Section 7

Strategies to scaffold learning

In this section, we will cover:

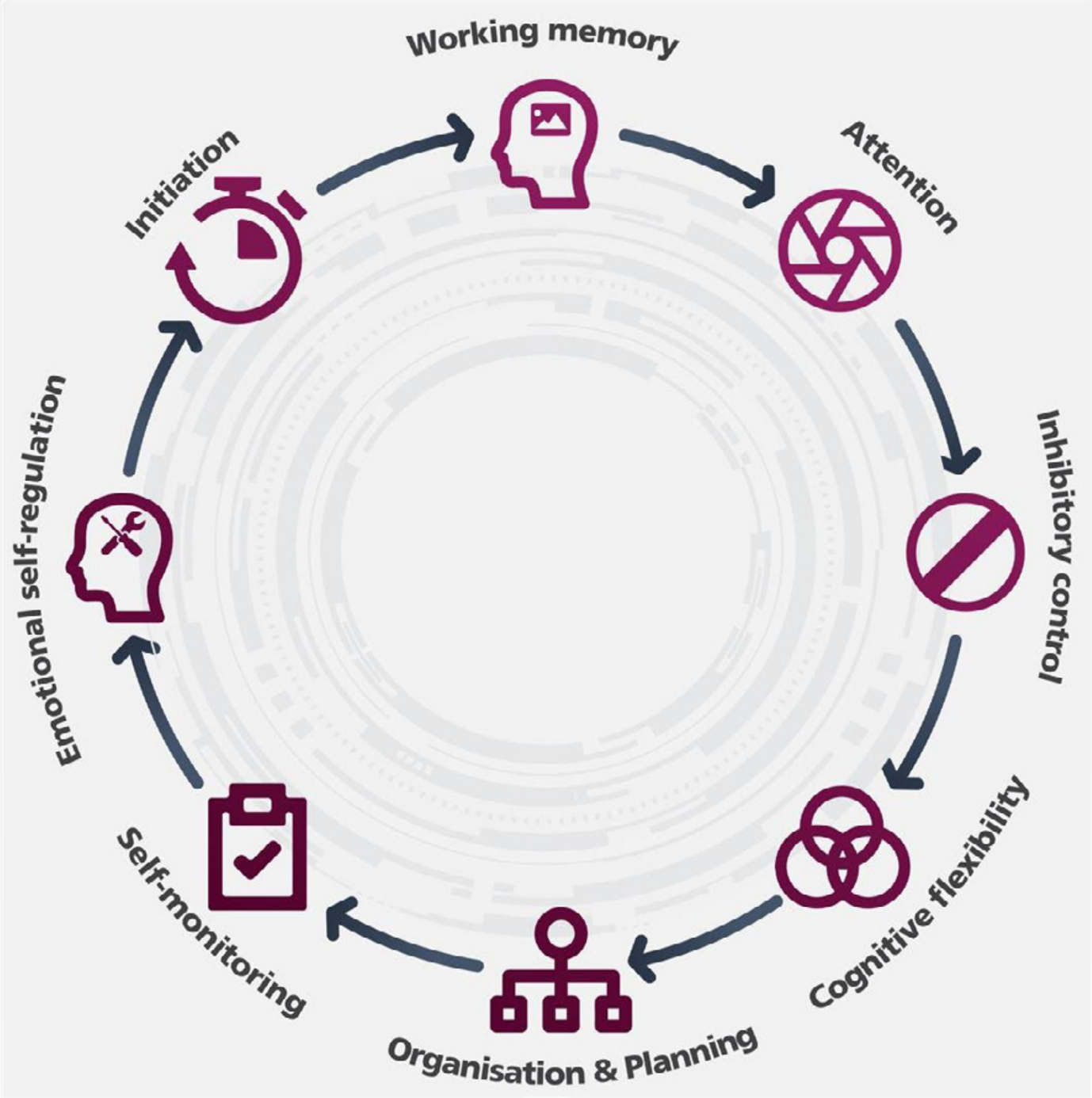
1. **Cognition and learning**
2. **Communication and interaction**
3. **Sensory and/or physical needs**
4. **Social, emotional and mental health difficulties**
5. **Neurodiversity and co-occurrence of need**

Cognition and learning

Within the SEND Code of Practice, Cognition and Learning needs are defined as support for learning difficulties when children and young people learn at a slower pace than their peers, even with adapted support. Learners with SEND may have greater difficulty than their peers in acquiring literacy and numeracy skills, or in understanding concepts, even with appropriate adaptations. They may also have other difficulties such as speech and language delay or difficulties interacting socially. Developmental delays in another area of need, such as Communication and Interaction, may impact on a learner's ability to consolidate skills and progress through to the next cognitive and learning developmental stage. Whilst some learners with SEND may have difficulties with one or more cognition and learning skill, often referred to as a specific learning difficulty, others may have difficulties across a broad range of cognition and learning skills which can have a moderate, severe or profound impact on a learner's overall learning and development.

We all change, develop skills, adapt and grow at all stages throughout our lives. Difficulties which are present in the early years and require additional support throughout primary school may not need on-going support in secondary school. Conversely, cognitive and learning difficulties may require additional support only in secondary school or beyond as a young person matures. This section will cover the cognitive and learning needs that you may observe in your classroom under the umbrella of 'executive functions'. It will also give strategies for adapting the environment and resources as part of the assess – plan – do – review cycle. You may have learners in your class who have been identified as having a learning need by an education or health professional, such as dyslexia, dyscalculia, dyspraxia or ADHD. These learners will have different profiles of strengths and difficulties. The most effective way of identifying any difficulties, informing interventions and determining the rate of progress is by assessing over time and monitoring the learner's response to teaching.

Executive functions



Cognition and learning



Executive Function is a term used to describe a set of mental processes that help us to connect experience to present action. These functions enable us to plan, organise, strategise, pay attention to and remember details.[1] They develop across childhood and into early adulthood.

In their guide to executive function and self-regulation [2], The Center for the Developing Child at Harvard University compares executive functions to the job of an air traffic control system managing arrivals and departures at multiple runways at a busy airport. Executive functions are highly inter-related and need to operate together to work efficiently.

Executive functioning skills have been linked to key developmental outcomes, such as reading, maths and even mental and physical health and wellbeing, as well as employability[3]. The most effective way to support executive function in the classroom is to explicitly model and teach metacognitive strategies.

When modelling and teaching metacognitive strategies, it is important to keep these principles in mind:[4]

- Strategies being taught should directly link with the curriculum subject area.
- Metacognitive strategies should be taught explicitly e.g., 'this is a strategy for memory' or 'this is a strategy for planning'.
- Strategies should be taught in a structured and systematic way using scaffolding, modelling and giving time to practise.
- Learners' motivation and self-understanding need to be addressed to ensure strategies are generalised. For example, if a learner is experiencing repeated failure on **too hard** tasks, then adaptations will be needed so that this learner can experience success.

We will now look at each of the nine areas of executive function to understand its function in the learning child or young person, what we might see if there are difficulties in this area, and how we need to respond with support. Understanding executive function skills underpins our response to learners in our class(es) with identified conditions, such as ADHD, autism, dyslexia, dyscalculia, or dyspraxia.

The areas we will cover in this section are:

- *Working memory – retaining and working with information in our brains*
- *Attention – controlling our attention*
- *Inhibitory control – filtering distractions*
- *Cognitive flexibility – switching mental gears*
- *Organisation and planning – resourcing and setting steps towards a goal*
- *Self-monitoring – checking and reviewing*
- *Emotional self-regulation – managing our emotions*
- *Initiation – getting started on a task or project*[5]

Cognition and learning



In Section 2, you learned about theories of **memory** and how children and young people's working memory capacity can differ widely, even for learners of the same age in a classroom. Working memory is the system which allows us to hold on to information and manipulate it in our minds for a short period of time.[6] It can include both verbal working memory and visual-spatial working memory. Efficient working memory is needed for a wide range of skills, such as reading comprehension, writing tasks, mental arithmetic, sequencing tasks, following discussions and remembering verbal instructions amongst many other everyday tasks.

Working memory is a core mechanism in literacy and numeracy learning[7] – learners are required to hold multiple pieces of verbal and visual information in mind and apply them. The below examples of working memory in action in the classroom illustrate its role.

If a learner is reading the word 'c,a,t', they must be able to identify the sound linked to each letter (phonological skills or knowledge), hold these in mind to blend them, and form the word. They may also be retrieving the meaning of the word, cat, from long-term memory, and applying it to the context of a story or a piece of writing. If a learner is still developing their literacy skills and does not yet have automatic recall of letter-sound knowledge for reading or spelling, then time should be taken to build more automatic recall of each letter-sound correspondence so that the learner can blend without excessive demand on working memory.

In mental arithmetic, to solve a number problem using addition, a learner will need to hold the numbers in mind, use their long-term memory to recall knowledge of addition, and calculate the answer.

Unfortunately, distraction, trying to hold too much information, and the demands of a task are all ways in which working memory can fail us. Learners with poor working memory often struggle to meet the heavy demands on their working memory of many everyday classroom activities. They may forget instructions, be easily distracted or abandon tasks before their completion.

Relationships

Children and young people who easily forget instructions or information are likely to feel anxious in the classroom. Some learners may try to hide their difficulties by not initiating work or abandoning tasks. As the teacher, you will need to look out for when a learner is struggling with working memory. Notice how the learner interacts with the set task, was the lesson content and/or related activities accessible? Were appropriate adaptations in place, e.g., chunked learning, concrete resources, visual aids? Factors such as anxiety, stress and tiredness can also negatively affect working memory from day-to-day.

Environment

Evaluate the 'cognitive load' of your lessons – can instructions be broken down into small steps? Can instructions be repeated or set out visually for learners to return to if information has been forgotten? Can transcribing from the board be avoided?

Strategies

Diaries, calculators, planners – we all use memory aids in our daily lives. There is little evidence that working memory capacity can be increased and therefore approaches which focus on compensatory strategies are recommended. This does not mean you need to have low expectations, but rather use compensatory strategies to ensure the information can move to the long-term memory. Be mindful that to move information into long-term memory it must be worked on i.e., rehearsed and practised. Time and space need to be given to this. **Rosenshine's Principles of Instruction**[8] explains how effective planned time to rehearse, and practise can be. Making information relevant and interesting to the learner, where it enhances the learning experience, can be a useful strategy – it is important that additional detail does not distract from the key content of the lesson. Furthermore, use of memory strategies reduce the amount of information to be held in the learner's mind at any one time (**cognitive load**) allowing them to process information without losing it. In school, these may be concrete resources e.g., number lines, word banks, reminders of rules. There are many sites online with suggested strategies, e.g., Education Corner's **Effective Memory Strategies**.

