pupils learn better if they know more about themselves as learners.

Getting the pupil's perspective can help to:

- involve them in developing increased motivation and pride in outcomes;
- give them responsibility for their learning;
- establish dialogue to help inform the nature of any targets;
- share a common aim of achievement, thus engendering greater respect on both sides;
- involve them as active learners to encourage them to help themselves;
- recognise strengths and achievements.

To give pupils a real voice in their learning takes time and can be challenging but there are good reasons for doing so.

Pupil Participation *(Continued)*

Ways to develop Pupil Participation

- Talk to the pupil about what they enjoy learning and doing, their skills, abilities and achievements, and how they achieved their skills.
- Talk about the purpose of the tasks.
- Set targets with the pupil.
- Talk about what the pupil has already learnt this term/week/day, and about what skills they used, and how those skills can be used in another context.
- Talk about what has helped a pupil to complete a task successfully.
- Listen to what pupils say about learning.

Conversations that focus on the concerns about a particular pupil's learning are more effective when they take place in a context where all pupils talk about their learning. Such conversations take time and practice but help to ensure that the pupil is interested in achieving any target.

Writing Learning Targets with Pupils

Conversations about a pupil's learning or behaviour need to lead to a discussion about how to move forward. A joint planning meeting involving pupils, teachers and parents can identify strategies, resources and who can help. It is important that the emphasis is on partnership as this helps to secure ownership. A scale (see Pupil Questionnaire 2 page 78-79) can help conversation about the pupil's views of their skills, and can help to give ideas for targets. It can also be used to review progress.

"If you were to rate yourself on a scale from 1-10 for how you are at handwriting, where do you think you would put yourself?"

"Where would you like to be?"

Have some of the pupil's writing available and talk to them about what it is about their handwriting that shows they have made progress, and what certain letter shapes they would like to improve to move up one notch on the scale.

"What could we do to help you move from 5 to 6?"

If a pupil gives an over-ambitious number, it is important to check with the child their understanding of the number they gave themselves. For younger pupils a scale of 1-5 may be more appropriate.

Pupil Participation *(Continued)*

Recording Learning Targets

Targets need to be recorded in a pupil-friendly, and accessible format. For a few pupils, an Individual Education Plan can offer a pupil-friendly framework for recording targets. It is recommended that schools record pupils' targets and interventions in their provision mapping.

Targets can be easily accessible by creating a bookmark with their targets on it. This helps pupils, the staff working with them and parents to regularly focus on and review relevant targets.

Inclusion Passport

The Inclusion Passport is a document which provides an up-to-date summary of the provision offered by a school to meet individual needs. It is particularly useful at points of transition (moving to a new school/setting, new phase or new class).

The passport has two elements:

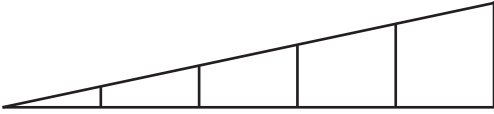
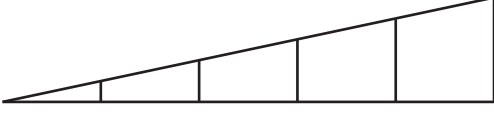
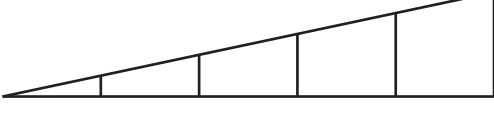

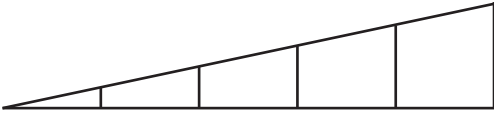
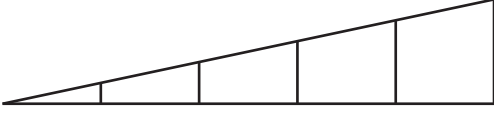
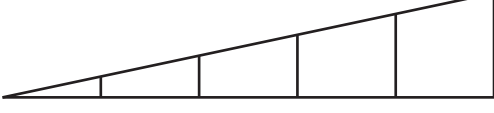
- The pupil passport, which they 'own' and can carry with them to take to a new school or to their lessons, to discuss with staff on a daily basis.
- The school's passport which forms a key part of the overall documentation retained by schools, and is passed on to new schools. It records the provision that a school has offered for an individual and the impact of that provision. It enables schools to make all staff aware of provision to which a pupil is entitled.

The Inclusion Passport should be used for all vulnerable pupils, not just for those identified with Special Educational Needs (SEN). However, schools should be developing passports for all those who have a statement of SEN, or who are identified at School Action Plus as a minimum requirement.

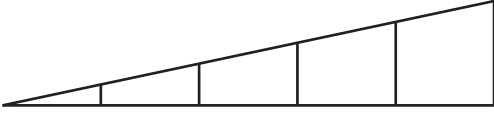
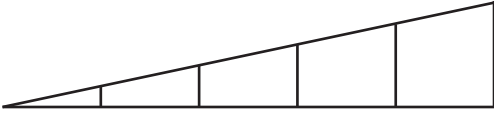
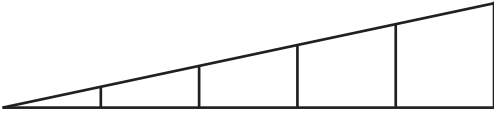
Schools should be developing Inclusion Passports at the key points of transition. However, good practice would be to then build on and continually update passports throughout a pupil's time in school.

"It is worth recording that this child exhibits very challenging behaviour at times; in many schools he would probably spend the majority of his energy resisting authority and challenging the power base of the teacher. However Peter knows that he has a voice and that we will listen to him and treat him with respect. In return he rewards us with an increasingly open love of learning."
Peacock (2007)

Pupil Questionnaire 1

Pupil's Name: _____ School: _____ Date: _____		
D.o.B. _____		
		Comments
1. Do you like school? Y/N How much?		
2. Do you enjoy playtime? Y/N How much?		
3. Do you find it easy to record your ideas? Y/N How much?		
4. Do you ever get frustrated because you can't do something? Y/N How much?		
5. Do you like working with others? Y/N		
6. Do you like P.E.? Y/N Explain your answer.		
7. Do you have any difficulties at lunchtime? Y/N What with?		

Pupil Questionnaire 1 (Continued)

		Comments
8. Do you use the computer to record your ideas? Y/N How much?		
9. Do you find copying from the board difficult? Y/N How much?		
10. Does the work go at the right speed for you? Y/N How fast/slow?		
Additional information:		

Pupil Questionnaire 2

Name: _____ Date: _____

D.o.B. _____

What do you enjoy about school?

Is there anything you find difficult?

How would you rate yourself on the following?

	POOR	EXCELLENT
Handwriting	1 2 3 4 5 6 7 8 9 10	
Using a ruler	1 2 3 4 5 6 7 8 9 10	
Using a rubber	1 2 3 4 5 6 7 8 9 10	
Using a compass	1 2 3 4 5 6 7 8 9 10	
Other maths equipment	1 2 3 4 5 6 7 8 9 10	
Cutting out	1 2 3 4 5 6 7 8 9 10	
Enjoyment of playtimes/breaktimes	1 2 3 4 5 6 7 8 9 10	

Recording your ideas on paper

	POOR	EXCELLENT
- short answers	1 2 3 4 5 6 7 8 9 10	
- longer answers	1 2 3 4 5 6 7 8 9 10	
PE	1 2 3 4 5 6 7 8 9 10	
Gymnastics	1 2 3 4 5 6 7 8 9 10	
Team games	1 2 3 4 5 6 7 8 9 10	
Getting ready for PE	1 2 3 4 5 6 7 8 9 10	
- socks	1 2 3 4 5 6 7 8 9 10	
- shoes	1 2 3 4 5 6 7 8 9 10	

Pupil Questionnaire 2 (Continued)

Which of these would you like to improve:

1.
2.
3.

Thank you for completing the questionnaire.

You told me that you like and in school.

You told me that you find difficult in school.

You said that you would like to get better at:

1.
2.
3.

We will work on first. I can help you to get better at by

Pupil Questionnaire 3

Name:	D.O.B.	Date:		
Y - YES S - SOMETIMES N - NO				
Do you like school?	Y	S	N	
What subjects do you enjoy most? Why?				
Do you have difficulty in any lessons?	Y	S	N	
Which lessons?				
Are teachers aware of your difficulties?	Y	S	N	
If no, which subjects do you feel teachers are not aware of your difficulties?				
What do you think teachers or adults could do to help you in class?				
Do you have difficulties with any of the below in class?				
Copying from the board.	Y	S	N	
Using a ruler.	Y	S	N	
Using a compass.	Y	S	N	
Using equipment in Design Technology.	Y	S	N	
Using equipment in Science.	Y	S	N	
Finishing work as quickly as others.	Y	S	N	
Writing neatly.	Y	S	N	
Drawing.	Y	S	N	
Do you have any difficulties in PE lessons?				
Dressing and undressing.	Y	S	N	
Understanding instructions.	Y	S	N	

Pupil Questionnaire 3 *(Continued)*

Y - YES	S - SOMETIMES	N - NO			
Throwing and catching balls.	Y	S	N		
Gymnastics.	Y	S	N		
Balance.	Y	S	N		
Running and movement.	Y	S	N		
Swimming.	Y	S	N		
Do you have any difficulties at lunchtime?					
Opening packets.	Y	S	N		
Carrying a tray.	Y	S	N		
Using a knife and fork.	Y	S	N		
Do you have any difficulties moving around school?					
Carrying bags.	Y	S	N		
In busy corridors.	Y	S	N		
On stairs.	Y	S	N		

Parents/Carers as Partners

In this document it is recognised that parents and carers should be given the opportunity to play a pivotal role in supporting their child with co-ordination difficulties. This involves dealing with the various agencies concerned and evaluating the best course of intervention for their child.

Success of any intervention is greater if it is part of the daily life of the child and their family. Home interventions that are short, relevant, appropriate and fun are more likely to be incorporated into family routines.

It should be noted that interventions at home may include the extended family or people from outside the family that have an expertise e.g. a piano teacher or an extended schools' sports club.

Included in this document are:

- a parental questionnaire;
- an advice booklet for parents;
- a parental leaflet with information about co-ordination difficulties.

*“My son’s co-ordination difficulties are only part of who he is and I feel that it is important that I highlight this.”
Parent of child with DCD*

Parental Questionnaire

Parent/Carer's Questionnaire

Name: _____ **D.o.B:** _____

School: _____

Please complete this questionnaire to help us meet your child's needs. If you would like help to do this please contact _____.

Does your child have difficulties in the areas listed below? **Tick if you feel there is a problem**, and add comments if you wish.

<i>Independence Skills</i>	✓ PROBLEM AREA	COMMENTS
Dressing and undressing.		
Toileting.		
Opening cartons, packets etc.		
Carrying food tray.		
Managing a knife and fork.		
Managing own belongings.		
Use of initiative.		
Awareness of time.		

Parental Questionnaire *(Continued)*

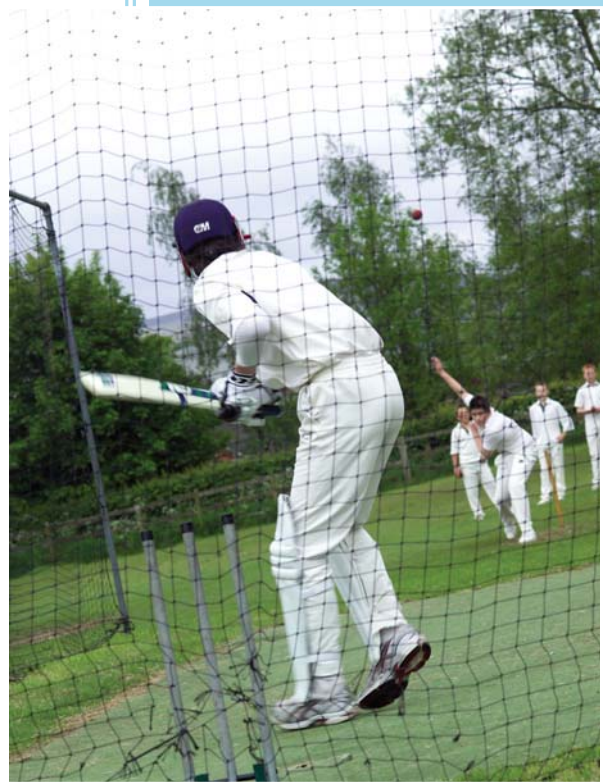
<i>Movement and Mobility</i>	✓ PROBLEM AREA	COMMENTS
Walking and running. Swimming		
Stamina.		
Negotiating stairs and obstacles.		
Sitting or standing still.		
Balance. Can they ride a bike?		
Climbing apparatus.		
Ball skills.		
<i>Recording Skills</i>	✓ PROBLEM AREA	COMMENTS
Pen or pencil grasp and control.		
Writing and drawing.		
Work layout and use of space.		
Using a computer keyboard and mouse.		

Parental Questionnaire *(Continued)*

<i>Communication, Social and Emotional Skills</i>	✓ PROBLEM AREA	COMMENTS
Language comprehension.		
Speech.		
Communication with adults.		
Communication with children.		
Following instructions.		
Managing frustration.		
Following rules in games.		
Unusual anxieties.		
<i>Managing Equipment</i>	✓ PROBLEM AREA	COMMENTS
Use of scissors and craft equipment.		
Use of ruler, eraser and maths equipment.		
Use of science and technology equipment.		

Section 9

Self Esteem



Feeling positive about ourselves helps us to make more effort to achieve and to attribute our achievements to our efforts. This helps us to feel more in control of our lives, and what happens to us.

Self-Esteem

What is Self-Esteem?

Self-esteem is essentially an attitude or opinion about ourselves. It is tied into the concepts of self-image and the ideal self.

Self-Image is how we see ourselves:

- how we think we look;
- what sort of person we think we;
- what we think are our skills are;
- how we think we relate to others.

Ideal Self is the person we would like to be.

Self-Esteem is the difference between our self-image and our ideal self.

Factors that underpin learning, such as pupils' pleasure in learning and their self-esteem have more of an effect on some children's achievements than teaching the curriculum 'harder and longer.'
Ainscow et al (2004)

Low self-esteem

Self image Ideal self

High self-esteem

Self image.....Ideal self

If the difference between our self-image and ideal self is large, we are said to have low self-esteem.

If the difference between our self-image and ideal self is small, we are said to have high self-esteem.

How do we Acquire Self-Esteem?

Self-esteem develops throughout our lives. It is influenced by how we see we are accepted and valued by those around us e.g. parents/carers, other significant adults, peers. We also see what is accepted and valued in others and this influences how we would like to be. An individual's self-concept is dependent on their interpretation of events and interactions i.e. OPINIONS/BELIEFS rather than FACT.

These beliefs are learnt. We are all more likely to notice and accept information which is consistent with our self-concept. This is described as BIASED SCANNING. Those with a poor self-image will be more open to information which confirms any inadequacies. They also distort contrary information to fit with a negative self-image.

Self-Esteem *(Continued)*

How Does Low Self-Esteem Affect Us?

Low Self-Esteem can result in:

- lower academic achievement;
- little effort -‘what is the point?’;
- reluctance to try new things;
- finding it hard to take credit for achievements;
- a belief that success comes from luck;
- little self-respect;
- depression.

It is quite healthy for there to be a discrepancy between an individual’s self-image and ideal self. This encourages some striving and like the effect of the level of adrenalin, there is an optimum which facilitates enhanced performance. When the discrepancy starts to worry the individual, self-esteem is lowered.

It is difficult for a pupil to compartmentalise failure in one area e.g. poor handwriting can become generalised and they can feel a failure. An adult is more likely to avoid situations where they do not feel competent. Avoidance and compensation/striving can become problematic if they become excessive.

They cannot afford to take risks. Feeling positive about ourselves helps us to make more effort to achieve and to attribute our achievements to our efforts. This helps us to feel more in control of our lives, and what happens to us.

How do we Increase Self-Esteem?

We can increase self-esteem by reducing the gap between the self-concept and the ideal self by helping pupils:

- to have a more realistic ‘ideal’;
- to have a more positive view of self.

Schools can influence self-esteem on several levels:

- individually;
- class;
- whole school.

Maines & Robinson (2001)

equate the level of a pupil’s self-esteem to money in their pocket.

Those with a lot of money can afford to try new things and take some risks. They may lose a little but they will not be poor.

Pupils with a low self-esteem can be viewed as having little money in their pocket.

Self-Esteem *(Continued)*

Teacher/pupils relationships are fundamental to fostering self-esteem. The psychological events of a classroom have been likened to therapy (Burns 1982) Rogers describes 3 conditions as necessary to affect change:

- ◆ **Empathy** - seeing things from another's point of view, try to stand in their shoes.
- ◆ **Unconditional/ Positive Regard** - accept the individual, liking and showing concern and interest. Helping them to feel accepted for what they can do rather than comparing them to others will make them less likely to have unrealistic expectations.
- ◆ **Genuineness** - being 'real' in the relationship of teacher/pupil. Congruence between verbal and non-verbal behaviour. The use of 'Positive Talk' and 'I' messages are relevant here. A person with low self-esteem is more likely to accept positive feedback if you are commenting about the work/behaviour rather than generalised evaluation.

Strategies to develop Self-Esteem

*List positive qualities, skills and assets.
Review life's successes.
Keep a positive data log.
Encourage self-praise/reward.
Treat self.
Share problems (self-disclosure).
Practice anti-perfectionist strategies.
Practice positive self-talk.*

Listening is the essential ingredient in forming a relationship.

Tactics for Increasing Positive Interactions with Pupils

- ◆ Label the act rather than blaming the individual.
- ◆ Taking the risk yourself - appropriate self-disclosure.
- ◆ If it is not done well rather than writing 'you must ...' try substituting 'I will help you to ...'. If it is done well give an 'I' message and a specific rather than merely 'Good try' substituting 'I like your choice of adjectives'.
- ◆ Apologise for being busy and keeping a child/young person waiting - this helps them to feel important and that they deserve your respect.
- ◆ Non-verbals - a hand on the shoulder, a pat on the back, a smile or a wink can be powerful indicators that you recognise a child/young person as an individual. Brief, fairly frequent non-verbal messages can give positive signals and maintain on-task behaviours.

Self-Esteem *(Continued)*

- ◆ A whisper in time - this can decrease an escalating situation. It is private and non-threatening.
- ◆ Target teach to success. Identify an agreed goal towards, ensure the steps to success are small, measurable and can be demonstrated to the child. For example 'To learn to catch a tennis ball successfully'.
- ◆ Let children/young people record their own achievements.
- ◆ The clearer about what the classroom/social aims the more effective they are.
- ◆ Circle time.
- ◆ Make Punishments Positive:
 - a) I'm not that strict;
 - b) Allow a calming down period.
- ◆ Positive 'I' messages - to all children/young people. Many positive messages are judgmental e.g. 'That is a good painting'. This may be rejected and the picture may be torn up because it may not be what she/he judges to be good.

Staff who have a positive self-concept are more able to promote self-esteem in their pupils.

Behavioural Approaches

The following can reinforce and shape behaviour to enhance self-concept e.g.:

- Work with the child/young person to help them set achievable goals and monitor these together regularly.
- Identify a behaviour that would indicate the child/young person was becoming more positive about herself, look for and positively reinforce this behaviour.
- Get a pupil to record positive comments with tally marks; deliberately increase your level of praise to the class as a whole/individuals.
- Appropriate touch when praising good academic/social behaviour in a way that encourages improvement and offers the support and information for the child/young person to do this.
- Try to make a positive comment before correction.
- Take every opportunity to make positive comments about a child/young person using 'I' statements.
- Encourage realistic self-praise.
- Avoid the use of should, musts, and oughts.

Self-Esteem *(Continued)*

Positive Talk

Get attention by:

- Using the child/young person's name.
- Establishing eye contact and keep this, if it is broken stop talking and say: 'John, look at me'.
- Use physical proximity e.g. stand near, put hand on shoulder.

Be clear by:

- Giving clear positive instructions i.e. tell him what you want him to do.
- Avoid long sentences. Stick to two or at most three pieces of information e.g. 'Put your shoes in the hall.
- 'Hang your coat up'.

Check that the pupil has understood you.

- Ask individual to tell or show you what they think has been said or agreed. Do not accept a nod, they might not realise that they have not understood correctly.

Give 'I' messages rather than 'You' messages.

- 'I' messages are non-judgmental and let the child/young person know what you feel and think.

Self-help tips for building self-esteem.

- ◆ *Be positive.*
 - ◆ *Be honest - accept yourself and your limitations, i.e. don't be over-critical.*
 - ◆ *Cope with criticism - can this be constructive? If it is unfair then ignore it.*
 - ◆ *Be assertive - notice your needs, say what you think and learn to say 'no'.*
 - ◆ *Have a go/become an 'expert' in a specific area.*
 - ◆ *Be clear about what is in you power to change and what is not.*
 - ◆ *Be organised e.g. lists*
 - ◆ *Plan in advance how to handle difficult situations.*
-



Section 10

Managing Transitions



When change is managed well and planned for transitions between classes, schools or settings can provide new opportunities for the development of children and young people.

Managing Transitions

Beginning a new school or setting can raise anxieties for children, young people and their parents/carers. This can be the case when beginning pre-school, primary school or secondary school. Even within the same school, starting a new class, year group or set can be a positive new beginning or pose difficulties.

When change is managed well and planned for, these transitions between classes, schools or settings can provide new opportunities for the development of children and young people.

Reports of successful transition highlight the importance of preparation and planning in advance of a young person's arrival. When transitions are smooth, children, young people and their parents consider that their views were listened to, and acted upon. On-going liaison ensured that any concerns were addressed early.

It is also helpful to plan for other transitions which take place in schools such as phase transitions, moves to different year groups and lesson groupings.

Research into positive inclusion experiences for children and young people highlights the importance of attitudes for all who are involved. Outcomes were better when a positive problem-solving approach was adopted by all.

When planning for a successful transition, it is useful to consider:

- ◆ **What are the possible obstacles to success?**
- ◆ **What approaches and/or equipment will reduce any barriers to a successful transition?**

Preparation

It is best if preparation for transition is begun in good time. This enables possible obstacles to be anticipated and allows solutions to be planned for.

Young people and their families may benefit from visiting the school or setting more often.

Good Communication

Talking with the children and young people, their parents/carers, staff who already know the young person, outside agencies is invaluable in developing a transition plan and keeping this on track. Good communication helps to establish and maintain positive relationships built on trust.

“Every time my child starts a new class, it’s as if he has started a new school - any difficulties seem to come as a surprise to his new teacher.”

Parent

My son felt as if his ideas were listened to and any concerns were followed up.”

Parent

Managing Transitions *(Continued)*

Information Sharing

Providing subject teachers, supply teachers, and teaching assistants with a clear outline of any difficulties which a pupil will encounter can prove invaluable. This can assist planning, teaching and supporting the children and young people.

Encouraging Peer Support

Acceptance by the peer group is highlighted as very important by young people and their carers particularly in the secondary school. It helps young people to feel part of school life and to continue to engage with their learning.

