

# **DIMENSIONS OF LEARNING: Cognition and Learning Needs**

## **Introduction**

The Code of Practice defines Cognition and Learning difficulties as referring to children and young people who:

- Learn at a slower pace than their peers, even with appropriate differentiation
- Show features of moderate (MLD), severe (SLD) and profound and multiple learning difficulties (PMLD)
- Show specific difficulties learning difficulties (SpLD) with one or more aspects of learning. This encompasses a range of difficulties including: dyslexia, dyspraxia, development coordination disorder (DCD), dysgraphia and dyscalculia

## **1. SPECIFIC LEARNING DIFFICULTIES (SpLD)**

SpLD is an umbrella term which emphasises the differences that pupils display across their learning. Pupils with SpLD 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 organisational skills and with coordination. Pupils with SpLD cover the whole ability range and the severity of their impairment varies widely.

### **SPLD: Literacy difficulties**

Some children find gaining literacy skills easy whilst others struggle in the initial stages (learning or hearing sounds) or in the later stages (gaining whole word recognition or applying spelling knowledge). These children may need a multi-sensory teaching intervention and additional resources to support their literacy development. There is a responsibility for teachers to tailor provision for children with literacy difficulties using the graduated response.

Assessment of children with literacy difficulties should not only consider what the pupil can or can't do but also involves looking at teaching and learning styles of the class teacher. It is important to review interventions frequently to assess whether they are having an impact and also considering if they need to be altered to suit the needs of the child.

### **Dyslexia**

If a child is struggling with reading and writing, it is important to structure interventions so that they can make progress. Multi-sensory teaching interventions for children with literacy difficulties should be structured, cumulative and incorporate overlearning and should be suitable for most children. The lack of a dyslexia diagnosis should not prevent a child from accessing an intervention that would support their literacy development.

There has been much discussion about the nature of dyslexia and historically there has been no single agreed definition. In 2009 Sir Jim Rose's Report on 'Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties' gave the following description of dyslexia:

- *'Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling.*
- *Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed.*
- *Dyslexia occurs across the range of intellectual abilities.*
- *It is best thought of as a continuum, not a distinct category, and there are no clear cut-off points.*
- *Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia.*
- *A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the individual responds or has responded to well - founded intervention.'*

In addition to these characteristics, the British Dyslexia Association acknowledges the visual and auditory processing difficulties that some individuals with dyslexia can experience, and points out dyslexic readers can show a combination of abilities and difficulties that affect the learning process. Some also have strengths in other areas, such as design, problem solving, creative skills, interactive skills and oral skills.

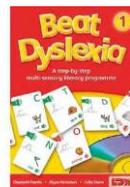
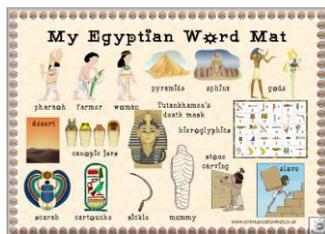
As a working definition, The British Psychological Society emphasises the need for a staged assessment process to take place. *'Dyslexia is evident when accurate and fluent word reading and/or spelling develop very incompletely or with great difficulty. This focuses on literacy learning at the 'word level' and implies that the problem is severe and persistent despite appropriate learning opportunities. It provides the basis for a staged process of assessment through teaching.'* (BPS 1999)

Dyslexic differences can occur in children of all abilities. It should be recognised that dyslexic children can demonstrate marked differences between their abilities in different areas – particularly between verbal and text-based skills – and that recognising their strengths can increase achievements. They may also have difficulties in concentration and organisation and in remembering sequences of words. They may mispronounce common words or reverse letters and sounds in words. Pupils with Dyslexia may also experience emotional and behavioural difficulties.

### **Universal Classroom Strategies to support children with literacy difficulties:**

- Introduce new vocabulary in advance and display words visually.
- Praise pupil for content and ideas in their writing.

