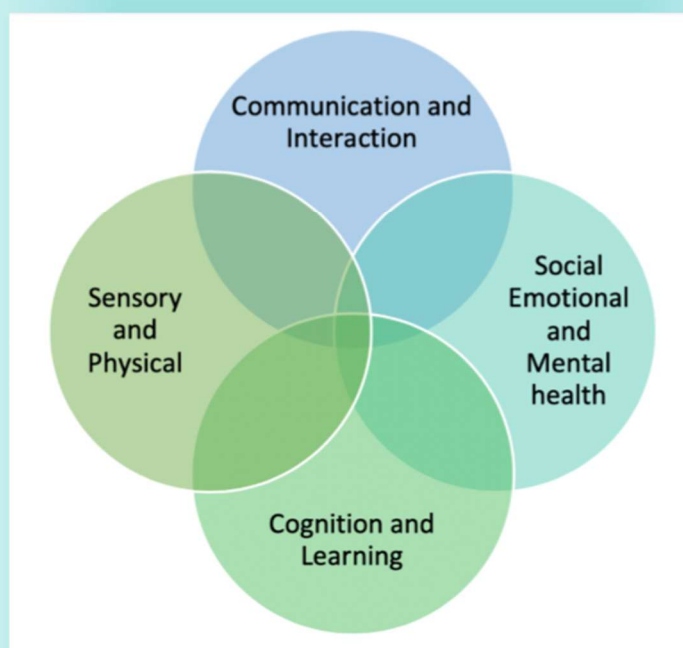




Cognition & Learning



SEND Guide

Please visit

www.oldham.gov.uk/grt for more information

Cognition and Learning

"Some learning difficulties and disabilities occur across the range of cognitive ability and, left unaddressed may lead to frustration, which may manifest itself as disaffection, emotional or behavioural difficulties."

"Support for learning difficulties may be required when children and young people learn at a slower pace than their peers, even with appropriate differentiation."

"Learning difficulties cover a wide range of needs, including moderate learning difficulties (MLD), severe learning difficulties (SLD), where children are likely to need support in all areas of the curriculum and associated difficulties with mobility and communication, through to profound and multiple learning difficulties (PMLD), where children are likely to have severe and complex learning difficulties as well as a physical disability or sensory impairment."

SEN Code of Practice (6.23, 6.30, 6.31

Desired outcomes- we want our children:

- ☺ To increase access to mainstream curriculum
- ☺ To have increased retention of key instructions and information
- ☺ To be able to work more independently
- ☺ To improve listening and attention
- ☺ To be able to record information in a variety of ways
- ☺ increasing confidence and self-esteem and reduced anxiety
- ☺ To have improved social inclusion

What we might see:

Slow progress and low attainment do not necessarily mean that a child has SEN and should not automatically lead to a child being recorded as having SEN.

However there may be an indicator of a range of learning difficulties or disabilities. Equally it should not be assumed that attainment in line with chronological age means that there is no learning difficulty or disability.

General learning difficulties

- Working just below age-related expectations
- Some difficulties with the acquisition of language, literacy or numeracy despite regular attendance, high quality teaching and appropriate intervention.
- Difficulty with the pace of the curriculum delivery
- Some problems with acquiring new concepts

Child may display:

- work avoidance: out of seat, sharpening pencils, talking, toilet trips
- low-level disruption
- bravado or overconfident- it's easy
- low self-esteem: aware of learning differences
- spoiling of own work
- challenging behaviour
- poor working memory
- difficulties with organisation
- poor independence and reliant on adult support

Specific learning difficulties for example dyslexia dyspraxia dyscalculia

- inconsistency day to day
- mild but difficulties in aspects of literacy numeracy or motor coordination despite intervention
- attention and concentration difficulties
- slow pace of work
- sequencing difficulties
- unable to follow instructions
- unusual profile of strengths and weakness
- self-esteem or poor motivation
- challenging or unusual behaviours for example tired, acting out, bored

Signs of dyslexia at primary school

If a child appears to be struggling with spelling, reading, writing or numeracy how do you know whether these difficulties are potential indicators of dyslexia?