Pairing or grouping young people with peers who can support them can be a useful way of helping them to settle into a new environment. Attendance at clubs is another way to meet peers with similar interests.

They may need a direct invitation and to be reminded about what is available, where and when they are held on more than one occasion.

Mentors

Children and young people can benefit from a mentor figure who has an awareness of their needs. Mentors can listen to any concerns and deal with any issues quickly, so that escalation does not occur. They can also act as an advocate should the need arise.

Staff Training

Staff who have received training about the issues, useful strategies and equipment are likely to feel more confident. This training could be formal through outside agencies, parents or from the pupils themselves. In some cases, training may be on-going in lessons from the child/young person.

Teaching Strategies

Those with co-ordination difficulties find it useful to have information presented on handouts, table or tapes for example. This provides the best opportunity for their focus to be the learning tasks. As a result, energy is not used up by making notes.

Often children with co-ordination difficulties find change challenging particularly at the key transition points in their school career.

Managing Transitions *(Continued)*

A number of subjects include topics which require good spatial awareness e.g. map reading, geometry, measuring, and technical drawing. Teachers can consider extra time and appropriate equipment in advance of lessons.

Visual perception tasks require longer processing time for some pupils with co-ordination difficulties. As a result finding their way around the building and following a timetable may take longer. Children/young people may also tire quicker than others, when completing certain tasks, because of the immense effort which is involved.

Validation

Like all children/young people, those with co-ordination difficulties benefit from having their strengths recognised and built upon, and by staff having high expectations of them. This helps to ensure that any difficulties are not globalised by the adults or the children and young people themselves.

Smooth transitions are prompted by:

Recognition

Preparation

Respect

Trust

On-going Learning

- *For all who are involved*



Appendix 1

Assessment

This appendix provides resources to support professionals in assessing the needs of children with co-ordination difficulties.

The resources are as follows:

Initial Assessments:

- Checklist 1 – initial observations.
- Checklist 2a – more detailed observation checklist linked to fine motor skills and handwriting.
- Checklist 2b – more detailed observation checklist linked to gross motor skills through a multi-skills assessment.

Detailed Assessments of a child's co-ordination:

- Teachers' Questionnaire;
- Walking/running and catching;
- Balancing;
- Jumping;
- Throwing and Catching;
- Visual Perception;
- Crossing the Mid-line;
- Fine Motor Skills.

These assessments should be analysed together with results of pupil and parent questionnaires to give an overview of a child's strengths and weaknesses in terms of co-ordination, and the impact these are having on their daily life.

Additional resources linked to assessments:

- Complete the shape;
- Scissors skills sheets;
- Copy shapes;
- Tracing lines;
- Mazes/Tracking between lines;
- Self-portrait.

Having a clear idea of a child or young person's strengths and weakness will inform on the most appropriate intervention strategies.

Initial Motor Skills Checklist 1

Activity	Yes (✓) No (X)
<u>Gross Motor</u> <ul style="list-style-type: none"> ● Difficulties with hopping, skipping and jumping. ● Difficulties with throwing and catching. ● Problems co-ordinating the body i.e. unco-ordinated. ● Poor ability to kick/strike a ball. 	
<u>Fine Motor</u> <ul style="list-style-type: none"> ● Awkward pencil grip. ● Poor letter formation. ● Slower than peers - often doesn't finish written work. ● Poor scissor skills. ● Slow changing for PE - struggles with buttons and fasteners/tying shoe laces. ● Poor pencil control - struggles with drawing. 	
<u>Behaviour</u> <ul style="list-style-type: none"> ● Reluctance to participate in sports and PE - frequently absent on days that PE takes place or forget kit or bring in sickness note. ● Difficulty in identifying dominant hand. ● Poor sitting posture. ● Wriggling. ● Following directions/instructions. ● Organisation of belongings and time. ● Attention difficulties. ● Difficulty in copying from the board. ● Struggling to master bike riding/swimming. ● Low self-esteem/confidence. 	

Checklist 2a Fine Motor/Handwriting

Activity	Yes (✓) No (X)
<p><u>Fine Motor</u></p> <ul style="list-style-type: none"> • Dominant hand/threading 10 beads in 2 minutes (swaps hands when undertaking task). • Pincer grip - manipulation of pegs into board using dominant hand. Either hand - (time a row). • Crossing the mid-line - transferring bean bag from 1 hand to another - without rotating the body. • Tie shoe/laces/buttons. • Twist nut and bolt. 	
<ul style="list-style-type: none"> • Cutting along line with curve and corner - round a circle. • Building tower with 10 1" cubes - watch for swapping hands. 	
<p><u>Handwriting</u></p> <p>(1) Pencil Grip:</p> <ul style="list-style-type: none"> - too much/too little pressure; - high up/too low shaft; - tripod; - thumb crossed/closed web space; - held between thumb and several fingers. <p>(2) Posture:</p> <ul style="list-style-type: none"> - rests wrist on table/forearm; - position of paper; - position of body on chair at table - feet touch floor? <ul style="list-style-type: none"> • Quick fox - DASH speed handwriting speed. • Free writing. • Draw a man - (Goodenough). • Draw circle, triangle, square +, x, diamond. • Draw a line with a ruler. 	

Checklist 2b Gross Motor Multi-Skills Assessment

Agility Assessment 1	<p>Pupil is assessed while moving forwards, laterally and backwards while avoiding obstacles e.g. SAQ™ Hurdles/ladders or cones. As with all assessments, encourage quality at a controlled speed. Alter difficulty through:</p> <ol style="list-style-type: none"> 1. cones or beanbags on their heads; 2. timed competition; 3. throwing and catching a ball at intervals/on the move.
Agility Assessment 2	<p>This task can be used with either colours or points of the compass as reference markers. Pupils must manoeuvre from one point to the next as commanded, using hands or feet as directed. Returning to the centre each time. Alterations for difficulty are:</p> <ol style="list-style-type: none"> 1. ball with passing drills; 2. timed competition; 3. balancing a cone on the head.
Agility Assessment 3	<p>This test will scrutinise gross motor control. Pupils will attempt one foot in each rung of an SAQ™ ladder while the other leg is 'dead' on the left or right of the ladder. The leg in the ladder rung producing a high knee lift and the opposite arm a sprint motion. Requirements are control, good knee lift and spring from the ball of the foot. The teacher must look closely for those who are rushed, lean forward, hunched, quickly lose control and often trip over the ladder.</p>
Balance Assessment 1	<p>Required for this test are balance pads, circular in shape, filled with air, creating an unstable base for the pupil to stand on. The tests require, 2 feet, 2 feet while catching a ball, 1-foot balance and for those extremely advanced 1 foot balance while catching. This test can be carried out for a timed period. Again, like all these tests we are looking for weakness in all the highlighted traits described at the start of this document, not one particular trait per test. Ensure pupils stand entirely on the balance board and not on the floor.</p>
Balance Assessment 2	<p>Three progressions in this assessment allow the teacher to see the pupil perform at different levels.</p> <p>The task is to balance along each of the apparatus, demonstrating moving balance in its simplest format:</p> <ol style="list-style-type: none"> 1. a simple marked line on the sportshall floor; 2. a bench - correct way up, using mats on either side for protection; 3. a bench - upturned, using the thin strip of wood to balance upon (inc. mats).

Checklist 2b Gross Motor Multi-Skills Assessment (Continued)

Co-ordination Assessment 1	<p>Much of the co-ordination assessment can be achieved through SAQ™-based activities (speed, agility, quickness). Most schools now realise the benefit of ladder and hurdle-based dynamic warm-ups and sports-specific drills which target gross motor control development through training of the central nervous system.</p> <p>This drill simply requires the pupil to place both feet in each rung of the ladder, and in each gap in the hurdles, keeping up a momentum, preferably quicker than walking pace. Using the chant (in their head) of 1-2, 1-2, 1-2, 1-2, 1-2 as a guide for the pupil.</p> <p>Main points: avoid rounded shoulders, staring down at feet, not raising knees, flat feet, tripping etc.</p>
Co-ordination Assessment 2	<p>The drill requires the pupil to focus on where their hands are being placed, while still moving efficiently using their lateral sidestep.</p> <p>Working in groups of four, pupils pick up an SAQ™ ladder, two pupils stand either side of the ladder, with one leading they will match hands into rungs of the ladder, thus moving laterally alongside crossing the mid-line where required.</p> <p>Focus on feet not crossing, speed of response, picking the correct placement.</p>
Co-ordination Assessment 3	<p>So far the majority of our assessments have been of gross-motor i.e. Agility, Balance, Co-ordination. What we want from these assessments is an overall picture of a child with potential DCD, and to get that we need to assess their fine motor control, and non-sports-specific-based tests can often show these well.</p> <p>Brain-gym style activities are wide and varied, the following are some very simple basic ones:</p> <ul style="list-style-type: none"> ● Face-to-face, hand mirroring. ● Index finger mirroring. ● As above but crossing the mid-line and changing heights. ● Body part recognition from word to action e.g. touch your nose, ears etc. ● Cross the mid-line with one hand holding the earlobe and one hand holding the nose...swap.

Teacher Questionnaire

Name: _____ **D.o.B:** _____

School: _____ **Date:** _____

Please complete this questionnaire to help identify needs.

Are there difficulties in the areas listed below? **Tick if you feel there is a problem**, and add comments as appropriate.

<i>Independence Skills</i>	✓ PROBLEM AREA	COMMENTS
Dressing and undressing.		
Managing own belongings.		
Use of initiative.		
Awareness of time.		
Other.		
<i>Movement and Mobility</i>	✓ PROBLEM AREA	COMMENTS
Walking, Running, Swimming.		
Stamina.		
Negotiating stairs and obstacles.		
Sitting or standing still.		

Teacher Questionnaire *(Continued)*

<i>Movement and Mobility (Contd.)</i>	✓ PROBLEM AREA	COMMENTS
Balance.		
Climbing apparatus.		
Ball skills.		
<i>Recording Skills</i>	✓ PROBLEM AREA	COMMENTS
Pen or pencil grasp and control.		
Handwriting.		
Drawing.		
Work layout and use of space.		
Using a computer keyboard and mouse.		
<i>Communication, Social and Emotional Skills</i>	✓ PROBLEM AREA	COMMENTS
Language comprehension.		
Speech.		
Communication with adults.		
Communication with children.		

Teacher Questionnaire *(Continued)*

Communication, Social and Emotional Skills <i>(Contd.)</i>	✓ PROBLEM AREA	COMMENTS
Following instructions.		
Managing frustration.		
Following rules in games.		
Unusual anxieties.		
Managing Equipment	✓ PROBLEM AREA	COMMENTS
Use of scissors and craft equipment.		
Use of ruler, eraser and maths equipment.		
Use of science and technology equipment.		
Other Areas	✓ PROBLEM AREA	COMMENTS
Attention.		
Memory.		
Behaviour.		

Teacher Questionnaire (Continued)

Please comment on strengths. Also, if you have further comments which may help when planning provision for this child, please add them below or on another piece of paper.

Questionnaire completed by:

Name: _____ Role: _____ Date: _____

Name: _____ Role: _____ Date: _____

Name: _____ Role: _____ Date: _____

Thank you for your help.

Please return the completed questionnaire to:

Motor Skills Assessment

Walking/Running/Crawling		Name:		Date:	
Activity	Observable Features	Y	N	Other Observations	Key Factors Involved
Walking	Maintain balance for 10 steps.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)
	Head held in a relaxed position.				
	Heels off the floor.				
	Arms by side.				
Running To run in a straight line in school hall or yard.	Lift heels when running.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)
	Makes an even sound when running in a straight line.				
	Arms used to assist movement.				
	Head looks forward.				
Crawling	Moves opposing hands and feet right hand/left foot, left hand/right foot..				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)
	Looks in direction of forward movement.				
	Crawls with toes on floor.				

Motor Skills Assessment (Continued)

Balancing		Name:			Date:	
Activity	Observable Features	Y	N	Other Observations	Key Factors Involved	
Standing Stand on a fixed point in an upright position, with a relaxed posture.	Toes and heels of both feet on the floor.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)	
	Relaxed position - arms straight by side.					
	Head still and looking forward.					
Balancing Balance on left foot. <i>It may be necessary to allow holding of the back of a chair initially to register competency.</i>	Balance maintained for at least count of 10 seconds. Strategies used.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)	
	Body remains upright.					
Balance on right foot. <i>It may be necessary to allow holding of the back of a chair initially to register competency.</i>	Balance maintained for at least count of 10 seconds. Strategies used.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)	
	Body remains upright.					
Hopping <i>This task should not be undertaken until balancing on each leg is achieved.</i>	Can hop on left foot 5 times with body upright.				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)	
	Can hop on right foot 5 times with body upright.					

Motor Skills Assessment (Continued)

Jumping		Name:			Date:		
		Y	N	Other Observations	Key Factors Involved		
Activity Static Jumping Demonstrate a single vertical jump with both feet together, landing on the same place.	Adequate lift from floor (spring-like).				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)		
	Appropriate arm swing to gain momentum.						
	Crouch before jump.						
	Take-off and landing with both feet together.						
	Upright posture when jumping.						
	Moves forward.						
	Fluent movement from one jump to the next.						
	Adequate lift from floor (spring-like).						
	Crouching before jump.						
	Take-off and landing with both feet together.						
Dynamic Jumping Check one forward jump first. Demonstrate forward jump both feet together, 5 jumps.	Adequate lift from floor (spring-like).				Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)		
	Crouching before jump.						
	Take-off and landing with both feet together.						

Motor Skills Assessment (Continued)

Throwing and Catching		Name:		Date:	
Activity	Observable Features	Y	N	Other Observations	Key Factors Involved
Throwing Throws beanbags into a hoop/basket 3 metres away. <i>Use 5 or 10 beanbags depending on age and ability of child.</i>	Uses left hand to throw underhand.			Score:	Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)
	Looks at hoop before throwing.				
	Uses right hand to throw underhand.			Score:	
	Looks at hoop before throwing.				
Catching Catches a ball from a distance of 3 metres. <i>Size of ball and distance will vary.</i>	Catches ball ten times.			Score:	Balance Stable shoulder girdle Trunk strength Proprioception (body awareness)
	Watches ball.				
	Traps ball in both hands.				
	Cradles ball in arms.				
	Stands appropriately.				

Visual Perception Assessment

Visual Perception		Name:		Age:		Date:	
Delayed Skill	Observable Features	Y	N	Other Observations	Key visual skills needed		
PENCIL SKILLS							
Immature drawings Significantly different to peers.	Are details lacking?				Observation skills. Spatial perception. Body image. Visual imagery. Visual discrimination. Visual form constancy. Directional awareness. Spatial awareness in near space. Hand-eye co-ordination. Motor planning difficulties.		
	Is the execution poor?						
	Are proportions very immature or the orientation unusual?						
	Is shape copying immature?						
	Are oblique lines either avoided or poorly executed?						
Lack of oblique lines in drawings or letter forms.					Spatial perception Body image. Observation skills. Visual imagery. Visual discrimination. Visual form constancy. Directional awareness. Spatial awareness in near space. Motor planning difficulties. Observation skills. Hand-eye co-ordination. Visual discrimination. Directional awareness. Observation skills. Hand-eye co-ordination. Motor planning difficulties.		

Visual Perception Assessment *(Continued)*

Delayed Skill	Observable Features	Y	N	Other Observations	Key visual skills needed
<u>Frequent reversals after the age of 7 yrs.</u>	b / d confusion, reversed numerals and letters?				Orientation in space. Left/right awareness. Visual memory.
<u>Immature writing.</u>	Difficulty changing direction with pencil?				Hand-eye co-ordination. Motor planning. Spatial awareness.
	Difficulty crossing the body mid-line with pencil? Swaps hands in the middle?				Bi-lateral integration. Visual scanning.
	Letters unrecognisable?				Hand-eye co-ordination. Visual discrimination. Visual form constancy. Directional awareness. Spatial awareness in near space. Motor planning difficulties.
	Starts letters at the bottom, despite being taught to start them at the top?				Spatial awareness in near space. Visual memory. Visual imagery.
<u>Poor use of space when drawing or writing.</u>	Starts writing in the middle of page, or writes or draws along one of the edges of the page?				Spatial awareness in near space.
	Writing or letters very variable in size, often expanding to fit space available?				Spatial awareness in near space. Hand-eye co-ordination.



Visual Perception Assessment (Continued)

Delayed Skill	Observable Features	Y	N	Other Observations	Key visual skills needed
<u>Poor use of space when drawing or writing (Continued).</u>	Letters scattered about the page, not sequentially placed? Poor spacing between words?				Spatial awareness in near space. Directional awareness. Spatial awareness in near space. Hand-eye co-ordination. Visual imagery.
<u>When reading paragraphs lacks fluency but single words read without difficulty.</u>	Missing words or lines out when reading? Hesitant and makes errors, or short attention span when reading?				Smooth saccadic movements. Visually crossing the body mid-line. Use of all visual fields. Visual figure ground.
<u>Difficulty copying from the whiteboard.</u>	Slow to copy, with several errors (omissions, repetitions, misspellings)?				Short-term visual memory. Accommodation of focus to different distances. Visual acuity. Visual figure ground. Visual scanning and smooth saccadic movements.
<u>Frequently gets lost when moving about school.</u>	Gets lost, or avoids moving around school or grounds to avoid getting lost?				Topographical orientation.
<u>Slow to dress independently.</u>	Frequently gets clothes inside out or back to front?				Spatial awareness in near space. Visual discrimination. Visual closure.

Visual Perception Assessment *(Continued)*

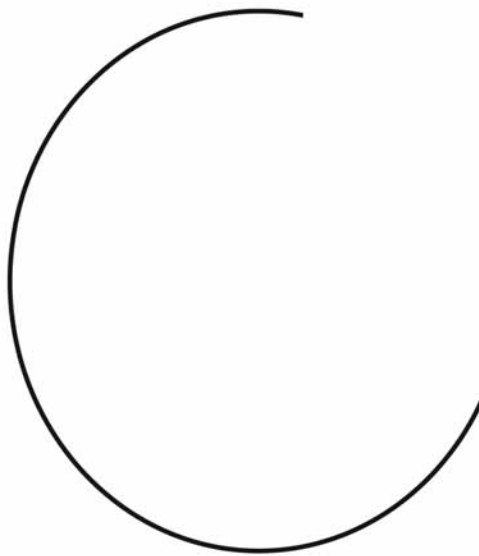
Delayed Skill	Observable Features	Y	N	Other Observations	Key visual skills needed
<u>Slow to dress independently.</u> <i>(Continued).</i>	Struggles to manage fastenings, yet has a secure pincer grasp?				Figure ground. Spatial awareness in near space. Visual closure. Hand-eye co-ordination.
<u>Frequently trips over or bumps into obstacles.</u>	Doesn't seem to notice obstacles until they are bumped into or fallen over?				Body image and awareness. Spatial awareness in wide space. Visual depth perception.
<u>Can't find objects looked for.</u>	Doesn't find objects which are amongst other objects?				Visual figure ground. Visual discrimination. Visual closure.

Visual Perception Assessment *(Continued)*

SELF-PORTRAIT		DATE:
		DATE:

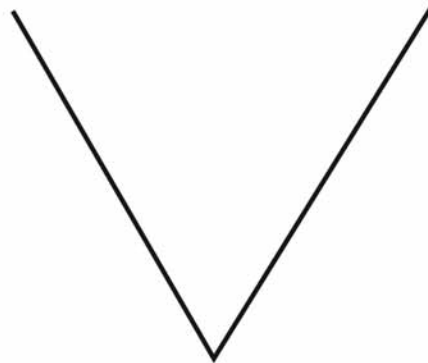
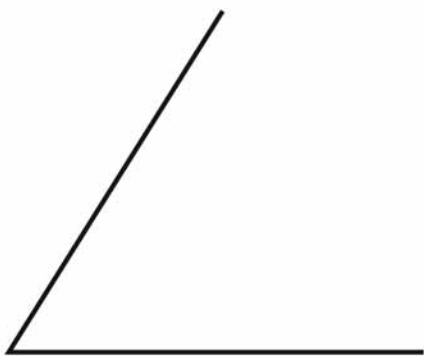
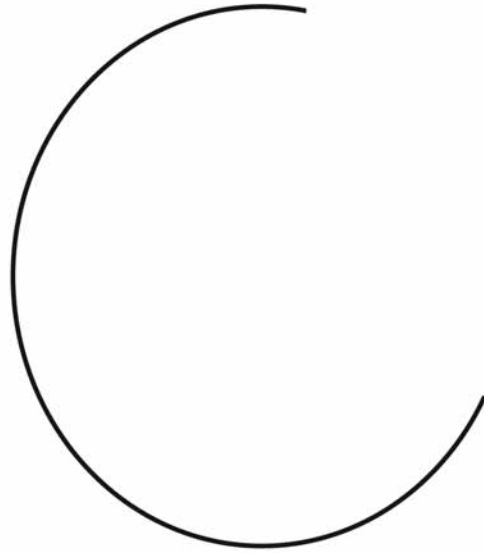
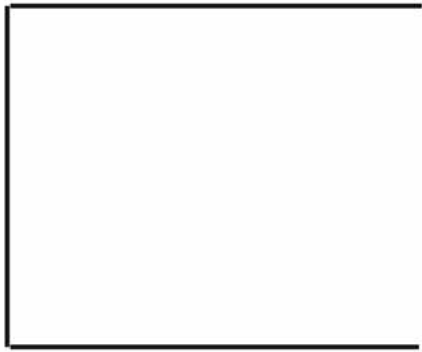
Visual Perception Assessment *(Continued)*

Complete these shapes



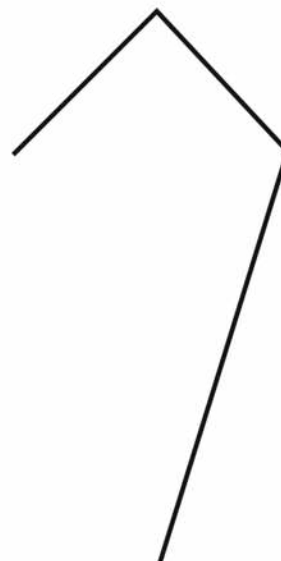
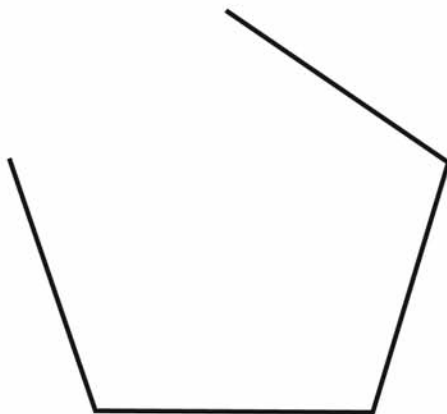
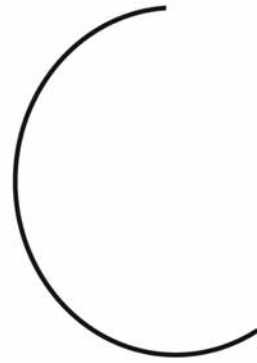
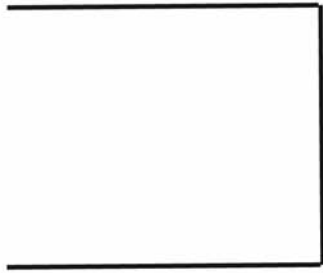
Visual Perception Assessment *(Continued)*

