

### **Solihull LA**

# Pathways to the Identification of Dyslexia, Dyscalculia and Developmental Co-ordination Disorder (Dyspraxia)

Date: Autumn 2020

### **CONTENTS**

Page 3	Purpose, Principles and Policy Statement
Page 4	Dyslexia
Page 10	Dyscalculia
Page 16	Developmental Coordination Disorder (Dyspraxia)
Page 19	Notes on Dysgraphia
Page 20	The Role of the School
Page 21	The Role of Solihull Local Authority
Page 21	The Role of Private Educational Psychologists, Clinical
	Psychologists and Specialist Teachers
Page 22	Provision in Solihull
	*****
Page 23	Appendix 1 - Dyslexia-friendly classroom strategies
Page 25	Appendix 2 - Literacy Checklists/Screeners and Skills
	Assessments
Page 26	Appendix 3 - Wave 2/3 Intervention suggestions
Page 28	Appendix 4 - Parent/Carer Questionnaire for Dyslexia or
	Dyscalculia assessment
Page 30	Appendix 5 - Sample pupil voice questionnaire
Page 31	Appendix 6 - Referral process and checklist
Page 32	Appendix 7 - Dyslexia pathway at a glance
Page 33	Appendix 8 - Wave 1 numeracy teaching strategies
Page 34	Appendix 9 - Maths Skills Checklists/Dyscalculia Screeners
Page 35	Appendix 10 - Wave 2/3 Maths and Numeracy Skills
	Interventions
Page 36	Appendix 11 - Dyscalculia pathway at a glance
Page 37	Appendix 12 - References

### **PURPOSE and PRINCIPLES**

### Solihull Local Authority (LA) has produced this document in order to:

- Promote the inclusion of children and young people (CYP) with specific learning difficulties in local mainstream schools.
- Provide clarity regarding the definitions of dyslexia, dyscalculia, dyspraxia/ developmental coordination disorder (DCD) adopted by Solihull LA.
- Ensure schools, parents and the LA are clear in the roles they play in supporting and recognising those CYP requiring formal identification of their specific learning difficulties.

### Solihull LA believes that:

- CYP with special educational needs should ordinarily have their needs met in mainstream schools or settings. This applies to those with a specific learning difficulty (SpLD).
- CYP with a SpLD should be offered full access to a broad, balanced and relevant education, with additional intervention and support, as appropriate.
- The views of the pupil should always be taken into account when support and assessment are being considered.
- Parents and carers have a vital role to play in supporting their child's education.

Solihull LA's guidance is based on the principles of the SEND Code of Practice which:

"...provides a set of fundamental guiding principles and a framework of support for pupils with special educational needs, including specific learning difficulties which affect one or more specific aspects of learning. This encompasses a range of conditions such as **dyslexia**, **dyscalculia** and **dyspraxia/DCD**. The majority of pupils' needs can be met within their educational settings at SEN Support but some pupils may have more significant and complex needs that require a Statement of Special Educational Needs or an Education, Health and Care Plan."

(SEND Code of Practice (CoP), DfE, 2014)

It is recognised by the LA that there are many overlaps between specific learning difficulties and that CYP with dyslexia, dyscalculia and/or DCD may often have co-occurring difficulties.

### Dyslexia

### **DEFINITION**

Solihull LA recognises well-established research evidence which demonstrates that dyslexia is a specific learning difficulty that can occur in children of all abilities<sup>1</sup> and that the identification of dyslexia does not rely on identifying a discrepancy between a child's overall cognitive abilities and their literacy skills. Solihull LA therefore supports the following working definitions of dyslexia:

"Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling."

(Rose Review, 2009)

"Dyslexia is evident when accurate and fluent word reading and/or spelling develops 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."

(British Psychological Society, 1999)

Solihull LA also shares in the widely accepted views that:

- Dyslexia is best thought of as a continuum with no clearly defined cut-off points.
- CYP with dyslexia commonly have difficulties in phonological awareness<sup>2</sup>
   memory<sup>3</sup> and processing speed.
- Co-occurring difficulties may be seen in aspects of language, motorcoordination, visual perception (including visual<sup>4</sup> and sequential memory) and/or personal organisation.
- A good indication of the severity and persistence of dyslexic difficulties can be gained by examining how the pupil responds, or has responded to, targeted intervention over time.

<sup>3</sup> e.g. Alloway and Alloway (2010),

<sup>&</sup>lt;sup>1</sup> e.g. Vellutino, Fletcher, Snowling & Scanlon (2004)

<sup>&</sup>lt;sup>2</sup> e.g. Snowling (2006)

<sup>&</sup>lt;sup>4</sup> e.g. Goudlandris & Snowling (1991) and Huestegge et al (2014)

### **ASSESSMENT**

The SEND CoP 2015 and the Rose Report 2009 both advise that assessment should not be regarded as a single event but as a continuing process, beginning in the classroom, as part of the graduated approach. Solihull LA promotes the use of three levels of assessment, as outlined in the Rose Report:

- 1. Monitoring of Progress
- 2. Skills Assessment
- 3. Comprehensive Assessment

### 1. Monitoring of Progress

As part of universal provision, Solihull LA expects schools to adopt 'Dyslexia-friendly' classroom practices (see Appendix 1). It would also expect schools to take steps to upskill their staff, through training, to create an environment where resources and strategies are used thoughtfully, to enable those children with literacy-learning difficulties to access a broad and balanced curriculum and to make good progress. It would be assumed that, in the first instance, a CYP who is not making the anticipated level of progress in literacy – despite appropriate adjustments and support in the classroom – be identified by the class teacher.

It would be appropriate at this point to use a **checklist** or **screening tool** (*see Appendix 2*) to tease out what the child can and cannot do, and the reasons why they may be finding a particular task difficult. It would then be pertinent to ensure that **classroom provision and additional interventions are targeting the child's** *exact* **<b>needs** e.g. phonological skills (e.g. awareness of rhyme, ability to segment/blend); sight word recognition; spelling etc. (*see Appendix 2 for suggestions*). At this stage, it would be important to liaise with the CYP's parents/carers and to ascertain their views.

NB. If it is hypothesised that dyslexia is present, it is important to keep an open mind and consider assessment based on emerging evidence, rather than one that seeks support for a predetermined view.

Rigorous ongoing assessment, tracking and monitoring of the CYP's progress would be expected over the subsequent weeks/months; this may be recorded on an

Individual Education Plan, provision map or similar document. The CYP's response to regular, evidence-based support is highly relevant to the identification of dyslexia.

