Section 2
Identifying Children:

C) Other (Specific) Learning Difficulties
Dyslexia is often referred to as Specific Learning Difficulty (Dyslexia).

‘The DCSF’s guidance, entitled Data Collection by type of Special Educational Need (2005) says that “specific learning difficulties” is an umbrella term which indicates that pupils display differences across their learning. Pupils with specific learning difficulties may have a particular difficulty in learning to read, write, spell or manipulate numbers so that their performance in these areas is below their performance in other areas. Pupils may also have problems with short-term memory, with organisation skills and with coordination. Pupils with specific learning difficulties cover the whole ability range and the severity of their impairment varies widely. Specific learning difficulties include dyslexia, dyscalculia and dyspraxia.’

Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties, Sir Jim Rose, June 2009.

It is important to note that dyslexia is only one of several specific learning difficulties. Specific learning difficulties should be distinguished from general learning difficulties, which are identified when a child has very low general cognitive ability and hence is likely to have problems in all areas of the curriculum.

In addition to dyslexia, dyscalculia and dyspraxia there are a number of difficulties that are commonly found in schools that may affect a child’s ability to acquire literacy. These include attention deficit hyperactive disorder (ADHD), autistic spectrum disorders (ASD) and specific language impairment (SLI).

The following specific difficulties are described in further detail. Please note that this list is not exhaustive.

- Developmental Coordination Disorder (including dyspraxia)
- Dyscalculia
- Autistic Spectrum Disorder (including Aspergers’ Syndrome)
- Attention Deficit Hyperactive Disorder (ADHD or ADD)
- Specific Language Impairment
Developmental Coordination Disorder (DCD): Definition.

The essential Feature of DCD is a marked impairment in the development of motor coordination. The diagnosis is made only if this impairment significantly interferes with academic achievement or activities of daily living. A diagnosis would not be made if a child experienced motor difficulties as part of a general medical condition (e.g. cerebral palsy).

Many schools use the term dyspraxia. It should be noted that dyspraxia applies to a small subgroup of children with DCD. In addition to difficulties with motor coordination, children with dyspraxia experience difficulties with motor planning, i.e. individuals have difficulties in planning what motor movements they need to make rather than just being clumsy in carrying out a movement. DCD and dyspraxia are medical diagnoses and hence identification requires assessment by health professionals and would usually involve assessment by an occupational therapist.

Developmental Coordination Disorder (DCD): Characteristic Features.

The following characteristics of DCD are summarised from *Children with Developmental Coordination Disorder: Strategies for Success*, by Cheryl Missiuna, 2003; CanChild, Centre for Childhood Disability Research.

When describing children with DCD, it is important to recognise that they are a very mixed group. Some children may experience difficulties in a variety of areas while others may have problems only with specific activities.

The physical characteristics are as follows:

1. Clumsy or awkward in his/her movements. S/he may bump into, spill or knock things over. May have difficulty with gross motor skills (whole body), fine motor skills (using hands) or both.
2. Delay in developing certain motor skills such as tricycle or bike riding, ball catching, handling a knife and fork, doing up buttons, and writing.
3. Discrepancy between his/her motor abilities and his/her abilities in other areas.
4. The child may have difficulty learning new motor skills. Once learned, certain motor skills may be performed quite well while others may continue to be performed poorly.

5. The child may have more difficulties with activities that require constant changes in his/her body position or adaptation to changes in the environment (e.g. tennis or skipping over a rope). The child may have poor balance.

6. Difficulties with activities that require the coordinated use of both sides of the body (e.g. cutting with scissors, handling a hockey stick).

7. 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 children with DCD.

Together with these physical characteristics, there are emotional issues to consider.

1. The child may avoid physical activities. For a child with DCD, motor skills are very difficult and require more effort.

2. Repeated failure may lead to low frustration tolerance, poor self-esteem, and lack of motivation due to problems coping with daily activities.

3. The child may avoid socialising with peers, particularly on the playground. Some children will seek out younger children to play with while others will go off on their own.

4. Dissatisfaction with his/her performance (e.g. erases written work).

5. The child may be resistant to changes in his/her routine or in the environment. If the child has to expend a lot of effort to plan a task, a small change in how it is to be performed may present a large problem for the child. E.g. may be confused by familiar sums presented in a different format.
Other common characteristics of DCD are:

1. The child may have difficulties balancing the need for speed with the need for accuracy. For example, handwriting may be very neat but extremely slow.
2. The child may have difficulties with academic subjects such as mathematics, spelling, or written language which require handwriting to be accurate and organised on the page.
3. The child may have difficulty with activities of daily living (e.g. dressing, using a knife and fork, folding clothes, tying shoelaces, doing up buttons and zippers, etc).
4. The child may have difficulty completing work within a normal time frame. Since tasks require much more effort, children may be more willing to be distracted and may become frustrated with a task that should be straightforward.
5. Problems with organisation can appear as the child becomes older. For example there may be difficulties in finding the right equipment and packing bags for school etc.
6. Some children with DCD can be very controlling and try to direct others to help them, rather than doing the actions themselves. This can make them unpopular at school.