Complete these shapes



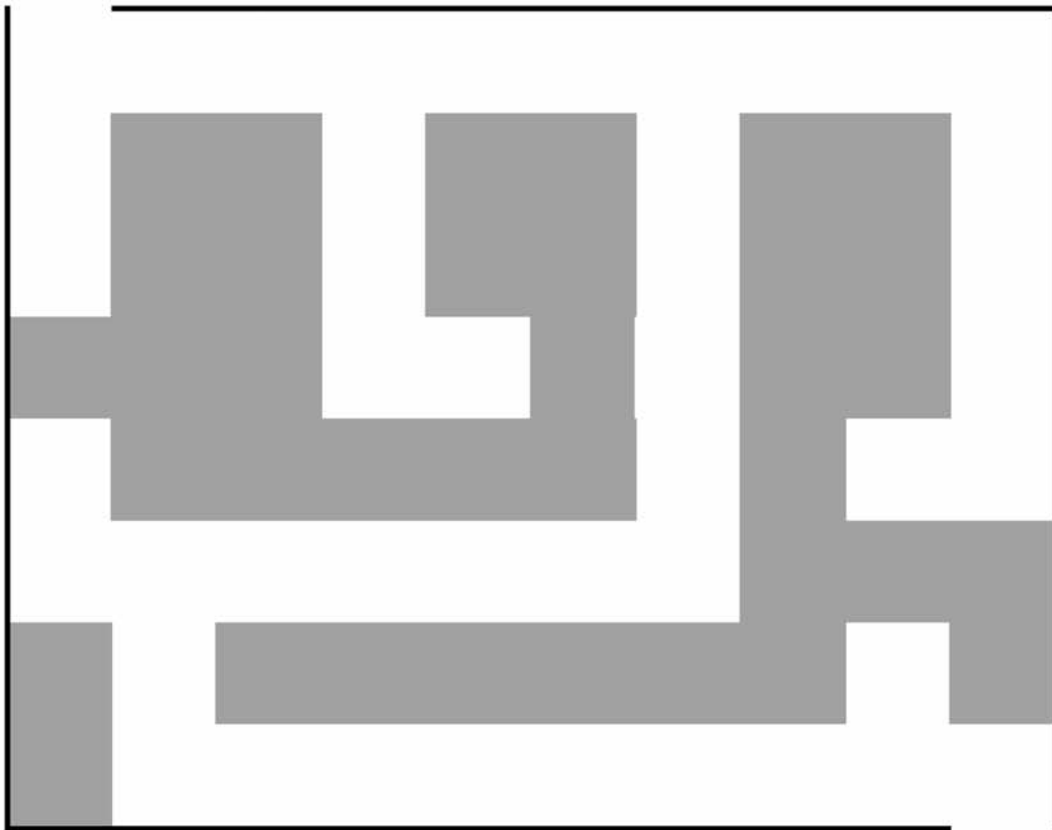
Visual Perception Assessment *(Continued)*

Complete these shapes using 1 line for each shape



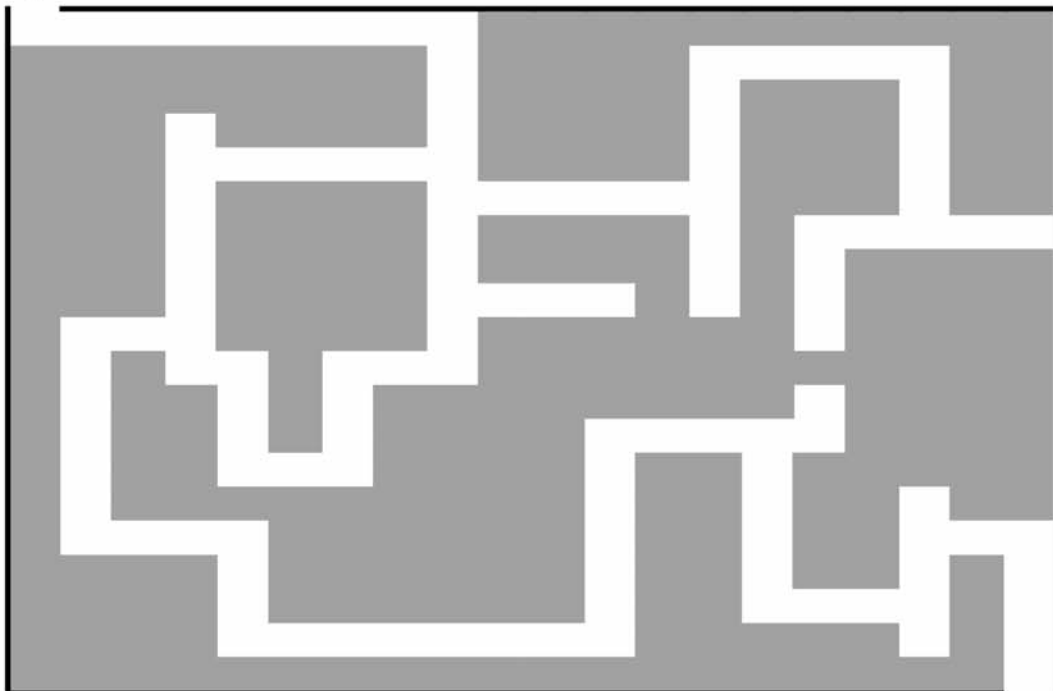
Visual Perception Assessment *(Continued)*

Help the bird find the nest



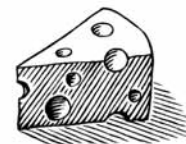
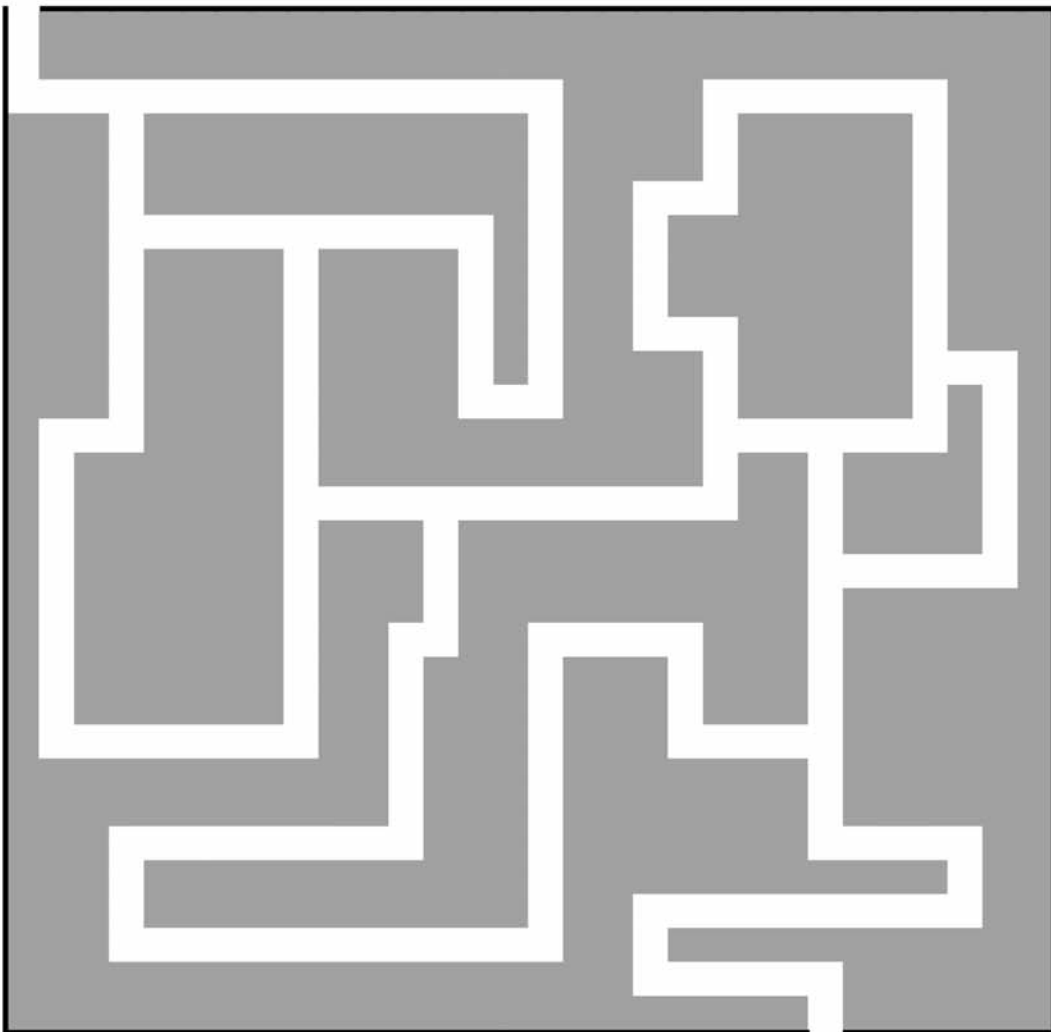
Visual Perception Assessment *(Continued)*

Help the dog find the bone

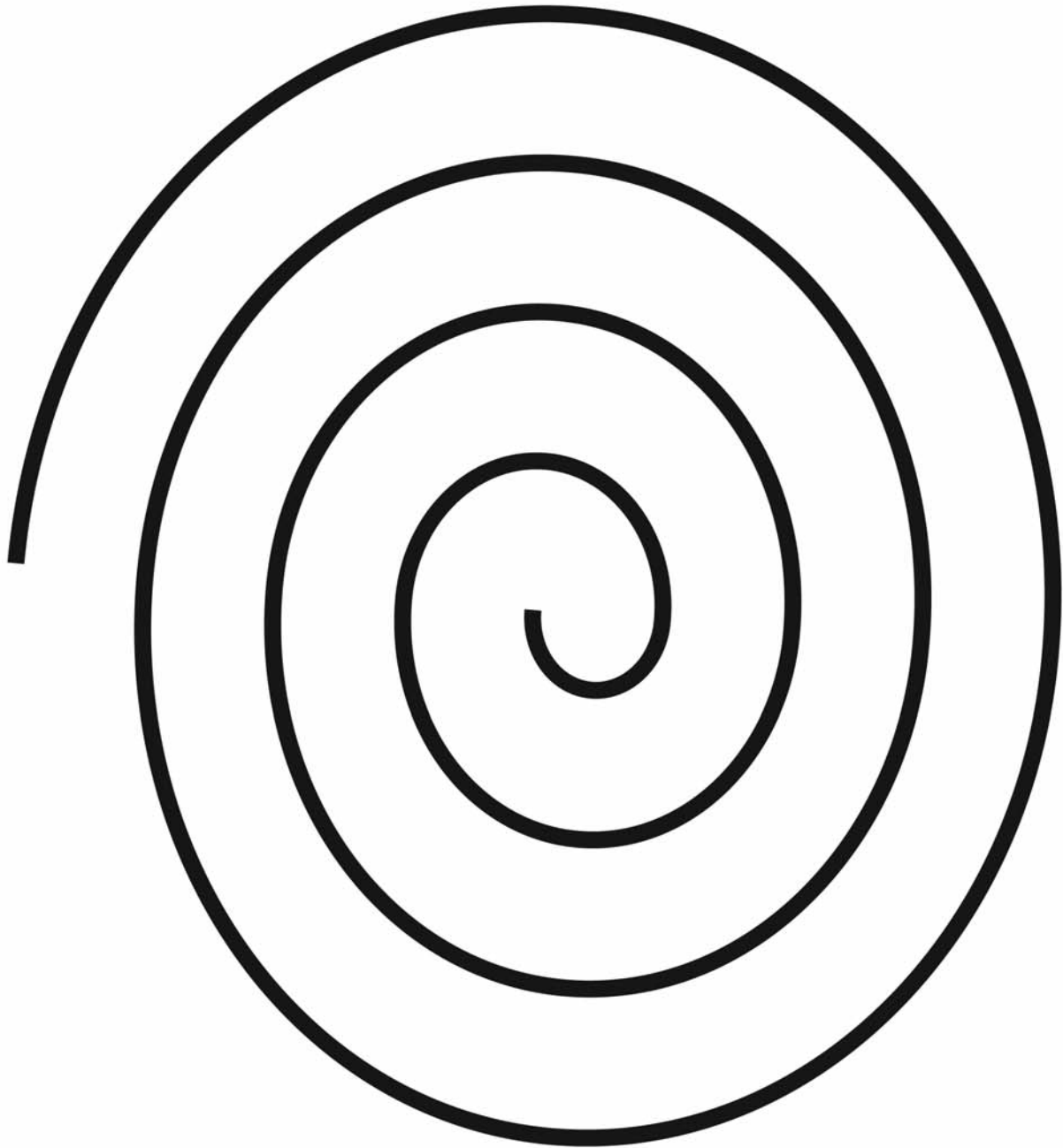


Visual Perception Assessment *(Continued)*

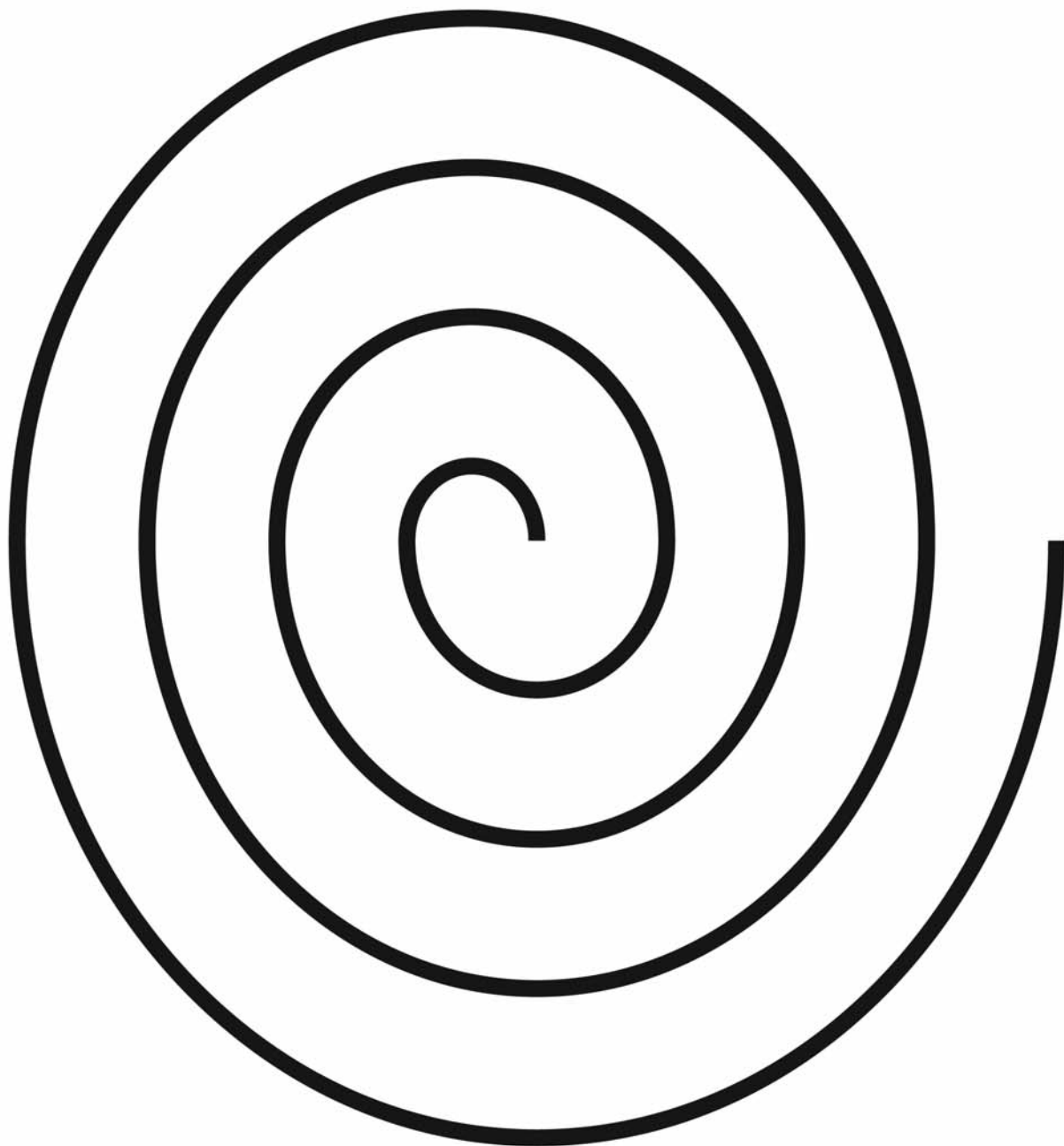
Help the mouse find the cheese



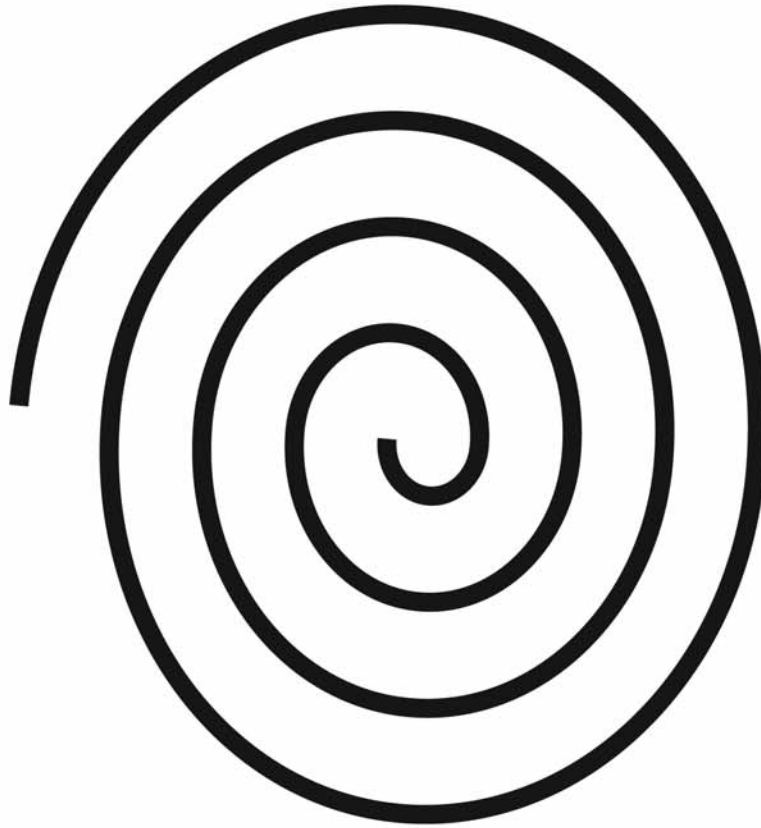
Visual Perception - Hand-Eye Co-ordination



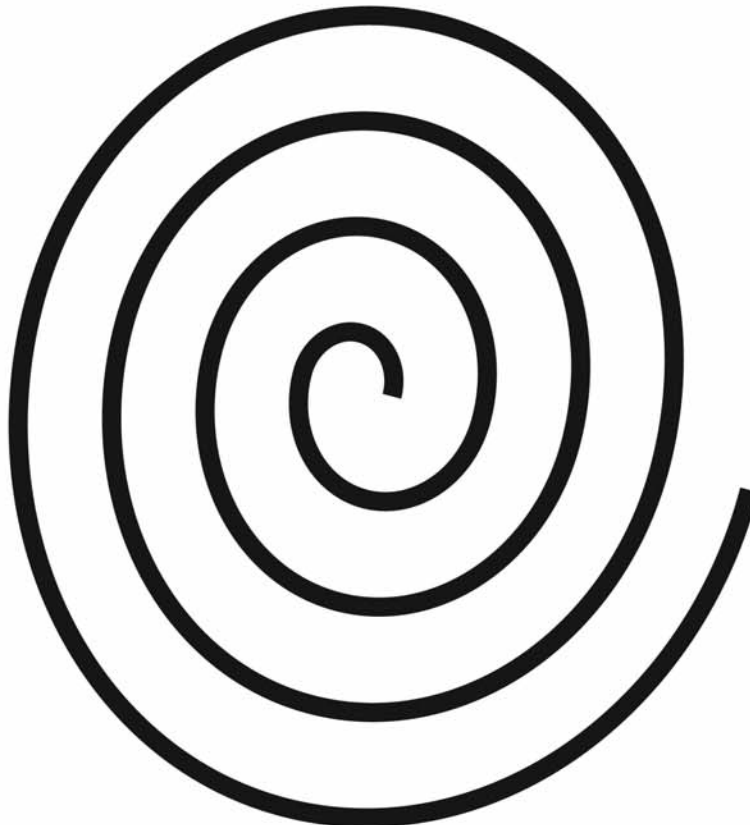
Draw a line from the outside to the centre.

Visual Perception - Hand-Eye Co-ordination *(Continued)*

Draw a line from the outside to the centre.

Visual Perception - Hand-Eye Co-ordination *(Continued)*

Draw a line from the outside to the centre.



Crossing the Mid-line Assessment

Crossing the Mid-line		Name:		Date:	
Activity	Observable Features	Y	N	Other Observations	Key Factors Involved
<u>Using a Pencil</u> Draw a picture of themselves.	Preferred hand to draw with?				Bi-lateral integration. Body awareness.
<u>Kicking a Ball</u>	Preferred foot to kick with?				Bi-lateral integration.
<u>Using a Kaleidoscope</u>	Preferred eye to look with?				Bi-lateral integration.
<u>Crossing the Mid-line Fine Motor activity</u> Place paper clip at top of sheet of paper.	Right hand can place clip on right-hand side.				Bi-lateral integration.
	Right hand can place clip on left-hand side.				
	Left hand can place clip on left-hand side.				
<u>Crossing the Mid-line Gross Motor activity</u>	Left hand can place clip on right-hand side.				Bi-lateral integration. Proprioception.
	Can touch right knee with left hand. Crosses over mid-line of body. Repeat touching right ear with left hand. Can touch left knee with right hand. Crosses over the mid-line of the body.				