### 2. Skills Assessment

Where progress is not made, it would then be expected for a **more detailed skills** assessment to be undertaken. This could be done by the school's SENCO although, the SEND CoP advises that:

"Where a pupil continues to make less than expected progress, despite evidence-based support and interventions that are matched to the pupil's area of need, the school should consider involving specialists including those secured by the school itself, or from outside agencies."

(SEND CoP, 2015 page 102)

The skills assessment, carried out at this stage, is useful in establishing whether the CYP is experiencing word-level difficulties and difficulties with 'dyslexia-sensitive' skills, in comparison to similar aged peers. It would serve to ensure that further recommendations for support are more highly individualised, and that any additional intervention is appropriate, with adaptations made as necessary. (See Appendix 2 for more details regarding the content of a skills assessment.)

During the subsequent **period of personalised Wave 3 intervention** (*see Appendix 3*), where concerns remain, the SENCO should begin to **collate additional information** required in order to refer the CYP for a comprehensive assessment, to ascertain whether their learning profile could be described as dyslexia. Gaining relevant background information from parents/carers would also be expected at this point e.g. health and developmental history, as well as the CYP's views (*see Appendices 4 and 5*).

### 3. Comprehensive assessment

Finally, the expectation is that a **comprehensive diagnostic assessment** be carried out by either an AMDBA-qualified specialist teacher with a current Assessment Practicing Certificate (APC) or an HCPC registered educational psychologist. At present, Solihull LA's Communication and Learning Difficulties (CLD) team (part of the Specialist Inclusion Support Service) provides this service, rather than the Community Educational Psychology Service. Settings who have a contract with the CLD team can request an

assessment from their annual allocation of hours, or this assessment can be spotpurchased.<sup>5</sup>

NB. Given that many of the difficulties experienced by CYP with dyslexia are developmentally typical at a young age, the LA does not feel it is appropriate to conduct a comprehensive assessment to identify dyslexia before the child is at least 7 years old. Ordinarily, it would be recommended that a child is also given time to 'settle' if they have transferred to a junior school from an infant setting; therefore in these cases it may be appropriate to wait until the spring term of year 3 at the earliest.

Before this diagnostic assessment, as part of the referral (*see Appendix 6*), school will need to provide the assessor with sufficient evidence that sizable and sustained efforts have been made to address the pupil's literacy difficulties, and that they are confident that other causes of literacy difficulties have been ruled out e.g. more generalised language difficulties, poor attendance, substantial difficulties with concentration/attention, English as an additional language etc.

Whilst there are stringent guidelines relating to the process and content of an assessment for dyslexia, and regarding the way in which the report is written, the Division of Educational and Child Psychology (DECP) notes that no one test can be considered obligatory. It should also be noted at this point that:

- No particular pattern of test scores can be regarded as necessary or sufficient in deciding whether and to what extent learning difficulties can be described as dyslexic;
- Whilst an IQ test is recommended by the SpLD Assessment and Standards Committee (SASC), it is not necessary to determine whether a pupil does or does not have dyslexia.

The comprehensive assessment report, in line with guidance provided by SASC in 2019, will ordinarily include:

<sup>&</sup>lt;sup>5</sup> Please email <u>joanne.shilton@solihull.gov.uk</u> for more details.

Cover sheet	CYP's details
	Assessor's details (including APC number)
Overview	Summary of the findings including results of assessments,
	diagnostic outcome and key recommendations
Background	Health and developmental history
Information	<ul> <li>Language development (including details of EAL status, if appropriate)</li> </ul>
	Educational factors e.g. frequent change of school,
	attendance
	Social, emotional and mental health factors
	• Current situation i.e. reported strengths and weaknesses in
	literacy, numeracy, memory, attention, speech/oral
	communication skills, language, social skills, organisation,
	attention/concentration etc.
	CYP's interests and aspirations
Cognitive abilities	Working and auditory memory
	Phonological processing: phonological awareness,
	phonological memory and rapid symbolic naming
	Speed of processing: phonological and/or visual
	Verbal and visual/non-verbal abilities
Additional evidence	Visual perceptual skills including visual and/or sequential
and information	memory
	Visual difficulties: tracking, discomfort and disturbance
	Motor difficulties
	Attention-related difficulties
	Receptive and/or expressive language skills
	Numeracy difficulties
Attainment	Reading skills: single word reading, text-level reading
	accuracy, reading speed and comprehension
	Other subskills involved in reading (e.g. letter-sound)
	correspondence) may be tested as required and dependent
	on the age of the CYP
	• Spelling
	Writing skills

Confirmation of	•	The identification of dyslexia will be made when the
diagnostic decision		qualitative and quantitative evidence in the assessment
		report maps to the definitions adopted by the LA and
		included in this policy document.
Recommendations	•	For settings e.g. at Wave 1, small group, individual
		teaching etc.
	•	Suggestions for home
	•	Access arrangements for examinations
Appendices	•	Explanation of statistical terms
	•	Summary of test results
	•	Definitions of dyslexia
	•	Test references and descriptors
	•	Further references

To summarise the pathway to identification, see *Appendix 7*.

### Dyscalculia

### **DEFINITION**

Although it is widely accepted that dyscalculia is a specific and persistent difficulty with the concept of number, currently there is no internationally agreed definition. The LA adopts the DSM-V (2013, USA) definition, which describes dyscalculia as:

"Difficulties in production or comprehension of quantities, numerical symbols, or basic arithmetic operations that are not consistent with a person's chronological age, educational opportunities, or intellectual abilities."

The LA also accepts the DfES (2001) definition of developmental dyscalculia 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."

Whilst dyscalculia is a specific learning difficulty with numeracy, characterised by a lack of 'number sense', it should be remembered that problems acquiring maths skills can result from other several other factors – or a combination of factors – and not just dyscalculia. For example:

- A CYP can have a specific learning difficulty with maths, but without the aforementioned core difficulty with number.
- Other specific learning difficulties are known to impact upon maths skill
  development e.g. dyslexia: working memory issues might impact on the ability
  to complete many maths-related problems; dyslexia and/or language difficulties
  may impact upon the understanding and interpretation of worded questions;
  learning differences associated with dyspraxia may impact upon the organisation
  of work and could affect sequencing skills etc.
- Environmental factors are known to play an important part in maths learning:
- Given the extent to which maths learning is cumulative, prolonged absence/sporadic attendance can have a huge impact on skill development; if one element is missed or insecure, the impact can be serious and wide-ranging.

- A pupil with weak concentration and attention skills may well struggle to develop sound maths and numeracy skills.
- Negative attitudes, lack of self-belief and maths-related anxieties can also all have an impact upon skill development.