Assessment

As a teacher, actively look out for working memory vulnerabilities in your class. Do you have learners who struggle to get started? Do they seem to give up and abandon a task before completion? Do they miss out words, letters, or parts of a task? Re-read Section 2, particularly the content about **different types of memory**. Observe the learner, consider and trial strategies that can support their access to the curriculum. Your subject leader/HoD can support you in further scaffolding the curriculum.

Cognition and learning – Attention



We know that children, young people and adults use **different types of attention for different tasks**. Selective attention helps us to focus on the information that we need to know, whilst filtering out all the incoming sensory information that we do not need for the task at hand. We use sustained attention to ensure we spend enough time to process all the information we need deeply enough to recall it. In and outside of the classroom we need to be able to switch our attention to different pieces of information and back again. Although divided attention creates cognitive load and is not as efficient as having a single focus, it is necessary to help us to do some tasks in life like cross an icy road without slipping over, whilst being aware of any oncoming traffic that might require us to speed up. To be able to use our attention effectively we need to have **inhibitory control.**

Inhibitory control develops over time, in response to interactions with the environment and people. Younger children have less control than older children, young people and adults. Inhibitory control allows a learner to control their attention, behaviour, thoughts and/or emotions to override the urge to do something else that their body wants, or their mind is attracted to and instead do what is more appropriate or needed. Without inhibitory control we would be at the mercy of impulses, habits and stimuli in the environment that pull us this way or that. Inhibitory control makes it possible for us to change and for us to **choose how we react and behave.** What do we see in the learner who has inhibitory control difficulties? These learners in class, like all children and young people, are bombarded with sensory information, but unlike other learners they find it hard, or for some, impossible, to filter out the information that is not currently relevant. This learner can present as a **daydreamer** i.e., they are quiet, might look attentive, but their mind is elsewhere. Or they may present more physically or verbally, changing subjects, looking around, and up and down from their seat. The need to constantly pull their attention back to the area of focus is effortful and, combining this with what we know about working memory, will lead to repeated loss of information. This can be very frustrating for you trying to support the learner, and it is very difficult for the learner who struggles to attend because they can easily pick up on this frustration.

Relationship

Children and young people with attentional difficulties can come to your class already having been exposed to adults being frustrated with them. This can result in an 'internal model of themselves' that they are **irritating** (see **Attachment Theory** in Section 2). The first thing that any adult working with learners with attentional difficulties needs to do is to understand that learners **may not be choosing** to react and behave as they are. Some children may not be able to control their selective attention and they may struggle to keep sustained attention. It is important to hold high expectations for all learners – some children and young people will need reasonable adjustments in place to support their access and success in meeting these expectations. Consider how you can support all learners to build internal views of themselves as valuable members of the classroom – monitor their interactions with adults and peers, ensure that learners with attention difficulties are understood and supported in their social relationships. Prepare any supply teachers with helpful learner profile information to ensure they are understood. Do not underestimate the patience required by families and teachers to support learners with attention and concentration difficulties. However, do recognise that the relationship is very important and a highly protective factor in helping these learners.



Cognition and learning – Attention

Environment

Learners with attentional difficulties can become cognitively fatigued with the effort needed to keep pulling their attention back repeatedly and re-finding lost information. Classrooms are naturally stimulating and so thought is needed to manage this for the learner, e.g., sit them with their back to the door to minimise seeing people coming in and out, not in front of a window that they can see out of. Inclusive classrooms should be calm and focused, with well-established routines and expectations.



Consider what happens when you fill a bucket –
you can keep putting things in, but at some point, it will overflow.

Learners can continue to take in information –
but at some point, they will no longer be able to retain the information.

Strategies

Post-it notes, numbered or ordered (1st/2nd etc.), big paperclips and highlighter pens are all good ways of marking a page so that the learner can find their place again independently once reminded. It is important to develop and teach strategies that are increasingly less dependent on adults, and instead orchestrate reminders to return to focus from a distance. This, established in primary school, is essential for secondary school where learners start to resist wanting to be different from their classmates (even if they still need adult support to regain their focus) and where independence becomes increasingly important.

Checklists that are domain-specific (e.g., for packing a school bag, working through a science experiment) are helpful for all learners and can be developed age-appropriately across the phases. This can lead into older children and young people learning to create their own checklists to support their independent planning and organisation.

Assessment

Learners with attention difficulties will take longer to complete tasks, are vulnerable to adults and other children over-helping to get a task completed and will have more difficulties created by their working memory being overloaded. It is therefore essential to use formative assessment to get a granular understanding of what is missing from their knowledge base and to use mastery approaches to secure the knowledge before moving on.

Educational Psychologists can assess for the type of attention difficulty being demonstrated, which can help with strategy building. Some learners you teach may have had an assessment by a health professional of their attention needs and have met the criteria for an attention deficit hyperactivity disorder (ADHD) diagnosis, which includes behaviours such as inattentiveness, hyperactivity and impulsivity.

This **Attention Difficulties Resource Pack** has been designed for class teachers to use online to support ideas on how to select and implement strategies.

Cognition and learning – Cognitive flexibility



Cognitive flexibility builds on inhibitory control and working memory and develops later. Cognitive flexibility is being able to change perspectives spatially (imagining something from a different perspective) or interpersonally (thinking from someone else's point of view). To change perspectives, we need to have knowledge of other perspectives. It then becomes possible to inhibit our previous perspective and load into working memory a different perspective. It is in this way that cognitive flexibility becomes possible through inhibitory control and recall of other perspectives.

Another aspect of cognitive flexibility involves applying learned strategies that can prompt us to change how we think about something (thinking outside the box). So, if one way of solving a problem isn't working, we know that we should try to come up with a new way of thinking about the problem.

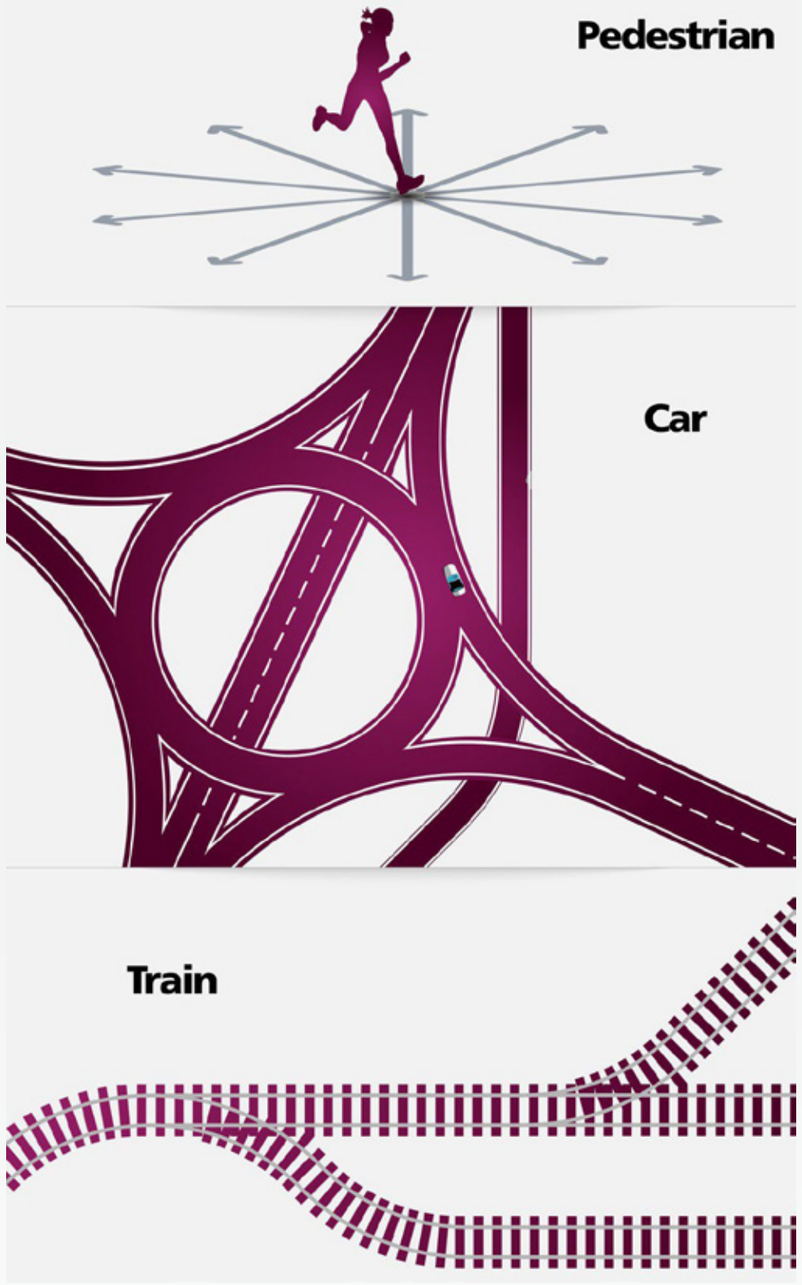
Cognitive flexibility also involves being flexible enough to adjust to changed demands or priorities, to admit you were wrong, and to take advantage of sudden, unexpected opportunities. For example, you were planning to do one activity, but then a great opportunity comes up to do something else, are you able to take advantage of that opportunity? Cognitive flexibility overlaps with creativity, task switching, and set shifting. Cognitive flexibility is the opposite of rigidity.

With this understanding in mind, what might we see in a learner who is struggling to be cognitively flexible? This is an aspect of autism but can also be seen in some learners without this diagnosis, who may have high levels of anxiety and manage their anxiety by controlling what happens in their environment. These learners may find a change in timetable or change in teacher distressing as opposed to the normal levels of discomfort we all feel with change. Socially, and in learning, they may find it hard to accept other people's explanation of events which can lead to arguments with peers and adults, e.g., they can only 'see' their interpretation of events - they may experience feelings of injustice when their view is not accepted. Conceptually they may require concrete resources to support their imagination of shape and space for longer than their same-age peers.

When planning lessons, consider adaptations to lessons that can enable some learners to have a range in opportunities to experience strategies and develop their knowledge in **domain-specific areas** before applying new learning to more complex tasks.

'Why can't they just go with the flow?'

Consider the image to the right. The pedestrian can change his/her direction at any time. The car driver can usually change direction quite quickly. A train driver, however, is on a fixed track and cannot change route until they get to 'points' where preparation has been made for them to change. 'Going with the flow' can be a challenge for some learners in our classrooms.