Fine Motor Skills Assessment

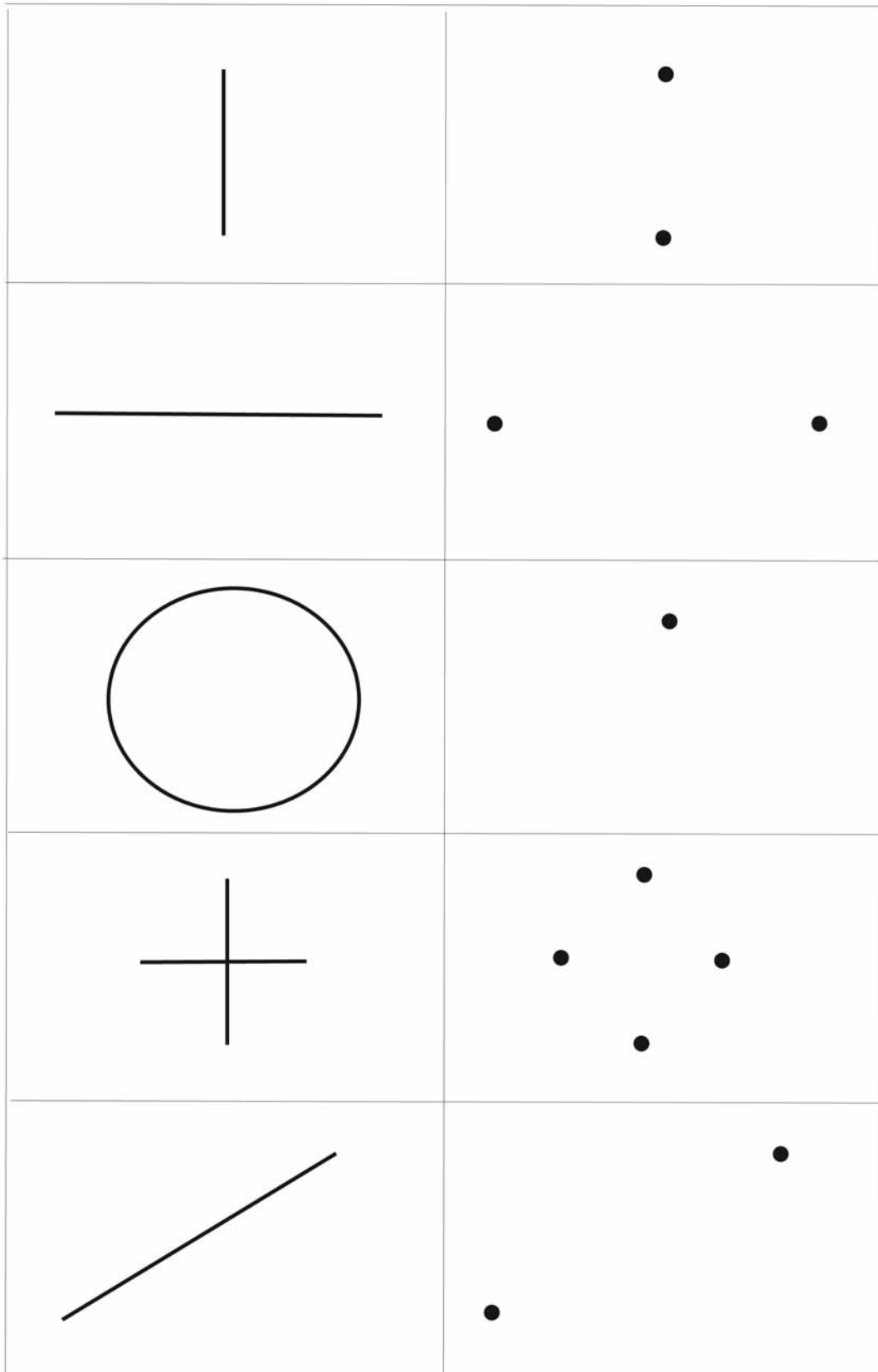
Assessments		Name:		Date:	
Fine Motor Skills		Y	N	Y	Other Observations
Activity	Observable Features				
<u>Threading</u> Thread 20 beads.	Complete task.				Time:
	Uses one hand to hold, other to thread.				
	Dominant hand used for threading through the whole task.				
<u>Isolate and Press</u> Press index finger into plasticine as if making a fingerprint.	Able to use left index finger. Other fingers kept still.				
	Able to use right index finger. Other fingers kept still.				Note how easily they can isolate the movement.
<u>Colouring</u>	Colours within lines.				
	Uses dominant hand only.				
	Uses to and fro hand movements.				
	Applies appropriate pressure.				
<u>Make marks on paper.</u>	Uses dominant hand only.				
	Can imitate or copy vertical line.				
	Can imitate or copy horizontal line.				
	Can imitate or copy circle.				
	Can imitate or copy triangle.				
	Can imitate or copy diamond.				
<u>Page Turning</u>	Is able to use fingers to turn pages of a book.				

Fine Motor Skills Assessment *(Continued)*

Assessments	Name:	Date:
Fine Motor Skills <i>(Continued)</i>.	Name:	Date:
Activity	Observable Features	Other Observations
<u>Building Bricks.</u>	Can build tower of 10 cubes.	
	Can release each cube easily.	
	Steady hand movements.	
	Uses dominant hand.	
	Uses dominant hand.	
<u>Scissor Control.</u>	Can cut along a straight line.	
	Can cut along a zig-zag line.	
	Can cut out a circle.	
	Can cut out a circle.	
<u>Finger Skills.</u> Open and close each hand.	Right hand. Stretches fingers and forms fist.	
	Left hand. Stretches fingers and forms fist.	
	Touch each finger independently to thumb. Right hand and left hand.	



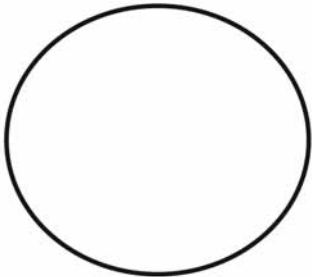

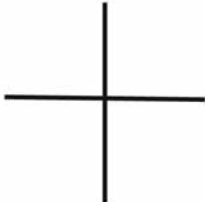
Fine Motor Skills Assessment *(Continued)*

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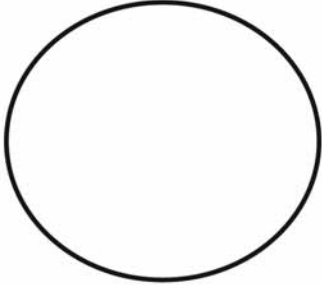
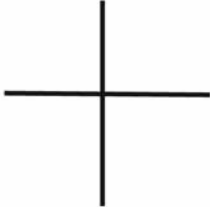
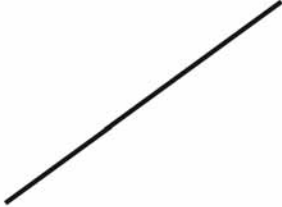

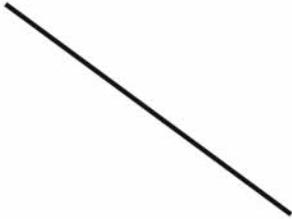


Fine Motor Skills Assessment *(Continued)*

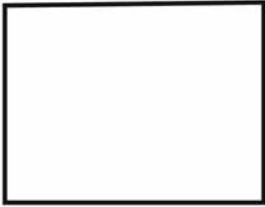
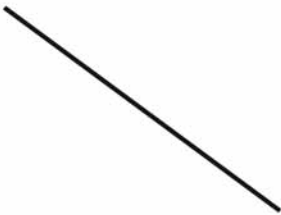
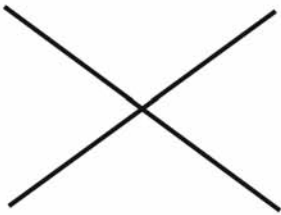
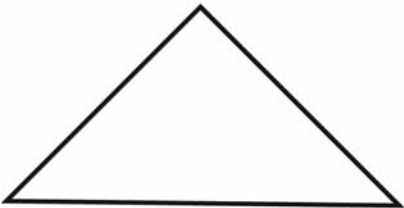
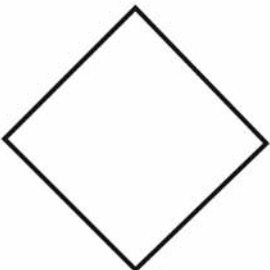
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Fine Motor Skills Assessment *(Continued)*

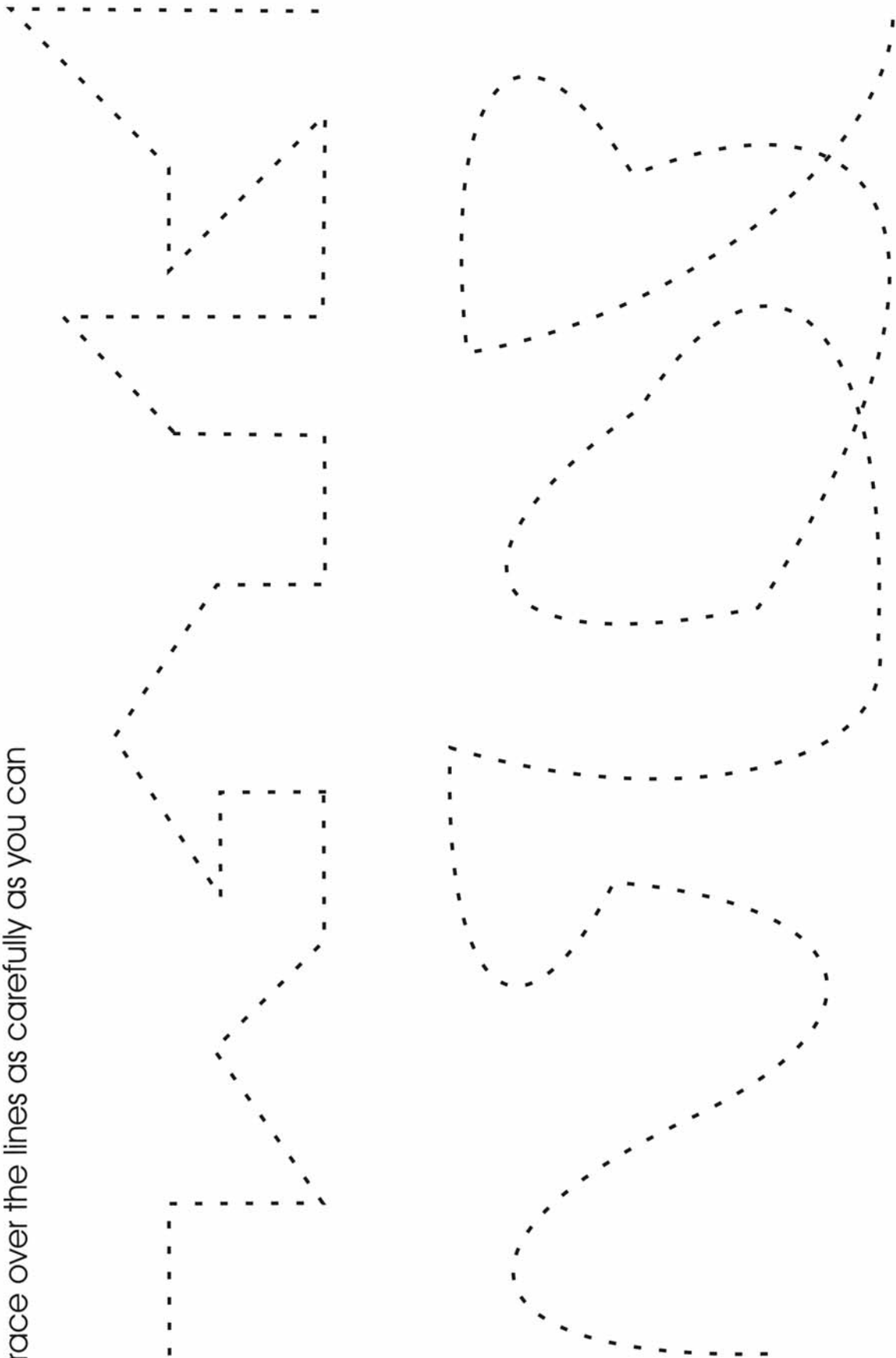
	
	
	
	
	

Fine Motor Skills Assessment *(Continued)*

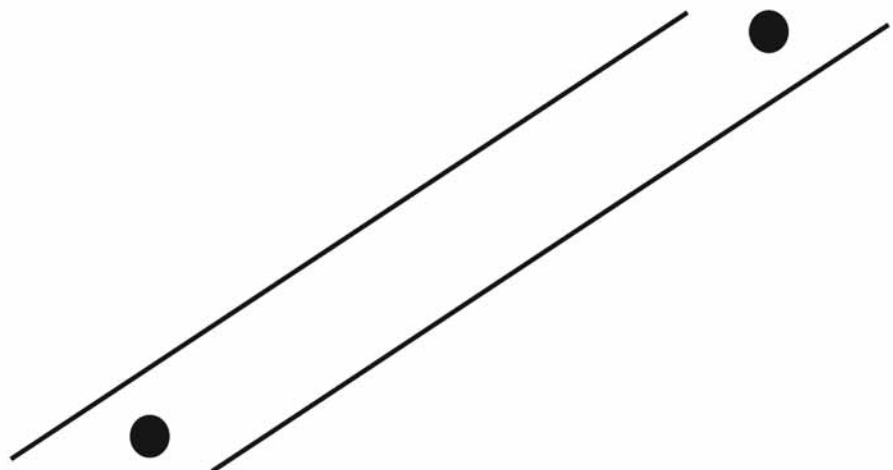
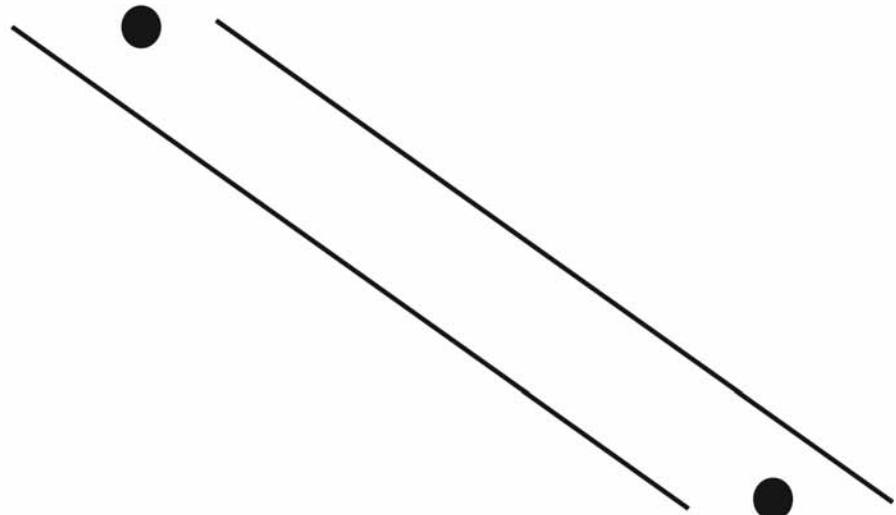
Fine Motor Skills Assessment *(Continued)*

Trace over the lines as carefully as you can



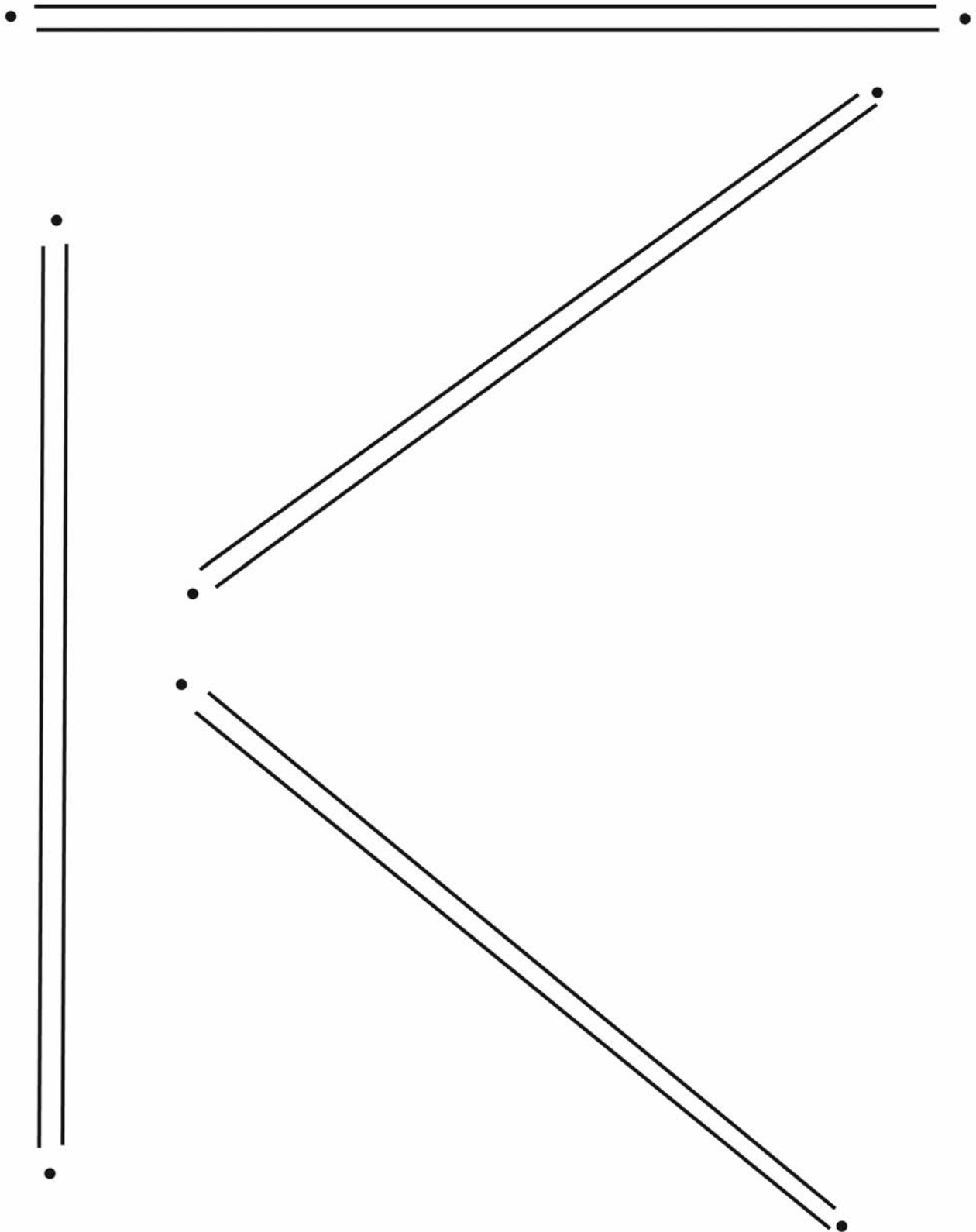
Fine Motor Skills Assessment *(Continued)*

Draw a line between each pair of lines from dot to dot



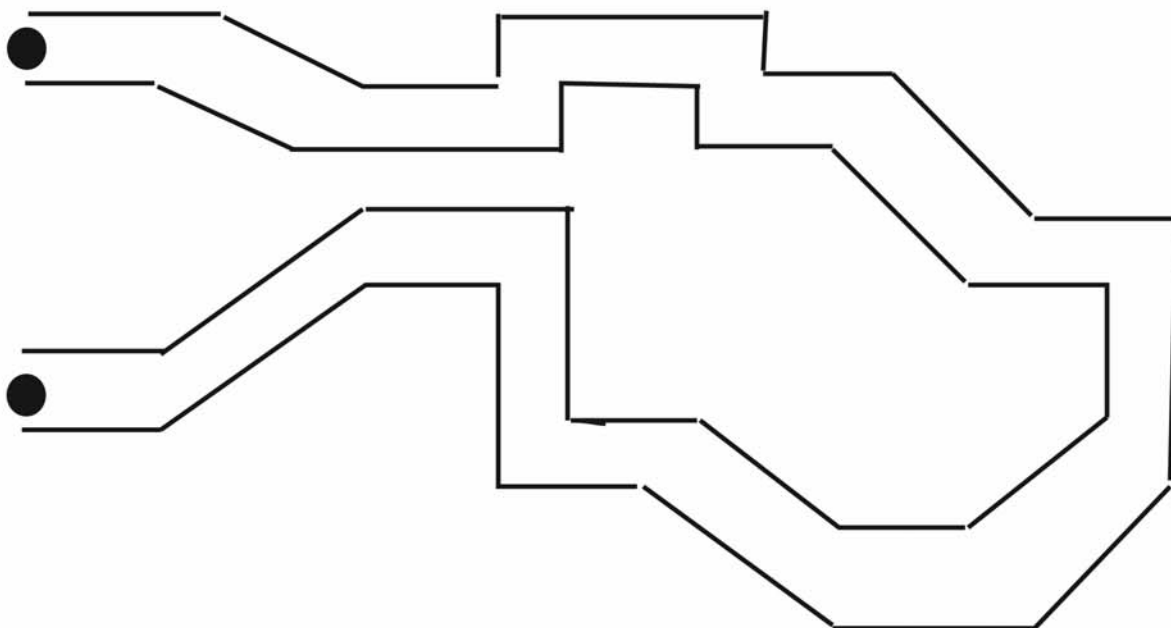
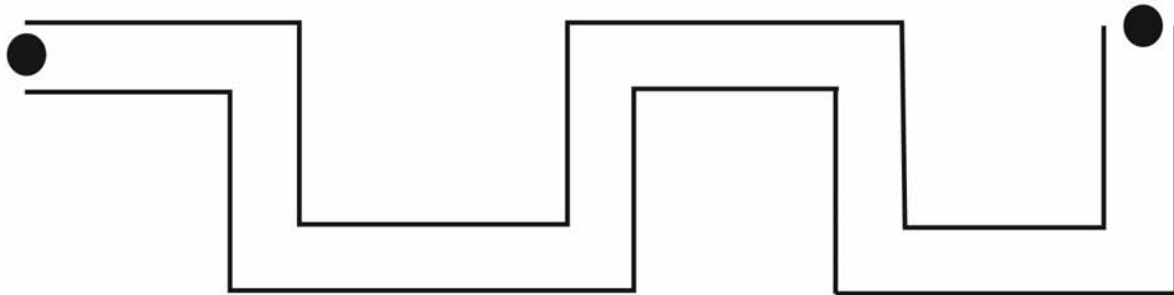
Fine Motor Skills Assessment *(Continued)*