### The LA also accepts that:

- Maths difficulties are best of thought of as wide-ranging spectrum, not a distinct category. Dyscalculia does not simply fall at the extreme end of a continuum; it is a specific difficulty with maths which is characterised by the fundamental inability to recognise the number of things in a small set (subitise) and to judge or compare quantities. It is also suggested that these difficulties often occur alongside weaknesses in visual spatial abilities and working memory systems.
- Chinn (2004) has added other aspects to dyscalculia, such as the difficulty of retrieving number facts quickly, even if they have been successfully learned.
- Dyscalculia can occur singly but is known to co-occur with other specific learning difficulties and medical conditions.

### **ASSESSMENT**

To identify dyscalculia, the LA would promote as good practice the three levels of assessment, over time, as detailed in the Rose Report (2009) for identifying dyslexia:

- 1. Monitoring of Progress
- 2. Skills Assessment
- 3. Comprehensive Assessment

The LA also pays due regard to the SASC Dyscalculia Working Party guidelines (2019) which state clearly that five criteria need to be met for identification of dyscalculia to take place. Additionally, the LA also recognises that assessment is complex and that not everyone who has difficulties with number will have dyscalculia (PATOSS, 2013).

### 1. Monitoring of Progress

As part of universal provision, Solihull LA expects schools to ensure that the teaching of mathematics is of a consistently high quality. The maths curriculum should be structured and cumulative, with lessons planned to ensure pupils "develop fluency,

mathematical reasoning and competence in solving increasingly sophisticated problems" (DfE, 2014). In key stages 1 and 2 (and beyond, as appropriate) the expectation is that pupils have access to multi-sensory learning experiences in order to support the development of their sense of number and to consolidate their learning of basic facts.

Through rigorous monitoring, schools should identify early on those pupils struggling to progress at the expected rate. In these cases, Wave 1 strategies and resources should be implemented (*see Appendix 8*) and additional provision should be put into place. This might be in the form of 'booster' sessions, pre-/post- teaching groups or targeted support. (*See Appendix 10 for suggested interventions*.)

To support the choice of intervention and to gain a clearer picture of the pupil's strengths and weaknesses, it is essential to complete a profiling tool at this stage. The LA recommends using the SNAP SpLD or the BDA Neuroprofiler, and/or an informal maths-difficulties checklist, although it is important to note that by using the latter in isolation, other difficulties (e.g. with language, attention or literacy skills) would not be picked up. (See Appendix 9 for more details on maths skills checklists.)

### 2. Skills Assessment

Where progress is not made, despite additional support and intervention, it would then be expected for a **more detailed skills assessment** and a **dyscalculia screener** to be administered (*see Appendix 9*) by a specialist teacher. The tasks involved in these aim to establish whether or not key deficits implicated in dyscalculia are present. Some tests may also help to establish if there are other factors involved in the pupil's difficulties acquiring numeracy and maths skills.

At this point in the graduated approach, schools should ensure that they are secure in their knowledge that factors such as wider language needs, difficulties associated with dyslexia or DCD (e.g. poor working memory, sequencing or recording skills), sporadic attendance or weak concentration, for example, are not the cause of the pupil's difficulties acquiring numeracy skills.

The report produced by the specialist teacher will summarise the findings and include recommendations for the pupil, school and home in terms of further intervention. It

may also suggest that, if difficulties persist, despite more tailored support, a more comprehensive assessment of need be undertaken, to determine whether or not the pupil's needs can be described as dyscalculia.

If a period of **Wave 3 evidence-based intervention** is recommended, to be followed up by a comprehensive assessment of need, the SENCO should begin to **collate additional information** including clear progress data relating to the tailored programme of support the CYP has received. Gaining relevant feedback from parents/carers would also be expected at this point e.g. health and developmental history (*see Appendix 4 for questionnaire*).

### 3. Comprehensive Assessment

Finally, the expectation is that a **comprehensive diagnostic assessment** be carried out by either an AMDBA-qualified specialist teacher with a current APC who has undergone dyscalculia-specific professional development, or an HCPC registered educational psychologist. At present, Solihull LA's CLD team provides this service, rather than the Community Educational Psychology Service. Settings who have an annual service level agreement with the CLD team can request an assessment from their annual allocation of hours, or this assessment can be spot-purchased.<sup>6</sup>

NB. Given that many of the difficulties experienced by CYP with dyscalculia are developmentally typical at a young age, the LA does not feel it is appropriate to conduct a comprehensive assessment to identify dyscalculia before the child is at least 7 years old. Ordinarily, it would be recommended that a child is also given time to 'settle' if they have transferred to a junior school from an infant setting; therefore in these cases it may be appropriate to wait until the spring term of year 3 at the earliest.

Before this diagnostic assessment, as part of the referral (*see Appendix 6*), school will need to provide the assessor with sufficient evidence that sizable and sustained efforts have been made to address the pupil's numeracy difficulties, and that they are confident that other causes of these difficulties have been ruled out e.g. language

<sup>&</sup>lt;sup>6</sup> Please email joanne.shilton@solihull.gov.uk for more details.

difficulties, poor attendance, substantial difficulties with concentration/attention, English as an additional language etc.

The comprehensive assessment report, in line with guidance provided by SASC in 2019, will ordinarily include:

- Relevant medical/developmental history
- Interview with child/young person relating to attitudes and maths anxiety
- Summary of any assessments relating to literacy difficulties: to rule out dyslexia
  as a cause of the difficulties with maths
- The results of an initial screening tool for dyscalculia (carried out as part of the skills assessment)
- Specific tests to establish the CYP's ability to subitise and judge magnitude
- A range of current standardised assessments of maths skills
- Tests of working memory and processing speed

According to SASC (2019), evidence presented in this report must then confirm that the numeracy difficulties:

- are unexpected in relation to age, level of education, level of experience and level of other attainments
- are specific and persistent
- are not solely caused by other factors such as:
  - o inappropriate teaching or gaps in mathematics education
  - social and personal factors which adversely affect attitude/motivation with regard to learning mathematics
  - maths anxiety
  - o incomplete mastery of the language of instruction (e.g. EAL/ESL)
  - more generalised learning difficulties
- are not a result of another neurological, physical or mental health condition

Then, five conditions would be expected to have been met to identify dyscalculia:

- 1. Difficulties with numeracy/maths skill acquisition have been persistent over time.
- 2. There is evidence that maths difficulties are currently impacting negatively on academic performance and everyday tasks.