Cognition and learning – Cognitive flexibility

Relationship

Children and young people who have difficulties with cognitive flexibility or are cognitively rigid will struggle with all the inevitable changes that can happen in the school day and it will create an emotional response that can be fatiguing. Recognising what kind of thinking is happening in your learners and being curious and patient is the first step in helping you, the teacher, to think what the best strategy will be. Talking through or justifying unexpected changes may be time-consuming, but some learners will need this opportunity to be able to move on and be open to learning again. If you have a learner with autism or anxiety in your class, it is important that you understand how cognitive flexibility is affecting them and how it manifests itself in class and at home. Your relationship with the parent is highly important for learners who are rigid in their thinking to ensure that the classroom environment is understood and that you can take advantage of what the parent has learnt to do in managing their child's rigidity. It will be important to inform parents of any changes that have occurred or will occur in the future so that they can help with preparing their child for this change. Adults providing a bridge between the rigid-thinking learner and their classmates may be needed to support with friendships, which is an important resilience factor for children and young people's emotional wellbeing.

Environment

In the classroom, it is inevitable that there will be change. Therefore, it is important that you create a structure for change to happen and provide opportunities to learn strategies to respond to unstructured, unplanned change. Also be mindful that the playground environment can be more challenging to the learner who struggles with cognitive flexibility than the classroom. Playtimes are often unstructured and changes in the rules of play and social interaction can happen frequently. Inclusive schools will reflect on environmental factors and provide support and structures to ensure all learners can access playtimes safely. This may include access to a different kind of breaktime environment to achieve a physical and mental break.

Strategies

As mentioned in **relationship**, close work between families and the teacher is helpful to understand what works best with learners struggling with cognitive rigidity or inflexibility. Use of visual timetables that have an established symbol for change can help to prepare learners that this is probable, and they will be informed if it is going to happen. Using social stories to explain different perspectives can be a resource that learners can return to and build a knowledge base of difference upon. In some subjects, using concrete resources for longer may be necessary to ensure mastery or consolidation of knowledge, and continue to be necessary throughout their learning. It is important that strategies are not seen as 'childish' because of how they are presented in class. Further strategies can be found in Section 7.

Assessment

Rigid thinking may prevent a learner from processing information as deeply as they need to. They may have decided they 'know' something and don't need to do anything further. There may be other areas of interest that they know in great depth, but not broadly. Your formative assessments will be helpful in identifying any gaps in knowledge. Other professionals can help with assessments to understand how it might be supported in class.





Cognition and learning – Organisation and planning



Planning is the organisation of details ahead of time to achieve a goal.[9] The executive function of planning for a goal helps the learner to understand what the objective of the task is, to visualise the steps required to do the task, to think about the time required for each step and to decide which resources they will need to complete the task. Learners of any age can be taught to plan to complete a goal, e.g., by showing them how to use daily timetables, or to follow recipes and simple visual and written instructions. Being explicitly taught how to plan for a goal becomes increasingly important through the learner's school career, as they are expected to become more independent in their learning, e.g., completing homework tasks, projects and revision.

Organisation is the synthesising and sorting of information that underpins all learning. Learners with difficulties with planning and organisation will begin tasks impulsively with no plan of action, often getting stuck and unable to visualise what the next step is. These learners can become 'off-task' quickly and what they do produce can be disorganised and incoherent. This becomes an increasingly significant problem as the learner progresses through year groups. The learner cannot achieve the success in learning that is needed to motivate when learning is challenging, requires perseverance and needs emotional self-regulation. These learners can be the ones who become disengaged with learning and seek out other ways of stimulating themselves in the classroom. It is therefore important to always understand what these behaviours are communicating and assess a learner's planning and organisational skills.

Relationship

Teachers need to be curious about a child or young person's learning behaviour. It is important to be attuned to your learners' needs by asking yourself why a learner is constantly off task, going through your own checklist of executive functions to identify possible solutions.

Environment

Direct teaching of planning and organisation explicitly throughout a learner's school career is part of quality first teaching. The move to Year 7 significantly increases the demand on learners to plan and organise themselves, both in and out of school. Secondary schools are aware of this and make accommodations to up-skill their new learners. However, new Year 7 learners who have executive function difficulties find this demand very challenging, and this can lead to great difficulties in the **transition** from primary school to secondary school. Executive function difficulties that may have been more easily supported in smaller primary schools can emerge across Year 7. Form tutors need to be particularly vigilant in spotting this and play a central role in sharing information between subject teachers to ensure support and understanding.

Strategies

Strategies fall into these categories:

- teaching how to organise materials
- teaching how to organise ideas and information
- teaching how to organise writing
- teaching organisational strategies for note-taking
- teaching organisational strategies for studying and test-taking

The work by Lynn Meltzer in this area is helpful for teachers. She provides a wealth of suggested strategies for across the age ranges.[10] Another useful source of strategies for supporting organisation and executive functioning needs is Understood.org's **4 Ways Kids Use Organisation Skills to Learn.**

Assessment

What do the learners in your class know explicitly about planning and organising tasks? Assessing your class at the beginning of the year (or any time) will help you to understand who is going to need additional and explicit teaching in this area to ensure that the independence you want for your learners has the extra component of the learner's metacognitive understanding. Assess by observing how the learner approaches a task, e.g. using an **Executive Function Checklist** to help to identify additional needs and inform your understanding of which area needs support.

Cognition and learning – Self-monitoring



Self-monitoring is a learner's ability to reflect on their own performance towards a goal and to identify any errors. This can be challenging for a learner who has attention and concentration difficulties as they need to monitor and reflect on the connection between effort, strategy use and performance. This learner needs to know **how** to check their work and **what** kind of error they are looking for in a structured way.

Relationship

Teachers should think about learners as individuals rather than groups when thinking about self-monitoring. A generic checklist for how to review or edit work, that may be good for most in your class, will probably contain distractors for the learner with a need in this area. For example, too many areas to monitor at once may overwhelm the learner. Knowing your learner and planning accordingly will ensure the learner feels success and can see there is a reason for doing this element of learning.

Environment

Create a classroom environment that normalises this reflective process. Acknowledge and model it as a skill that everyone needs: to check, review and edit their work. Explain that we all can capture our missed errors in this way. Demonstrate to the learner the tangible benefits of putting the effort in to self-monitoring, to improve writing or thinking about potential solutions to problems. For a learner with cognition and learning needs, the message of **why** this is important needs to be communicated through the teacher-learner relationship. It is also important that this stage in learning is not missed out, because the learner naturally takes longer to complete tasks or struggles to attend to reflection tasks. You need to value this element of developing independent learners and work out how much the learner with additional needs can manage.

Learners who have difficulties with executive function will need to be guided on how to stop and think about their work. Some of the conversations you will have had with your class about metacognition (and by other teachers over time) may or may not have been heard and understood. It is important to know what your starting point is with a learner. Refer to questions in the Education Endowment Foundation's **Metacognition and Self-regulated Learning Guidance Report** (knowledge of task, knowledge of self, knowledge of strategies) as this will help you relate to your learner's starting point.

Strategies

- Self-monitoring and metacognitive strategies need to be taught in a systematic way to the whole class, but they will need to be broken down into smaller personalised steps for learners with cognition and learning needs.
- Make explicit and subject-domain-specific the key questions from the EEF **Metacognition and Self-regulated Learning Guidance Report**. What does the learner know about the task? What do they know about themselves? What strategies do they know? Answers to these questions could be recorded and kept at the beginning of subject-specific exercise books in ways that are helpful to the learner, for example, a list, a grid, or a visual representation.
- Procedural facilitators such as planning frameworks, writing frames, or checklists may be needed, but the higher order thinking needs to be given **equal focus** to ensure a move to independence (i.e., the learner being asked questions about their learning, and support to ask these questions of themselves as they become more practised).

Assessment

Metacognitive strategies or self-monitoring may be a difficulty across all learning areas, or there may be strengths in some areas over others. You can create a helpful subject specific baseline using the EEF **Metacognition and Self-regulated Learning Guidance Report** areas to question learners. Over time this can lead to information that can be used in a learner passport, to support transition to new year groups and teachers.

Cognition and learning – Emotional self-regulation



This is the learner's ability to manage their emotions by creating enough emotion to learn (moderate arousal) and to reduce the kind of emotion that will disrupt attention and shift flexibly (high arousal, for example, anger, anxiety). Moderate arousal has a positive effect on working memory, cognitive flexibility and inhibition. High arousal has a detrimental effect on these areas. Learners need to learn how to regulate their emotions, and this is related to their age and maturation levels. Learners with attachment needs, anxiety needs, poor self-concept needs, and autism or ADHD needs may exhibit difficulties in this area.

Relationship

We have explored the importance of relationships for learning under **attachment theory** in Section 2. There are many reasons why a learner might struggle to emotionally self-regulate. For example, there can be significant attachment reasons (not feeling safe to learn), physiological reasons (hungry, tired, bored, sensory) and anxiety reasons related to cognitive inflexibility (struggle to change, adapt in the moment). Seek to understand what is leading to the emotional dysregulation, through the teacher-learner relationship, so that the right kind of support can be used to help the learner back into a good thinking position.

Environment

Emotional regulation is one of the executive functions that is most supported by the environment that you create – both the emotional environment, and the physical environment. Learners who have executive functioning needs can develop over time a view of themselves as failures. This can become embedded as a personal trait, e.g. 'I'm no good at maths'. This is increasingly difficult to overcome in the face of challenging work. As a teacher, you should create safe learning spaces by setting tasks that are at a reachable level for all learners by creating an environment where success is planned for all, and by normalising mistakes as part of the learning process. This allows learners to take risks without fear of failure, knowing that errors are expected and that tasks will be achievable.

The physical environment is also important for emotional regulation. An organised classroom with clearly labelled areas (words and images) can help with anxiety and promote independence. You cannot always guarantee spaciousness in a classroom, but it is important to think about how the area is used to create quiet areas, messy areas, or low sensory areas depending on your classroom mix. Lighting sounds or busy displays can be stimulating and over-stimulating. Consider the advice in **Section 4**, including on supporting learners with **sensory needs**, when thinking about the impact of your classroom on your learners with SEND.

Strategies

The most effective strategy for learners who struggle with emotional regulation will be having a mentally healthy school. This involves a whole-school ethos, and usually a policy of how the school practises emotional wellbeing in all parts of the school community, from the highest level of your organisation all the way through to each individual relationship in the school. Whole-staff training in emotion coaching[11] or trauma-informed practice can give the foundational understanding that all staff teams need. Whole school training on attention and concentration needs, (possibly specific to conditions like autism) will also increase your ability to identify the possible reasons behind emotional regulation and help everyone choose successful interventions and approaches earlier. Proactive teaching is more beneficial to children and young people than post-event intervention.