- Provide opportunities for child to record their knowledge in different ways – role play, diagrams, flow charts, orally. Voice to text software such as Dragon Dictates could also help the child to record their ideas.
- Identify their strengths; encourage them to use them in the classroom.
- Ensure that the child has to copy from the board as little as possible.
- Do not ask the child to read aloud in class unless they specifically ask to do so.
- If the child performs slowly, reduce the amount of work he/she is given. Never take away their breaks; they need a break more than most!
- Use multi-sensory teaching approaches wherever possible.
- Provide the child with work in visual formats such as diagrams, charts, pictures and videos as they can sometimes perform well with a visual learning style.
- Ensure that there is sufficient time given to over-learning. Children will need to practise many times in order to remember and use information. They will need to be given training that will help them devise strategies to help them revise for tests.
- Ensure that homework is given on a sheet or scribed into a planner
- Assess work for content and meaning not spelling or handwriting.
- Provide short, clear instructions.
- Organise the class so that the child has a 'buddy' who can support them at appropriate times without creating a dependency on them.
- Where possible, use bullet points and not continuous prose.
- Use images to support text.
- Write clear, concise sentences and instructions.
- Use bold to highlight as italics and underlining can make words appear to run together.
- PowerPoints, handouts and whiteboards should not have white backgrounds.
- Build into the lesson plenty of opportunities to develop speaking skills as research has clarified the role this has an impact on reading and writing.
- Praise will need to be specific, 'I like the way that you...'



Writing instructions

How to

You will need

1. First you

2. Then you

3. Next

4. Finally



# COGNITION AND LEARNING NEEDS

## Literacy Difficulties

### SEN SUPPORT TARGETED

Assess, Plan, Do, Review	Curriculum and Teaching Methods	Resources
<p><b>Assess</b></p> <p>Despite cycles of Assess Plan Do Review the child is not making progress and will need a more targeted approach.</p> <p>Strengths and weaknesses are analysed through: both Curriculum-related assessment and standardised assessment for reading and spelling.</p> <p>A referral to occupational therapy or the orthoptist maybe required if specific difficulties coordination, handwriting and visual tracking are noticed.</p> <p>Pupil voice should be considered in the assessment and this should inform the plan-what strategies help and support them, what they find easy/hard Parents should be invited into school and the child's strengths</p>	<p><b>Assessment</b></p> <p>Information that teachers can draw upon to establish a clear analysis of pupil's need;</p> <ul style="list-style-type: none"> <li>-teacher's assessment and experience of the pupil,</li> <li>-information pupil progress, attainment and behaviour.</li> <li>-individual's development in comparison to their peers,</li> <li>-the views and experience of parents,</li> <li>-the child's own views</li> <li>-advice from external support services.</li> </ul>	<p>Curricular attainment analysed and reading and writing tests administered where appropriate i.e. Single Word Spelling Test, York Assessment of Reading Comprehension, and Non-Verbal Reasoning tests.</p> <p>Standardised assessments can be used for access arrangements during SATs and examinations.</p> <p>The SENCo advises on, and facilitates assessment, planning and monitoring</p>

<p>and difficulties should be discussed. Outcomes for the SEN SUPPORT Plan will be agreed</p> <p><b>Plan</b></p> <p>SEN Support plans are drawn up and use 'Smart' outcomes</p> <p>Assessment information informs further adjustments to teaching and learning that may be required as well as identifying additional interventions required.</p> <p>Further knowledge about literacy difficulties is sought</p> <p><b>Do</b></p> <p>Provide in class resources to promote independence</p>	<p><b>Handwriting</b> - Small group handwriting interventions are implemented. (See motor coordination interventions) Touch typing programmes could be used if handwriting is difficult.</p> <p><b>Spelling</b> – small group spelling interventions are delivered. In class resources provided.</p> <p><b>Reading</b> – small group interventions for reading, paired reading, use text to speech software. Extra multi-sensory phonics groups. Short overlearning activities are undertaken daily.</p> <p><b>Staff training</b></p> <p>IDP (Dyslexia) is completed by staff throughout the school</p> <p>Training from a specialist teacher from the SEN Service can be requested</p> <p>Continue to differentiate work appropriately but provide extra resources the child to be able to work independently and successfully</p> <p>Additional focus groups are used to support the child's use of organisational resources</p>	<p>Resources such as Handwriting Without Tears, Write from the Start, Speed Up! could be used. iPad applications can also be used to support handwriting i.e. Blobblewrite, Hairy letters</p> <p>Use text to speech software to allow children to access age appropriate texts- Clicker, Claread</p> <p><a href="http://www.idponline.gov.uk">www.idponline.gov.uk</a></p> <p>The Inclusion Development Programme (dyslexia) has been delivered to all staff. Specific training from SEN Service could take place to build capacity in schools to support children with literacy difficulties.</p> <p>Precision Teaching carried out daily</p> <p>Spelling mats with phoneme/grapheme correspondence, Clicker 6, ACE Spelling dictionary, talking tins, ICT and specialist software, such as 'Clicker' used, Paired reading</p>
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<p>Teach organisation and planning using key visuals/mind maps</p> <p>Allow children to use alternative ways of recording</p> <p>Interventions through small groups using evidence based interventions</p> <p><b>Review</b></p> <p>Monitoring of progress will be systematic and centred on the effectiveness of the interventions used.</p> <p>If the pupil has made sufficient progress and it is felt that they have achieved the outcomes set, it may be that they no longer need support at a targeted level and their needs can be met using universal</p>	<p>Work is recorded using- flowcharts, diagrams, voice recording, video, annotated still photographs, PowerPoints.</p> <p>Small focussed group work for children will be delivered</p>	<p>enabled</p> <p>Audio books could be provided to provide the child with age appropriate language.</p> <p>Key visuals, task planners and mind maps be used within class</p> <p>Resources provided in class</p> <p>A teacher or teaching assistant delivers small group evidence based interventions i.e. Fresh Start, Paired Reading.</p> <p>Extra Phonics groups using a multi-sensory approach are implemented. Try not place the child in a phonics group with younger children.</p> <p>Parents/carers and child or young person should be involved and inform the review process and the setting of new targets.</p>
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<p>support.</p> <p>Regular reviews are held with parents on a minimum of a termly basis and the interventions and evaluation are discussed.</p> <p>Consultation from specialists from SEN Service/ educational psychology service is sought to provide strategies and advice on further interventions.</p> <p>If the child is still not making progress, even after cycles of targeted support, a more specialised approach will need to be implemented.</p>		<p>Specialist Teachers or Educational &amp; Child Psychologists may provide advice on strategies</p>
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# COGNITION AND LEARNING NEEDS