There are some obvious signs such as a spiky profile which means that a child has areas of strong ability alongside areas of weakness. There may be also other family members with similar weaknesses. Remember that not all dyslexic children will display the same weaknesses and abilities

General signs to look for are:

- Speed of processing: slow spoken and or written language
- poor concentration
- difficulty following instructions
- forgetting words

Written work

- poor standard of written work compared with oral ability
- produces messy work with many crossings out and words tried several times- eg wippe, wype, wiep, wipe
- confused by letters which look similar particularly b/d, p/g, p/q, n/u, m/w
- poor handwriting with many reversals and badly formed letters
- spells a word several different ways in one piece of writing
- makes anagrams of words e.g. tired for tried, bread for beard
- produces badly set out written work, doesn't stay close to the margin
- poor pencil grip
- produces phonetic and bizarre spelling: not age or ability appropriate
- uses unusual sequencing of letters or words

Reading

- slow reading progress
- find it difficult to blend letters together
- has difficulty in establishing syllable division or knowing the beginning and ending of words

- unusual pronunciation of words
- no expression in reading and poor comprehension
- hesitant and laboured reading, especially when reading aloud
- misses out words when reading or adds extra words
- fails to recognise familiar words
- loses the point of a story being read or written
- has difficulty in picking out the most important points from a passage

Numeracy

- confusion with place value- for example: ones, tens, hundreds
- confused by symbols such as +, x signs
- difficulty remembering anything in a sequential order for example tables, days of the week, the alphabet

Time

- has difficulty learning to tell the time
- poor time keeping
- poor personal organisation
- difficulty remembering what day of the week it is, their birthday, seasons of the year, months of the year
- difficulty with concepts- yesterday, today, tomorrow

Skills

- poor motor skills leading to weaknesses in speed control and accuracy of the pencil
- limited understanding of non-verbal communication
- confused by the difference between left and right, up and down, east and west
- indeterminate hand preference
- performs unevenly from day to day

Behaviour

- uses work avoidance tactics such as sharpening pencils and looking for books
- seems dreamy does not seem to listen
- easily distracted
- is the class clown or is disruptive or withdrawn

- is excessively tired due to amount of concentration and effort required

A cluster of these indicators alongside areas of ability may suggest dyslexia and further investigation may be required.

Signs of dyscalculia

A person with dyscalculia or mathematical learning difficulties may:

- have difficulty when counting backwards
- have a poor sense of number and estimation
- have difficulty in remembering basic facts despite many hours of practice and rote learning
- have no strategies to compensate for lack of recall other than to use counting
- have difficulty in understanding place value and the role of Zero in our number system
- have no sense of whether any answers that are obtained are right or nearly right
- be slower to perform calculations- provide fewer examples rather than more time
- forget mathematical procedures especially as they become more complex for example long division. Addition is often the default operation. The other operations are usually very poorly executed or avoided altogether
- avoid tasks that are perceived as difficult and likely to result in a wrong answer
- have weak mental arithmetic skills
- have high levels of Mathematics anxiety

A young child with dyscalculia may:

- have difficulty recognising numbers
- be delayed in learning to count
- struggle to connect numerical symbols with their corresponding words
- have difficulty recognising patterns and placing things in order
- lose track when counting
- need to use visual aids such as fingers to help count

As maths becomes a major part of the school day the children with dyscalculia are likely to:

- have significant difficulty learning basic maths functions like addition and subtraction, times tables and more
- be unable to grasp the concepts behind word problems and other non-numerical math calculations
- have difficulty estimating how long it will take to complete a task
- struggle with maths homework assignments and tests
- have difficulty keeping at age-related expectations in maths
- struggle to process visuospatial ideas like graphs and charts

Signs of dyspraxia

Delays in reaching normal development milestones can be an early sign of dyspraxia in young children. For example your child may take slightly longer than expected to roll over, sit, crawl or walk.

You may also notice that a child

- shows unusual body positions or posture during their first year
- has difficulty playing with toys that involve good coordination such as stacking bricks
- has some difficulty learning to eat with cutlery

These signs may come and go

Problems in older children:

As the child gets older they may develop more noticeable physical difficulties plus problems in other areas. Problems with movement and coordination are the main symptoms of dyspraxia.

Movement and coordination problems. Children may have difficulty with:

- playground activities such as hopping, jumping, running and catching or kicking a ball. They often avoid joining in because of their lack of coordination and may find physical education difficult.
- walking up and down stairs

- writing drawing and using scissors- writing and drawing may appear scribbled and less developed compared to other children their age
- getting dressed, doing up buttons and tying shoelaces
- keeping still- they may swing or move their arms and legs a lot

A child with dyspraxia may appear awkward and clumsy as they may bump into objects, drop things and fall over a lot. But this in itself isn't directly a sign of dyspraxia as many children who appear clumsy actually all have normal movement skills for their age. Some children with dyspraxia may also become less fit than other children as their poor performance in sport may result in them being reluctant to exercise.