Learners who are displaying very visible emotional dysregulation will attract your attention. However, be aware of the hidden emotional dysregulation that is also happening for some learners. It is important to be curious, listen to the family and consider if a learner is masking their emotional distress or presenting as 'numb' during the school day, if families are reporting to you that their child is coming home distressed. They may seem fine in the classroom, only to let all of their emotion pour out once they get home. Families often refer to these as 'melt-downs'. Group and individual strategies need to build on this ethos of teacher knowledge and curiosity about emotions and behaviours. In a situation where reports demonstrate a learner is presenting differently at home and at school, it can be beneficial to seek support from the SENCO.

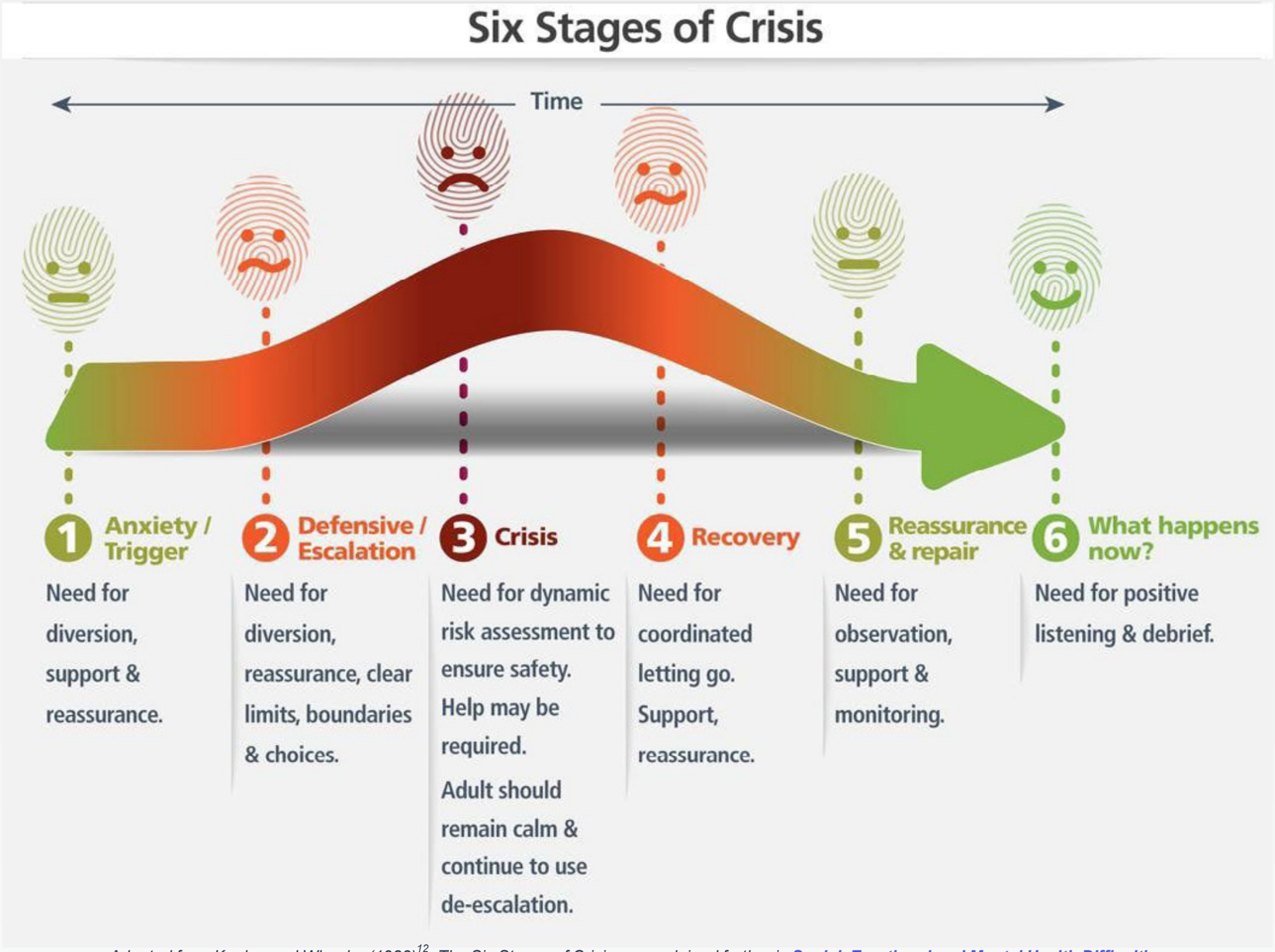
Cognition and learning – Emotional self-regulation

Assessment

Initial assessment always comes from you as the teacher. Continuous professional development is important for teachers and an essential part of maintaining a whole-school ethos. The first assessment you make stems from being curious about each learner's emotional level: Is this age appropriate? What is going on in this learner's life outside of school? What is going on in our classroom? Is the work being set appropriate? Ask this last question of yourself again. Sometimes learners who like to talk about their work can be masking underlying executive functioning needs but are described as 'able'. Sometimes they are given work that is too hard for them to achieve **because** of how it has been presented.

If you have considered the learning environment and made reasonable adjustments, but still do not see progress, then it is time to seek additional support in line with the ***graduated approach***. This may be speaking to the Mental Health Lead (MHL) or the SENCO in the first instance. They will be able to provide guidance and advice. For example, have you put adjustments in place with consistency? Are you working with all the information needed, or do you need to speak to the family some more? Have you asked the learner?

An Educational Psychologist (EP) would be the next external professional who could support you with an assessment of what might be causing the emotional dysregulation. They can work alongside you and provide further recommendations. The EP will also be able to advise if the need is significant enough to require more bespoke intervention, for example, access to direct interventions by an EP, a child and wellbeing practitioner (CWP), an education mental health practitioner (EMHP), or in-school therapist. They may also suggest a referral to CAMHS, which is the mental health equivalent of triage.



*Adapted from Kaplan and Wheeler (1983)[12]. The Six Stages of Crisis are explained further in **Social, Emotional and Mental Health Difficulties**.*

Specific learning difficulties

Specific Learning Difficulties (SpLD)

'Specific learning difficulties' is an umbrella term used to refer to several commonly occurring difficulties:

- Dyslexia or literacy difficulties
- Dyscalculia or numeracy difficulties
- Developmental Co-ordination Disorder (DCD)
- Dysgraphia
- and increasingly **ADHD**

This section is intended to provide advice for learners with SpLD diagnoses.

Dyslexia

Dyslexia or literacy difficulties is a learning difference that primarily affects reading and writing information. Learners who present with dyslexia or literacy difficulties may have an underlying phonological deficit which can cause difficulties which primarily affect phonological skills, verbal working memory and verbal information processing. The British Dyslexia Association have made a helpful film: **What is dyslexia?**

Relationship

Dyslexia and difficulties with the acquisition of literacy skills can have far-reaching impact on a learner's life, beyond difficulties with reading, writing and spelling. This is because so much of what we do relies on literacy. It is important to take time to find out what your learner with dyslexia or literacy difficulties struggles with, keeping in mind the executive functions above that can help you to consider what their experience in your classroom is like.

Environment

It is important to think about how you produce resources for learners identified with dyslexia or who present with significant difficulties acquiring literacy skills. Ensure they are included and have easy access to the information you are trying to communicate, not just in the classroom but across school. Ideas for creating a **dyslexia friendly classroom** can be found here.

Strategies

Literacy interventions and evidence for them can be found in the Education Endowment Foundation' s Toolkit: **Language and Literacy**

Learners with dyslexia or literacy difficulties require formative assessment to understand the specific areas of needs that they require support with. A planned literacy programme can then be put in place, delivered consistently by someone who is trained in the literacy programme and supported by others who are knowledgeable about the intervention being given.

Assessment

Dyslexia or literacy difficulties are not the same in all learners (or adults) and can range from being mild to severe. To assess the severity depends on how well learners respond to evidence-based interventions, which should be delivered consistently and effectively over time. Educational Psychologists or specialist teachers will recommend such interventions, and it is usually expected that a period of implementation, assessment and review occurs to ensure the intervention best fits the learner's needs.

Dyslexia can occur alongside other needs, and is not linked to intellectual abilities (i.e., a learner can have general learning difficulties and dyslexia or have a more able cognitive profile and have dyslexia). Some learners with dyslexia and adults can have specific strengths often thought to be associated with their dyslexia, e.g., oral skills or problem-solving.

Specific learning difficulties

Dyscalculia

Developmental Dyscalculia is a condition that affects how children and young people learn and remember arithmetic facts – the branch of mathematics that deals with calculations: addition, subtraction, multiplication and division. Learners with dyscalculia have difficulty in executing calculation procedures, immature problem-solving strategies, take longer to solve problems and have higher error rates.[13] This is despite regular attendance and teaching opportunities.

These are the common behaviours that can be seen in learners with dyscalculia:[14]

- Difficulty when counting backwards
- A poor sense of number and estimation
- Difficulty in remembering basic facts despite many hours of practice and rote learning
- The only strategy to compensate for lack of recall is to count in ones
- Difficulty in understanding place value
- No sense of whether an obtained answer is right or nearly right
- Slow to perform calculations
- Forgets mathematical procedures, especially when complex, for example, long division
- Addition is often the default operation
- Avoids tasks that are perceived or predicted as likely to result in a wrong answer
- Weak mental arithmetic skills
- High levels of mathematical anxiety

Relationship

You need to bring empathy to the relationship when working with a learner who is having difficulty acquiring basic maths skills. You will need to understand the learner's strengths and weaknesses in the area (and more generally as a learner). Learners can often know more than they realise but have not been able to generalise or organise their knowledge (i.e., see the developmental structure of mathematics or see how it inter- relates). Understanding your learners, both their prior knowledge and confidence in maths, can enable more effective teaching and scaffolding. It is important that you teach and ensure systematic rehearsal of core facts, methods and strategies that learners are missing.

Environment

Remember that mathematics is hierarchical when you go about planning lessons and resourcing your classroom. Ensure that the learner is always building on existing knowledge, creating an increasingly secure base, rather than teaching a lesson at a level because that is what the chronological age of the learner is (for example, teaching Year 5 level lessons when the learner is working at Year 3). It is important for inclusion and the emotional wellbeing of the learner that concrete resources are not derided in your class but normalised as a strategy that we all use when needed. For example, in secondary settings you can demonstrate and value use of concrete materials such as number lines on rulers, calculators, or problem-solving frameworks.