- 3. Scores achieved in standardised mathematics tests are **significantly** lower than expected for the age of the child or young person.
- 4. A low score on a test of maths is not due solely to inappropriate teaching, poor mathematical memory, slow speed of working or gaps in early education.
- 5. There is a significant difficulty with the understanding of simple number concepts and a lack of an intuitive grasp of numbers, identified using a recognised assessment.

If the above criteria are not all satisfied, but the assessment identified difficulties with numeracy and related skills, the assessor will conclude that the CYP has maths difficulties, but not dyscalculia.

To summarise the pathway to identification, see *Appendix 10*.

### Developmental Coordination Disorder (Dyspraxia)

### **DEFINITION**

Developmental Coordination Disorder (DCD), also known in the UK as dyspraxia, is a common disorder affecting movement and coordination in children, young people and adults. Symptoms will have been present since childhood and are not caused by other medical conditions or illnesses and will be impacting upon performance of activities of daily living.

According to the Dyspraxia Foundation:

"DCD... is a common disorder affecting fine- and/or gross-motor coordination... Individuals may vary in how their difficulties present: these may change over time depending on environmental demands and life experiences, and will persist into adulthood."

It goes on to say:

"An individual's coordination difficulties may affect participation and functioning of everyday life skills in education, work and employment. Children may present with difficulties with self-care, writing, typing, riding a bike and play as well as other educational and recreational activities."

The *Movement Matters* working definition of DCD/Dyspraxia, agreed by consensus and recognised by the NHS, states that the condition occurs across the range of intellectual abilities and that coordination difficulties will affect the individual's functioning in everyday activities, including in the classroom, at work and in leisure activities. They also note that DCD/Dyspraxia can co-occur with other developmental and specific learning difficulties.

### **ASSESSMENT**

Solihull LA promotes a graduated approach to identifying needs in this area. This
may include: the use of motor-skills checklists carried out in school to help
monitor and target support; adaptations in terms of equipment or curriculum
delivery; and the use of targeted interventions to address the areas of concern.

- If difficulties persist in the area of fine- and gross-motor skill development, affecting everyday activities that are not expected for their age or development level following a period of support, adaptations and intervention, advice should be sought from a specialist teacher. A referral to Occupational Therapy for further advice and more in-depth assessment may be an appropriate next step.
- Occupational Therapists (OTs) use standardised movement assessments to
  establish whether or not the CYP's motor-skills profile and processing skills are
  in line with other children their age or development level. Following the
  assessment, a report is written detailing any recommendations for the child to
  build their independence or participation in everyday activities.
- Where appropriate, after thorough examination of the evidence by a
  paediatrician (which would include analysis of the child/young person's
  developmental history, neurological assessments etc.) a diagnosis of DCD may
  be given.
- Some children may be referred to a paediatrician first; if the paediatrician suspects that DCD may be the underlying explanation for their difficulties following an examination and consultation, they will refer to Occupational Therapy for further assessment before confirming this diagnosis or ruling it out.

### Further notes:

- Prior to referral for assessment with an Occupational Therapist, it is advised that the child's eyesight has recently been assessed.
- For a range of reasons, DCD is not usually diagnosed under the age of 5. This is following the European Academy of Childhood Disabilities guidelines.
- For children where there is evidence or suspicion of more generalised developmental delay or wider learning difficulties, an Occupational Therapist is likely to consider the development of their motor skills in relation to the levels of progression in their other skills and abilities.
- Where a child has co-occurring difficulties with memory, attention or
  hyperactivity, for example, schools should consider whether a referral to
  Occupational Therapy to complete the movement assessment is appropriate at
  that time. If a child has challenges accessing a standardised assessment, the
  results will be unreliable and therefore no diagnosis will be able to be given. It
  may be more appropriate to refer in the future, when these symptoms are better

understood or managed; or a referral should be made to the community paediatricians instead.	
For additional information please see:	
www.dyspraxiafoundation.org.uk	
www.movementmattersuk.org	
https://canchild.ca/	
Page <b>18</b> of <b>38</b>	

### **Notes on Dysgraphia**

There are no agreed criteria for the diagnosis of dysgraphia; indeed it is now more contentious an issue than previously. The British Dyslexia Association, SASC and other bodies consider the difficulties associated with specific handwriting difficulties to fall somewhere on the DCD/Dyspraxia 'spectrum'. Consequently, the LA made the decision in 2018 to **cease identification of dysgraphia**. Where difficulties of this nature are apparent and affecting progress, it is considered best practice to refer the child or young person to the Occupational Therapy Service in the first instance, assuming appropriate support/intervention has been offered/implemented and little impact has been noted.

### The Role of the School

### General

- To guarantee all teaching staff have core skills, as described in SEND CoP (2014), in order to differentiate learning opportunities to meet the needs of the majority of learners
- To ensure that high quality teaching is consistently in place to support the acquisition of literacy skills for all
- To make sure that systems are consistently in place to regularly assess and monitor pupils' progress in literacy, in order to inform further intervention, and to highlight pupils who may need additional and different provision
- To ensure that appropriate additional and different provision is in place, which is delivered regularly, by suitably trained staff and over time
- To make effective use of the school's SEN delegated budget
- To provide a graduated response to intervention in line with the SEND CoP (2014) according to the severity of a pupil's needs and in collaboration with pupils and parents
- To seek and implement advice from education support services where necessary
- To organise access arrangements for pupils with SpLD, if appropriate, and with reference to curriculum and examination guidance

### Interventions

It is widely recognised that quality classroom teaching is the bedrock of effective practice. However, research suggests that children falling behind their peers need more help than the classroom normally provides (Brooks, 2016). Intervention should draw from evidence-based practice both in relation to national research and also to a pupils' responses to interventions. It should include:

### Structure

 logical progression with small-steps teaching and explicit links made between steps

### • Reinforcement

o over-learning opportunities with 'little and often' practice to aid automatic retrieval

### · Skills teaching

 which concentrates on the development of useful and transferable skills to reduce burdens on memory

### Multi-sensory approaches

 active and interactive integration of visual, auditory and kinaesthetic elements of teaching and learning

### Metacognition

 encouraging pupils to think about what strategies and approaches would be best for them to use in different circumstances

### Success-based learning

o to improve self-confidence and reduce anxiety and frustration

### The Role of Solihull Local Authority

- To support and advise schools in their implementation of good quality and effective literacy and numeracy teaching for all
- To ensure that local schools have access to teachers with specialist knowledge, skills and understanding in the teaching of children with specific learning difficulties
- To work with schools to help them use preventative strategies and to support early identification of pupils with literacy and numeracy difficulties
- To keep up-to-date with current research in the acquisition of literacy and numeracy skills and to undertake action research and disseminate best practice to schools
- To provide a pathway to the formal identification of dyslexia and dyscalculia

# The Role of Private Educational Psychologists, Clinical Psychologists and Specialist Teachers

 The LA recognises that parents/carers and settings may choose to purchase the services of an appropriate professional working in this field. When choosing an assessor, it is strongly recommend that safeguards are taken into account, such as checking they are suitably qualified, that they are registered with appropriate professional bodies (e.g. British Dyslexia Association (BDA) or Professional Association of Teachers of Students with Specific Learning Difficulties (PATOSS)) and that they have current DBS certificates. For example, Educational and Clinical Psychologists are required to be registered with the Health and Care Professions Council (please refer to <a href="www.hcpc-uk.org">www.hcpc-uk.org</a> to check registration status); specialist assessors should possess a current Assessment Practicing Certificate (APC).