Draw a line between each pair of lines from dot to dot



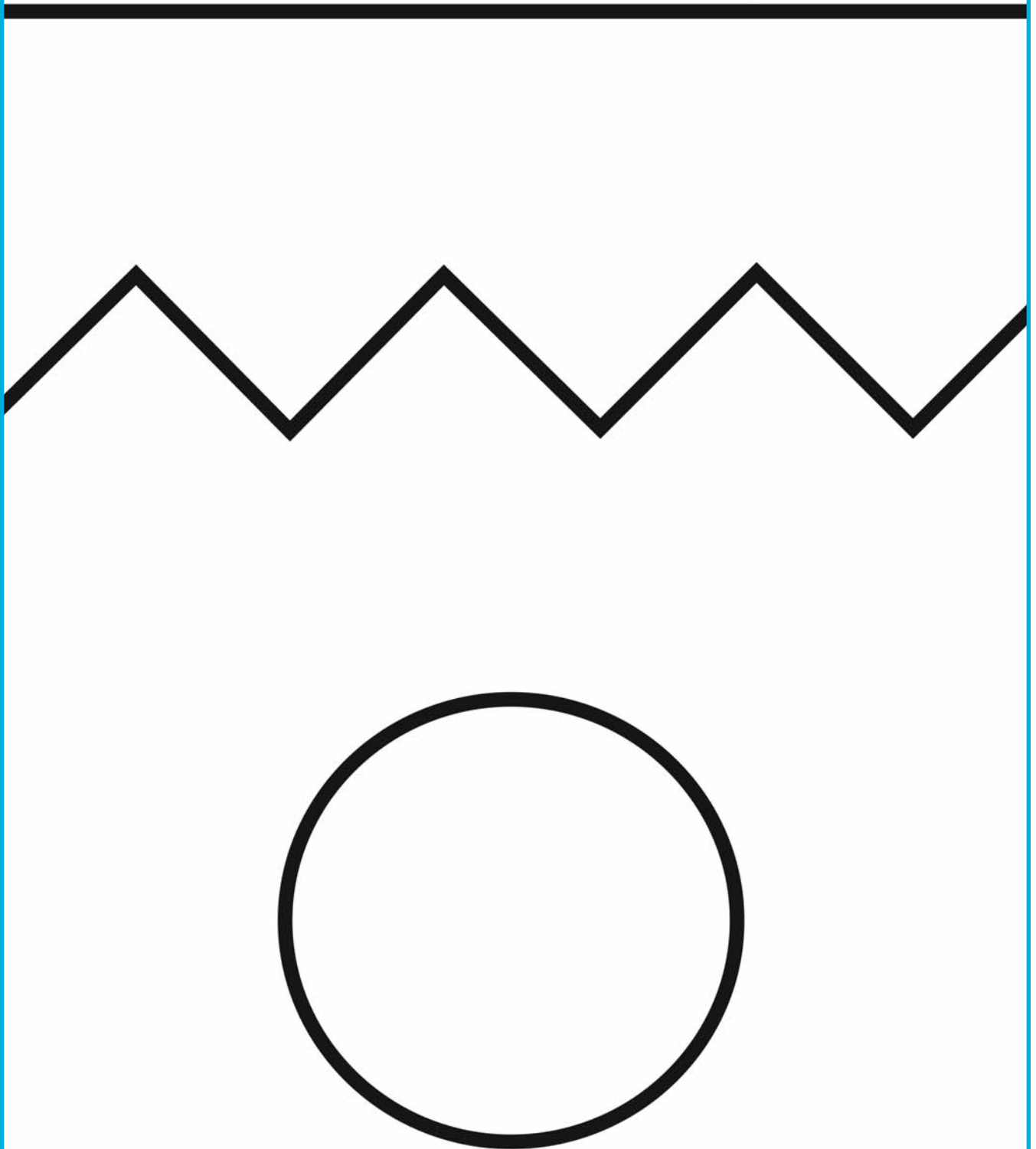
Fine Motor Skills Assessment *(Continued)*

Draw a line between each pair of lines from dot to dot



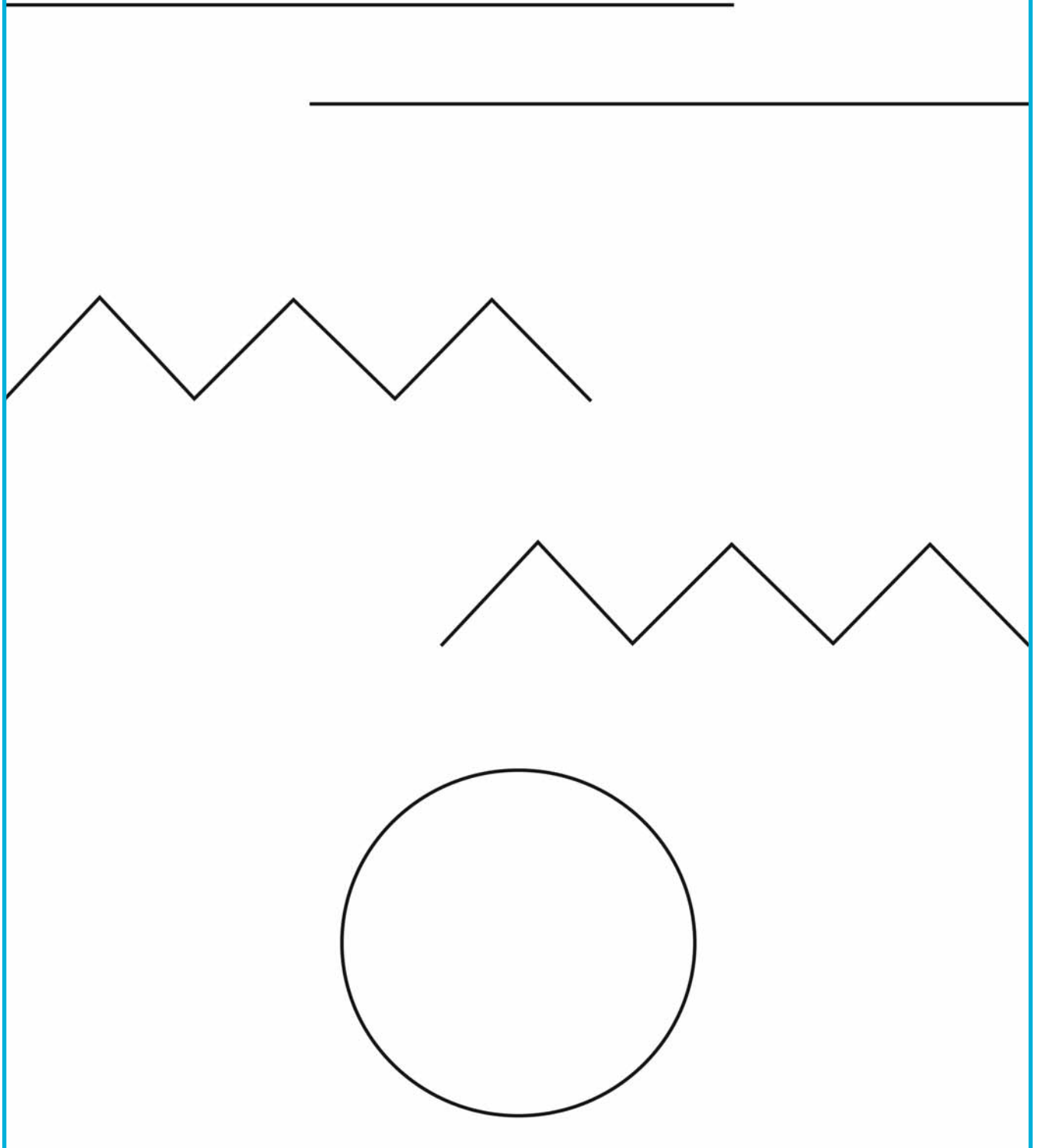
Fine Motor Skills Assessment - Scissor Skills

Cut along the lines



Fine Motor Skills Assessment - Scissor Skills *(Continued)*

Cut along these lines



Intervention Programme - Balance Activities

Activity Name	Instructions to pupil	Notes/Equipment
Static Dribble	Stand on your left leg and use your right leg to touch ball. Repeat standing on your right leg. Repeat 5 times.	
Toe Touches	Stand on top of the step with side of your foot at the edge. Touch the floor with toes of foot nearest the edge. DO NOT PUT YOUR WEIGHT THROUGH THIS FOOT. Stand up and put both feet on top of the step. Repeat 10 times. Turn around and repeat with different foot.	Record number of left and right toe touches in one minute. Steps
Step Ups	a) Leading with left leg - step up with left leg and bring up right leg. b) Leading with right leg - step up with right leg and bring up left leg.	Record the number of cycles completed in 1 minute leading with both left and right leg.
Hopping On The Spot	Stand within large hoop. Have five attempts at hopping on each leg.	Record highest number of hops achieved before losing your balance on both left and right legs. Large hoop.
Heel-Toe Walking	Walk along a line on the floor with your heel touching your toe each step. Try this forwards and backwards. How many steps can you do without falling off the line?	Straight line on floor.
Hopscotch	Stand your left leg on the circle. On 'go' jump and land with your feet either side of the circle and then hop back on left leg. After 30 seconds on left leg repeat using right leg.	Tape lines or circle. Circle drawn on floor. Record number of complete jump and hop sequences achieved in thirty seconds.

Intervention Programme - Visual Tracking Activities

Activity Name	Instructions to pupil	Notes/Equipment
Up and Under	Stand, holding a beanbag in your left hand. On 'go' lift your right leg and toss the beanbag under it to your right hand. Next, lift our left leg and toss the beanbag under it to your left hand.	Beanbag. How many in 1 minute?
Ball Bounce	Bounce ball using left hand - keeping feet in circle. Use right hand - keeping feet in circle. Use right and left hands alternatively. Perform each 30 seconds each.	Football, tennis ball and circle. Change to football once activity becomes fluent.
Spin and Toss	Lie on the floor on your tummy. Place five beanbags at 90 degrees to your left and five beanbags 90 degrees to your right. The large hoop should be placed four feet in front of you. On go pivot yourself around on your tummy and pick up one beanbag from your left. Pivot back to starting position and toss it into the hoop. Repeat to pick up a beanbag from your right side. Continue until all beanbags have been collected and tossed.	5 Beanbags - Hoop Record the time taken for the child to complete the task. Extension - move hoop further away.
Bubble Burst	Blow bubbles - how many can you burst in 1 minute?	Bubbles. Bubble Machine.

Trunk Stability Activities

Activity Name	Instructions to pupil	Notes/Equipment
Aeroplanes	<p>Lie on your tummy on the floor, with legs straight and arms at shoulder level.</p> <p>On go - lift arms and legs off the floor together. Hold this position for as long as you can.</p> <p>Repeat five times.</p>	<p>Record max. length of time you were able to keep our hands, arms and legs up off the floor.</p>
Bridging	<p>Lie on back with knees bent and feet flat on the floor. Hold ball in one hand. On go, lift up your bottom to make a bridge. Pass the ball under the bridge to your other hand and then over your tummy back to the start.</p>	<p>A tennis ball.</p> <p>Record how many times you can pass the ball around our body in 1 minute.</p>
Log Rolling	<p>Lie on back with arms above head holding the hoop and legs down straight. Place 2 skittles on your left - one level with forearm and other with lower calf. Place other skittles across the room. On go roll like a log keeping arms and legs straight - aiming to knock over skittles.</p> <p>Continue for a minute.</p>	<p>1 hoop.</p> <p>4 skittles.</p> <p>Record number of skittles knocked over in 1 minute.</p>
Stretch Out	<p>Position yourself on all fours (hands and knees) with the beanbag balanced on your head.</p> <p>Lift our left arm off the floor and stretch it out straight at shoulder level. Balance in this position for as long as possible, without the beanbag falling off. Repeat with your right arm.</p> <p>Repeat with left leg and right leg.</p>	<p>Beanbag.</p> <p>Record the time each positioned was maintained.</p>
Tailor Stretch	<p>Sit cross-legged on the floor. As the pegs are given to you one at a time, move to them. Move to the upright position before passing the peg to the other hand and pegging it onto the edge of the box. Repeat with 20 pegs.</p>	<p>20 clothes pegs and a box.</p> <p>Record number of successfully transferred pegs and also the number of times the child lost their balance.</p>
Bridging with One Leg Extended	<p>Lie on your back with your knees bent up and your feet flat on the floor. Lift bottom without wobbling. When in lifted position lift your left foot and straighten the left leg. Hold five seconds put your foot back and lower your bottom. Repeat straightening right leg.</p>	<p>Record the number of successful lifts using the right and left legs to a maximum of ten lifts for each leg.</p>

Trunk Stability Activities (Continued)

Activity Name	Instructions to pupil	Notes/Equipment
Superman	On all fours balance a beanbag on your head. Balance the beanbag while you stretch your left arm straight out in front of you and right leg right behind you. Balance as long as you can. Repeat lifting your right arm and left leg.	Record best times achieved. Beanbag.
Reverse Sit-ups	Sit on floor with knees bent and your feet flat on the floor. Your arms should be out straight at shoulder level with your hands beside your knees but not touching them. Lower body slowly back towards the floor, as far as possible without going all the way down. Stop and return to an upright sitting position. Repeat ten times.	Record the total number of reverse sit-ups completed with control. Do not let the pupil crash backwards to the floor.
Side Saddle	Start in a high kneeling position. On go rotate hips and position yourself down in side sitting, balance then come back to high kneeling, rotate hips the opposite side and go down to side sitting on this side, balance and come back to high kneeling again.	Record the best time in which the child was able to complete a set of ten cycles. Support may be needed initially.
Leg Lifts	Sit on floor with your legs out straight holding the ball between your ankles. (A) On go lift the ball up and down slowly and with control. (B) On go lift the ball and move to the left and place down, lift and return to the mid-line, lift and move to the right and place down, lift and return to the mid-line.	One large sized football. Record (a) the number of lifts; (b) the number of cycles completed in one minute.
Bottom Lifts	Place the ten beanbags at one skittle and the box at the other. Sit on the floor at the skittle with the beanbags. On go put one beanbag on your lap, put your hands on the floor, push down on them and lift your bottom upwards and backwards and lower it back to the floor. Repeat this action to move your body backwards towards the box. Then repeat this moving forwards to get the next beanbag.	Time how long 10 beanbags takes. 2 skittles, 6 feet apart. 10 beanbags and box/container.

Bilateral Integration Activities

Activity Name	Instructions to pupil	Notes/Equipment
Peg Game	Take pegs from right side with right hand and peg them onto box positioned on your left. Repeat using left hand with pegs on left and box on right.	Talk about left and right. Get clothes pegs.
Bunny Hops	Start with both hands and feet on the floor in a crouched position. Move both hands forward and jump with both feet together bringing them up closer to hands.	Repeat over a distance of five metres. Repeat this ten times.
Scramble Around	Place your preferred hand on the centre dot and extend other arm towards the ceiling. Leaning on your preferred hand walk your feet around the circle.	How far can he go without resting? How many circles can he make? Mark a dot on the floor and then a circle around the dot, that has the radius about the height of your child.
Penny Flipping	Line up a row of pennies from left to right so that the row reaches from in front of left shoulder to in front of right shoulder. Cross mid-line by using one hand to flip them all over in line without leaning to right or left.	Try using both hands at once by starting simultaneously at left and right ends of row and flipping pennies until hands meet at the middle. One penny coins.
Streamers	Make circles and shapes in front of body with streamers	Discuss left, right, and other positional language. Coloured streamers.
Far Side	Ask pupils to sit backwards on a chair and ask them to throw beanbags at targets located far to the sides. Throw a beanbag at one of the targets.	Alternatively use a bench or a gym ball or tell them to stand as if feet glued to floor. Beanbags/circles/hoops on ground.

Strengthening Shoulder Girdle Activities

Activity Name	Instructions to pupil	Notes/Equipment
Push-Ups	On all fours on the floor (knees directly under hips and hands at shoulder level). Bend arms at the elbows so that you can touch the floor with your nose. Strengthen your arms slowly and come back to all fours position. Repeat 20 times.	Record the number of completed press-ups and time taken to do them.
Snake Creep	Commando crawl a distance of six feet along the floor using your arms and legs, but keeping your tummy on the floor.	Once fluent repeat with a Beanbag on head. Record time taken. Beanbag.
Bunny Hops	Start with both hands and feet on the floor in a crouched position. Move both hands forward and jump with both feet together bringing them up closer to hands. Repeat over a distance of ten feet. Repeat this ten times.	
Beanbag Throw	Lie face down on the floor with hands below your shoulders. Straighten your elbows to lift your upper body away from the floor. Use alternate hands to throw a beanbag into a hoop ahead of you. Repeat with 10 beanbags (5 with your right hand and 5 with your left) with the hoop 3 metres ahead.	Beanbag.
Crab Walking	Walk around the room on your hands and feet with your tummy facing the ceiling. Don't let your bottom touch the ground. Do 10 lengths of the room.	
Soft Surface Crawling	Crawl forwards and backwards on lilo or soft pillow.	Lilo/soft pillow.
Beanbag Balance	Balance bean bags on outstretched arms. How long can you balance them for?	Beanbags.
Stretching Activities		Encourage working above shoulder level - e.g. painting at easel, blackboards, cleaning windows.

Strengthening Shoulder Girdle Activities *(Continued)*

Activity Name	Instructions to pupil	Notes/Equipment
Balloon Strike	Hit balloon (or ball on string).	Suspend balloon or ball on string above pupil's head and hit with hands or cardboard roll.
High Kneeling	Throw a ball overarm to a partner whilst kneeling.	Ball. Pupil works with partner
Overarm Throwing	Throwing large ball - both hands, also from above head.	Basketball net, volleyball.
Water Pouring	With container held at arms length pour water from one container to another.	Two appropriate size containers and water.
Push-Up From Kneeling Position	On all fours lower yourself to floor by lowering elbows slowly and maintaining a straight back.	Make into a game by picking up with mouth a sweet from a plate in front or lowering elbows alternately to take a hula hoop off each finger i.e. 10 push-ups. Sweet on a plate. Hula hoops.
Wall Push-Ups	Push-ups against wall: Stand an arm distance away from a wall. Lean on the wall, with the hands flat on it. Keeping the arms straight, use fingers to push away from the wall to get to an upright position.	As the pupil becomes more proficient move the feet backwards to that there is a greater angle of lean against the wall.
The following activities are also good at developing shoulder and pelvic stability: Trampoline under qualified supervision. Climbing frames - hanging/swinging/chin-ups. Horse riding. Cross-country running. Swimming. Fishing. Rowing. Running on sand.		

Pupil Organisational Skills Questionnaire

NAME:		DATE:	
Who packs your bag?	YOU	SOMEONE ELSE	
- if it is someone else, why do they do it?			
Where do you put letters that need to go home?			
Do you remember to give letters to your parents?		YES	NO
If you forget letters, what would help you remember?			
Where do you put letters that need to come to school?			
Do you remember to hand letters in?		YES	NO
If you remember, how do you remember?			
If you forget letters, what would help you remember?			
Do you know your timetable?		YES	NO
If so, how did you learn it/how do you remember?			
If not, how do you cope?			
Would anything help you remember?			
How do you find your way around?			
Do you get to your lessons on time? If not, why not?			

Pupil Organisational Skills Questionnaire *(Continued)*

HOMEWORK		
Do you have a planner?	YES	NO
- if you do not have a planner, how do you record your homework?		
if you have a planner do you use it?	YES	NO
- if you do not use your planner, why not and where do you write your homework down?		
Do you remember when you have homework?	YES	NO
- if you remember homework, how do you remember it?		
- if you forget homework, what would help you remember?		
Do you remember to hand homework in?	YES	NO
If you remember to hand your homework in, what reminds you?		
If you forget to hand your homework in, what would help you remember?		
What happens if you forget your homework?		
Does anyone ever check that you have written your homework down correctly?	YES	NO SOMETIMES

Pupil Organisational Skills Questionnaire *(Continued)*

LUNCH		
What do you do for lunch?		
Do you remember all that you need? If yes, how? If no, explain, and what would help you remember?		
Do you ever miss lunch?		
GENERAL		
Can you tell the time?		YES NO
Do you wear a watch?		YES NO
Do you often forget things?		YES NO
If you forget things, how often does this happen?		Every day. Two or more times a week. Once a week.
- what happens when you forget things?	- get into trouble at home. - get into trouble at school. - hope no one notices.	
What were you most worried about before you came to secondary school?		
What do you wish you had known or been able to do before you came to high school?		
If you could get better in one of the things we have talked about, what would it be?		
Anything else you think is important.		

School Organisational Skills Questionnaire

Name: **Date:**

Do you have pupils in your school with organisational difficulties?

If so, approximately how many?

What are the main issues surrounding organisation? Tick all that apply.

- Remembering books/equipment.
- Getting to the right place at the right time.
- Communication with parents.
- Homework.
- Organisation within the lesson.
- Other (please specify).

For each statement you have ticked, please give examples of strategies adopted/promoted by the school.

Remembering books/equipment.

Getting to the right place at the right time.

Communication with parents.

Homework.

School Organisational Skills Questionnaire *(Continued)*

Organisation within the lesson.

Other (please specify).

What do you wish pupils could do in terms of organisation **before** they started at Secondary School?

**Thank you for taking the time to complete this form.
Please return to:**

Appendix 3

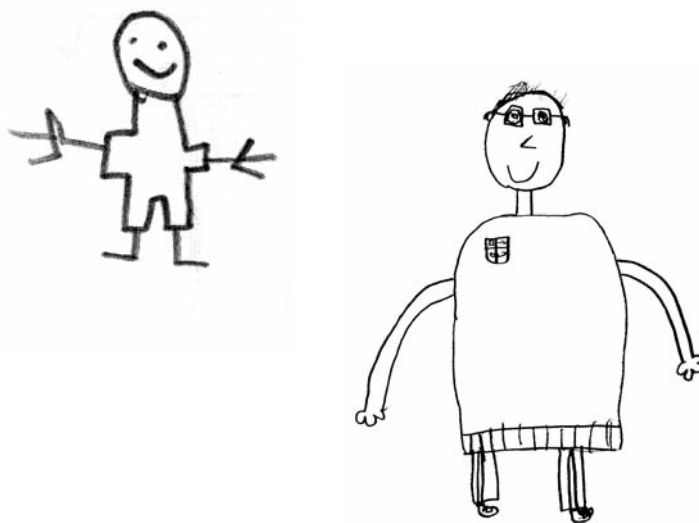
A Motor Skills Programme

In addition to focusing on skill acquisition a motor skills programme can help to develop fundamental or core skills such as:

- balance;
- visual tracking;
- trunk stability;
- bilateral integration;
- shoulder girdle stability;
- proprioception (body awareness);
- Fine Motor Skills.

This section includes a blank planning format and ideas which can be used as part of a motor skills programme.

An improvement in body awareness and visual tracking is illustrated by the drawings before and after a ten-week motor skills programme.



Pupil A benefitted from a motor skills programme. He described himself as a bit non-stop. His main areas of difficulty were maintaining balance, following instructions, maintaining concentration, maintaining a topic of conversation, social skills, sequencing problems, handwriting and scissor skills. His motor skills programme focused on balance, trunk strength and visual tracking. His skill focus was handwriting.

Intervention Programme Planning Sheet

Name:

Week:

Objective	Activity	Date:	Date:	Date:
Skill				
Notes				

Name:

Week:

Objective	Activity	Date:	Date:	Date:
Skill				
Notes				

Intervention Programme - Balance Activities

Activity Name	Instructions to pupil	Notes/Equipment
Static Dribble	Stand on your left leg and use your right leg to touch ball. Repeat standing on your right leg. Repeat 5 times.	
Toe Touches	Stand on top of the step with side of your foot at the edge. Touch the floor with toes of foot nearest the edge. DO NOT PUT YOUR WEIGHT THROUGH THIS FOOT. Stand up and put both feet on top of the step. Repeat 10 times. Turn around and repeat with different foot.	Record number of left and right toe touches in one minute. Steps
Step Ups	<ul style="list-style-type: none"> a) Leading with left leg - step up with left leg and bring up right leg. b) Leading with right leg - step up with right leg and bring up left leg. 	Record the number of cycles completed in 1 minute leading with both left and right leg.
Hopping On The Spot	Stand within large hoop. Have five attempts at hopping on each leg.	Record highest number of hops achieved before losing your balance on both left and right legs. Large hoop.
Heel-Toe Walking	Walk along a line on the floor with your heel touching your toe each step. Try this forwards and backwards. How many steps can you do without falling off the line?	Straight line on floor.
Hopscotch	Stand your left leg on the circle. On 'go' jump and land with your feet either side of the circle and then hop back on left leg. After 30 seconds on left leg repeat using right leg.	Tape lines or circle. Circle drawn on floor. Record number of complete jump and hop sequences achieved in thirty seconds.