## Literacy Difficulties

### SEN SUPPORT SPECIALIST

<b>Assess, Plan, Do, Review</b>	<b>Curriculum and teaching methods</b>	<b>Resources</b>
<p><b>Assess</b> If there has been little identified progress towards achieving outcomes, it may be necessary to adjust the outcomes and the time frame to achieve these outcomes. If 3 or 4 cycles of the graduated response have been completed then more specialist level of support will be needed.</p> <p>An in-depth analysis of strengths and weaknesses are used using more specialised tests.</p> <p><b>Plan</b></p> <p>Consultation and advice are sought from external agencies and included in the SEN Support Plan</p> <p>The SEN Support Plan is reviewed regularly, on the basis of approximately once every half term</p>	<p>External agency advice from assessments is reflected in support/ classroom</p>	<p>Use of both National Curriculum assessment and more specialised tests such as York Assessment of Reading Comprehension, Diagnostic Reading Assessment, Dyslexia Screening Test- however this is NOT a diagnostic tool.</p>



<p>School can apply for a Block of Teaching or specialist literacy assessment if 13 hours of specialist support at primary and 16 hours support for secondary can be evidenced and progress is still limited.</p>		<p>towards becoming a 'Dyslexia Friendly' environment</p> <p>A teaching assistant must be available to observe each session to build capacity within school and continue the intervention.</p>
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### Further reading:

[www.bdadyslexia.org.uk](http://www.bdadyslexia.org.uk)

<http://www.arkellcentre.org.uk/News/Pdfs/Dyslexia-Information-for-teachers-and-other-professionals.pdf>  
[www.dyslexiaaction.org.uk](http://www.dyslexiaaction.org.uk)

<http://www.thedyslexia-spldtrust.org.uk/>

<http://www.nasen.org.uk/resources/resources.supporting-pupils-with-specific-learning-difficulties.html>

Miscue Analysis guidance:

<http://repository.excellencegateway.org.uk/fedora/objects/etf:1257/datastreams/RESOURCE/content>

Identifying and Teaching Children **and Young People with Dyslexia and Literacy Difficulties 2009 Sir Jim Rose**

Dyslexia Friendly Schools Good Practice Guide British Dyslexia Association 2012

What works for children and young people with literacy difficulties Greg Brooks 4<sup>th</sup> edition 2013

How to identify and support students with DYSLEXIA: Chris Neanon 2002  
Dyslexia and Inclusion 2<sup>nd</sup> edition Gavin Reid 2012  
Dyslexia Guidance Martin Turner and Phillipa Boden 2007  
Removing Dyslexia as a Barrier to Achievement Neil McKay– third edition 2012

## COGNITION AND LEARNING NEEDS

### Specific Learning Difficulties –

### Mathematics Difficulties

**It is likely that at least 15% to 20% of the population have difficulties with certain aspects of arithmetic. It is thought that there is a much smaller percentage who have severe specific difficulties with mathematics and these individuals could be considered as dyscalculic. (What Works for Children with Mathematic Difficulties DfES 2009)**

The Department for Education defined dyscalculia in 2001 as:

‘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.’