 Furthermore, parents and carers are advised to ensure that the assessment report produced by the specialist assessor or Educational Psychologist meets SASC standards (2019) in order for any diagnoses to be recognised during adulthood.

### **Provision in Solihull**

Provision in Solihull to meet the range of pupils' needs includes:

- Delegated SEN funding to all schools which can be used to target support for the needs of CYP with Specific Learning Difficulties
- Specialist services which are provided by the Solihull Inclusion Support Service:
   Communication and Learning Difficulties Team. This includes access to Specialist

   Teachers to provide advice, assessment, teaching, training and evaluation of intervention programmes
- Educational Psychologists will be involved if the child or young person's needs meet the threshold for an Education Health and Care Plan assessment.
- One secondary additionally resourced provision (ARP), attached to Langley Secondary School. The purpose, process and entry criteria for placement at the ARC was reviewed and updated during 2018/19. See
   <a href="https://socialsolihull.org.uk/localoffer/education/additionally-resourced-provision/">https://socialsolihull.org.uk/localoffer/education/additionally-resourced-provision/</a> for more details.

### Appendix 1 - Dyslexia-friendly classroom strategies

The following list is not at all exhaustive, but provides suggestions for supporting those CYP presenting with difficulties in the classroom related to literacy-acquisition:

### Supporting reading and phonics

- Differentiate text: replace polysyllabic words with simpler synonyms; keep sentences short and simple in structure; break up large paragraphs etc.
- Use visual cues to support text.
- Check on readability of worksheets.
- Ensure clear presentation of materials e.g. rounded font e.g. Sassoon CR Junior or Arial with font size 14pt ideally, which is 1.5 line or double spaced.
- Ensure pupils have readers for tests.
- Provide access to assistive technology e.g. scanning pens, screen readers etc.
- Use laminated mats with visual reminders of grapheme/phoneme correspondences (GPCs) and key words.
- Group and display words encountered in the curriculum into sets with similar GPCs/spelling patterns e.g. bread, head / brain, main, chain, etc. Colour-code the common grapheme.

### Supporting spelling

- Provide a small whiteboard and pen for the pupil when they are writing, to rehearse spelling choices before making a decision.
- Provide laminated phoneme frames to support the pupil to attempt spellings.
- Remind pupils to apply learned strategies such as 'Fred Talk', 'Fred Fingers' or dots and dashes to help them use phonics for spelling.
- Trial the use of the 'magic line': the pupil writes the initial grapheme/s followed by a
  line to represent the rest of the word they are unsure of. This is useful for younger
  pupils who are at the beginning of their writing journey. They should be supported by
  an adult to re-read their work aloud at regular intervals and helped to complete the
  'magic line' words.
- Use speech-to-text spelling Apps.
- Provide pupils with personal spelling journals/books to collate words over time which can be 'sorted' according to their spelling pattern e.g. 'igh' or '-tion' words.

### **Supporting writing**

- Provide visual reminder of letter shapes especially b/d/p. Easy access to an alphabet arc or chart would support their speed of recall of letters.
- Provide a range of ergonomic pencils/pens and grips.

- Consider the seating position of the pupil in the classroom e.g. a left-handed person should be positioned to the left of the pupil next to them; pupils with tracking difficulties should be directly facing the interactive whiteboard.
- Provide plenty of time to plan and discuss ideas for writing.
- Provide a language-rich environment to support the pupil's writing: use pictures, films and props to promote discussion.
- Use writing frames/planning maps to encourage the use of paragraphs.
- Provide additional time for writing tasks as required.
- Provide pupils with their own copies of information they are required to copy, rather than expecting them to copy from the board.
- Allow pupils to record work in different ways e.g. using voice to text software (e.g. Dragon Dictate, Voice Record Pro, Write Online) or 'writing' software such as Clicker, shared and paired writing tasks etc.

### Supporting auditory/working memory

- Give just one instruction at a time; where multiple instructions need to be given, provide them in sequential order and either leave them visible on the whiteboard and/or give a copy on a printed sheet.
- Plan opportunities for 'spaced review' into lessons. This allows the lesson to be delivered in bite-sized chunks, each consolidated by review before moving on.
- Give regular verbal reminders of task instructions and teaching points in class.
- Teach the pupil how to mind-map or make notes of the information heard in class discussions.
- Consider using a 'memory buddy' that the pupil can ask if he/she has been overloaded with auditory information.
- Avoid tasks which involve 'multi-tasking'.
- Provide information in multiple ways: speak it, show it, and create opportunities to physically work with it or model it.
- Use memory aids such as wall charts, posters, checklists, which must be referred to in the lesson.
- Use recording devices e.g. A Talking Postcard, Dictaphone or Talking Tin.

### Appendix 2 - Literacy Checklists/Screeners and Skills Assessments

The following lists provide schools with examples of suggested screening and assessment tools which could be used as part of the process of identifying dyslexia. Please consult your CLD team specialist teacher for further advice and information.