Intervention Programme - Visual Tracking Activities

Activity Name	Instructions to pupil	Notes/Equipment Instructions to adult
Up and Under	Stand, holding a beanbag in your left hand. On 'go' lift your right leg and toss the beanbag under it to your right hand. Next, lift our left leg and toss the beanbag under it to your left hand.	Beanbag. How many in 1 minute?
Ball Bounce	Bounce ball using left hand - keeping feet in circle. Use right hand - keeping feet in circle. Use right and left hands alternatively. Perform each 30 seconds each.	Football, tennis ball and circle. Change to football once activity becomes fluent.
Spin and Toss	Lie on the floor on your tummy. Place five beanbags at 90 degrees to your left and five beanbags 90 degrees to your right. The large hoop should be placed four feet in front of you. On go pivot yourself around on your tummy and pick up one beanbag from your left. Pivot back to starting position and toss it into the hoop. Repeat to pick up a beanbag from your right side. Continue until all beanbags have been collected and tossed.	5 Beanbags - Hoop Record the time taken for the child to complete the task. Extension - move hoop further away.
Bubble Burst	Blow bubbles - how many can you burst in 1 minute?	Bubbles. Bubble Machine.

Trunk Stability Activities

Activity Name	Description	Notes/Equipment Instruction to pupil
Aeroplanes	Lie on your tummy on the floor, with legs straight and arms at shoulder level. On go - lift arms and legs off the floor together. Hold this position for as long as you can. Repeat five times.	Record max. length of time you were able to keep our hands, arms and legs up off the floor.
Bridging	Lie on back with knees bent and feet flat on the floor. Hold ball in one hand. On go, lift up your bottom to make a bridge. Pass the ball under the bridge to your other hand and then over your tummy back to the start.	A tennis ball. Record how many times you can pass the ball around our body in 1 minute.
Log Rolling	Lie on back with arms above head holding the hoop and legs down straight. Place 2 skittles on your left - one level with forearm and other with lower calf. Place other skittles across the room. On go roll like a log keeping arms and legs straight - aiming to knock over skittles. Continue for a minute.	1 hoop. 4 skittles. Record number of skittles knocked over in 1 minute.
Stretch Out	Position yourself on all fours (hands and knees) with the beanbag balanced on your head. Lift our left arm off the floor and stretch it out straight at shoulder level. Balance in this position for as long as possible, without the beanbag falling off. Repeat with your right arm. Repeat with left leg and right leg.	Beanbag. Record the time each positioned was maintained.
Tailor Stretch	Sit cross-legged on the floor. As the pegs are given to you one at a time, move to them. Move to the upright position before passing the peg to the other hand and pegging it onto the edge of the box. Repeat with 20 pegs.	20 clothes pegs and a box. Record number of successfully transferred pegs and also the number of times the child lost their balance.
Bridging with One Leg Extended	Lie on your back with your knees bent up and your feet flat on the floor. Lift bottom without wobbling. When in lifted position lift your left foot and straighten the left leg. Hold five seconds put your foot back and lower your bottom. Repeat straightening right leg.	Record the number of successful lifts using the right and left legs to a maximum of ten lifts for each leg.

Trunk Stability Activities (Continued)

Activity Name	Instruction to pupil	Notes/Equipment
Superman	On all fours balance a beanbag on your head. Balance the beanbag while you stretch your left arm straight out in front of you and right leg right behind you. Balance as long as you can. Repeat lifting your right arm and left leg.	Record best times achieved. Beanbag.
Reverse Sit-ups	Sit on floor with knees bent and your feet flat on the floor. Your arms should be out straight at shoulder level with your hands beside your knees but not touching them. Lower body slowly back towards the floor, as far as possible without going all the way down. Stop and return to an upright sitting position. Repeat ten times.	Record the total number of reverse sit-ups completed with control. Do not let the pupil crash backwards to the floor.
Side Saddle	Start in a high kneeling position. On go rotate hips and position yourself down in side sitting, balance then come back to high kneeling, rotate hips the opposite side and go down to side sitting on this side, balance and come back to high kneeling again.	Record the best time in which the child was able to complete a set of ten cycles. Support may be needed initially.
Leg Lifts	Sit on floor with your legs out straight holding the ball between your ankles. (A) On go lift the ball up and down slowly and with control. (B) On go lift the ball and move to the left and place down, lift and return to the mid-line, lift and move to the right and place down, lift and return to the mid-line.	One large sized football. Record (a) the number of lifts; (b) the number of cycles completed in one minute.
Bottom Lifts	Place the ten beanbags at one skittle and the box at the other. Sit on the floor at the skittle with the beanbags. On go put one beanbag on your lap, put your hands on the floor, push down on them and lift your bottom upwards and backwards and lower it back to the floor. Repeat this action to move your body backwards towards the box. Then repeat this moving forwards to get the next beanbag.	Time how long 10 beanbags takes. 2 skittles, 6 feet apart. 10 beanbags and box/container.

Bilateral Integration Activities

Activity Name	Instructions to pupil	Notes/Equipment
Peg Game	Take pegs from right side with right hand and peg them onto box positioned on your left. Repeat using left hand with pegs on left and box on right.	Talk about left and right. Get clothes pegs.
Bunny Hops	Start with both hands and feet on the floor in a crouched position. Move both hands forward and jump with both feet together bringing them up closer to hands.	Repeat over a distance of five metres. Repeat this ten times.
Scramble Around	Place your preferred hand on the centre dot and extend other arm towards the ceiling. Leaning on your preferred hand walk your feet around the circle.	How far can he go without resting? How many circles can he make? Mark a dot on the floor and then a circle around the dot, that has the radius about the height of your child.
Penny Flipping	Line up a row of pennies from left to right so that the row reaches from in front of left shoulder to in front of right shoulder. Cross mid-line by using one hand to flip them all over in line without leaning to right or left.	Try using both hands at once by starting simultaneously at left and right ends of row and flipping pennies until hands meet at the middle. One penny coins.
Streamers	Make circles and shapes in front of body with streamers	Discuss left, right, and other positional language. Coloured streamers.
Far Side	Ask pupils to sit backwards on a chair and ask them to throw beanbags at targets located far to the sides. Throw a beanbag at one of the targets.	Alternatively use a bench or a gym ball or tell them to stand as if feet glued to floor. Beanbags/circles/hoops on ground.

Strengthening Shoulder Girdle Activities

Activity Name	Instruction to pupil	Notes/Equipment
Push-Ups	<p>On all fours on the floor (knees directly under hips and hands at shoulder level). Bend arms at the elbows so that you can touch the floor with your nose. Strengthen your arms slowly and come back to all fours position. Repeat 20 times.</p>	<p>Record the number of completed press-ups and time taken to do them.</p>
Snake Creep	<p>Commando crawl a distance of six feet along the floor using your arms and legs, but keeping your tummy on the floor.</p>	<p>Once fluent repeat with a Beanbag on head. Record time taken. Beanbag.</p>
Bunny Hops	<p>Start with both hands and feet on the floor in a crouched position. Move both hands forward and jump with both feet together bringing them up closer to hands. Repeat over a distance of ten feet. Repeat this ten times.</p>	
Beanbag Throw	<p>Lie face down on the floor with hands below your shoulders. Straighten your elbows to lift your upper body away from the floor. Use alternate hands to throw a beanbag into a hoop ahead of you. Repeat with 10 beanbags (5 with your right hand and 5 with your left) with the hoop 3 metres ahead.</p>	<p>Beanbag.</p>
Crab Walking	<p>Walk around the room on your hands and feet with your tummy facing the ceiling. Don't let your bottom touch the ground. Do 10 lengths of the room.</p>	
Soft Surface Crawling	<p>Crawl forwards and backwards on lilo or soft pillow.</p>	<p>Lilo/soft pillow.</p>
Beanbag Balance	<p>Balance bean bags on outstretched arms. How long can you balance them for?</p>	<p>Beanbags.</p>
Stretching Activities		<p>Encourage working above shoulder level - e.g. painting at easel, blackboards, cleaning windows.</p>

Strengthening Shoulder Girdle Activities *(Continued)*

Activity Name	Description	Notes/Equipment
Balloon Strike	Hit balloon (or ball on string).	Suspend balloon or ball on string above pupil's head and hit with hands or cardboard roll.
High Kneeling	Throw a ball overarm to a partner whilst kneeling.	Ball. Pupil works with partner
Overarm Throwing	Throwing large ball - both hands, also from above head.	Basketball net, volleyball.
Water Pouring	With container held at arms length por water from one container to another.	Two appropriate size containers and water.
Push-Up From Kneeling Position	On all fours lower yourself to floor by lowering elbows slowly and maintaining a straight back.	Make into a game by picking up with mouth a sweet from a plate in front or lowering elbows alternately to take a hula hoop off each finger i.e. 10 push-ups. Sweet on a plate. Hula hoops.
Wall Push-Ups	Push-ups against wall: Stand an arm distance away from a wall. Lean on the wall, with the hands flat on it. Keeping the arms straight, use fingers to push away from the wall to get to an upright position.	As the pupil becomes more proficient move the feet backwards to that there is a greater angle of lean against the wall.
The following activities are also good at developing shoulder and pelvic stability: Trampoline under qualified supervision. Climbing frames - hanging/swinging/chin-ups. Horse riding. Cross-country running. Swimming. Fishing. Rowing. Running on sand.		

Proprioception Activities

<p>Proprioception is the awareness of the position of different body parts in relation to each other and in space. Children with low tone ('floppy' muscles) often have reduced proprioceptive awareness, and less feedback is available from their joints about where their body is in space. To improve proprioception, children/young people need lots of activities against resistance or with increased pressure to enable them to become more aware of their body position.</p>		
Activity Name	Instruction to pupil	Notes/Equipment
Pillow Walk	Walk over rug the length of the room 10 times keeping your balance.	Arrange a selection of pillows/soft toys on the floor (creating an uneven surface) and cover with a rug. (Walking over uneven ground outside on grass/pebbles/sand is also great practice).
Clock Hands	Stand up with hands by your sides. Using your arms as the hands of a clock ,tell the time (selected by your partner). You can start this game standing in front of a mirror to help the placement of your arms.	
Touch and Feel Tray	Reach under the cloth without looking to find the object selected by your partner. OR your partner places 1 object under the cloth. Place your hands under the cloth and try to guess what object is without looking.	Place a selection of 10 small objects/toys on a tray. Cover the tray with a cloth. Pupil working with adult or peer.
One Leg Balance	Stand up with feet together. Close your eyes and see if you can keep your balance. Next practice standing on 1 leg. Once you can do this without holding on try this with your eyes closed. How many seconds can you balance for with eyes closed?	Two appropriate size containers and water.
Tray Maze	Holding a tray with extended arms and direct a marble through it.	Make a plasticine maze on a tray.
Marble Painting	Hold tray at arms length. Move to make a picture.	Place paper in the bottom of an ice cream container, add two blobs of paint and a marble. Put the container on a heavy tray and

Proprioception Activities *(Continued)*

Activity Name	Description	Notes/Equipment
Drawing	Make a large-scale drawing/picture on wall or blackboard.	Suitable wall/blackboard chalks.
Textured Drawings	Drawing with paper over textured surface e.g. corrugated card and texture rubbings e.g. tree bark, coins etc.	
Bench Pull	Lie on your tummy on PE bench, arms straight and holding sides with hands, pull yourself up to hands and repeat.	
Moving Statues	Pupil lies on his back on the floor with eyes closed. Therapist moves one arm or leg into a sequence of different positions. The child has to remember and repeat accurately without help.	Bench
Space Hopper	Lying over and walking on hands.	Space hopper or gym ball.
Skipping	Skipping with a rope.	
Whistle Tube	Swing a whistle tube, swing forwards, backwards and diagonally, change arms.	
<p>The following activities are also good at developing proprioception: Push and pull; dressing up in heavy clothes; paper tearing (thick card/paper); carrying objects such as shopping, chairs, gym equipment (with supervision); skipping; construction games.</p>		

Fine Motor Skills Activities and Resources

Resource	Suggestion For Use	Supplier
"Write From The Start" Ion Teodorescu and Lois Addy.	Programme with extra activities and games to develop handwriting skills e.g.: <ul style="list-style-type: none"> • hand/eye co-ordination; • spatial awareness; • figure - ground discrimination; • letter orientation. 	LDA
"Speed Up" Lois Addy.	Kinaesthetic Programme to develop handwriting skills. Includes assessment checklist and activities.	LDA
"Cutting Skills" Mark and Katy Hill.	For teaching and assessment of cutting skills.	LDA
Selection of pencils, crayons, chalks and blackboard, and pastels.	Different leads and shapes - for experimentation: e.g. Triangular Chubbies.	NES Arnold W H Smiths Early Learning Centre
Selection of Grips	For pencils and pens. Blu-tak is also useful.	NES Arnold LDA
Selection of Pens	<ul style="list-style-type: none"> • Gel and rollerball - different types of grips, thickness and flow/resistance. • Light-up pens - adapting pressure. • Novelty pens - motivators e.g. fluorescent, colour change, "Smell-gel". 	NES Arnold W H Smiths Early Learning Centre Jespers Darley Mill Paper Tree
Ink Stamps	To develop pincer grip and pressure.	Baker Ross
Plastic Bubble-wrap	Popping races - to develop pincer grip and strengthen muscles.	
"Construct-o-Straws"	Manipulative control and pincer grip.	NES Arnold
Pipe Cleaners	Rolling between fore-finger and thumb.	NES Arnold

Fine Motor Skills Activities and Resources *(Continued)*

Resource	Suggestion For Use	Supplier
Non-Slip Matting	For exercise books and paper. Also available in non-slip strips.	
Paper Plates	<ul style="list-style-type: none"> • Use to develop pincer movement by clipping pegs around edge of plate. • Develop control by picking up beads or buttons with tweezers. • Use in craft activities for developing scissor skills. 	
Small Coloured Pegs	<ul style="list-style-type: none"> • For marking the start of a piece of writing. • Pincer movement activities: "Snapping Crocodiles". • Colour sequencing. 	
Magnetic Whiteboard and Easy-flow Pens. Magnetic foam letters.	<ul style="list-style-type: none"> • Easier to write on. Useful for letter-shape formation. Double Doodles and Lazy 8s. • Large and small. • Tactile - for multi-sensory learning. 	Smart Kids
Carbon Paper	Use with sheets of scrap paper to make a sandwich - to adapt pressure.	
Beads, rigid threading bases, and soft laces.	<ul style="list-style-type: none"> • Manipulative skills, co-ordination. • Sequencing following pattern templates. • Embroidery cards. 	NES Arnold
Balls	<ul style="list-style-type: none"> • Throwing/catching. • Koosh ball - isolate and pull each spine. 	NES Arnold
Rulers	<ul style="list-style-type: none"> • Handled to aid control. • Ring binder ruler for older pupils with organisational difficulties. 	Rymans
Finger puppets and hand puppets.	Proprioceptor/motor skills: <ul style="list-style-type: none"> • Identifying and isolating fingers Finger rhymes e.g. "Two Fat Gentlemen Met In The Lane".	NES Arnold
Bubble Blowing Set.	Catch one on each finger.	

Fine Motor Skills Activities and Resources *(Continued)*

Resource	Suggestion For Use	Supplier
Pritt Roller	Easier to use - could recommend to older pupils' own equipment.	Jespers
Chunky Pegs and Board	Manipulation and co-ordination. Pegs are stackable.	LDA
Selection of Ribbons	<ul style="list-style-type: none"> • Rolling up and around a pencil. • Gathering with a nipping action or with thumb into palm of hand. • Write dancing. 	
Play Dough and Cutting Tools.	<ul style="list-style-type: none"> • Formation of letter shapes. • Rolling, pressing with finger-tips and palms. • Press map pins in strips. 	
Fine Motoring.	Photocopiable worksheets to develop fine motor skills.	Easy Learn Ltd. www.easylearn.co.uk
Tall Stacker.	Pegs and Pegboard Set.	www.taskmasteronline.co.uk
Threading Tree.	Designed to be easy to hold, this tree has a "wasp" threader attached by cord for threading.	www.taskmasteronline.co.uk

Supporting Pupils With Verbal Dyspraxia

<p>Children with verbal dyspraxia should be referred to the speech therapist as early as possible as it is generally recognised that children with developmental verbal dyspraxia do not get better without help. They require regular therapy delivered by a speech therapist and practise at school and/or home.</p>		
Area To Develop	Activities	Purpose
Lips	<ul style="list-style-type: none"> • Looking in a mirror and making funny faces. • Open and shut mouth. • Make a big mouth like a lion. • Make a little mouth like a mouse etc. • Blowing and sucking through different pipes, tubes and straws - using lips alone. 	To improve lip shape and movement.
Tongue	<ul style="list-style-type: none"> • Practise sticking tongue out. • Looking in a mirror and licking spoons and lollies. • Licking games - practise licking downwards onto chin, lick sideways, lick upwards up behind teeth. 	To improve tongue shape and movements so that it is well controlled and placed accurately for speech sounds.
Soft Palate	<ul style="list-style-type: none"> • Blowing bubbles. • Blow painting. • Blowing pipes and recorders. • Blow football using plastic tubing or straws. 	To encourage easy rapid movements of the soft palate to close off the nasal passages when appropriate in speech.
The Larynx	<ul style="list-style-type: none"> • Encourage singing. • Play games using different voices. 	To improve strength and quality of vocal tone.
Breath Control	<ul style="list-style-type: none"> • Encourage child to make a sound e.g. 'ah' first for a short time and then gradually increasing the length of the breath and sound. • Use a blow pipe and ball - keep the ball in the air for an increasing length of time. 	To encourage good easy breathing for speech.

Appendix 4

Handwriting

Evidence from existing studies suggests that handwriting intervention programmes may also have a real impact on the composing skills of young writers, Christensen (2005) Medwell and Wray (2007) suggest that if pupils have to devote large amounts of working memory to the control of lower level processes such as handwriting they may have little working memory for higher-level processes such as the generation of ideas, vocabulary selection, and editing. By making handwriting an automatic process the problem of limited working memory can be addressed.

This appendix contains information on:

- teaching handwriting;
- features of good handwriting;
- hand exercises;
- handwriting questionnaire;
- letter formation record sheets;
- support for number formation.

Handwriting improvement after two months of a regular handwriting programme.

objective: To understand that heat travels from a source.

objective: Understand that sounds are made when objects of when materials vibrate.

Developing good handwriting is dependent on the pupil sitting correctly, having stability of the upper torso, shoulder, forearm and wrist and a secure pencil grasp.

The National Handwriting Association has several inexpensive publications that help children write legibly and at a greater speed.
www.nha-handwriting.org.uk

Beginning To Teach Handwriting

The ability to write legibly is a skill which needs to be taught because it is not simply acquired. Acquiring this ability requires physical, sensory and cognitive development. Basic requirements for developing writing skills are:

- A secure sitting position (or good postural fixation in other chosen positions).
- A developmentally mature shoulder girdle, wrist and finger movements. The strength and co-ordination of the muscles and bones.
- Intact sensory feedback both during and after movement i.e. visual, kinaesthetic and tactile.
- Visual motor control and motor memory i.e. the ability to co-ordinate eyes, arms and hands. It contributes to the ability to learn new shapes, letters, numbers, print between lines and colour written boundaries.
- Established laterality and bilateral hand skills i.e. which is the dominant hand and the ability to use your hands together e.g. one hand to steady the paper and one to write, one to cut using scissors and the other to hold the paper.

Skills which may demonstrate a pupil's readiness to write are:

- the ability to recognise and match simple shapes;
- using scissors with one hand;
- the ability to dress themselves;
- the ability to draw a recognisable person;
- the ability to copy oblique or diagonal lines. Copying is the ability to reproduce a form after only being shown a picture of the completed design. Imitation is the ability to reproduce a form after watching someone first.

In the early stages, practising motor skills activities encourages the neurological pathways of the brain to develop. As a result, access to motor skills programmes is a basic requirement in helping all children/young people to develop their fine motor skills regardless of their age. On average, it takes up to the age of 4 or 5 years for a child/young person to develop the foundations and to master writing. As a result, concentrating on pre-writing skills and the foundations to writing will help more children/young people to be successful.

Teaching Approaches include:
DAILY PRACTICE using a 'hands on' (or hand-over-hand' approach to guide and inform movement.
TALKING THROUGH the letter formation and using one finger to start off is also helpful.
MODELLING letter formation.
REPEATING each letter movement many times in order to secure the learning.
ESTABLISHING a good seating position.

Beginning To Teach Handwriting *(Continued)*

Beginning writing and/or mark-making activities in a supportive way can help children/young people to improve their fine motor skills. It can also help to enhance their self-esteem.

An awareness of how mark-making develops, as well as consideration of the environment and the teaching approaches can all contribute to a supportive learning experience for children/young people.

Developmental Stages

An awareness of the developmental stages can be useful in understanding why a child/young person may be experiencing difficulties with some aspects of their writing. The acquisition of pre-writing skills is dependent on the child's ability to interpret visual information and to have enough fine motor co-ordination maturity to reproduce it.





Once children have developed sufficient readiness to write, the best way to develop their handwriting is by practising letter formation.

Age 1 year	Imitate making a mark.
Age 1½ years	Spontaneous scribble. Imitate stroke movements.
Age 2 years	Imitate vertical line.
Age 2½ years	Imitate a horizontal stroke.
Age 3 years	Copy a circle.
Age 4 years	Copy a vertical-horizontal cross.
Age 4½ years	Copy right oblique line (right handers).
Age 4½ years	Copy a square. Copy left oblique line.
Age 5 years	Copy an oblique cross. Start forming letters. Copy a triangle.
Age 6 years	Writing and drawing comfortably. Copy a star.
Age 8	Copy a vertical diamond.

Beginning To Teach Handwriting *(Continued)*

Holding the Pen or Pencil

When children begin to mark-make, they may hold their pencil or crayon in a number of ways. The stages below demonstrate how pen or pencil grip matures.

Palmar Grasp	Crayon held in fisted hand. Arm moves as a unit.	
Digital Pronate	Pencil held with fingers. Wrist pronated and slightly ulnar deviated. Forearm moves as a unit.	
Static Tripod	Pencil held proximally in crude approximation of thumb, index and middle fingers. Hand moves as a unit.	
Dynamic Tripod	Pencil held with precise opposition of distal phalanges of thumb, index and middle fingers. Ring and little fingers flexed to form a stable arch. Exhibits fine localised movements of Proximal interphalangeal joints.	

Children have the best chance of being successful when their physical environment (and the method of teaching handwriting) have been given consideration.

Some children find triangular or trigenic grips helpful when they are learning a mature handwriting grip.

However some children's fingers aren't strong enough for a dynamic tripod grip, and as a result it would be counterproductive to insist on this position. By the time children are eight years old their pencil grip is likely to be established.