Pupils with dyscalculia have difficulty in acquiring mathematical skills. They may have difficulty understanding simple number concepts, lack an intuitive grasp of numbers and have problems learning number facts and procedures.

- Dyscalculia and dyslexia occur both independently of each other and together. The strategies for dealing with dyscalculia will be fundamentally the same whether or not the learner is also dyslexic.

### Universal Support for Mathematics

It is important to take time to observe what the child is doing and where they are making mistakes within the process so that you can focus your teaching more effectively.

#### Universal support for children with mathematics difficulties:

- Revise basic concepts frequently.
- Start lessons using an activity with concrete resources before writing down calculations. Let the children touch, feel and manipulate the concrete resources.
- Provide lots of counting activities beginning at different starting points. Use objects for counting forwards and backwards.

- Break topics down into small steps
- Minimize the number of strategies that a child has to consider
- Have children make up their own number problems
- Use IT to reinforce learning - Numbershark, [www.gogomathsgames.com](http://www.gogomathsgames.com), [www.topmarks.co.uk](http://www.topmarks.co.uk)
- Make deliberate mistakes and allow the children to correct you.
- Be explicit in teaching topics- don't presume that children have understood prior learning objectives
- Maths symbols can look alike so :Position symbols around the room to distinguish between them, play snap games to help pupils recognise differences in signs and make sure that maths sheets and text books are not too busy.
- Vocabulary- Pre-teach specific mathematic vocabulary, use vocabulary mats and have displays of maths focus vocabulary available, accompany vocabulary with pictures to reinforce understanding and vary the vocabulary that you use frequently e.g. use add, more than, increase, plus.
- Retaining Mathematic knowledge can be difficult for some children and they may have weak visual and auditory memories. Spread out 'memory' work- little and often, use flow charts to outline processes, use memory cues like gestures and movement to help. Use short, simple instructions and ask the pupil to repeat them back.
- Verbally reinforce the steps involved: songs, games, rhymes e.g. I ate and ate 'til I was sick on the floor  $8 \times 8 = 64$ .
- Sequencing difficulties may arise with patterns and sequencing numbers. Play games that emphasise the sequential nature of numbers, use base ten blocks or coins to support the transfer of a learnt sequence 90, 80, 70... to a modified sequence 92, 82, 72...., Specifically teach the children to look for patterns within numbers and encourage them to use their prior knowledge to work out answers i.e. using derived facts.
- Make all maths teaching Multi-sensory learning experiences - Visual, kinaesthetic and auditory strategies, use 3d props to help reinforce concepts, let the pupil use concrete apparatus for as long as they need it and encourage children to talk through problems.
- Make Maths meaningful and fun! There is a wealth of games and activities to promote maths enjoyment.
- Try to relate mathematics as practically as possible to real life contexts and provide opportunities for them to use their skills – real life shopping experiences, measuring areas with tape measures, rulers, and trundle wheels.

- Play games that teach the concept you would like them to learn.
- Focus on games and activities not worksheets
- Examples of concrete resources to support mathematical learning: multilink cubes, Diennes, numberlines, dice, fraction tiles, Numicon

**(Mathematics difficulties)**

**SEN SUPPORT TARGETED**

<b>Assess Plan Do Review</b>	<b>Curriculum and Teaching Methods</b>	<b>Resources</b>
<p><b>Assess</b></p> <p>Despite cycles of Assess Plan Do Review the child is not making progress and will need a more targeted approach.</p> <p>Base-line assessment is undertaken to outline and target areas of strengths and weaknesses. Assessments may include curriculum-based, criterion-referenced or norm-referenced test.</p> <p>Assessments may include:</p> <ul style="list-style-type: none"> <li>• Sandwell Early Numeracy Test</li> <li>• Basic Number Screening Test</li> </ul> <p>Pupil voice should be considered in the assessment and this should inform the</p>	<p>Assessment in class and through Standardised tests to be completed and appropriate outcomes included in support plan.</p> <p>Pupil voice is obtained and a one page profile is created</p>	<p>Sandwell Early Numeracy Test</p> <p>Overcoming Barriers in Maths</p> <p>Basic Number Screening Test</p>