To help, every primary school has been provided with a School and Parent Advice Regarding Kids (SPARK) File. This was written by occupational therapists and provides detailed descriptions of how to support children with motor difficulties.

It is possible to buy copies of the SPARK file for a small fee.

When concerns are raised, school staff should refer to the SPARK file and complete approx 2 term’s worth (approx 3 months) of support based on the resources available in the file. If the child’s difficulties persist teachers should complete the checklist and refer to an occupational therapist for assessment. Checklists and referral form can both be found at the back of the SPARK file. As part of the referral process the child is also required to receive a neurological screen from their GP.
If a child’s primary needs are related to behaviour and attention difficulties, a referral to Marlborough House is more appropriate, where support from an occupational therapist may also be accessed.

A referral to the occupational therapist will involve an assessment and may lead to a block of treatment for pre-school and primary children. For the intervention to be successful it is expected that parents will engage in working towards management strategies and goals that have been set following assessment.

It is assumed that marked difficulties with motor skills will have been identified prior to the pupil transferring to secondary school. Occupational therapists will accept referrals from secondary schools but their intervention is more likely to take the form of advice on managing specific challenges rather than a block of therapy.
Dyscalculia

Developmental dyscalculia is a condition that affects the ability to acquire arithmetical skills. Dyscalculic learners may have difficulty understanding simple number concepts, lack an intuitive grasp of numbers and have problems learning number facts and procedures. Even if they produce a correct answer or use a correct method, they may do so mechanically and without confidence. (DfES 2001).

It should be noted that there is a need for further research to clarify our understanding of specific difficulties with mathematics. It is thought that mathematical reasoning is dependent on areas of the brain called parietal lobes and that dyscalculia occurs when there is a deficit in the functioning of the parietal lobes. However, research has not yet confirmed this link.

The characteristics of dyscalculia are:

- Difficulties in learning and remembering arithmetic facts and executing procedures
- Immature strategies – e.g. using fingers
- Poor understanding of basic number concepts, especially numerosity (the ability to recognise how many items there are in a set without counting them individually).
- Weak intuitive grasp of numbers, hence often no way of checking if an answer is likely to be correct.
- Poor retention and motivation

Many children have difficulties with maths for reasons other than dyscalculia. For example:

- Maths is cumulative, so if a pupil fails to learn some basic facts (such as place value) the subsequent stages may make little sense. Gaps may occur through disrupted education, poor teaching, poor memory skills, slow information processing skills, EAL, behaviour issues etc.
- Pupils with poor attention find it hard to focus and hence often miss instructions, explanations and opportunities to practice their skills.
- Children with poor working memory skills often have difficulties across the curriculum. However, problems may be most evident in maths; activities such as mental maths place a heavy load on working memory.
- **Poor literacy skills/Dyslexia.** Many pupils who struggle with literacy also struggle with maths. The exact link between these two difficulties is still under debate. As children progress with maths there is increasingly a need to read questions, many of which may involve quite complex language. Pupils who have to concentrate very hard on decoding the words have less capacity to focus on the mathematic task in hand. This is compounded when pupils have weak working memory skills.
- **Anxiety.** Many pupils feel anxious in maths lessons. Anxiety puts the mind into fight or flight mode and restricts our ability for logical thought.

To help and support, rule out other explanations for difficulties with mathematics perhaps by checking for gaps in learning, memory skills etc. There is no cure for dyscalculia however current research suggests that dyscalculics can make progress if they are re-taught basic skills and supported with very structured teaching.