Additional problems

As well as difficulties related to movement and coordination, children with dyspraxia can also have other problems such as:

- difficulty concentrating- they may have a poor attention span and find it difficult to focus on one thing for more than a few minutes
- difficulty following instructions and copying information- they may do better at school in a one-to-one situation than in a group so they can be guided through work
- being poor at organising themselves and getting things done
- being slow to pick up new skills- they need encouragement and repetition to help them learn
- difficulty making friends- they may avoid taking part in team games and may be bullied for being different or clumsy
- behaviour problems- often stemming from a child's frustration with their symptoms
- low self-esteem
- children with dyspraxia may have poor coordination and some additional problems, other aspects of development for example thinking and talking are usually unaffected

High Quality Teaching

Including differentiation that meets the needs of all children
Scaffolding to independence:

Scaffolding is breaking up the learning into chunks and then providing a tool or structure with each chunk.

It is temporary help that assists the learner to move towards a new concept and or level of understanding.

It enables a learner to know how to do something so that they can complete a similar task alone.

It is future orientated- with help today, alone tomorrow

It is aimed at handover- alone

Ideas for scaffolding could include:

Reading

- preview the text- activate Prior contextual knowledge, discuss or define key vocabulary (creative support)
- revise strategies (strategy check bookmark)
- chunk the text and then read and discuss as you go (text marking)

Writing

- Preview- activate Prior contextual knowledge, plan (writing frame),
- explore key vocabulary spellings and definitions (word and definition mat)
- support punctuation (checklist)
- give sentence starters (writing frame to complete)
- show a best practice model (WAGOLL)

Maths

- provide a worked example (checklist and model),
- provide hands-on resources (concrete manipulatives)
- work through a concrete, pictorial and then abstract model, give key facts (learning mat)

Teachers are able to identify specific difficulties and make suitable adjustments:

- teach to child learning style and build on strengths- demonstration, prompts, visual support and opportunities for practice
- concrete practical based learning activities

- teaching using multi-sensory methods and hands-on practical activities
- tasks broken down into manageable steps
- differentiation in presentation, pace and outcome
- mixed ability groups- good role models and working to each other's strengths
- supportive resources available in class, such as coloured overlays, word mats, table square, writing scaffolds, graphic organizers, task planners, timers
- mind mapping techniques
- making links with previous learning
- social and emotional factors are taken into account
- incorporate people's interests to improve motivation
- pre and post teaching
- specific precision teaching
- promoting positive growth mindset
- regular monitoring of progress
- realistic expectations and agreed targets
- developing metacognition and pupils awareness of what works for them
- additional support staff aware of implications of children's learning needs and how to respond when appropriate
- work buddy, peer support, sensitive groupings
- extra thinking time to process information
- regular check ins with specific positive praise- language of success
- differentiated homework
- modify language to reduce memory and processing demand
- visual timetable, word Banks, word walls, ABC charts, phonic sheets
- use alternatives to written recording
 - cloze procedure
 - word processing
 - drama or role-play
 - talking tins
- use of ICT to support learning

Provision to support cognitive load may include:

- visual task timelines
- Checklists
- voice recording devices for recording instructions
- additional processing time
- task slicing
- mini whiteboards for jottings

Provision to support task organisation, maintenance and completion skills may include;

- work station approach
- visual task timelines
- voice recording devices
- photo checklist of equipment needed
- Motivators
- instructions given in short, correctly sequenced chunks
- understanding of task checked opportunities to ask for clarification

Provision to support attention and listening skills may include:

- task slicing
- Motivators
- visual task timelines
- planned opportunities to move, refresh and refocus
- wobble cushion
- privacy board

Provision to support reading may include:

- texts are matched to ability
- paired buddy reading approaches are utilised so that pupils can support each other
- coloured overlays
- reading aperture windows
- decoding strategy prompt cards
- pre-exposure to top new and or tricky words

Provision to support spelling may include:

- word mats
- alphabet and sound charts
- search cards for editing
- arrange of dictionary types

- memory hooks for tricky words such as mnemonics

Provision to support punctuation used may include:

- prompt cards
- punctuation actions

Provision to support maths may include:

- concrete apparatus
- hundred squares
- number lines
- worked examples
- additional rehearsal to develop fluency

Provision to support writing may include:

- graphic organizers or writing frames
- sentence openers
- sentence endings
- example text
- picture prompts for sequencing
- colourful semantics frames

For Further strategies see:

communication in print widgets

staff familiar with the range of apps or software to support areas of learning wheel of apps

www.callscotland.org.uk

staff referred to and incorporate strategies outlined in the IDP for pupils with dyslexia

www.idponline.org.uk

Further resources

The DyslexiaSPLD Trust has a wide range of resources including a free professional development framework

www.thedyslexia-spldtrust.org.uk

Education Endowment Foundation has a teaching and learning toolkit which summarises research to help schools make decisions about teaching practice to help close the attainment gap between children

Supporting pupils with dyslexia

Break tasks down into small manageable chunks which are supported with a visual timetable. This will support working memory allowing the pupil to focus on the main learning.