<p>plan- what strategies help and support them, what they find easy/hard</p> <p>Parents should be invited into school and the child's strengths and difficulties should be discussed. Outcomes for the SEN SUPPORT Plan will be agreed</p> <p><b>Plan</b></p> <p>SEN Support plans are drawn up and use 'Smart' outcomes</p> <p>Assessment information informs further adjustments to teaching and learning that may be required as well as identifying additional interventions required.</p> <p>Further knowledge about maths difficulties is sought from Education and Child Psychology Team</p> <p>Small Group Maths intervention groups are implemented</p> <p><b>Do</b></p> <p>Provide in class resources to promote independence</p> <p>Provide more able 'buddy' for peer support</p>	<p>Access to work subject/buddy</p> <p>Provide concrete materials for the children to use- don't expect them to automatically get them independently</p> <p>Small group focussed support during Numeracy lessons</p> <p>Model Interventions for groups and/or individual pupils</p> <p>Grouping arrangements or additional support in the classroom are used flexibly to promote independent learning</p> <p>The use of 'over-drilling' and Direct Instruction strategies</p>	<p>Teacher meets with parents</p> <p>Small Group Targeted Maths interventions led by a teacher or teaching assistant include:</p> <p>Number Shark</p> <p>Numicon – a multi-sensory Maths teaching programme Foundation Stage KS1 and 2</p> <p>Maths Recovery</p> <p>Dyscalculia Toolkit</p> <p>Overcoming barriers with Mathematics</p> <p>Talking Maths</p> <p>BEAM- Be a Mathematician</p> <p>1stClass@number</p>
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<p>Interventions delivered through small groups using evidence based interventions</p> <p><b>Review</b></p> <p>Monitoring of progress will be systematic and centred on the effectiveness of the interventions used.</p> <p>If the pupil has made sufficient progress and it is felt that they have achieved the outcomes set, it may be that they no longer need support at a targeted level and their needs can be met using universal support.</p> <p>Regular reviews are held with parents on a minimum of a termly basis and the interventions and evaluation are discussed.</p> <p>Consultation from the educational psychology service is sought to provide strategies and advice on further interventions</p>	<p>Support Services: Support SENCo in training in the use of assessment tools</p> <p>Parents/carers should be involved in discussions related to assessment results</p> <p>Pupils should be involved in target setting and monitoring of progress</p>	
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## Specific Learning Difficulties - Mathematics

### SEN SUPPORT SPECIALIST

<b>Assessment, Planning &amp; Review</b>	<b>Additional Human Resources</b>	<b>Curriculum and Teaching Methods</b>
<p><b>Assess</b></p> <p>If there has been little identified progress towards achieving outcomes, it may be necessary to adjust the outcomes and the time frame to achieve these outcomes. If 3 or 4 cycles of the graduated response have been completed then more specialist level of support will be needed.</p> <p>An in-depth analysis of strengths and weaknesses are used using more specialised tests.</p> <p>Pupil voice should be considered in the assessment and this should inform the plan- what strategies help and support them, what they find easy/hard</p> <p>Parents should be invited into school and the child's strengths and difficulties should be discussed. Outcomes for the SEN SUPPORT Plan will be agreed</p> <p><b>Plan</b></p> <p>Consultation and advice are sought from</p>	<p>The SENCo is responsible for liaising with staff and for the implementation and monitoring of the IEP</p> <p>Access to considerable small group/in class teacher/TA support</p> <p>Parents/carers should be involved in discussions related to assessment results</p> <p>Pupils should be involved in outcome setting and monitoring of progress</p>	<p>The Dyscalculia Assessment Jane Emerson and Trish Babbie</p>