Strategies

It is important for you to know what knowledge the learner has. **Rosenshine's Principles of Instruction** highlights effective teaching approaches to ensure that all learners have frequent opportunity to rehearse small steps to mastery.

Explain to the learner why you are teaching a method and the idea behind it. This can help with motivation to achieve understanding and then the skill of the method. Be flexible with your methods for calculation. Whilst some learners may develop understanding through use, for some learners certain calculation methods may not make sense. Be mindful that multiple methods for the same outcomes may not be helpful, and impact detrimentally on cognitive load.

Use a structured maths approach and be aware of different levels of maths skills when providing practice opportunities in small steps.

Assessment

It will be essential to use assessment to inform your teaching and, where appropriate, evidence-based interventions, which should be delivered consistently and effectively over time. Educational Psychologists or specialist teachers will recommend such interventions, and it is usually expected that a period of implementation, assessment and review occurs to ensure the intervention best fits the learner's needs.

Specific learning difficulties

Developmental Co-ordination Disorder

Developmental Co-ordination Disorder (DCD), commonly known as dyspraxia, is a condition where an individual finds learning/completing everyday tasks challenging. This is due to poor co-ordination of their motor skills which cannot be explained by physical, sensory or intellectual impairment. More information can be found through the NHS.

Relationship

Learners with DCD generally find many skills that we take for granted challenging. They frequently become despondent, avoidant or show negative behaviour as coping mechanisms. There are also studies showing that learners with DCD are at increased risk of presenting with symptoms of anxiety and/or depression. It is important that this is considered when teaching a learner who generally feels unsuccessful in tasks that they observe their peers to find easy. Patience and encouragement are needed to foster an attitude where they are willing to continue trying.

Environment

DCD is observed to affect learners in all environments throughout their day. This includes writing and cutting in the classroom, doing up the zips or buttons on their school uniform before going out to play, throwing/catching in the playground, using cutlery to cut their food during lunch, changing into their clothing/ tying their laces for PE, balancing and sequencing the gymnastic movements etc. An environment where value is put on attempting/participating rather than success/outcomes will help learners with DCD who may need several attempts to execute simple tasks.

Strategies

Learners with DCD can be successful in tasks with the right level of support and the correct strategies in place. They may find it harder to learn through demonstration or verbal prompting and might be more successful when problem-solving and finding solutions for themselves. Frequently their method is atypical but functional. A strategy taught by therapists that would be helpful within the school setting is Cognitive Orientation to daily Occupational Performance (CO-OP). More information can be found through the **International Cognitive Approaches Network** (ICAN).

Assessment

A diagnosis of DCD is usually made by a paediatrician, often in collaboration with an Occupational Therapist and/ or physiotherapist from 5 years of age. If considering a DCD diagnosis, it is important to rule out learning difficulties and other reasons for motor deficits such as a diagnosis of Cerebral Palsy. A free online screening can be completed jointly with the child's parents to establish if further assessment is required. This is called the Developmental Co-ordination Disorder Questionnaire (DCDQ).

Specific learning difficulties

Dysgraphia

'...dysgraphia is the term associated with specific learning disabilities in writing. It is used to capture both the physical act of writing and the quality of written expression.'

This is the definition found in the 2013 revision of DSM-5, under 'specific learning disabilities'. The term does not appear in its own right in either of the major international classification systems (DSM-52 or ICD-103) to describe specifically a handwriting difficulty.

More information can be found at **www.nha-handwriting.org.uk**.

Dysgraphia describes handwriting that is generally illegible. It is characterized as a learning disability specific to writing skills being below age expectancy and intelligence. It includes handwriting difficulties associated with the impaired mechanics of handwriting; the storing process of words and processing the letters in those words; and fine motor skills required to control a pen/pencil. Generally speaking: the ability to express oneself in writing, including language ability and the organisation and planning of text. It often overlaps with other learning disabilities such as speech impairment, attention deficit disorder (ADD), or DCD.

Indicators of dysgraphia may include:

A mixture of upper and lower case letters; irregular letter size and shape; incomplete letters; struggling to use writing as a communication tool; odd writing grip; considerable spelling mistakes; occasional pain when writing; decreased or increased speed of writing and copying; talking to self while writing; general illegibility and reluctance or refusal to complete writing tasks.

However, it is important to remember that these indicators are also shared with other difficulties including, but not limited to, dyspraxia, dyslexia, hypermobility and DCD.

Relationship

It may appear that a learner who is able to demonstrate extremely good understanding and has strong verbal skills, produces untidy and poorly structured work. It is important to consider dysgraphia rather than presuming this being a result of little effort or attention.

Environment

To support learners with dysgraphia in the classroom, the following could be considered/trialled:

- Accommodations – this could include touch-typing and using voice recognition software such as Dragon.
- Making tasks more accessible through giving them less to write, printing resources that they can stick in rather than copy from the board or work in pairs where someone else can scribe.
- Write short messages/comments, using post-it notes, pictures and photos to make the task simple and more fun.
- Further resources and ideas can be found at **Understood.org**.

Strategies

Adaptive materials, including sloping boards, lined paper and pencil grips, may be supportive in a variety of combinations for learners struggling with dysgraphia. However, handwriting assessments may also be of help in identifying the component difficulties for remediation or professional therapeutic input, including hand strength, arm and body positioning and fine motor co-ordination.

Assessment

When looking at a learner's handwriting, it is important to break it down into the components of writing to see where the difficulties lie (an Occupational Therapist can assist with this). This includes: letter formation, line placement, spacing between words, correct joins, correct sizing of tall and short letters, entry and exit strokes. Other things to consider include pencil grasp and sitting posture.

Some Educational Psychologists would describe handwriting as being dysgraphic if more than 25% of the handwriting sample is hard to read or illegible when the sample is read from the bottom backwards but there are no formal assessments or diagnostic criteria.

Communication and interaction

SEND Code of Practice Definition

Children and young people with speech, language and communication needs (SLCN) have difficulty in communicating with others. This may be because they have difficulty saying what they want to, understanding what is being said to them or they do not understand or use social rules of communication. The profile for every student with SLCN is different and their needs may change over time. They may have difficulty with one, some or all of the different aspects of speech, language or social communication at different times of their lives.

Children and young people with conditions such as ASD, including Asperger's Syndrome and Autism, are likely to have particular difficulties with social interaction. They may also experience difficulties with language, communication, and imagination, which can impact on how they relate to others.



Speech, Language and Communication Needs

Understanding the learning need(s)

Learners may present with difficulties in one or more areas of speech, language, communication, and interaction skills. Broadly, the skills a Speech and Language Therapist will assess are:

- Attention and listening skills
- Understanding of spoken language and expression of language
- Speech
- Pragmatic skills
- Eating and drinking skills

Difficulties in these areas can impact on the following: ***attention, organisation, working memory, time management, listening skills, sensory perception, speed of processing and confidence as a learner***. The risk of failing to address and support difficulties is that the learner disengages with their learning, fails to build positive relationships with adults and peers and experiences reduced opportunities for activity and participation.

Developmental Language Disorder

*Speech and Language UK has developed the **DLD Guide** for teachers supporting learners with DLD in mainstream classrooms. The guide provides detailed information about what DLD is, and how to identify and support DLD in a mainstream classroom.*

Attention and listening skills, including:

- Attending to whole class, small group and 1:1 activities
- Switching attention between preferred and non-preferred activities
- Following multi-step or complex instructions
- Learning and remembering new information

Understanding of (spoken) language and expression of language, including:

- Understanding, learning, and using vocabulary and concepts
- Understanding, learning, and using accurate sentence structure, tense, and prepositional language
- Following or giving multi-step or complex instructions
- Word finding difficulties
- Difficulties following or sequencing ideas

Speech, including:

- Clarity and accuracy
- Fluency (stammering/stuttering)
- Voice quality

Pragmatic skills, including:

- Use of intonation, facial expression, and gesture
- Turn-taking skills in conversation
- The ability to maintain topic
- The ability to interpret non-literal language

Eating and drinking skills:

Especially for learners with complex needs, who may require a modified diet and/or specialist equipment.

Speech, language and communication needs

It is important for supporting adults to understand the differences between:

- *Learners with **language delay**, where with input their skills are likely to catch up with age-related peers.*
- *Learners **acquiring English as an Additional Language**, where language acquisition skills are unimpaired, and, with time and appropriate adaptation, they are likely to acquire English language skills in line with typically developing monolingual English speakers.*
- *Learners with **Developmental Language Disorder**, a lifelong condition characterised by difficulties with understanding and/or using spoken language, for which ongoing therapy can be effective.*

Relationship

No two learners with SLCN will be exactly alike and it is crucial to understand the individual learner's profile, in order to best support them and help them fulfil their potential in the classroom, the wider school environment and outside school too. When evaluating a learner's profile, information will be gathered from families as well as school to better understand the nature and impact of their difficulties. There may be similarities at school and at home, for example, short attention span or good focus on preferred topics. There may be differences, for example, when the learner is more reluctant to engage and interact in the school environment but is talkative at home. This will inform the nature of effective support. The aim is to ensure consistency of support both at home and in school, and good communication between the two environments is essential.

Learners with SLCN are often more adept at learning using visual aids, rather than drawn from auditory information. They often benefit from a structured approach to tasks, repeated practice and specific, positive and constructive feedback on their attempts.

Teachers and families using the successful communication-enhancing strategies with the learner, are also likely to see increased engagement and progress in learning and greater confidence in communication and interaction skills.