### **Initial screening tools**

- SNAP SpLD also includes more detailed tests useful for stage 2
   https://www.hoddergibson.co.uk/subjects/general/products/second-level-ages-11-14/snap-spld-(special-needs-assessment-profile)-subscription
- British Dyslexia Association Neuroprofiler two available: one for primary aged and another for secondary <a href="https://www.bdadyslexia.org.uk/advice/educators/teaching-for-neurodiversity">https://www.bdadyslexia.org.uk/advice/educators/teaching-for-neurodiversity</a>
- Inclusion Development Programme Checklist two available: one for primary aged and another for secondary
- Lucid products (paper-based and online screening assessments) available
   from GL Assessment <a href="https://www.gl-assessment.co.uk/products/lucid/">https://www.gl-assessment.co.uk/products/lucid/</a>

### Skills assessment tests

- Dyslexia Portfolio includes a battery of tests which can highlight difficulties in dyslexia-associated skills <a href="https://www.gl-assessment.co.uk/products/dyslexia-screener-portfolio-and-guidance/">https://www.gl-assessment.co.uk/products/dyslexia-screener-portfolio-and-guidance/</a>
- Standardised word-level and sentence-level reading tests e.g. Diagnostic Reading Analysis - 3<sup>rd</sup> edition; York Assessment of Reading Comprehension; reading tests included in the Dyslexia Portfolio (see above); Academic Achievement Battery single word and sentence-level reading subtests; Salford Sentence Reading Test - 2<sup>nd</sup> edition etc.
- Spelling tests e.g. Helen Arkell Spelling Test 2<sup>nd</sup> edition; spelling test included in the Dyslexia Portfolio (see above); Academic Achievement Battery spelling subtest;

NB. Several of the tests listed above are only to be administered by those with specialist teacher status. Please ensure you check when selecting assessments to use.

### **Appendix 3 - Wave 2/3 Literacy Interventions**

What follows is a list of evidence-based interventions, suitable for addressing word-level literacy skills across all key stages. It is assumed that all adults delivering and/or supervising an intervention should be suitably trained and have a method of robustly tracking progress. Where length of intervention suggests 'variable' it is suggested that the programme be undertaken for a minimum period of 6 months; although response to the intervention should be monitored throughout, and alterations made if progress is not as rapid as might be expected.

Intervention		Used	to ta	arget		Approx.	Session	Delivery	Individual	Suggested
	Phonics	Reading accuracy	Reading comp.	Spelling	Writing	length of intervention	length	method	or small group	age-group
Rapid	/	/	/			Variable	Up to	Computer	1:1 or	KS2
Reading							60 mins	supervised	small	
							2-3 x	by Teacher	group	
							pw	or TA		
Rapid Plus	/	/	/			Variable	Up to	Computer	1:1 or	KS3
							60 mins	supervised	small	KS4
							2-3 x	by Teacher	group	
							pw	or TA		
Rapid				/	/	Variable	Up to	Teacher or	1:1 or	KS2
Writing							60 mins	TA	small	
							2-3 x		group	
							pw			
Read Write	/	/	/	/	/	34 weeks	60 mins	Teacher or	Small	Upper KS2
Inc Fresh							3 x pw	TA	group	KS3
Start										
Cued				/		6 to 8 weeks	15 mins	Teacher or	1:1	KS2
Spelling							3 x pw	TA		
Paired		/				9 weeks	Variable	Teacher or	1:1	All
Reading								TA		
Toe by Toe	/	/				74 weeks	10-20	Teacher or	1:1	KS2
							mins	TA		KS3
							daily			KS4
Acceleread/	/	/	/	/	/	4 to 8 weeks	20 mins	Computer	1:1 or	KS2
write							daily	supervised	small	KS3
									group	

								by Teacher		
								or TA		
IDL Literacy	/	/	/	/		12 weeks	20-30	Computer	1:1	KS2
							mins 2-	supervised		KS3
							3 x pw	by Teacher		
								or TA		
Launch the	/	/		/	/	Variable	30 mins	Teacher or	1:1 or	All
Lifeboat							3 x pw	TA	small	
									group	
Precision	/	/		/		Variable	10 mins	Teacher or	1:1	All
Teaching							daily	TA		
Reading	/	/	/			Variable	20-25	Computer	1:1	KS2
Wise							mins 3-	supervised		KS3
							5 x pw	by Teacher		
								or TA		
Direct	/	/		/		6-8 weeks	10-15	Teacher or	1:1/small	All
Instruction							mins	TA	group	
							twice			
							daily			
Direct	/	/				Variable	20 mins	Teacher or	1:1/small	KS2
Phonics							daily	TA	group	KS3
Phonological	/	/				Variable	20 mins	Teacher or	1:1/small	KS1
Awareness							daily	TA	group	KS2
Training										KS3
(PAT)										
Thinking	/	/	/			3-6 months	30-60	Teacher or	1:1	KS3
Reading							mins 3	TA		KS4
							x pw			
Word Wasp				/		74 weeks	10-20	Teacher or	1:1	KS2
							mins	TA		KS3
							daily			KS4
Catch-up	/	/		/		44 weeks	15 mins	Teacher or	1:1	KS2
Literacy							2 x pw	TA		KS3

### Appendix 4

### Parent/Carer Questionnaire for Dyslexia or Dyscalculia assessment

Child's Full Name			
Date of Birth		Male/Female	
		Marc/ Terriare	
Family Background Brothers/Sisters			
(with ages)			
If your child was	At what age and are they aware?		
adopted:			
What languages are spoken at home?			
If English is not their f	irst language, how long has Englis	sh been spoken?	)
Developmental and N	Medical History		
-	eeks' was your child born? Were th	ere any complic	ations at birth
or any early childhood	illnesses/injuries?		
_ =	our child meet the usual developm	ental milestones	s (e.g. walking,
talking)? Please provid	e further details if appropriate.		
	dical diagnosis (e.g. Autism, Toui	· · · · · · · · · · · · · · · · · · ·	
report is available.	, including who carried out the ass	sessment and wi	nen, and if a
report is available.			
Has your shild had a r	ecent <b>sight test?</b> YES NO (circle)	Date tested:	
What was the outcome	_	Date testeu.	
at mas the satesine	••		
	ecent hearing test? YES NO (circl	e) Date tested	:
What was the outcome	<u>!</u> ?		

(Blood)	members ha	Reading	Writing	Spelling	Maths	Motor
Relative						skills
	formation inc	luding detai	ls of any idei	ntified learnir	ng difficultie	s in the
family:						
Parental o	oncerns					
		concerns rela	ating to your	child's learni	ng?	
			J 7		5	
At what ac	ae did vou fir	st notice tha	t thev were 6	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
At what ac you see?	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
	ge did you fir	st notice tha	t they were e	experiencing	difficulties a	ınd what did
you see?				experiencing	difficulties a	ınd what did
you see?	ge did you fir			experiencing	difficulties a	ınd what did
you see?				experiencing	difficulties a	ınd what did
you see?				experiencing	difficulties a	and what did
you see?				experiencing	difficulties a	ınd what did
you see?				experiencing	difficulties a	and what did
you see?				experiencing	difficulties a	and what did
you see?				experiencing	difficulties a	and what did

## <u>Appendix 5 - Sample Pupil Questionnaire for Dyslexia assessment</u> My name is: \_\_\_\_\_\_ I would describe myself Out of school I enjoy... as... Things that I find In school, I am good at... difficult are... I would like help with... In future, I would like to be...