<p>external agencies</p> <p>The SEN SUPPORT plan should reflect the advice and recommendations of any external agencies</p> <p>Recommendations, delivery methods and evaluation techniques are explicit in SEN SUPPORT PLAN and 'SMART', carefully considered. Outcomes continue to be used and are monitored and reviewed regularly.</p> <p><b>Do</b></p> <p>A more specialised maths intervention programme is delivered on a one to one basis</p> <p><b>Review</b></p> <p>Monitoring of progress will be systematic and centred on the effectiveness of the interventions used.</p> <p>If the pupil has made sufficient progress and it is felt that they have achieved the outcomes set, it may be that they no longer need support at a specialist level and their needs can be met using universal/targeted support.</p> <p>Regular reviews are held with parents on a minimum of a termly basis and the interventions and evaluation are discussed.</p>	<p>A teaching assistant/ teacher must deliver the programme in a quiet environment in a one to one basis</p>	<p>Multi-sensory teaching programmes:</p> <p>Numicon</p> <p>Unicorn Maths</p> <p>Power of 2</p> <p>The Dyscalculia Toolkit</p> <p>Five minute box</p>
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Consultation from the educational psychology service is sought to provide strategies and advice on further interventions		
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### **Further Reading**

IT and Maths

<http://bdatech.org/learning/i-c-t-numeracy-and-maths/>

Support for Parents

<http://www.ronitbird.com/wp-content/uploads/2013/09/toptentips.pdf>

Assessment tools:

<http://www.gl-assessment.co.uk/products/dyscalculia-screener>

The Dyscalculia Assessment Jane Emerson and Patricia Babbie 2013

Overcoming Difficulties with Number Ronit Bird 2009

Dyscalculia Toolkit Ronit Bird 2013

The Dyscalculia Resource Book Ronit Bird 2011

# COORDINATION DIFFICULTIES

## MOTOR COORDINATION DIFFICULTIES

Some children do not achieve typical developmental milestones. There could be several reasons for this such as social, hereditary and environmental factors. This must be considered when considering whether a child is not meeting an age appropriate skill.

In addition, a child with a learning difficulty for example, may be of eight years of age, and working at a learning age of 5. Therefore it will be expected that their motor skills will be at age 5 even though the child is eight years of age.

Further information regarding Motor Skills and when to refer children to the Occupational and Physiotherapy Service can be found in The Handbook for Refers from Bridgewater Community Healthcare:

<http://www.bridgewater.nhs.uk/wp-content/uploads/2013/02/Motor-Skills-Handbook-for-Referrers1.pdf>

There will be children within the school population who present with motor coordination difficulties which cannot be attributed to either a medical condition or a learning difficulty. These children may need referral to the Bridgewater occupational therapy services if there still not making progress with these skills after targeted interventions.

## DEVELOPMENT COORDINATION DISORDER

The Diagnostic and Statistical Manual – V (DSM-V) classes DCD as a specific difficulty associated with marked impairment in the development of motor coordination.

Pupils with DCD are affected by an impairment or immaturity of the organisation of movement, often appearing clumsy. Gross and fine motor skills are hard to learn and difficult to retain and generalize. Pupils may have poor balance and coordination and may be hesitant in many actions (running, skipping, hopping, holding a pencil, doing jigsaws, etc.). Their articulation may also be immature and their language late to develop. They may also have poor awareness of body position.

DCD is recognised when the impairment significantly interferes with academic achievement or activities of daily living; when the difficulties are not associated with a medical condition (e.g. cerebral palsy); the difficulties are in excess with those normally associated with general learning difficulties; they are not an acquired difficulty but have been present since childhood.

Children with developmental coordination disorder have difficulties with motor coordination compared to other children the same age. Some common symptoms include:

- Clumsiness
- Delays in sitting up, crawling, and walking
- Problems with sucking and swallowing during first year of life
- Problems with gross motor coordination (for example, jumping, hopping, or standing on one foot)
- Problems with fine motor coordination (for example, writing, using scissors, tying shoelaces, or tapping one finger to another)

There is quite often an overlap of DCD with ADHD, Dyslexia, and Social Communication Difficulties and, therefore, may be present in all or some of the categories of need described in the Code of Practice.

Dyspraxia is a condition that there is no internationally agreed formal definition. In the UK however it is often used to refer to the DCD condition.

## **Glossary of terms used in relation to Motor Difficulties**

Gross Motor Skills – are involved in the movement and coordination of the arms, legs and other large body parts during movements.

Fine Motor Skills - are involved with the coordination of small muscle movements.

Proprioception- refers to the body's ability to sense movement with joints and joint position. The ability enables us to know where our limbs are in space without having to look.

Motor Planning- is the ability to plan the movements needed to carry out a particular activity.

Gait - a person's manner of walking.

Core stability - The capacity of the muscles of the torso to assist in the maintenance of good posture and balance especially during movement.

Bilateral integration- is the ability to use both sides together in a coordinated way in activities.

Crossing the mid-line – means that a body part is able to spontaneously move over to the other side of the body to work there.