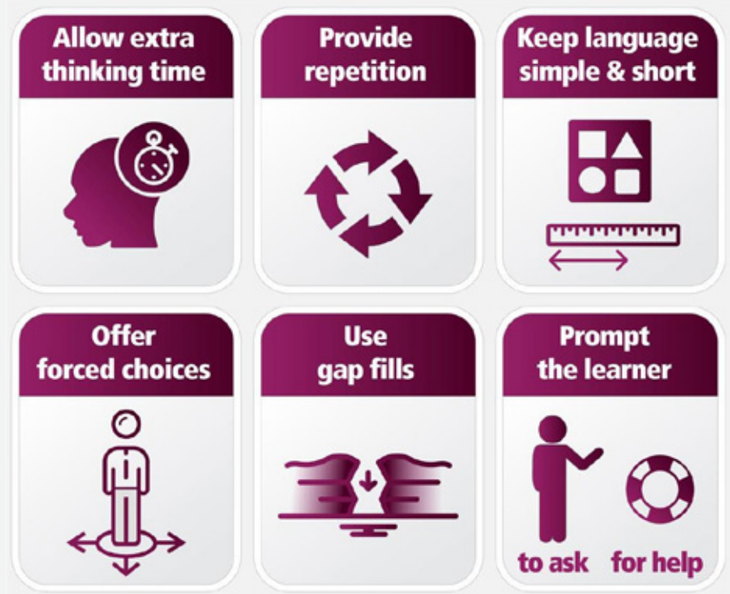
Environment

- Optimise listening conditions, using appropriate volume, pacing and animation.
- Consider seating position and orientation.
- Reduce visual, auditory and other sensory distractions.
- Explicitly teach active listening skills – for example, how to be aware of how one's body feels when fully focussed, how to listen to the entire speech stream, how to make links between the known and unknown to support understanding, how to support recall, how to use the new learning.
- Build movement breaks into lessons to provide optimal state for learning.
- Consider working partnerships – both adult-to-learner and peer- to-peer.
- Provide positive, specific feedback:
    - especially when the learner's behaviour meets minimal expectations, e.g. 'You demonstrated strong listening skills, as you stayed in your seat and I could see you focussing on me as I was speaking'.
    - especially when correction is necessary, e.g. 'I can see you thought hard about your answer as you took your time and used (…). However, the correct answer is (…) because (…).
- Reinforce positive aspects of engagement, e.g. 'I could see that you were taking notes there to help you recall that word/ definition and that will really help you complete the work.'

Strategies

- Increase use of visual support, such as sand timers and whiteboards, to maintain attention and support understanding.
- Increase use of gesture to maintain attention and support understanding.
- Introduce real objects and kinaesthetic means of teaching to maintain attention and support understanding.
- You could provide learners with task lists, word banks and narrative frameworks to engage with and complete work with increasing independence.
- Simplify language – use positive instruction and reduce the number of words used.
- Allow time for repetition (using the same language).
- Allow additional time for processing, recapping and checking understanding.
- Check understanding by asking the learner to explain what they have to do, to provide an explanation in their own words, or to demonstrate their understanding using alternative means (drawing, gesture, action).
- Use forced choices to support understanding and expression. For example, 'When enslaved people were taken via the Middle Passage, did they cross the Atlantic or Pacific Ocean?'
- Use gap fills to support understanding and expression. For example,
'Two similar poles will repel each other, two different poles will….'
- Provide accurate language models, recasting the learner's attempts when appropriate.
- Underline or emphasise accuracy by repeating or modelling correct answers.
- Prompt the learner to ask for help by exploring the aspect which is difficult for them.

Speech, language and communication needs





Resources

- Mini whiteboards – failing this, use a scrap of paper with a simple task list or checklist for reference.
- Visual timetables.
- Visuals, post-it notes, displays and working walls.
- Reward charts – to be effective the reward system must be consistent, fair, motivating, easy to understand and actively used.

Assessment

Attention and listening skills

Does the learner find it hard to concentrate during a whole-class lesson or carpet time? Do they focus for longer on independent activities?

Consider the impact of the classroom environment, sensory sensitivities, or difficulty with understanding, that leads to inattention and disengagement.

Understanding of language

Does the learner have difficulties responding to questions in class or following or remembering instructions? Do they give tangential answers that are vaguely related to the topic under discussion?

Consider the learner's prior knowledge in the subject area. Would they benefit from pre-teaching of key content and vocabulary? Could increasing the visual and gestural input, simplifying language and chunking information benefit the learner? Consider the pacing of the lesson and consistency of the language used. Provide opportunities for additional thinking time by posing the question that you wish the learner to consider and explaining that you will return to them in x minutes for their answer. Cloze procedure (gap fills) and forced choices can support expressive language.

Expression of language

Does the learner have difficulty learning and using new vocabulary, forming sentences, telling stories or participating in class discussion?

Consider increasing the visual and kinaesthetic input and allowing alternative means of communication, e.g., writing, drawing or gesturing. Consider partnering the learner with a sensitive classmate, with whom they can rehearse their answer.

Speech

Does the learner say words clearly, and can you understand their speech? Is voice quality or fluency a concern?

Accept the content of the learner's expressive language rather than focussing on the clarity, voice quality or fluency. A referral to a Speech and Language Therapist is necessary to assess the difficulty, identify the cause(s) and provide a programme of support.

Pragmatic skills

Does the learner experience difficulty when working with others? Will they initiate conversations? Have they formed friendships?

Consider the environment, peer working arrangements, how you assign specific roles to individuals, and whether there are skills that can be explicitly taught and practised to be generalised to the wider environment.

Autism spectrum disorder

What is the autism spectrum?

'Autism is a lifelong neurodevelopmental condition that affects how people perceive, communicate and interact with the world. Autism is referred to as a spectrum because while there are similar core areas affected, each child or person diagnosed will experience them differently'.[1]

The term 'ASD' is a medical diagnosis. The diagnostic process usually involves a multi-disciplinary diagnostic team which often includes a psychologist, speech and language therapist, paediatrician or psychiatrist.[2] There needs to be evidence of differences in certain core areas of development compared with that of a 'typical' child or young person for a diagnosis of autism to be given. This evidence should indicate that everyday life is affected by these differences in an ongoing manner. These core areas are:

1. Social communication and interaction
2. Restricted and repetitive patterns of behaviour, interests or activities
3. Sensory perception and responses.

In education, this leads to four areas of difference that can impact on learning:

- Interacting, playing and developing relationships with others
- Processing information
- Taking in and perceiving sensory information

Definitions of autism have changed as understanding of the condition has developed. Some people, including many adults with autism, use the term Autistic Spectrum Condition (ASC) rather than ASD.This reflects autism being understood in terms of difference in the core areas rather than disorder.

Social communication

Autistic learners often have difficulties with interpreting both verbal and non-verbal language like gestures, facial expression and tone of voice. Some learners with autism are unable to speak or have limited speech. Others may have some very good communication skills but will need explicit teaching to nderstand pragmatic language (for example,tone of voice, body language). Other challenges can include:

- Taking things literally and not understanding abstract concepts
- Processing information or answering questions at speed
- Applying learnt language inappropriate contexts.

Some autistic learners will repeat back learnt phrases without knowledge of the meaning. This is called echolalia and is something teachers should be aware of in both social situations and in academic work.

Social interaction

Every autistic learner has a unique profile of strengths and challenges. When interacting with those around them, in both structured and unstructured situations, learners with autism may have difficulty with:

- Recognising and/or understanding the feelings of others.
- Understanding how they are feeling in a given situation and how to regulate their emotions.

Autistic learners can have difficulty expressing their emotions both verbally and non-verbally. They may:

- Not understand social norms, such as those associated with friendship or authority. Social norms should be explicitly taught.
- React in unexpected ways, e.g., a direct demand may trigger anxiety or distress.
- Prefer to be on their own.This can be a preference, a reaction to being overloaded by too many people,or a lack of understanding of how to interact with peers.

Social stories can support autistic learners with their social communication and social interaction. Social stories can be created for both routine situations in the classroom/school and for contexts more specific to the learner, e.g., transitioning from English to maths lessons, using safe hands at playtimes. Social stories will also greatly benefit autistic learners at transition – both mid-year transitions and end of year transitions. These can be used for reinforcing messaging around new routines, new classrooms, new teachers, and/or new schools.

There may be times when an autistic learner behaves in an unexpected manner. As teachers, it is our responsibility to work alongside the family and the learner to understand the triggers that may lead to the behaviour, and so to better support the learner. For further information, please refer to **Section 4: Creating an inclusive environment.**

Many autistic learners have emotional and wellbeing needs. Provision plans should identify adjustments which pre-empt contexts and triggers for anxiety. It is also important that autistic learners are taught to recognise what leads to and then triggers their anxiety. This can help them and others to find ways to cope and manage these.

Difficulties with self-awareness mean that many autistic learners have difficulty recognising and regulating their emotions. Learners have difficulty communicating emotions through words; emotions may instead be communicated through behaviour. This may include 'melt-downs' when learners are distressed and overwhelmed.

The Autism Resource Suite *has been developed by Autism Education Trust, along with the Autism Centre for Education and Research (University of Birmingham), the National Autistic Society and Ambitious about Autism to provide the latest guidelines, resources and practical strategies to teachers and school leaders working with autistic learners.*

Autism spectrum disorder

Restrictive and/or repetitive patterns of behaviour

Thinking flexibly is a challenge for most autistic learners. Learners can present with restrictive interests, which may be highly preferred and motivating. At times, these interests may present in a perseverative manner. These interests can be an asset and open a way of engaging with the learner, both academically and socially. For example, foundational maths concepts can be taught through Mario characters, and sentence structure can be taught through talking about an image of a preferred movie.

Restrictive and repetitive patterns of behaviour can also be in response to high levels of anxiety. Strict adherence to these individual preferences can directly impact a learner's ability to manage change and transition. These difficulties can be further impacted by the social context and/or perceived social pressures.Over stimulation can also intensify a learner's experience.

Sensory perception and responses

Autistic learners may experience **sensory information** differently to their peers. They may be under- or over-sensitive to sounds, touch, light, colours, tastes, smells, temperatures and pain. This can impact their experience in a variety of contexts and range from minor to severe. It is important that you notice the behaviours of an autistic learner and work with the learner, their family and colleagues to develop a thorough understanding of the learner's sensory profile. Autistic learners may be able to explain the challenges they experience, or they may respond to challenges with unexpected behaviours. When these behaviours arise, take note, and work with key stakeholders to understand the form and function of the behaviour. This shared understanding can lead to the development of a proactive approach, in which you identify tailored provision and/or modifications to the environment and routines that can mitigate the learner experiencing overstimulation, distress and/or high levels of anxiety.

Autism and potential co-occurrence of need

Autistic learners vary in their profile of strengths and needs, life experiences and the presence of other conditions (for example, learning disability, attention deficit hyperactivity disorder [ADHD] or epilepsy). No two individuals on the autism spectrum are the same. Autistic learners need to be understood as individuals first and foremost.

Autistic learners can be socially naïve and vulnerable. Play, and other unstructured times, can be particularly difficult and may lead to high levels of anxiety. In some instances, the behaviours autistic learners display may lead to misunderstandings, this may create upset. Autistic learners are at an increased risk of bullying, exclusion from school, safeguarding concerns and mental health difficulties. For further information, please refer to **The Language Learners Use**.