Page 30 of 38

### **Appendix 6 - Referral process and checklist**

### Referral process

The referral for a comprehensive assessment should be done using the standard SISS form, online at: <a href="https://eservices.solihull.gov.uk/SMBCWebForms/?Form=SISS\_referral">https://eservices.solihull.gov.uk/SMBCWebForms/?Form=SISS\_referral</a>

Choose CLD team and then either dyslexia or dyscalculia assessment, as required. Ideally, the referral should have been discussed with a CLD team specialist teacher prior to referral.

### Checklist

The following checklist should be used well in advance of the comprehensive assessment date, as the specialist teacher carrying out the assessment will not be able to proceed without the following:

- Outcomes of screening and further skills assessment
- Evidence of appropriate, evidence-based intervention delivered regularly over time (minimum 6-12 months)
- School attainment and progress data
- Parental views/questionnaire
- Pupil views
- Attendance data
- Other supporting data (e.g. assessment by Speech and Language Therapist, reports from a previous setting etc.) and information relating to factors known to impact upon learning e.g. bereavement, illness, frequent changes in school setting etc.

All of the above will inform the assessment carried out to establish whether or not the CYP's learning profile is consistent with the definition of dyslexia or dyscalculia.

### Appendix 7 - Dyslexia pathway at a glance

### **Quality First Teaching (QFT)**

All classrooms should be dyslexia-friendly as it is widely accepted that strategies and resources that work for pupils with dyslexia are also useful for those without. It is also the case that most CYP with dyslexia can make good progress with support at this level. A basic level of training in dyslexia would also be expected for teaching and support staff.

### **Initial Screening**

Where concerns are raised regarding a CYP's progress in phonics, reading and/or spelling, school should complete an initial screening tool to identify specific areas of need, in order to ensure that appropriate provision is made in the classroom and in small groups. It may be that the profiling tool identifies other areas of need e.g. fine-motor skills difficulties, wider language difficulties. These will need investigating and ruling out as a cause of literacy difficulties before dyslexia can be identified. If not already the case, parents/carers should become involved at this point.

### **Initial Intervention and Support**

Once a profiling tool has been completed it would be expected that classroom strategies and/or resources become more tailored to the individual child's learning needs. Additional intervention would also begin, targeting phonics, reading and/or spelling through regular, evidence-based interventions. This should take place over 3-6 months (minimum) and progress monitored/tracked.

### **Skills Assessment**

At this stage more formal assessment is appropriate to ensure that the difficulties being experienced by the child are at word-level rather than with wider literacy and/or language skills. It should also begin to establish the CYP's phonological awareness and processing skills, at a basic level. This can be done in school by a teacher trained in using standardised tests or a specialist teacher from CLD team. Results can then be used to inform further targeted intervention.

### **Targeted Intervention**

A pupil's difficulties with literacy will be targeted through regular, frequent, evidence-based multi-sensory interventions, adapted to suit the CYP as and with opportunities for overlearning built in to the programme. It would be expected that this intervention is delivered by someone who has undergone suitable training and that it takes place for a minimum of 3-6 months. Clear starting points and progress data should be collated.

### **Comprehensive Assessment**

If difficulties persist, a comprehensive assessment of the pupil's abilities and skills by a specialist teacher with an Assessment Practicing Certificate (APC) should take place. The resulting report will be proof-read by another specialist teacher with an APC and will conclude whether or not the pupil's currently presenting profile is consistent with dyslexia or otherwise.

### Appendix 8 - Wave 1 numeracy teaching strategies

The following are suggestions for supporting those CYP presenting with maths difficulties in the classroom:

- Ensure there is plenty of opportunity for repetitive overlearning to maximise the chance of new concepts and processes being committed to long-term memory.
- Encourage the pupils to 'see' patterns in numbers: explicitly draw attention to things that may seem obvious.
- Always use squared paper for written calculations and embed the good practice of using squares to align columns.
- Display mathematical vocabulary in a way that shows how words are linked e.g. subtract/take-away/less than etc.
- Ensure number squares have alternate rows shaded to assist the pupil with tracking.
- Where possible, relate maths to everyday life.
- Use visual support during whole class teaching and where possible give opportunities for hands on learning.
- Provide images/resources such as number tracks and lines, 100 square, multiplication grids, etc.
- Check pupils understanding regularly to prevent them from repeating misconceptions
- Introduce new concepts using numbers the child finds easy to manipulate, before moving on to higher numbers.
- Provide aids to recall of basic number facts own pocket number line, 100 square, number fact chart – to overcome problems in recall of facts.
- Encourage the pupil to make jottings to note instructions for each of the steps in multi-step problems or mental calculations, to help overcome problems in working memory.
- Break down instructions and explanations into 'chunks'.
- Use uncluttered worksheets to avoid too much visual information
- Use colour-coded place value cards to help overcome problems with left-right sequencing.
- Where appropriate, use pre-prepared formats for calculations, graphs and tables

### Appendix 9 - Maths Skills Checklists/Dyscalculia Screeners

The following lists provide schools with examples of suggested initial checklists and screening tools which could be used as part of the process of identifying dyscalculia and other maths-related difficulties. Please consult your CLD team specialist teacher for further advice and information.

### **Initial checklists**

- Steven Chinn Dyscalculia checklist (2019) and activities from 'More Trouble with Maths' (2017) <a href="http://www.stevechinn.co.uk/dyscalculia/the-dyscalculia-checklist">http://www.stevechinn.co.uk/dyscalculia/the-dyscalculia-checklist</a>
- SNAP SpLD
   https://www.hoddergibson.co.uk/subjects/general/products/second-level-ages-11-14/snap-spld-(special-needs-assessment-profile)-subscription
- British Dyslexia Association Neuroprofiler two available: one for primary aged and another for secondary
   https://www.bdadyslexia.org.uk/advice/educators/teaching-for-neurodiversity
- British Dyslexia Association Dyscalculia Checklist

### **Screening tests**

- Dyscalculia Screener (GL assessment) online screening tool with tests
  assessing subitising, number sense etc. (minimum purchase 10 tests)
  https://www.gl-assessment.co.uk/products/dyscalculia-screener-and-quidance/
- Fiefer Assessment of Mathematics the screening element comprises three key subtests
- Dynamo Maths Profiler For subscribing schools, this provides a tailored programme of intervention post-test <a href="https://www.dynamoprofiler.co.uk">https://www.dynamoprofiler.co.uk</a>
- Diagnostic Assessment of Maths Skills (DANS) for KS1 and KS2 only
   https://www.senbooks.co.uk/product/diagnostic-assessment-of-numeracy-skills-dans-

NB. Several of the tests listed above are only to be administered by those with specialist teacher status. Please ensure you check when selecting assessments to use.