The main aim of handwriting from this stage is legibility and flexibility rather than the type of grip used

Handwriting Assessment

DASH - The Detailed Assessment of Speed of Handwriting

The Detailed Assessment of Speed of Handwriting can play a role in identifying children/young people with handwriting difficulties and provides information relevant to intervention planning.

The assessment includes 5 sub-tests, each testing a different aspect of handwriting speed. The sub-tests examine fine motor and precision skills, the speed of producing well-known symbolic material, the ability to alter speed of performance on two tasks with identical content as well as free writing competency.

The 5 tasks are:

1. Copy best - copying a sentence in 'best' handwriting for 2 minutes.
2. Alphabet writing - writing the alphabet in lower case for 1 minute.
3. Copy fast - copying a sentence quickly for 2 minutes.
4. Graphic speed - drawing Xs in circles for 1 minute.
5. Free writing - writing on a topic of 'My Life' for 10 minutes.

The test is aimed at those aged between 9-16 years eleven months and can be administered individually or in a group - complete battery of tests takes maximum of 30 minutes.

The DASH test is ideal for providing evidence for Access Arrangements for Key Stage 2 and 4 National Curriculum Tests and for general qualifications.

Standardised sub-test and composite scores are provided based on a nationally stratified normative sample of over 500 children/young people collected across the UK in 2006.

Ref. Barnett, A. Henderson, S. Scheib, B. and Schulz, J. (2007).

It is usual to consider two different aspects in the assessment of handwriting:

(1) the final product (in terms of quality and speed of production)

(2) the writing process (how writing evolves, posture of the writer).

It is also important to consider the skill in a wider context in terms of how the skill has been taught and what other literacy and language skills the child has.

Barnett (2006)

Handwriting Assessment

Improving Handwriting - A Checklist

Take a good look at a piece of your handwriting and fill in the following questionnaire.

	Today. Marks out of 10	2 Weeks later. Marks out of 10
1. All letters except <i>d</i> and <i>e</i> start at the top.		
2. Oval letters are closed and watertight. <i>a b d e g o p q</i>		
3. Letters with straight lines are straight and parallel. <i>a b d f g h i j k l m n p q r t u v w x y z</i>		
4. The relative height of letters is uniform. <i>e.g. ace, bell, gray</i>		
5. Letters are correctly placed in relation to the baseline. <i>e.g. baffle, jog</i>		
6. The space between letters is even.		
7. The space between words is even <i>(should be the size of two 'o's joined together).</i>		
8. Letters which end at the top join horizontally.		
9. Letters which end on the baseline join diagonally.		
10. A sentence begins with a capital letter and ends with a full stop.		

Choose one of the items from the list, which you think needs improvement. **This is your handwriting goal.**

Put a circle around your goal. Think about it every time you write. Only YOU can improve your own handwriting.

Look at your writing in 2 weeks time to see if you have made some progress. If you think you have achieved your goal, choose another one. If not, keep working at the old one!

Handwriting Exercises

Reproduced with kind permission from Wilson Stuart, Outreach, including suggestions by Ann Markee and Maggie Wagstaff.

1

- Good sitting position, feet flat, back straight, head tall.
- Bottom back on chair.
- Sit on hands - sit on one, wave the other.
- Hold edge of chair (2 hands).
- Push self up - lean right & lean left.
- Lift (shrug) 2 shoulders, 1 shoulder.
- Lift alternate shoulders.
- Shake 2 hands in the air - shake 1.
- Shake up, down, fast, slow, one hand still, one hand shake.
- Hands on table.
- Touch them.
- Shake hands with yourself.

2

- Make 2 fists (hands on table).
- Straighten arms (elbows off table).
- Are hands level?
- Thumbs out then in.
- Pull fists towards you.
- Hide thumbs under table.
- Stretch arms again (keep fists).
- Lift 2 arms up to shoulder level.
- Lift 1 arm up, keeping the other down.
- Move arms in, out, cross them.
- Turn them over fingers up.
- Bend elbows, thumbs on top.
- Thumbs in, out, wriggle them.
- Clap 2 fists together.
- Climb fists upwards (thumbs in).

Handwriting Exercises (Continued)

3

- Make 2 flat hands (thumbs out).
- Spread fingers (thumbs touching).
- Close fingers and thumbs.
- Turn them over (touch little fingers), Stand flat hands up (thumbs up).
- Put 1 on the other and cross them.
- Lift flat hands & straighten arms.
- One higher, one lower, one up, one still.
- Make a V with 2 flat hands.
- Rest chin in it.
- Make a \wedge with hands, put on head.
- Clap hands to rhythms, simple to hard.
- Clap hands then thighs to rhythms.
- Increase complexity.

4

- Make 1 fist, 1 flat hand, change.
- Lift from table - shoulder level.
- Lift 1 keep the other still.
- 2 fists on shoulders - 2 flat hands on table, cross them.
- Clap fist on flat hand, change.
- Make rhythms this way.
- Clasp 2 hands together, make a clapping noise.
- Interlock fingers.
- Stretch forwards, sideways circle them.
- Put them behind your head, push palms forward.
- Flat hands & elbows together on table, slide elbows out wrists down, hands stay together.

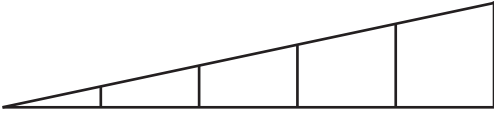
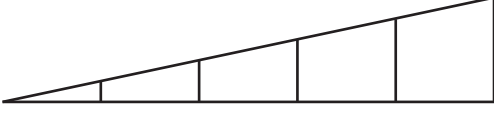
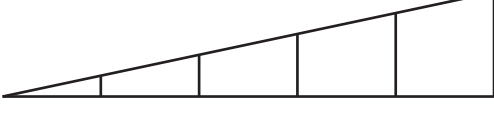

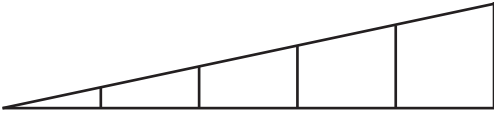
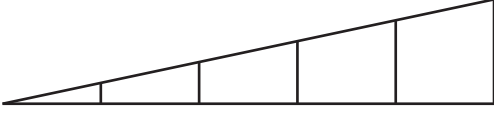
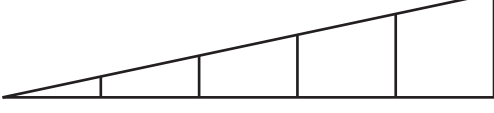
5

- Rub hands together (fronts and backs).
- Hands flat on table, tap thumbs, tap all fingers.
- Tap individual fingers.
- Make clasped hands again.
- Press all finger tips and thumbs together.
- Move them (pressed together).
- Make hoops, finger and thumbs.
- Pincer grasp.
- Make hoops, finger & thumb and other fingers.
- Look through them (glasses monocle).
- Hold ears with finger and thumb.
- Cross arms and hold ears.
- One hand, hold nose.

Handwriting Reminders

Do	Don't
1. Do sit up. Do put your feet on the floor.	6. Don't have your elbows touching your neighbour.
2. Do have your paper at a comfortable angle.	7. Don't have your table and chair too big or too small.
3. Do move your paper up as you fill the page.	8. Don't have a shadow over your work.
4. Do think about whether you need lines or not.	9. Don't use paper that is too big or too small.
5. Do choose the best writing tool for the job.	10. Don't grip your pen so that your hand aches.

Handwriting - Questionnaire

Name: _____ School: _____ Date: _____		
D.o.B.: _____		
	Pupil to colour in blocks	Comments
1. Do you like your handwriting?		
2. Can you read it?		
3. Can other people read it?		
4. Do you sit correctly when you write?		
5. Do you have a comfortable pencil grip?		
6. Do you form your letters correctly?		
7. Do you leave spaces between your words?		

Record Sheet for Letter Formation

Name:

<u>Letter</u>	Date	Date	Date	Date	Date	Date	Date mastered no of words per min.
c							
a							
g							
d							
o							
q							
p							
b							
n							
h							
m							
l							
i							
t							
u							
v							
w							
y							
e							
f							
j							
k							
r							
s							
x							
z							

Record Sheet for Letter Joins

Name:

Letter	Date	Date	Date	Date	Date	Date	Date mastered no of words per min.
ca							
cg							
gd							
do							
og							
qu							
po							
pa							
no							
na							
ba							
bo							
ha							
ho							
ph							
la							
lo							
lm							
lp							
lb							
ma							
mo							
mb							
mp							
im							
hi							
pi							
bi							
ai							
to							

Record Sheet for Letter Joins *(Continued)*

Letter	Date	Date	Date	Date	Date	Date	Date mastered no of words per min.
ta							
it							
um							
un							
ud							
va							
vi							
vo							
wa							
wo							
ya							
yi							
ye							
me							
he							
te							
fa							
fi							
fe							
fu							
ja							
ji							
je							
ju							
ka							
ki							
ck							

Writing Numbers

Write the numbers in the boxes in the following order:

1 2 3
4 5 6
7 8 / 0 9

Numbers must not extend outside the box. 8 and 0 share a box as they may be drawn the wrong way round, but they will still look the same.

Laminate the grid.

Pupil to write each number in its box on a daily basis.

•	•	•
•	•	•
•	•	•

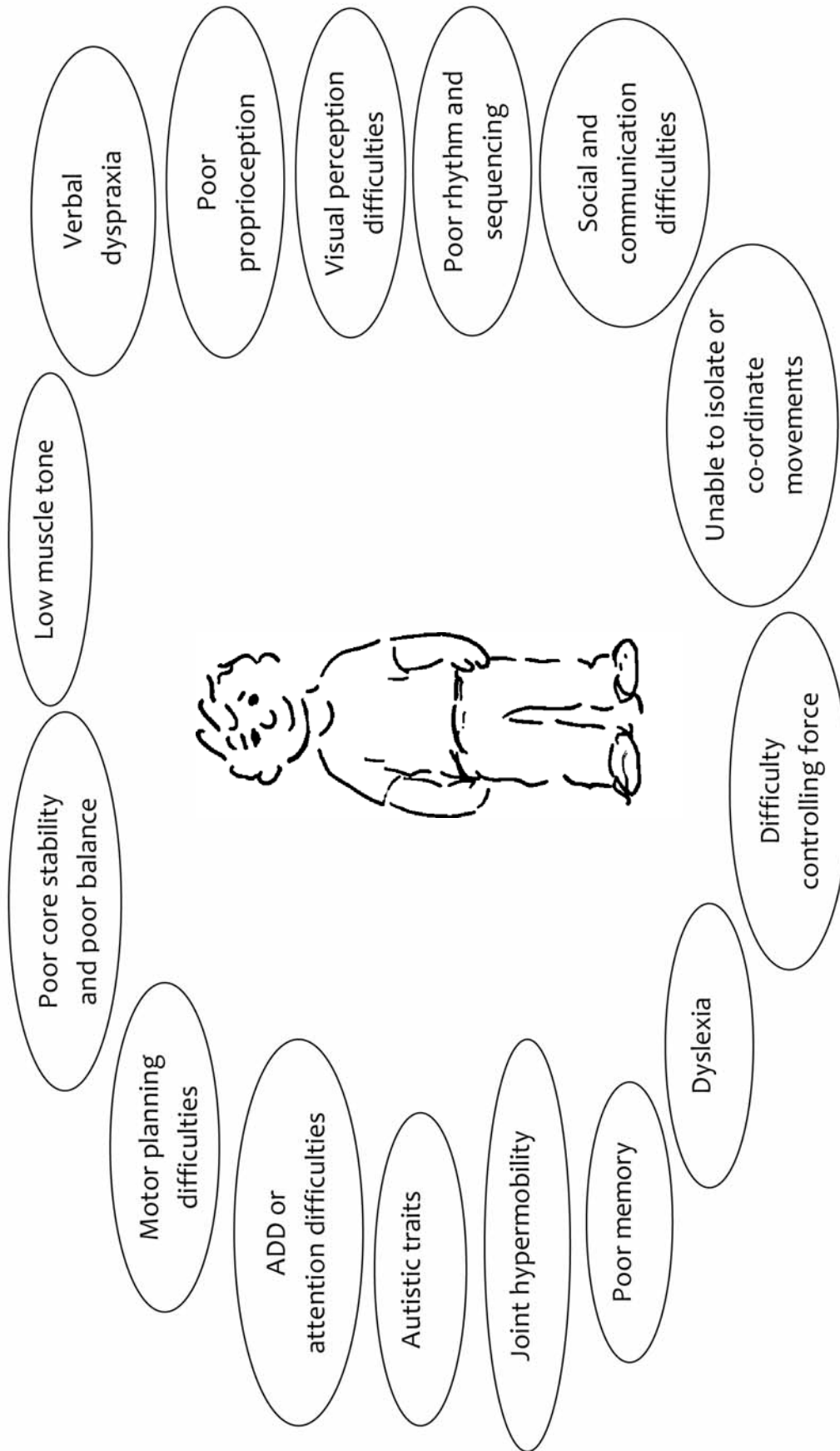


Appendix 5

More In depth Information

Overview of Common Difficulties

An Individual May have A Few Or Many Of These Difficulties, In Any Combination



EVERY INDIVIDUAL HAS A UNIQUE PROFILE OF STRENGTHS AND WEAKNESSES - NO TWO INDIVIDUALS PRESENT WITH THE SAME SIGNS

Speech and Language Difficulties

Children/young people with co-ordination difficulties are often reported to have difficulties with various aspects of speech, language and communication. Some of these are well-known to co-exist with the disorder, but it is also recognised the likelihood of them having other unrelated developmental disorders as well has been reported as being 60%. These children/young people may present with a wide range of speech and language disorders.

In particular, children/young people with developmental co-ordination difficulties are commonly reported to show speech and language difficulties such as the following:

- May have history of delayed language development.
- May have poor auditory memory: older children may struggle to take notes or dictation in class, younger ones may find following instructions hard.
- May have slow response time.
- May have difficulties with maintaining peer relationships.
- May have a very literal use of language.

Even though the language and communication difficulties are not the primary difficulty, these children/young people should still be referred to the Speech and Language Therapy Department as soon as the problems become apparent. Even if the direct therapy is not required the therapist can assist with setting IEP targets and with advising on the full nature of the difficulties.

Children with developmental verbal dyspraxia have difficulty in planning, initiating and executing speech sounds and non-speech movements. It is a motor programming problem not a muscle weakness.
Hill (2003)

It is better for a child to utter two or three spontaneous words than to copy a sentence of seven words.
Addy (2003)

Verbal Dyspraxia

Children/young people may, or may not have speech disorders alongside more general co-ordination difficulties. Those with significant speech disorders, are often described as being verbally or orally dyspraxic. Verbal dyspraxia is a difficulty in co-ordinating and sequencing precise movements of the lips, tongue and oral musculature quickly and accurately enough to attain intelligible speech. There is no damage to their muscles and nerves to account for their problems. Children/young people with dyspraxia will struggle to copy voluntary non-speech movements of the lips, tongue etc. They may well also have eating and drinking problems.

The severity of verbal or oral dyspraxia can vary. Children may be completely non-verbal, relying on sign or communication aids, or may just be hard to understand at times. They may also have associated language problems of any type but most frequently:

- Difficulties with expressive language, grammar and complex sentences.
- Word finding difficulties.
- Social skills problems.
- Facial expression difficulties.

Children/young people who have verbal dyspraxia often have a history of:

- Delayed onset of speech.
- Speech that is very difficult to understand.
- A continuing delay in speech (use of words) and language (use of sentences and structure of sentences).

It is not unusual for children to start single word talking as late as three or four years. Progress may be slow and grammatical errors persist long into junior and even secondary school.

The inability to write clearly is closely associated with verbal dyspraxia. This is linked to:

- The physical difficulty of actually holding and co-ordinating the fine movements of the writing implement. This will affect the formation of letters and numerals.
- The verbal language problem. This often presents as a difficulty with the processing of language and the formation of words into a meaningful flow of ideas and thoughts from the brain to the mouth to the writing hand, where written expression takes place.

A child with Verbal Dyspraxia may have good understanding but limited communication skills.
Portwood (1999)

Verbal Dyspraxia (Continued)

The causes of oral and verbal dyspraxia are not known, but are assumed to be due to immature neural development. They often re-occur in families with a history of similar problems. Early referral to speech and language therapy is essential for these children to make progress, pre-nursery if possible. In the early stages this therapy may be needed just to help these children overcome their anxiety about communication and help them to relax about making sounds. When they are ready for 1:1 therapy this is often a type of motor programming and needs to be done frequently. Additional language work can often be done very frequently. Additional language work can often be integrated into other curriculum activities or carried out in groups. The speech and language therapist, in addition to working directly to improve their communication, can also offer training in how best to communicate with the child/young person and how to differentiate the curriculum to ensure they access it.

Children/young people with Verbal Dyspraxia often have difficulties with:

Sequencing – tables

Nursery Rhymes

Spelling – as it relies on the breaking down of words into their component parts and one making the link between speech sounds and written letter symbols.

Reading

Handwriting

Numeracy

Generalising Learning

Sensory Processing and Sensory Modulation

Our brains register incoming sensory stimulation from our visual, auditory, tactile, vestibular, proprioceptive, olfactory and gustatory systems. Our brains sort out what is important, what needs to be attended to, and what can be ignored. This process is essential to making an appropriate response. It is essential to both learning and to controlling behaviour.

Children/young people with sensory modulation difficulties can easily be over-stimulated and over-aroused (low threshold for stimulation) or under-aroused (low threshold for stimulation). In either case learning will be difficult for the child with sensory modulation difficulties

Each sensory system has a two-fold function. Firstly, it facilitates the level of general arousal or alertness that is appropriate to our needs in any given situation. This is called 'sensory modulation'. Secondly, it facilitates discrimination, to make sense of or give meaning to the sensory information received. This is called 'sensory perception'. Sensory perception depends on the person being sufficiently alert to register and to attend to the stimulus for long enough to make sense of it. However, if the person is over-aroused, for example in an anxious and hyper-vigilant state, or very excited and giggly, they will be likely to misinterpret the information or miss it because they have been distracted. Therefore, for a person to perform optimally, both functions need to be working well and contributing to 'sensory integration' - that is, the organisation of sensory information for use.

Activities virtually never stimulate only one sensory system. They usually affect several at the same time to different degrees.

We all have to be alert in order to learn. Alertness allows us to register what is happening in our environment, and our level of alertness or arousal depends to some extent on our thresholds for stimulation. The term 'threshold' refers to the level of stimulation that a person needs to register an event. The higher the threshold, the more sensory input is required to elicit a response. Children/young people with sensory modulation difficulties can easily be over-stimulated and over-aroused (having a low threshold for stimulation), or conversely can be under-aroused (having a high threshold for stimulation). In either case, learning will be difficult for those with sensory modulation difficulties as the optimum level of arousal for learning will not be attained.

Unless the sensory stimulus is strong enough to cross over the threshold, the person will fail to register it, so the stimulus will not contribute to his general level of arousal, and neither will he be able to interpret it and use it to understand his environment and respond appropriately.

Some children/young people tend to act in accordance with their stimulation threshold. Those who have high thresholds that are not often reached may be noted, for example, to frequently show a low alertness level, to have a dull affect, and to take little interest in or show poor understanding of their environment. Children/young people who have low thresholds that are very

Sensory Processing and Sensory Modulation *(Continued)*

easily reached are noted to frequently be very highly aroused. This can show as general excitement or as anxiety, and frequently as emotional lability.

However, some children/young people work to counteract their stimulation thresholds. If they have high thresholds, they are driven to meet these thresholds and raise their levels of arousal. They seek to add different types of sensory stimulation to their daily activities, through movement, touch, deep pressure, the production of sound, or seeking visual or olfactory stimuli. They are likely to appear restless and fidgety as they seek out the types of stimulation they need to raise their level of arousal. Frequently they take risks and appear to lack considerations of safety while playing. Those with low thresholds who act to counteract their thresholds, on the other hand, will try to avoid strong stimulation and which would cause them to become too highly aroused. They may do this by avoiding noisy or visually stimulating environments, or by avoiding movement and therefore reducing their vestibular stimulation. Typically they appear to like to have a high degree of control over their environment, and become distressed when thwarted.

Sensory Modulation is the ability to maintain one's level of alertness at an optimal level for any given situation through the use and control of sensory input.

As adults most of us are fairly adept at this and are barely conscious of the many strategies we use - adjusting our sitting position, chewing gum, fiddling with jewellery or clothes or waggling our feet.

Sensory Modulation

These children/young people are less effective at controlling their levels of alertness than adults, and can quickly become over excited or, conversely, lethargic and unfocused - neither of which is conducive to learning. Experienced teachers know this and use all sorts of methods to bring the children/young people in their class up or down to an alertness level that is 'just right' for learning.

For example, a teacher may set up a routine whereby, following playtime, children/young people enter the classroom and sit quietly on the carpet or at their desks with a book. Once the routine is established, the children coming in from playtime in a highly aroused state are already starting to calm down as they hang up their coats. The fresh air (tactile), the change of scene (visual), the activity (vestibular and proprioceptive) and noise (auditory) in the playground have all raised the children's arousal levels. The teacher has used routine, sitting down, and looking at a book - all calming and organising activities - to help them reduce their arousal level and reach an effective level of alertness for learning.

On another occasion, the teacher may use the volume, speed and tone of his or her voice and movements to first match and then to

Sensory Processing and Sensory Modulation *(Continued)*

When children/young people behave impulsively and inappropriately it can be useful to recognise the sensory consequences of their actions and consider if this is contributing to their behaviour. If more appropriate ways can be found to meet their sensory needs then their behaviour, attention and learning will all benefit.

Sensory stimulation is cumulative, so the effect of any particular stimulus is influenced by the state of arousal that the child is already in due to preceding circumstances. This makes it harder to predict what a future response may be.

lead over-aroused children into calmer, more focused behaviour. On the other hand, when children/young people have been sitting listening or working for a while, and their posture is deteriorating and their concentration is beginning to fall off, the teacher may do some group exercises to raise the arousal levels of the class. If the teacher fails to do this, it is likely that some of the children will become restless and noisy as they find their own ways to reach an appropriate level of alertness, distracting others at the same time!

Sensory Seeking and Sensory Avoidance Activities

We all have needs and preferences for various sensory stimulation, and try to avoid others that we find unpleasant in any quantity. As adults we usually manage our 'sensory diet' - the total amount and variety of sensory stimulation we receive over a period of time - to meet our needs without too much difficulty. However, some individuals who have unusually low or high thresholds that they are trying to counteract have an overriding drive to seek out or avoid some types of sensory input. The 'sensory diet' that they need in order to feel okay is very different from that needed by the average child. This can pose difficulties. Their sensory seeking or avoiding behaviour may interfere with their ability to relate to others and to learn, it may be inappropriate to their environment or even unsafe.

For example, children/young people who need extra vestibular input to increase their level of arousal or proprioceptive input to calm them down may seek this through increased activity levels when the expectation is that they remain seated and attend to their work. Some may seek tactile stimulation by impulsively touching things they shouldn't, or touching their neighbours when seated on the carpet or in a queue. Also, because some children/young people find certain sensory stimuli unpleasant, they may seek to avoid them by refusing to take part in activities or using other avoidance strategies.