Primary Case Study

Jack was 5 years old when diagnosed with ASD. *In nursery he spent most of his time in a quiet corner, playing happily with the garage and cars. He would sit at carpet time and fiddle with the wheels of a favourite car but did not join in the activities. He enjoyed running around outside and playing on the trikes. He was referred to the paediatrician by his GP as his Mum thought something was 'not quite right' compared to her other children.*

When he began in reception his behaviour changed. Initially he just refused to follow adult instructions. He would not line up in the playground at the beginning of the day. When eventually cajoled into the classroom, he would settle under a table in the back corner of the room and only come out when the other children had left to go out to play. He was becoming increasingly difficult to get through the door, clung to his mother, screamed and hit out. He stopped attending school.

The SENCO called a meeting with the class teacher, parent and the school EP. They all contributed and listened to each other's understanding of when this behaviour occurred and 'why?' All perspectives were noted and considered. The EP and SENCO were able to contribute their knowledge and understanding of autism and how this could explain Jack's behaviour and his perspective of school. The EP and SENCO used the SPELL framework to support their involvement and planning. The main hypotheses which emerged were around managing change, transition and sensory overload. They drafted a SEN support plan. Jack's mum and class teacher discussed this with Jack and got his ideas about what would help.

The outcomes decided at the meeting prioritised Jack's emotional wellbeing, reducing his anxiety and promoting inclusion in the school. The class teacher made some adjustments to the classroom environment, including increasing the use of visual prompts. A symbol and word were added to the class timetable at the end of the day for 'home time'. Changes were made to the classroom routine; these included Jack coming in 10 minutes before the other children and giving him an allocated place to sit at the back of the room in the corner. This meant people did not crowd or walk past him and knock his chair (his Mum had explained that he became overloaded when there were crowds of people milling around). During the 10 minutes before school a consistent specified adult went through the class and individual visual timetables with him. The individual timetable was developed in consultation with Jack, Mum, SENCO and EP. Jack was given a short task to complete at his table while the other children arrived and settled. This was included on his visual timetable and was always something he enjoyed and was achievable, e.g., a visual search puzzle from a workbook or a task such as sorting out coloured pencils for the class teacher. The plan was reviewed after six weeks.

Autism spectrum disorder

Supporting learning and inclusion

A proactive approach that encompasses quality first teaching, reasonable adjustments and tailored interventions will support most autistic learners in a mainstream environment. Provision plans are an important tool to ensure consistency of provision, which will encourage progress towards agreed, measurable outcomes.

For quality first teaching to be realised, Autism Education Trust have identified four principles:

- Understanding the individual with autism
- Positive relationships
- Learning and development
- Enabling environments

SPELL, the NAS model, can help class and subject teachers understand and plan provision for autistic learners.

Structure, **P**ositivity, **E**mpathy, **L**ow arousal, **L**inks.

Structure: Playtime and other unstructured contexts

Unstructured times such as break, lunch, tidying up, or moving between lessons can be difficult and anxiety-provoking for autistic learners. These contexts are often overwhelming in a sensory way, as there is a lot of movement and noise. They are also complex socially. These unstructured times are often a priority area for support and adjustments.

Structure and routine reduce uncertainty and make the world, the classroom and break times more predictable and safer. Creating structured environments, using routine, simple language and visual information usually supports autistic learners. These approaches include class and individual timetables, reducing and eliminating clutter and irrelevant materials from the class, labelling classroom and school areas using appropriate symbols or words, and visual prompts such as a spot or cushion to indicate where to sit or stand. Structure can also increase independence.

Breaks can also be structured by providing organised activities and clubs. It is important that autistic learners can make their preferences known. Peer partners at unstructured times can support some autistic learners. It is important for adults supporting autistic learners to monitor peer interactions, as learners can be at an increased risk of bullying and/or exploitation.

Positive approaches and expectations

When working with autistic learners it is important to identify, respect, and build on natural strengths, interests and abilities. Preferences and interests motivate and engage learners in the curriculum. Autistic learners may avoid new experiences and want to only engage in their preferred interests. Structure and positive, sensitive support can reduce their level of anxiety and help them learn to tolerate and accept such experiences and develop new interests.

Expectations should be high but realistic and based on careful assessment. Assessments should be made from as wide a perspective as possible and include the learner and family voice. It is important to identify barriers in accessing educational, social and community experiences. This can present in different ways. Some autistic learners may have difficulty with verbal communication, leading to underestimation of their ability and potential. Other learners may have a good grasp of speech and text, whilst masking other difficulties.

Empathy

The quality of the relationship between autistic learners and those who work with them is of vital importance. Effective professionals are calm, predictable, empathetic and analytical. When working with autistic learners we must try to understand the world from the learner's perspective, knowing what motivates and interests them.

It is also essential to understand what frightens, preoccupies or otherwise distresses them. We should model empathy to the school community and develop high expectations of respect and tolerance from learners and adults for differences in thinking and behaviour.

Low arousal

Many autistic learners benefit most in a setting where sensory and other stimulation is managed and reduced. Approaches and social and physical environments generally need to be calm and ordered to reduce anxiety and help with concentration. There should be as few distractions as possible when the learner is expected to focus on activities chosen by others. Noise levels, colour schemes, smells and lighting are examples of elements in the environment that should be considered.

Clear information should be given in the way best suited to the learner, with care taken not to overload. A break-down sheet can help when writing instructions for a task. Some learners may need more time to process information, especially speech. It is often helpful to gain the learner's attention by saying their name before giving instructions, speaking slowly and keeping sentences short and direct.

Some learners may seek out and need sensory experiences. This needs to be managed in a sensitive and structured way. Relaxation and arousal reduction provision may also be helpful in promoting calm and general wellbeing, and in reducing anxiety.

Links

Clear and open communication will reduce the risk of misunderstanding, confusion or the adoption of fragmented, piecemeal or inappropriate approaches. Legislation requires all professionals to work with the learner and their families through the graduated approach. This may include professionals from external agencies involved with the learner. Information which helps staff understand and provide for the learner can be shared through a provision plan.

Sensory and/or physical needs: Hearing impairment

SEND Code of Practice Definition

Some children and young people require special educational provision because they have a disability which prevents or hinders them from making use of the educational facilities generally provided. These difficulties can be age related and may fluctuate over time. Many children and young people with vision impairment (VI), hearing impairment (HI) or a multi- sensory impairment (MSI) will require specialist support and/or equipment to access their learning, or habilitation support. Some children and young people with a physical disability (PD) require additional ongoing support and equipment to access all the opportunities available to their peers.

Hearing impairment

The term hearing impairment includes all types of hearing loss and deafness, and is a term used within a medical model of disability. Within this section, we have used the term 'deafness' as part of **the social model of disability**, with an intention to focus on an individual's strengths, as well as needs. As teachers, we need to ensure the language we use when speaking about learners does not imply a learner is 'impaired' and therefore 'broken'. When planning lessons, it is important to remember that being deaf or having a hearing loss is not a barrier to learning or acquiring information, but communicating information that is not accessible, is.[1]

Understanding the learning need

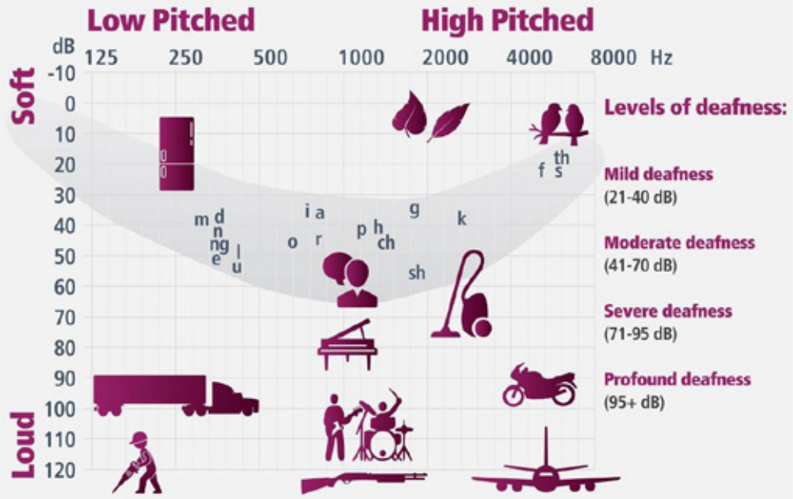
Deafness can be present from birth (congenital deafness) or acquired later in life. As the classroom teacher, it is crucial that you understand your learner's deafness, how this impacts on their access to language and strategies and resources (including amplification systems and assistive technology) that support their access to learning in the classroom environment. Some deaf learners communicate using British Sign Language (BSL), or a combination of BSL and English – this is called a total communication approach.

There are two main types of deafness:

- Sensorineural hearing loss/deafness: this is caused by damage to the structures in the inner ear or the auditory nerve. A sensorineural hearing impairment is permanent.
- Conductive hearing loss/deafness: this is where sounds are unable to pass efficiently through the outer and middle ear into the inner ear. This can be caused by blockages, such as wax in the outer ear, or fluid in the middle ear (glue ear). A conductive hearing impairment is usually temporary, but in some cases it can be permanent.

Some learners will have a combination of sensorineural and conductive deafness. Both sensorineural and conductive deafness can:

- Occur in one ear (unilateral deafness), or both ears (bilateral deafness).
- Vary in severity, from mild to profound, as detailed in the 'speech banana' diagram'.



A 'speech banana', as shown in the diagram above, is a useful tool that can help you understand the impact of a learner's deafness. This diagram is adapted from NDCS[2] and based on British Society of Audiology definitions of hearing loss. It demonstrates what a learner can hear without amplification (explained further later in this section).

If you have a deaf learner in your class, but do not have access to further information about the learner's hearing levels, you should speak to the learner, their family and/or the Qualified Teacher of the Deaf for more information. As the classroom teacher, it is essential for you to understand a learner's hearing with, and without, amplification [hearing aid(s) and/or cochlear implant(s)]. As the diagram shows, a learner with 'mild deafness' is likely to not hear sounds including /k/, /f/, /th/, and /s/, which can cause difficulty with articulation and language acquisition. Even mild deafness can have a significant impact on a learner's access to classroom teaching**.** A learner with 'moderate deafness' is likely to not hear a substantial number of speech sounds; this will significantly impact their access to language and learning in the classroom environment. **Phonak's hearing impairment simulations** are a useful source to hear examples of the effects of mild and severe deafness.

Hearing impairment

Amplification Systems

Amplification systems, including hearing aids, cochlear implants, and bone conduction aids enable a learner to access sounds more effectively. However, these devices do not replicate normal hearing, nor replace it.