School staff should:

- Promote understanding based learning using practical activities and concrete materials. Avoid learning by rote.
- Teach foundation knowledge of numbers – go back to basics.
- Teach small progressive steps & carefully control the difficulty of the work
- Limit all demands on memory
- Keep explanations short
- Encourage lots of number games
- Ask questions to extend pupils’ learning e.g. ‘How did you work that out?’
- Encourage verbalising procedures
• Be supportive and prepared to re-teach sections that have not been retained
• Give pupils time to think

The following resources are also appropriate:

• **Section 3 of these Dyslexia Friendly Guidelines.** See “Supporting Children: Mathematics and Numeracy”
• **WESFORD II.** Dyslexia Resources File, Mathematics Section.
• **Dyscalculia Guidance** by Brian Butterworth and Dorian Yeo.
• **The Dyscalculia Toolkit** by Ronit Bird
• **Mathematics for Dyslexics including Dyscalculia** by Chinn & Ashcroft
• **Tests for Dyscalculia** by Tony Attwood
• **How Dyslexics Learn: Grasping the Nettle.** Saunders, K., White, A., (2002). (This has a good section on supporting maths difficulties, in general).
Autistic Spectrum Disorder (ASD) Indicators of Difficulties in the Three Core Areas

Autistic Spectrum Disorders (ASD): Definition.

ASD - Indicators of Difficulties in the Three Core Areas: Social Communication.

Social Communication
- Delayed speech and language and/or difficulties communicating
- Echolalic chatter (when the child echoes what others have said)
- Pupils may talk at others rather than with them
- Literal understanding of language, hence problems with metaphor e.g. ‘It’s raining cat and dogs’ etc.

ASD - Indicators of Difficulties in the Three Core Areas: Social Interaction.

Social Interaction
- Have difficulty playing with others particularly in unstructured situations
- Lack of understanding of other people’s feelings and needs
- Difficulties expressing emotions etc

ASD - Indicators of Difficulties in the Three Core Areas: Social Imagination.

Social Imagination
- Limited pretend play skills, often involving repetitive behaviours
- May order objects according to size or colour rather than playing with them imaginatively
- Limited use of common sense
- Inability to think and behave flexibly.
Many people with ASD are either over sensitive or under-sensitive to light, noise, touch, taste and smell. Within our school environment we must work to respect these sensitivities.

Many pupils with ASD have difficulties acquiring literacy. This may be for a number of reasons. Difficulties with social understanding and sensory sensitivity can lead to high levels of anxiety in busy crowded places such as schools. As anxiety inhibits logical thought it may make it more difficult for pupils with ASD to learn new facts. Likewise pupils with ASD may be very rigid in their thinking skills, which may make it more difficult for them to assimilate new information. However, the pupil may also be dyslexic.

Difficulties will vary considerably from one pupil to another, but the following strategies are often helpful.

- Reduce anxiety levels as much as possible to enable the pupil to focus on work.
- Provide a visual timetable showing what activities will be completed each day.
- Warn the pupil of changes in routine or when an activity is due to end.
- Use clear routines and boundaries so that school life is predictable.
- Avoid use of metaphor and sarcasm as language may be understood literally.
- Strategies such as social stories may be helpful for unstructured situations.
- Pupils may learn better with few distractions this may be achieved through TEACCH Structured Teaching (See ASD Guidelines p44)
- Be aware that books/worksheets with lots of pictures may distract from the text. Pupils may benefit from the amount of visual information being limited when they are learning to read.
Who to contact

For further information please refer to: Autistic Spectrum Disorders: Guidelines for an ASD Friendly School. Alternatively contact Julia Cook, Advisory Teacher for Social Communication and Interaction Difficulties, or Simon Kitson, Senior Educational Psychologist, specialism in ASD.

To obtain a diagnosis of ASD in Swindon a child must be assessed by the Pervasive Developmental Disorder Assessment Group (PDDAG). This is a multi-agency team of professionals and based at Marlborough House. Referrals to PDDAG can be made via Marlborough House (if they are already involved), TAMHS, Julia Cook, Speech and Language Therapist, Educational Psychologist etc. Referrals direct from school should always be discussed with the link Educational Psychologist first. All referrals should be made on a PDDAG referral form.
Attention Deficit Hyperactive Disorder, Definition, Distinguishing Behaviours

**Attention Deficit Hyperactive Disorder (ADHD)**

Until recently ADHD - also sometimes referred to as attention deficit disorder (ADD) or hyperkinetic disorder (HKD) - was identified as a neurobiological disorder caused by an imbalance of some of the neurotransmitters found in the brain.

However in September 2008 the National Institute for Health and Clinical Excellence (NICE) produced a guideline for the diagnosis and management of ADHD in children. NICE defined ADHD as ‘a complex disorder resulting from multiple genetic and environmental risk factors’. Hence it is now recognised that environmental factors, such as diet, may be relevant when diagnosing ADHD. For an ADHD diagnosis to be made it is important that the child demonstrates significant difficulties in all contexts, and that the behaviour is not just seen in one context such as home or school.