To support with spelling: offer word mats, personalise dictionaries, alphabet strips and high frequency words.

Present written material clearly. Avoid busy text, use double lined spacing, a clear and rounded font on a pastel background. Add subheadings and supportive images to aid understanding.

Allow learner's access to text in advance of the lesson so that they can rehearse reading and identify any other words that they may not yet understand.

Offer multi-sensory learning opportunities.

Remember to explore assistive technology. Many common classroom computer programs have built-in accessibility features.

Keep instructions short and simple. Offer one at a time and include visual supports.

Provide equipment checklists.

To help with recall of instructions record them as they are issued using a voice recording device. The pupil can then play back your instructions as many times as they need to.

Help with organisation for writing tasks by providing graphic organizers and writing frames.

Remember that your pupil will be working hard to process and produce written information. Allow rest or respite time to avoid fatigue.

Some pupils will benefit from the use of coloured overlays to limit visual stress.

Aid recall of spellings by making personally significant. Explore mnemonics, visual Cues Rhymes and ditties.

Provide lots of opportunities for overlearning. Keep revising regularly

Supporting pupils with dyspraxia

Use peer buddies to model tasks

Task slice- start with the end goal and work out what steps are needed to achieve it. Develop a personalised individual timeline to detail the steps and provides support and structure

Offer a range of writing tools and grip supports. Allow your pupil to test them all to find the one that they like the best and is most comfortable for them.

Don't forget to explore and if needed modify other tools that are regularly used at school such as scissors, cutlery and rulers.

Offer the use of a wedge cushion and writing slope to aid the development of perfect posture for writing.

Incorporate physical activity into classroom routines such as a hand work out before handwriting session and a 5-minute 'wake and shake' activity for all children at the start of the day and after lunch. Plan natural movement opportunities such as giving out books and Resources will help.

Have a fine motor table or activity box available for all peoples to access.

Allow additional time for completing activities and building respite time to avoid fatigue.

Consider alternative means to writing as a form of communication.

It's often beneficial to place students with dyspraxia at the front of the room, sat face on to the teacher so they have an easier view of the board. This also limits the need for turning or twisting.

Support personal organisation with photo checklists detailing what equipment is required for particular lessons on particular day.

Offer multi-sensory learning opportunities to reinforce handwriting.

Rehearsed sequencing skills.

Use task timelines to support activities linked to daily living such as changing for PE. This will support sequencing work on developing core strength. This will support the pupil in adopting and maintaining an appropriate posture for tabletop activities.

Resources to support cognition and learning difficulties

Resources in school

- Stile trays and books 10,11,12
 - Sentence structure and punctuation
 - understanding and interpreting texts
 - word structure and spelling
- HiLo Comprehension cards
- 5-minute box
- Thinking skills book 1
- Narrative therapy
- Rapid Write
- Direct Phonics
- Toe by toe

- The number box
- Stern
- Numicon
- Power of 2
- Plus 1
- Perform with Time
- Graphic Organisers for Reading: Photocopiable
- Resources to enhance Critical Thinking

Resources to support specific learning difficulties such as dyslexia, dyspraxia and dyscalculia

Assessments

- visual stress assessment pack
- Ann Arbor screen testing
- Dyslexia Portfolio
- Memory
- DASH

Interventions

- Hickey multi-sensory program
- Jungle journey
- Write from the start
- Motor skills United

Working Memory

- How can I remember All That: Simple stuff to improve your working memory
- Memory Mates
- Working Memory Activities
- Target Ladders: Working Memory & Auditory Processing

Resources

- coloured reading rulers
- tinted paper, tinted exercise books
- ace dictionary
- alphabet letters and activities
- using laptops
- easy grip tweezers
- lacing boards

- threading activities
- pencil grips
- sloping writing boards
- fidget toys
- cushions for seat
- easy catch balls

Books

- Helping Your Dyslexic Child
- Dyslexia in Practice
- Living with Dyslexia
- Dyslexia- 100 years on
- Dyslexia- the Facts
- 100 Ideas for supporting pupils with Dyslexia
- Teaching Literacy to Learners with Dyslexia- a multisensory approach