Automaticity - a process that is carried out rapidly and without effort or intention.

Hypermobility- An increase in the normal range of joint movement. This may cause instability

Asymmetrical tonic neck reflex (ATNR) is a primitive reflex found in new born humans but normally vanishes around three months of age. When the face is turned to one side, the arm and leg on the side to which the face is turned extend and the arm and leg on the opposite side flex.

Visual Motor Integration- is the coordination and assimilation of visual information and fine motor movement. It allows eyes and hands to work together in a smooth, organised efficient way.

Hand eye coordination is the ability to perform tasks that involve coordinating the movement of the hands and eyes i.e. catching or hitting a ball

Visual Spatial relations is the ability to perceive the position of two or more objects in relation to each other and in relation to your own self.

### **Universal Strategies for motor coordination difficulties**

- Use multiple and short sessions for interventions as 'little and often' is best for learning e.g. five minutes handwriting practice every day rather than one long session per week.
- Set up a variety of practice situations - e.g. different activities for fine motor skills: one handed tasks such as constructing jigsaws, picking up pegs; two-handed activities such as using scissors, handwriting, threading, sand/rice trays
- Break down tasks into smaller units to be learned; ensure that the child knows what they are working towards and what the end goal looks like e.g. the different components in learning to bat in a game of rounders.
- Use movement for other goals, moving to learn as in cooperative games for social skills - encourage socially appropriate opportunities for movement.
- Make it easy for the child to join in appropriate activities at school.
- Differentiate activities so that they gradually increase in difficulty e.g. at first the child may catch a large ball with two hands then gradually reduce the size of the ball or increase the distance.
- Where support is available (e.g. from a teaching assistant), encourage progress by gradually reducing the level of support as the child becomes more confident and starts to succeed.
- Give the child choice of activities, recognising that this may require a greater range than we typically see e.g. dance or martial arts may be preferable to team games.

- Encourage partner work with a friend who is empathetic yet challenging.
- Praise the child for effort as well as achievement.
- Don't just tell the child they need to improve – show them explicitly how!
- When transitioning to a new school, ensure there is support available for moving between classes.
- Provide task planners, writing frames to help with organisation
- Allow short breaks in the middle of long sessions to aid concentration
- Try not to place children on chairs without backs
- Keep children away from windows or in the middle of the classroom where they aren't distracted by visual and auditory information
- Ensure a visual timetable is in place.
- Have spare pens and equipment that you can lend out easily
- Incorporate fine motor skills activities into lessons, they should be fun and all children will enjoy them
- Be specific with praise as children with low self-esteem will become desensitised to generic positive comments
- Provide a reasonably quiet work environment
- Provide resources to enable an efficient pencil grip : Pencil grippers, triangular pencils, grotto grips,

## COGNITION AND LEARNING NEEDS

### Developmental Coordination Disorder (Dyspraxia)

#### SEN SUPPORT TARGETED

<b>Assess Plan Do Review</b>	<b>Curriculum and teaching methods</b>	<b>Resources</b>
<p><b>Assess</b></p> <p>Despite cycles of Assess Plan Do Review the child is not making progress and will need a more targeted approach.</p> <p>Base-line assessment of fine and gross motor skills is undertaken to outline and target areas of strengths and weaknesses.</p> <p>Pupil voice should be considered in the assessment and this should inform the plan- what strategies help and support them, what they find easy/hard</p> <p>Parents should be invited into school and the child's strengths and difficulties should be discussed. Outcomes for the SEN SUPPORT Plan will be agreed</p> <p><b>Plan</b></p> <p>SEN Support plans are drawn up and use 'SMART' outcomes</p>	<p>Parents/carers should be involved in discussions related to assessment results</p> <p>Pupils should be involved in target setting and monitoring of progress</p> <p>An assessment is undertaken of those physical and social environments that may become barriers to learning</p>	