Engine Speed

Sometimes, when individuals have a particular difficulty with maintaining the right level of alertness, it is useful to use the analogy of controlling our 'engine speed' so that it is 'just right' for the activity. According to their sensory thresholds and their response to them, some children/young people will tend to have 'engine speeds' that run too fast, and others to have 'engine speeds' that run too slow. This analogy can provide a non-judgemental vocabulary to help the child/young person, their

Sensory Processing and Sensory Modulation *(Continued)*

parents and those working with them to develop insight into how to help the individual to adjust their arousal levels to the task at hand, and be more successful.

This terminology is used in the 'Alert Programme'. The 'Alert Programme' is a very useful form of intervention for children/young people with sensory modulation difficulties. It has been successfully used to help them with attention difficulties, either because they have a low arousal level and generally inattentive or because their level of arousal is too high and they are too easily distracted, with their attention jumping from one thing to another and interfering with their ability to focus for any length of time.

Each individual has a unique pattern of responses. What is a pleasant stimulus for one child can be unpleasant for another child, and what arouses one child may be hardly noticed by another.

Individuals who have difficulties in this area can learn to become more aware of when their 'engine speed' is inappropriate to the situation, and with support they can begin to manage their own sensory regulation by carrying out calming behaviours or arousing behaviours as appropriate. This is usually a slowly evolving process during Key Stage 3 or above and dependent on the child, with adult support, developing a useful degree of insight.

Assessment and Management

Where there are significant difficulties with sensory modulation the individual would benefit from assessment from an occupational therapist or another professional with training in this field. Often children/young people have these difficulties in combination with other conditions, such as developmental co-ordination disorder, in which case referral to a paediatric occupational therapist would normally be appropriate, or with attention deficit disorder, autistic spectrum disorder, or attachment disorder, in which case referral to the Child and Adolescent Mental Health Service would normally be appropriate.

Where there are milder difficulties, it may be possible to fulfil their needs through assessment and provision within the school setting. Page 29 - 55 offers suggestions for help within the classroom.

When trying a new strategy e.g. the Move 'n' Sit cushion always remember that initially the novelty value may give misleading results. The child may need to be more familiarised with it before conclusions can be drawn about how helpful it will be

Visual Perception

Visual Function

We interpret the visual information reaching our brain through our visual system in order to make sense of our environment. A large proportion of the brain is involved in processing visual processing, including the parietal lobe in both cerebral hemispheres.

In order to take in visual information from the environment we use many visual skills, including:

- fixation on an object or two dimensional shape;
- saccadic movements (the tiny movements our eyes use to explore objects that they fixate on - essential for reading);
- pursuit of moving objects (sometimes called 'tracking');
- accommodation (the ability to focus on objects at different distances);
- binocular fusion, stereopsis and convergence/divergence (all contributing to depth perception).

Visual Perception

We need to be alert to the stimuli in order to attend to it, and our attention needs to be sustained long enough for us to take in enough information for our needs. The information then needs to be interpreted and organised.

Another set of skills is required for this: the interpretation of visual information at a pre-cognitive level, the integration of visual information together with information from the other senses, plus the cognitive ability to make use of this information in the light of our previous knowledge of the world.

It is important to remember that, while we all have an individual profile of strengths and weaknesses in these and other functional visual skills areas, in practise these skills are not used in isolation but in combination with each other. In addition, other factors are also strongly involved. For example, fatigue, anxiety and distractibility can all have strongly negative effects on visual perception.

Visual skills

- *visual discrimination*
 - *visual form constancy*
 - *visual figure ground*
 - *visual spatial relationships*
 - *visual closure*
 - *visual memory*
 - (*short- and long-term*)
 - *visual sequential memory*
-

Visual imagery is an important ability that assists problem-solving, planning, imagination, memory and sequencing skills

Hand-eye co-ordination is the ability to move the hands quickly and precisely into position according to visual and kinaesthetic information received.

Perceptual Difficulties

1 Figure Ground Discrimination	<p>Everyone must be able to discriminate relevant matter from a background. We must be able to discriminate both visually and auditorily. When undertaking task-like copying from board the pupil must be able to focus on a particular piece of text and not be distracted by rest of the information.</p> <p>If worksheets are ‘too busy’ pupils struggle to focus on one aspect. Difficulties keeping lines of writing separate/difficulty knowing where to start and finish.</p> <p>When there is a lot of noise pupils are not able to discriminate between relevant and irrelevant information.</p>
2 Visual Closure	<p>This is the ability to perceive an object even when it is seen in parts. This skill allows us to see letters individually within a word but also see the word as a whole.</p> <p>Pupils with difficulties will write fragmented letters e.g. ‘a’ is written as ‘o l’.</p>
3 Visual Form Constancy	<p>This is the ability to perceive an object as possessing variable properties, such as shape, position and size.</p> <p>2 and 3 dimensional forms of a shape are recognized as being from same category e.g. square shape and 1 cm cube belong to square category.</p> <p>Size constancy is important for games such as football i.e. person familiar with size of standard football recognizes it as such even when at opposite end of pitch looking smaller.</p> <p>When writing, pupils struggle with the size and shape of letters. Copying from the board is very challenging.</p>
4 Spatial Relationship	<p>This is the ability to perceive the position of 2 or more objects in relation to self and in relation to each other.</p> <p>As well as ability to perceive distances between objects and self. When playing football the goalkeeper scans whole field and makes up a picture of where all the players are situated and how far apart and how far from the goal.</p> <p>When writing, pupils with difficulty in this area will have difficulty with spacing of letters and words.</p>
5 Position In Space	<p>This is the position of an object in relation to oneself.</p> <p>Important to understand body image (relationship of different body parts to others, regulates body’s position against gravity, keeps one upright).</p> <p>Difficulties in this area lead to mirror writing/orientation of letters e.g. b/d u/n, may start writing from right of page.</p>
6 Hand/Eye Co-ordination	<p>This is the earliest perceptual skill (baby) - ability to co-ordinate a hand movement to a visual goal.</p> <p>Eyes co-ordinate what hands are doing (N.B. not hands themselves). Difficulties with dressing, tying shoe laces, eating and handwriting.</p>

Classroom Resources

RESOURCE	SUPPLIER	INFORMATION
ANGLED WORK SURFACE		
Writing Slopes	www.specialdirect.com	Enable children to work at the optimum angle.
'Write Start' desk top	LDA	
CUSHIONS (WEDGE)		
Move 'n' Sit	LDA, Homecraft-Rolyan	Improve seating position.
Posture Pack seating wedge	Back in Action	
Fit Chair Air Cushion	www.specialdirect.com	
PENCIL GRIPS		
Pencil Grips The Ultra Pencil Grip	www.specialdirect.com Taskmaster Anything Left-Handed Hope Educational www.the3dcentre.co.uk	A collection of different pencil grips. The Ultra Pencil Grip has a special finger guard to hold fingers in the correct position and prevent them from crossing over, while its large size assists with pen control and support. Suitable for both right and left-handers.
PENCILS		
Write Start Pencil	LDA	Pencils to promote better handwriting.
Hand Huggers	Bright Minds, Nottingham Rehab	
Lyra 'Ferby' Pencils	Galt Educational, NES Arnold	
Yoro Pencil	Left'n'Write	
PENS		
Berol Handwriting	NES Arnold	A selection of pens to support fluent and legible handwriting.
Light Up Pens	SEN Marketing	
Pen Again	Nottingham Rehab	
Ring Pen	Hope Educational	

Classroom Resources (Continued)

RESOURCE	SUPPLIER	INFORMATION
PENS (Continued)		
Stabilo S'Move	Special Direct	
Squiggle Wiggle Writer	Special Direct	
Yoro Pen	Left 'n' Write	
PAPER		
Visible Exercise Book	Phillip and Tracey	Improves legibility using visual cues to help children recognise margins, control letter size and develop letter and word spacing.
Stop Go Right Line Paper with Raised Lines	Taskmaster	
Redispace Paper	www.specialdirect.com	
Heavily Lined Paper	Partially-Sighted Society	
READING SUPPORT		
Line Tracker	Taskmaster	Supports scanning of text.
Reading Window	LDA	
SCISSORS		
Easi-Grip	Taskmaster	Scissors designed for easy use.
Self-opening Scissors	Left'n'Write	
Teaching/Dual Control Scissors	Taskmaster	
Rollcut Scissors	Nottingham Rehab	
SENSORY EQUIPMENT		
Fidget Items	Happy Puzzle Company Special Direct	Resources to support sensory regulation difficulties.
Fidget Pencils	LDA	
Chewy Tubes	Winslow	
Weighted Lap Pads	LDA	
Weighted Wraps	LDA	

Further Resources

RESOURCE	SUPPLIER	INFORMATION
GROSS MOTOR EQUIPMENT		
Zedbug	www.specialdirect.com	A mini-trike for 3-11 year olds.
Totally Tactile Balls	www.taskmasteronline.co.uk	A pack of 9 very tactile balls in three bright colours.
Hands and Feet	The Consortium	Can be used to develop balance and motor skills.
Balance Boards	www.physiosupplies.com Davies Sport	Ideal for improving balance, control and co-ordination.
Gymball	Widely available	
Co-Oper Blanket/Band	Davies Sports	Designed to allow children to experience co-operative movement.
MISCELLANEOUS		
Theraputty	www.whistlingtortoise.co.uk Nottingham Rehab (www.nrs-uk.co.uk)	Therapeutic putty for strengthening the hand and wrist, as well as improving fin http://www.aslhealth.scot.nhs.uk/resources/sheets/putty.pdf - examples of exercises.
Dyceem Reel	Nottingham Rehab (www.nrs-uk.co.uk)	Non-Slip matting.
Coiler Laces	www.shoelaceplace.co.uk	Laces that don't need to be tied.
Lace Locks	www.sportsaver.co.uk	Laces that don't need to be tied.
Gel Ball Hand Exerciser	www.whistlingtortoise.co.uk	Colour-coded to provide variable resistance exercises for hands, fingers and forearms.
Good Grips Cutlery	www.whistlingtortoise.co.uk	The built-up handles are made of soft latex-free material, with flexible ribbing that is comfortable and adapts to any grip.
Wrist Rests/Support	Inclusive Technology	Support for wrist during keyboard use.
VISUAL PERCEPTION		
Visual Perception Skills	Mark and Katy Hill LDA	Photocopiable activities to improve visual understanding.

Further Resources *(Continued)*

RESOURCE	SUPPLIER	INFORMATION
<p>VISUAL PERCEPTION (Continued)</p> <p>One Finger and Two Finger Spaces</p>	<p>www.specialdirect.com</p>	<p>Features an arrow for directionality, a window for tracking when reading, see-through colour to heighten the intensity of the black letters on the white paper, a ruler and it is transparent.</p>
<p>VERBAL DYSPRAXIA</p>		
<p>Motor Skills for Mouths</p>	<p>www.specialdirect.com</p>	<p>Fun oral activities.</p>

Handwriting Resources

RESOURCE	SUPPLIER	INFORMATION
The National Handwriting Association	www.nha-handwriting.org.uk	Training and information on teaching handwriting.
Developing a Handwriting Policy for Your School.... a practical guide.	The National Handwriting Association ISBN 1872832 20 2	Advice on developing a handwriting policy, or reviewing an existing one.
Writing left-handed.... write in, not left out.	The National Handwriting Association ISBN 1872832 21 0	Advice on how to support left-handers with their writing.
Handwriting in the Secondary School.... not a secondary skill!	The Handwriting Interest Group ISBN 1872832 89 X	Advice for developing handwriting skills in secondary school.
PenPals for Handwriting, Cambridge University Press	www.cambridge.org/uk/education/primary/literacy/penpals/reviews.htm	A resource for teaching handwriting, includes CD-ROMS designed to be used with an interactive whiteboard.
Speed Up!	Lois Addy, LDA 2004	A kinaesthetic programme to develop fluent handwriting.
Which Handwriting Scheme?	National Handwriting Association	Detailed information on individual schemes, including a resume of the content and copies of some of the pages.
Magnetic Writing Gel Boards	TTS (0800 318686) www.tts-shopping.com Special Direct	Draw and Write Touch Board
Roll 'n' Write	NES Arnold	
Alphabet Pegboard	ASCO	
Writing Activity Cards	Special Direct	
HandiWriter (wrist loop)	Taskmaster	
HandWriting for Windows	www.inclusive.co.uk	Allows production of worksheets in many styles of handwriting.
Joint Exercises for Successful Handwriting	AMS Educational ISBN 978 1 902751 61 0.	

Suppliers

SUPPLIER	CONTACT INFORMATION
Anything Left-Handed	Tel: 0845 8723272 Fax: (01993) 770653 www.anythingleft-handed.co.uk
ASCO - Educational Supplies	19 Lockwood Way, Leeds LS11 5TH Tel: (0113) 2707070 www.ascoeducational.co.uk
Back In Action	Various locations Tel: 020 7930 8309 (Head office) www.backinaction.co.uk
BIME	The Wolfson Centre, Royal United Hospital, Bath BA1 3NG Tel: (01225) 824103 Fax: (01225) 824111 info@bime.org.uk
Bright Minds	Wells Way Works, Wells Road, Radstock, Bath BA3 3RZ Tel: 08444122249 Fax: 0800 266 787 www.brightminds.co.uk
Consortium	Hammond Way, Trowbridge, Wiltshire BA14 8RR Tel: 0845 330 7780 Fax: 0845 330 7775 www.theconsortium.co.uk
Davies Sports	Hyde, Cheshire SK14 4LL Tel: 0845 120 4515 Fax: 0800 138 3788 www.daviesports.co.uk
Galt Educational	Johnsonbrook Road, Hyde, Cheshire SK14 4QT Tel: 08451203005 Fax: 08000560314 www.galt.educational.co.uk
GLS	1 Mollison Avenue, Enfield EN3 7XQ Tel: 0845 120 3213 Fax: 0800917 2246 www.glsed.co.uk

Suppliers (Continued)

SUPPLIER	CONTACT INFORMATION
Happy Puzzle	PO Box 586, Elstree, Herts. WD6 3XY Tel: 0870 873 8989 Fax: 0870 873 8987 www.happypuzzle.co.uk
Hawkins Bazaar	www.hawkin.com Tel: 0844 573 4000 Address various (most contacts on line).
Homecraft Rolyan	Nunn Brook Road, Huthwaite, Sutton-in-Ashfield, Nottinghamshire NG17 2HU Tel: 08444 124330 Fax: 08448 730100 www.homecraft-rolyan.com
Hope Education	Hyde Buildings, Ashton Road, Cheshire SK14 4SH Tel: 08451 20 20 55 Fax: 0800 929139 www.hopeeducation.co.uk
Inclusive Technology	Riverside Court, Huddersfield Road, Delph. Oldham OL3 5F Telephone: (01457) 819790 Fax: (01457) 819799 www.inclusive.co.uk
LDA	Pintail Close, Victoria Business Park, Nottingham NG4 2SG Tel: 0845 120 4776 Fax: 0800 7838648 www.ldalearning.com
Left 'n' Write	5 Charles Street, Worcester WR1 2AQ Tel: (01905) 25798 Fax: (01905) 25798 www.leftshoonline.co.uk
NES Arnold	Hyde Buildings, Ashton Road, Hyde, Cheshire SK14 4SH Tel: 08451204525 Fax: 0800328 0001 www.nesarnold.co.uk
Nottingham Rehab	Tel: 0845 1204522 www.nrs-uk.co.uk

Suppliers (Continued)

SUPPLIER	CONTACT INFORMATION
Philip and Tracey	Johnsonbrook Road, Hyde, Cheshire SK14 4QT Tel: 0845 123 7760 Fax: 0800 1380091 www.philipandtracey.co.uk
Physio Supplies	www.Physiosupplies.com Tel: (01775) 640972
Posturite	No specific address as dependent on location Tel: 0845 345 0010 www.posturite.co.uk
Shoe Talkers	46-48 Uphill Way, Uphill, Weston-on-Super-Mare, North Somerset BS23 4TN Tel: (01934) 626499 Fax: (01934) 626499 www.shoelaceplace.co.uk
Smart Kids	5 Station Road, Hungerford, Berkshire RG17 0DY Tel: (01488) 644644 www.smartkids.co.uk
Special Direct	Park Lane Business Park, Kirkby-in-Ashfield, Nottinghamshire NG17 9GU Tel: 0800 318686 Fax: (01623) 726870 Specialdirect.com
Sports Saver	www.sportsaver.co.uk Tel: (01492) 531818
Taskmaster	Morris Road, Leister LE2 6BR Tel: (0116) 2704286 www.taskmasteronline.co.uk
Whistling Tortoise	www.whistlingtortoise.co.uk Tel: 0131 225 6365 Fax: 0131 225 6383
Winslow	Goyt Side Rd, Chesterfield, Derbyshire S40 2PH Tel: 0845 230 2777 www.winslow-cat.com

Glossary

Asymmetrical	When one side of the body differs from the other side.
Ataxia	Movements are jerky, unsteady walking with a wide base, imperfect balance and at times an intention tremor.
Atrophy	Wasting of muscles or nerve cells.
Backward Chaining	A technique used for learning skills. The skill or task is broken down into small component parts and learnt or practised by starting with the last part in the sequence and gradually working backwards, as each part is fully established.
Bilateral Integration	The ability to use two sides of the body together in a co-ordinated manner.
Buddy Scheme	A strategy to promote positive relationships between children/young people. Buddies are trained to listen to classmates and taught ways of dealing with other pupils' problems.
Child and Adolescent Mental Health Service (CAMHS)	A specialist service for families with children/young people who have a significant level of concern regarding their emotional health and well-being.
Common Assessment Framework (CAF)	The Common Assessment Framework (CAF) is a key part of delivering frontline services that are integrated and focused around the needs of children and young people. The CAF is a standardised approach to conducting an assessment of a child/young person's additional needs and deciding how those needs should be met.
Congenital	Existing at or before birth.
Contracture	Permanently tight muscles and joints.
Dynamic Balance	The ability to maintain balance as we are moving.
Extension	The process of straightening or stretching the body or a limb.
Eye teaming	A term used to describe the general skills needed to ensure the two eyes work together when viewing a target. These skills include convergence, focus and eye-tracking as well as the perceptual skills to control these processes.
Flexion	Bending or pulling in a part of the body or a limb.
Hypertonia	High muscle tone which may lead to muscle tightness.
Hypotonia	Low muscle tone which may lead to muscles being floppy.
ICT	Information Communication and Technology

Glossary (Continued)

Kinaesthesia	This combines proprioception and tactile stimulation to give the brain information about the movement of body parts.
Motor Planning	The ability of the brain to conceive of, organise and carry out a sequence of unfamiliar or unskilled motor actions.
Occupational Therapy	The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. Occupational therapists generally do this by modifying the environment, or by adapting the activity to better support participation.
Physiotherapy	Physiotherapists help and treat people of all ages with physical problems caused by illness, accident or ageing. Physiotherapists identify and maximise movement potential through health promotion, preventive healthcare, treatment and rehabilitation.
Proprioception	The ability to know where body parts are in space without looking. Proprioceptors (sense organs) are found in muscles, joints and tendons.
Proximal	Closest to the body.
Saccade	Rapid movement of both eyes such as when scanning a line of print.
Sensory Integration	A process that describes the ability to organise sensory information for use in or by the body.
Splinter Skills	An isolated skill that is mastered with effort and can then not be generalised for other purposes.
Static Balance	The ability to maintain balance while standing.
Symmetrical	When both sides of the body are the same.
Task Analysis	A method of identifying the stages and components required in order to complete a task.
Tone	The normal tensions of the muscles at rest.

Further Reading

RESOURCE	SUPPLIER	INFORMATION
Children with Developmental Co-ordination Disorder at Home and in the Classroom.	Cheryl Missiuna, CanChild Centre for Childhood Disability Research www.canchild.ca	This 12 page booklet can be downloaded for free from www.fhs.mcmaster.ca/canchild
Supporting children with moderate learning difficulties in mainstream settings and schools.	NYCC (2007)	Especially p27 re under-developed co-ordination skills.
Supporting Children with Co-ordination Difficulties, Hull Learning Services.	David Fulton Publishers (2005) www.fultonpublishers.co.uk	At-a-glance guidance and practical strategies for SENCOs, teachers and TA, easy to 'dip into' with advice across all areas.
Occupational Therapy Approaches for Secondary Special Needs - Practical Classroom Strategies.	Jill Jenkinson, Tessa Hyde and Saffia Ahmad (2002).	It is highly recommended that this book is purchased by secondary school special needs departments as a resource. The book continues with a section that gives specific examples of how a young person may present within the classroom and provides advice on how to manage situations with different strategies.
Inclusion for Children with Dyspraxia/DCD - A Handbook for Teachers.	Kate Ripley (2001).	
Motor Skills United	www.specialdirect.com	A Motor Skills Programme created by Stockport County Council Learning Support Service.
High Quality PE for Pupils with Autism.	www.youthtrust.org/inclusion	Easy to use ideas for busy teachers.
The Jungle Journey DEMS programme (Development of Early Motor Skills)	Staffordshire County Council	Gross and Fine Motor Skills Activities.
Do and Discover	Bridgend County Borough Council	Fun activities to develop physical skills in the early years.

Further Reading (Continued)

RESOURCE	SUPPLIER	INFORMATION
Early Years Movement Skills – Description, Diagnosis and Intervention.	Mary Chambers and David Sugden.	For support of children (with motor difficulties) up to age of 7 - includes Early Years Movement Skills checklist.
Developing School Provision for Children with Dyspraxia - A Practical Guide.	Edited by Nichola Jones	Comprehensive information on provision for pupils.
Start Write, Stay Write	A. Harris and J. Taylor.	At-a-glance guidance and practical strategies for SENCOs, teachers and TA, easy to 'dip into' with advice across all areas.
Occupational Therapy Approaches for Secondary Special Needs - Practical Classroom Strategies.	Jill Jenkinson, Tessa Hyde and Saffia Ahmad (2002).	
Understanding Motor Skills in Children With Dyspraxia, ADHD, Autism And Other Learning Disabilities.	L. Kurtz.	A guide to improving co-ordination.
100 ideas for supporting pupils with Dyspraxia and DCD.	Amanda Kirby and Lynne Peters.	Ideas for all ages.
Dyspraxia Developmental Co-ordination Disorder.	Dr Amanda Kirby.	A parent/carer's guide.
Helping Children with Dyspraxia.	Maureen Boon.	A parent/carer's guide.
Making Inclusion Work For Children with Dyspraxia.	Gill Dixon and Lois Addy.	Provides practical strategies for schools and promotes 'joint' working between professionals and parent/carers.
The adolescent with developmental co-ordination disorder (DCD).	Amanda Kirby.	Practical guide to support adolescents with DCD difficulties.
Building Blocks for Learning Occupational Therapy Approaches.	Jill Jenkinson, Tessa Hyde and Saffia Ahmad.	Practical resource for the Primary School.

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