### Appendix 10 - Wave 2/3 Maths and Numeracy Skills Interventions

What follows is a list of evidence-based, multi-sensory interventions, suitable for CYP with maths and numeracy skill difficulties across all key stages. It is assumed that all adults delivering and/or supervising an intervention should be suitably trained and have a method of robustly tracking progress.

All programmes of work should be tailored to target gaps in understanding and learning and the starting point should always be the CYP's point of 'firm-competency'. It is suggested that an intervention be undertaken for a minimum period of 6 months; although response to the programme should be monitored throughout, and alterations made if progress is not as rapid as might be expected.

Intervention/Programme	Approx. length of session	Session length	Delivery method	Individual or small group	Suggested age-group
Numicon	Various	Varies	Teacher or TA	1:1 or	KS1
Various interventions				small	KS2
				group	KS3
Catch-Up Numeracy	15 mins	2 x pw	Teacher or TA	1:1 or	KS1
				small	KS2
				group	KS3
The Power of 2	5-10 mins	Daily	Teacher or TA	1:1	KS2
					KS3
					KS4
IDL Numeracy	20-30 mins	2-3 x pw	Computer supervised	1:1	KS1
			by Teacher or TA		KS2
					KS3
Dynamo Maths	20-30 mins	2-3 x pw	Computer supervised	1:1	KS2
			by Teacher or TA		KS3
					KS4

There are many other comprehensive and high quality online maths programmes which provide excellent resources and games to consolidate maths skills such as times tables, telling the time etc. However, these are not the same as 'intervention' and should not be used alone if a CYP's difficulties are indicative of dyscalculia. Direct teaching using multi-sensory resources should be used to develop the CYP's understanding of the number system and processes, and also to target specific areas of need; this should then facilitate the development of their wider maths skills.

### Appendix 11 - Dyscalculia pathway at a glance

### **Quality First Teaching (QFT)**

Schools should be able to evidence that their approach to the teaching of basic numeracy and maths skills is structured and cumulative, with lessons planned to ensure pupils "develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems" (DfE, 2014).

### **Initial Screening**

Where concerns are raised regarding a CYP's ability to understand and grasp basic number concepts, and to retain number facts (for example), school should complete an initial screening tool/checklist to identify specific areas of need, in order to ensure that appropriate provision is made in the classroom and in small groups. If not already the case, parents/carers should become involved at this point.

### **Initial Intervention and Support**

Once a profiling tool has been completed it would be expected that classroom strategies and/or resources become more tailored to the individual child's learning needs. Additional intervention would also begin, targeting number concepts, basic operations etc. through evidence-based interventions. This should take place over 3-6 months (minimum) and progress monitored/tracked.

### **Skills Assessment**

At this stage more formal assessment is appropriate to ensure that the difficulties being experienced by the CYP include some of the key barriers implicated in dyscalculia e.g. subitising, understanding magnitude etc. This can be done in school by a teacher trained in using dyscalculia screening tests or a specialist teacher from the CLD team. Results can then be used to inform further targeted intervention and to decide whether or not it might be appropriate to pursue a comprehensive assessment in future.

### **Targeted Intervention**

A pupil's difficulties with numeracy and maths will be targeted through regular, frequent, evidence-based multi-sensory interventions, adapted to suit the CYP and with opportunities for overlearning built in to the programme. This intervention should be delivered by someone who has undergone suitable training and that it takes place for a minimum of 3-6 months. Clear starting points and progress data should be collated.

### **Comprehensive Assessment**

If difficulties persist, and the skills assessment indicated that the CYP's difficulties may be consistent with dyscalculia, a comprehensive assessment of the pupil's abilities and skills by a specialist teacher with an Assessment Practicing Certificate (APC) and relevant training and experience should take place. The resulting report will be proof-read by another specialist teacher with an APC and will conclude whether or not the pupil's currently presenting profile is consistent with dyscalculia or more general maths difficulties.

### **Appendix 12 - References**

Alloway, T.P. & Alloway, R.G. (2010) Investigating the predictive roles of working memory and IQ in academic attainment *Journal of Experimental Child Psychology* **106**(1), p20-29

British Psychological Society (1999). *Dyslexia, literacy and psychological assessment.*Report of a working party of the Division of Educational and Child Psychology.

Leicester

Brooks, G. (2016) *What works for children and young people with literacy difficulties?*5<sup>th</sup> edition The Dyslexia-SpLD Trust

Chinn, S. (2004) *The Trouble with Maths: A Practical Guide to Helping Learners with Numeracy.* Routledge

DfE (2014) National curriculum in England: mathematics programmes of study.

Department for Education <a href="https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study">https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study</a>

DfE (2014) Special Educational Needs and Disability Code of Practice. Department for Education https://www.gov.uk/government/publications/send-code-of-practice-0-to-25

Goudlandris, N.K. & Snowling, M. (1991) Visual Memory Deficits: A Plausible Cause of Developmental Dyslexia? Evidence from a Single Case Study *Cognitive Psychology* **8**(2), p127-154

Huestegge, L., Rohrßen, J., van Ermingen-Marbach, M., Pape-Neumann, J. and Heim, S. (2014) Devil in the details? Developmental dyslexia and visual long-term memory for details. *Frontiers in Psychology* **5**, p686

Rose, J. (2009) Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties DCSF

SpLD Assessment and Standards Committee (2019) SASC Guidance on the Assessment of Dyscalculia and Maths Difficulties <a href="https://sasc.org.uk/Downloads.aspx">https://sasc.org.uk/Downloads.aspx</a>

Snowling, M (2006) Nonword repetition and language learning disorders: A developmental contingency framework. Applied psycholinguistics, 27(4), 588-591. Vellutino, F., Fletcher, J., Snowling, M., & Scanlon, D. (2004) Specific reading disability (dyslexia): what have we learned in the past four decades? Journal of Child Psychology and Psychiatry **45**(1), p2-40 **Document authors:** 

Jo Shilton - Specialist Teacher and Assessor (SISS)

Paula Thompson - Specialist Teacher and Assessor (SISS)

Holly Graham - Occupational Therapist (Children's Community Therapies - NHS)