<p>Assessment information informs further adjustments to teaching and learning that may be required as well as identifying additional interventions required.</p> <p>Further knowledge about DCD difficulties is sought from Bridgewater OT/ Physiotherapy Handbook</p> <p>Advice is sought by the SENCo from external agencies, such as Specialist Teachers, Educational &amp; Child Psychologists, Community Paediatrician</p> <p><b>Do</b> Provide in class resources to promote independence and to enable children to be successful</p> <p>Provide small group sessions for interventions</p> <p>Provide more able 'buddy' for peer support</p> <p>Provide opportunities for child to record their knowledge in different ways – role play, diagrams, flow charts, orally. Voice to text software such as Dragon Dictates could also help the child to record their ideas.</p>	<p>Adult led support from a Teaching Assistant/teacher during curriculum areas that involve gross and/or fine motor skills</p> <p>Targeted short interventions are implemented 'little and often'</p>	<p>Brain Gym</p> <p>Examples of Handwriting group interventions: Theodorescue Write from the Start, Speed up! Hand, The Handwriting</p> <p>Balance- Balance Boards/platforms</p> <p>Fine motor skills- tweezers, theraputty,</p> <p>Motor skills development- Rainbow Road</p> <p>Improving concentration – Fidget Busters Sharon Drew and Liz Atter, Sit n move cushions, fiddle toys</p> <p>Hand eye coordination- Pattern Boards,</p>
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**Review**

Monitoring of progress will be systematic and centred on the effectiveness of the interventions used.

If the pupil has made sufficient progress and it is felt that they have achieved the outcomes set, it may be that they no longer need support at a targeted level and their needs can be met using universal support.

Regular reviews are held with parents on a minimum of a termly basis and the interventions and evaluation are discussed.

Consultation from the educational psychology service is sought to provide strategies and advice on further interventions

## COGNITION AND LEARNING NEEDS

### Developmental Coordination Disorder

#### SEN SUPPORT SPECIALIST

Assessment, Planning & Review	Curriculum and teaching methods	Resources
<p><b>Assess</b></p> <p>If there has been little identified progress towards achieving outcomes, it may be necessary to adjust the outcomes and the time frame to achieve these outcomes. If 3 or 4 cycles of the graduated response have been completed then more specialist level of support will be needed.</p> <p>An in-depth analysis of strengths and weaknesses are used using more specialised tests.</p> <p>On-going assessment of gross and fine motor skills is undertaken, using observation and discussion and specialist assessments are undertaken.</p> <p>If cycles of Assess Plan Do Review have been implemented and the child is still not made progress the child could be referred to Bridgewater for more specialist interventions</p>	<p>Support from a Teaching Assistant during tasks involving handwriting</p> <p>Assessment and Advice is sought by the SENCo from external agencies, namely Occupational Therapy, Physiotherapy and Educational &amp; Child Psychology</p>	<p>Examples of these are: ABC Movement Battery, DASH Handwriting Assessment</p> <p>Complete Sensory Processing Questionnaire</p> <p>The use alternative recording methods</p> <p>Guidance and support during physical education lessons</p> <p>The use of an amanuensis during public examinations</p>

<p>Adaptations of the physical environment of the class room are explored</p> <p><b>Plan</b></p> <p>SEN SUPPORT PLAN reflects the advice and recommendations of external agencies and assessments</p> <p>A Risk Assessment is undertaken if necessary</p> <p><b>Do</b></p> <p>Implement one to one specific programme.</p> <p><b>Review</b></p> <p>Monitoring of progress will be systematic and centred on the effectiveness of the interventions used.</p> <p>If the pupil has made sufficient progress and it is felt that they have achieved the outcomes set, it may be that they no longer need support at a specialist level and their needs can be met using universal/targeted support.</p> <p>Regular reviews are held with parents on a minimum of a termly basis and the interventions and evaluation are discussed.</p>	<p>Parents/carers should be involved in discussions related to assessment results</p> <p>Pupils should be involved in target setting and monitoring of progress</p> <p>Necessary supervision during unstructured times of the school day, such as breaks and lunchtimes</p>	<p>Specialist one to one programmes are implemented. Examples of these are:</p> <p>Handwriting without tears</p> <p>SMART MOVES Motor Skills Development Programme</p> <p>Structured recommended exercises</p>
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Consultation from the educational psychology service is sought to provide strategies and advice on further interventions		
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### **Further Reading**

<http://www.movementmattersuk.org/dcd-dyspraxia-adhd-spld/developmental-disorders-documentation/help-for-primary-schools.aspx>

<http://www.dyspraxiafoundation.org.uk/>

**Development Dyspraxia: Identification and Intervention: A Manual for Parents and Professionals Madeline Portwood 1999**

**Caged in Chaos Victoria Biggs 2014**

**Dyspraxia: Developmental Co-ordination Disorder Amanda Kirby 2006**

<http://www.nha-handwriting.org.uk/about-nha/providing-help/books-resources>