ADHD is a medical diagnosis and hence must be diagnosed by medical professionals.

**Distinguishing behaviours that may be seen in school**

‘ADHD has three main hallmarks: inattentiveness, an almost reckless impulsiveness and, in some but not all cases, a knee-jiggling, toe-tapping hyperactivity’. (Holowenko, 1999, p.14)

Hyperactive or impulsive behaviours may include:
- Fidgeting & fiddling
- Having trouble playing quietly/ flitting from one activity to another
- Interrupting others & acting before thinking
- Always being ‘on the go’.

Symptoms of inattention may include:
- Being disorganised
- Being forgetful and easily distracted
- Difficulty to sustaining attention in tasks or play activities
- Problems following instructions.
Whilst ADHD behaviours occur to some extent in all of us, the difference between ADHD and normal behaviour is the degree of the problem and the difficulties it causes. Children with ADHD show this behaviour to a significantly greater extent and severity. (ADDISS, October 2003)

ADHD is thought to affect approximately 3% of school children and is four times more likely to be diagnosed in boys than girls.

School staff should be aware that children may display difficulties with concentration and over activity for a number of reasons for example:

- The child may be dyslexic and suffering frustration in the classroom. They may employ work avoidance strategies as a result.
- The child may have difficulties with memory, which affects their concentration and attention.
- The child may be experiencing high levels of anxiety which leads to restlessness and problems with concentration. Anxiety may have a wide range of causes such as; Attachment difficulties (as a result of neglect, abuse, bereavement, inconsistent parenting etc), bullying, academic difficulties, difficulties associated with having Autistic Spectrum Disorders etc.
- Some younger children have not been taught to concentrate and come from home environments that do not encourage skills such as sitting still and listening.
- Some children are very sensitive to poor diet and lack of exercise.

If a child is displaying significant ADHD behaviours it would be helpful to discuss the situation with the parents, so that behaviour at school can be compared with behaviour at home. 90% of disruptive behaviour in the classroom is low level and responds well to positive classroom management strategies. However if the problem is severe and persistent it may be beneficial for the child to be assessed by the ADHD clinic at Marlborough House. This clinic can be accessed through a referral from Primary Mental Health Team or the child’s GP.
If a diagnosis of ADHD is made, the child may be prescribed medication to reduce the effects of the difficulty. Increasingly, however, professionals advocate managing ADHD through behaviour strategies rather than medication. The 2008 NICE guideline does not recommend medication being given to children under five years old unless other treatments have been tried and failed.

The following strategies may support pupils with the above behaviours:

- Sit distractible pupils as close as possible to the teacher without being perceived as punitive.
- Provide some seating away from distractions for pieces of independent work.
- Set short achievable targets and reward task completion promptly. Allow a short break before setting next target.
- Be clear about when pupil movement is allowed and when it is discouraged. Provide pupil with legitimate reasons to move round the classroom between activities.
- Provide pupil with something to fiddle with during times when they need to be quiet. For example a stress ball or a piece of Blu Tack can be useful, on the understanding that they are not used to distract other pupils.
- Provide frequent positive feedback for specific desired behaviour e.g. 'Good listening' or 'good sitting'. Rewards and sanctions should be implemented swiftly.
- Use timers to focus attention for specific periods of time.

Strategies should be used consistently and the child’s behaviour monitored over time, so that their response to intervention can be evaluated.
References

ADDISS (The National Attention Deficit Disorder Information and Support Service): ADHD: Paying Enough Attention. A research Report into ADHD in the UK October 2003

Holowenko: Attention Deficit/Hyperactivity Disorder. A Multidisciplinary Approach 1999


The National Institute for Clinical Excellence ADHD Guideline can be downloaded at www.nice.org.uk
Specific Language Impairment (SLI)

SLI refers to all children with a marked difficulty in their development of their understanding and use of spoken language.

The World Health Organisation (1993) defines it as:

- Language skills which are below 2 standard deviations for the child’s age when assessed on standardised tests.
- Language skills which are at least 1 standard deviation below their non-verbal IQ, when assessed on standardised tests.
- The child’s difficulties cannot be attributed to neurological, sensory (e.g. hearing loss) or physical impairments, nor does the child have pervasive developmental disorder (e.g. ASD).

Definitions from other sources also add that the child’s difficulties cannot be attributed to environmental or emotional factors. However, there is still debate among researchers about the most appropriate definition.

Difficulties in the above areas can affect a child’s

- **Comprehension** (understanding of spoken words and sentences),
- **Expression** (using spoken words and sentences)
- or both.

Children with SLI can have difficulties in one or more areas, and so each child may have a different profile of difficulty. Areas that might be affected include:

- **Phonology/Speech** Use of the speech sounds that make up words, including the co-ordination of the lips, tongue, palate and airflow.
- **Intonation and Stress (prosody)** – The rhythm of the way we speak
- **Syntax (grammar and phonology)** – The way that words and parts of words combine to make phrases and sentences (e.g. the ‘ed’ ending on words to form the past tense).
Specific Language Impairment, Prevalence and Indicators, Difference from Language Delay

- **Semantics** - the meaning of words, parts of words, phrases and sentences. This includes children who have difficulties with ‘word finding’ (knowing the word, but not being able to recall it).
- **Pragmatics** – Understanding how we use language in different situations and how we convey feelings. It includes social communication skills (eye contact, turn taking etc.)
- **Attention & Listening** – the ability to ignore distractions, to focus on important sounds/voices, and maintain focus for a length of time. At birth, children have fleeting attention, which develops to become single channelled, two channelled and finally their attention control is integrated. This is usually by the age of 5 years.
- **Auditory Memory** – remembering spoken information

5-7% of children will have SLI, and it is more common in boys. It is a developmental condition and may change over time. The causes are likely to be multifactorial.

Often children with SLI:-

- Have a close positive family history of specific language impairment.
- Have a mismatch between different areas of language skills (e.g. semantics and syntax) in relation to other aspects of cognitive development.
- Need specialist targeted support rather than general support.
- May have other co-occurring conditions e.g. motor/co-ordination difficulties. However, these must be excluded as the cause of the child’s difficulties.

Most children with language delay catch up with their peers around the time they enter school. These children are also known as ‘late talkers’. Other children with language delay continue to be delayed even after starting school; some of these will have SLI.
To diagnose, expertise is needed to determine if a child has SLI. It is important to build a picture of the child’s strengths and weaknesses.

Assessment often includes:

- A hearing test (by audiology)
- A test of non-verbal skills (by an Educational Psychologist)
- Assessment of the child’s speech, language and communication skills (by a Speech & Language Therapist)
- Some children will have a developmental assessment (by a Paediatrician)

The aim of the assessment is to decide whether the child’s language difficulties are specific/primary (not the result of any other difficulty) or secondary (such as the result of hearing impairment, ASD or learning difficulty).

Many children with SLI experience severe long-term difficulties. The impact of these difficulties varies depending on the severity of the problem, how early it is identified, the support the child receives, the child’s confidence, and their environment.

Children with SLI sometimes experience social and behavioural problems, which increase over time. They may be withdrawn, aggressive, have poor interaction, or be at risk of bullying.

Children who have SLI often have difficulties with accessing all areas of the National Curriculum, although their thinking skills and academic potential are better than their language skills. There is also a high rate of reading, spelling and maths difficulties amongst children with SLI. Both children with SLI and children with dyslexia often have poor phonological skills, but children with dyslexia tend to have better spoken language skills than children with SLI.
If you are concerned that a child has difficulties with their speech and language development, make a referral to the Speech & Language Therapy Service. Anyone can refer, including parents.

Contact details for Speech & Language Therapy are:

Speech & Language Therapy Department
Eldene Health Centre
Eldene
Swindon
Wiltshire
SN3 3RZ

Tel: 01793 439960

While the child is waiting to be seen, family and school staff can try the following tips:

- **Try not to ask too many questions.** Comment on what your child is doing instead. This will help children learn the meaning of words and hear how words can go together to make sentences.
- **Praise your child’s attempts at communicating.** Children need to be encouraged to try and communicate, even if they make a mistake.
- **Don’t correct mistakes.** Instead, model back how the word or sentences correctly, so they can hear how it should sound.
- **Use gestures** – Point to things you are talking about and use actions to match the words you are saying. This helps children learn the meaning of words.
- **Use short, simple sentences** – Some children find it difficult to remember long complex sentences or might not understand the grammar. They need instructions breaking down into small chunks that they can remember and understand.
- **Look at books together** – Books help children learn lots of new words, and about what a story is. The bold, colourful pictures in books also help children understand the meaning of words and provide something for you both to talk about.
Sing songs and rhymes – Singing helps children learn about rhythm and rhyme. The repetition and actions help to make learning to talk fun.

There are also several websites that might be useful:

www.literacytrust.org.uk
www.ican.org.uk
www.ican.org.uk/talkingpoint
www.talktoyourbaby.org.uk
www.afasic.org.uk

Sarah Woodhams, Registered Speech & Language Therapist

References:

Afasic (2004)