- A cochlear implant is a device with two parts: an external sound processor and an internal implant which contains an electrode array that is inserted into the cochlea. A cochlear implant replaces the function of damaged sensory hair cells inside the inner ear. The University of Southampton has shared useful examples of how different sounds may be heard with a cochlear implant, in their resource: **What does a cochlear implant sound like?**
- A hearing aid is a device that makes sounds louder and clearer, reducing the impact on deafness. There are different types of hearing aids, with the most common being the 'behind the ear' (BTE) hearing aid.
- A bone conduction aid is an alternative to a regular hearing aid for those with problems in their outer or middle ears. It transfers sound by bone vibration directly to the cochlea, bypassing the outer and middle ear.
- A bone conduction implant is used permanently following a surgical procedure to fit the device, for example, for damage to the outer/middle ear but where the cochlea is functioning normally.

Assistive Technology

Background noise can greatly impact a learner's ability to hear. The National Deaf Children's Society resource **What does hearing loss sound like?**, enables you to hear what a deaf learner may hear in the classroom. To support learners in a classroom environment, they may have access to FM systems, streamers and soundfields.

- A personal radio aid system consists of two parts. The Transmitter is worn by the speaker and the Receivers by the learner. It enables the learner to hear the speaker over distance and some background noise.
- A soundfield system allows all learners to hear wherever they are seated in the classroom and whichever direction their teacher faces. It provides an even spread of sound around the classroom.

As the classroom teacher it is your responsibility to ensure that a learner's technology is used correctly and consistently and is working. Consider these two situations, which emphasise the importance of the appropriate use of a personal radio aid.

- For a learner with a hearing aid, which amplifies all sounds – if a learner is tapping their pen on the table, the hearing aid is likely to amplify the tapping over the voice of the teacher. The correct use of an FM system will help to mitigate this, bringing the voice of the teacher directly to the learner.
- For a learner with a hearing aid or cochlear implant completing independent work – if the teacher does not mute the radio aid whilst working with a different group of learners or speaking with the teaching assistant, the learner will hear these conversations, which will be a distraction to the work that they are meant to be completing.

There may be times that you suspect a learner's hearing aid or cochlear implant is not working. It is important to have an ongoing dialogue with the learner, their family and specialist teacher about both their learning and their amplification systems to make troubleshooting easier. Sometimes, it can be that a battery has run out, and a new battery will get the equipment working again! Some deaf learners will not be able to tell you that their hearing aid or cochlear implant is not working. In these times, knowledge of the Ling 6 sounds can prove useful for you to check a learner's hearing. For further information on the Ling 6 sounds, and how you can use them to check a learner's hearing, please refer to **Jane Madell's summary**.



Hearing impairment

Specialist Advice

A key resource in planning effective provision for a deaf learner is the Qualified Teacher of the Deaf (QToD). A QToD is often a part of a local authority's specialist sensory services. A QToD is a qualified teacher, with the skills and knowledge required to provide quality teaching to mainstream learners and has undertaken additional training to complete a mandatory qualification and acquire expertise in teaching learners with deafness. A QToD will work collaboratively with you to develop a conducive learning environment, providing you with guidance on high quality teaching strategies to support a learner's access to teaching and learning. They can support you in understanding a learner's deafness and their amplification system, providing both small group and/or whole school CPD on strategies to support deaf learners in the mainstream setting.

Deaf learners can receive varying levels of support from a QToD. Some learners will only have monitoring visits, whilst others may have direct teaching intervention.

Some deaf learners will have access to support from a Speech and Language Therapist. Speech and Language Therapists provide individualised support to deaf learners in areas such as articulation, attention and listening skills, communication (receptive and expressive language) and comprehension.

Case Study

W moved to England aged 12 years old from Afghanistan. He had a bilateral moderate-severe hearing impairment and did not have access to hearing aids before moving to England.

W attended a mainstream secondary school with a Hearing Support Centre. It was a significant change for W, and the secondary school environment was different from his experience of schooling in Afghanistan. While adjusting to a new country, he also had to adjust to using hearing aids - sometimes he would turn his hearing aids off in lessons. He knew some English, but his vocabulary was limited.

The Qualified Teachers of the Deaf (QToDs) who worked as part of the Hearing Support Centre collaborated with his subject teachers to ensure W was able to access learning in mainstream classrooms with his peers. Together with the SENCO, a personalised timetable was created for W. In his first year, he had small group English lessons with a QToD in the Hearing Resource Centre and three hours per week intervention time in the Hearing Support Centre. He attended all other lessons with his peers; the QToD worked collaboratively with the subject specialists to plan appropriate support so that W could access these lessons.

As an example, for science, W's science teacher and QToD met in advance of all units of study. The science teacher reviewed upcoming content with the QToD, and together they identified the learning objectives for W to work towards. The QToD, during W's intervention time, pre-taught vocabulary so that he was prepared to engage in lessons in the mainstream lesson. In the mainstream lesson, W engaged in the learning alongside his peers, with the QToD supporting directly in one science lesson per week. This support was planned in advance and took a variety of forms, including the QToD and science teacher co-teaching parts of a lesson, the QToD providing 1:1 support, or the QToD working with a group of learners.

When the QToD was not supporting W in the lesson, the classroom teacher employed the following strategies:

- *The classroom teacher always checked-in with W during the starter activity, asking a question about football (or other preferred topic) to build a rapport over time and ensure his hearing aids were on and working.*
- W had preferential seating, with proximity to the classroom teacher.
- IWB slides were simple and organised, with content presented clearly. All slides were printed for W so that he did not have to listen and take notes at the same time. The printed slides were in his book for the start of each lesson, and the teacher also provided slides to other learners in the class (e.g., learners with dyslexia); this was in line with the learners' individual needs and ensured W was not singled out.
- W's name was always called before asking a question (open questions check the learner's understanding of the task).
- The classroom teacher always used the FM system during whole class input.
- Instructions were presented orally and in writing, as a checklist.

The teacher checked in frequently and often provided additional support during independent work. This additional support was planned for each lesson and took different forms depending on the lesson, including small group teaching sessions for additional instruction or over- learning opportunities; resources to support his learning such as sentence starters, word banks, numeracy mats; modified assignments to meet his individualised learning objectives, and personalised secondary sources to support his access to language.

Hearing impairment

Environment and Teaching Strategies

The classroom can be a great benefit, or detriment, for a deaf learner. You should work with the Qualified Teacher of the Deaf (QToD) to develop a conducive learning environment. Some factors to consider when developing the environment:

- **Background noise** – When the classroom is empty, listen carefully to the sounds in the classroom. Is there noise coming from the computers, or a projector?
- **Noise outside the classroom** – When learners are outside (on the playground, or in the lunch hall), does the noise carry to your classroom? Is the music room near to your classroom? Consider if noise from outside the classroom may impact the learner.
- **Noise within the classroom** – Consider other sounds in the classroom that a learner's amplification system may amplify. For example, when a learner goes to stand up from their chair, do the feet of the chair scratch loudly against the floor? There are solutions for noises like this, such as felt furniture pads.
- **Seating arrangements** – It is important that deaf learners can see the teacher, without having to turn their body, for classroom instruction. It is crucial that you face learners when teaching and delivering new content, so that the learner can see your facial expressions and, for some learners, lipread. It can be challenging for deaf learners to locate where sound is coming from – this is important for class discussions. Talk to the learner, and the QToD, about the most conducive location for the learner to sit. Where possible arrange seating in an arc/semi-circle. This enables the learner to see you as well as some of their peers.
- **Lighting** – Consider the fall and direction of natural and artificial light. Standing with light behind you, either from a window or interactive whiteboard, makes it very hard for a learner to see lip pattern and facial expression.

Access to language:

- Always face learners when presenting new information. Do not talk with your back to learners, e.g., whilst writing on the IWB.
- Present new information orally and in writing together at the same time so that the learner can hear the word and see how it is written. Opportunities for pre-teaching in a small group setting will greatly benefit deaf learners during follow-up whole-class teaching.
- Provide visuals and word banks during whole class learning activities, small group and independent work.
- Always turn on closed captions.
- Repeat contributions from other learners, so that deaf learners are not missing information from classroom discussions. This includes social situations – if something funny happens on the other side of the room, take the time to explain what happened so that the learner does not feel they are missing out because of their deafness.
- Choose your language carefully – figurative language, such as idioms and alliteration, can be confusing or easily misunderstood. Always pre-teach this language, or if a phrase spontaneously comes up in a lesson, explain the meaning behind it.
- Be mindful of your facial expressions – deaf learners will use other sensory systems to better understand language. Be aware that deaf learners may not be able to detect the information from the tone of your voice.
- Some learners may use British Sign Language (BSL), or a total communication approach (a combination of BSL and English). Ensure learners can access language through their preferred communication approach in all parts of the lesson.

Accessibility of the classroom environment *ensuring:*

- Speech is clear – adults and other learners need to speak clearly, where words are enunciated at a normal pace, and not overenunciated.
- Staff check daily that the learner's technology is working.
- Amplification systems are consistently used to support a learner's access to teaching.
- Adults always call a learner's name to gain their attention, before asking a question.
- A visual system is in place for the class, e.g., a traffic light system, to support all learners to work within appropriate 'noise' levels.
- Always check that deaf learners have understood classroom instructions. In 1:1 conversation, it is best to avoid yes/no questions. Encourage the learner to repeat back what they have heard if you are checking they understood an instruction or new information.

Hearing impairment

Assessment

Many deaf learners in mainstream settings have the potential to attain and achieve at age-related-expectations when effective provision is in place that supports their access to learning. It is integral that access arrangements are in place when assessing learners with deafness, during both formative and summative assessments. Access arrangements are individual to the learner, but may include:

- Access to technology, including:
  - personal and classroom amplification systems
  - laptops/tablets used as part of a learner's normal way of working
- 25% extra time
- Readers
- Reading Aloud
- Scribes
- Language Modifier
- Communication Professional (e.g., Communication Support Worker or BSL interpreter)



Resources

- NatSIP (National Sensory Impairment Partnership) has developed **A Place to Start – Working with a child or young person with a sensory impairment** to support mainstream or special school staff who are working with learners with a sensory impairment. It is important to note that the advice provided in this resource does not replace the advice and support a local sensory support team provides.
- If you are concerned a learner in your class may have an undiagnosed hearing loss, the National Deaf Children's Society has produced a useful document to support teachers in **recognising the signs of hearing loss**.
- **'BATOD (British Association of Teachers of Deaf Children and Young People)** has developed the Specialist Deaf Curriculum Framework to support deaf children, young people and their families to make informed and independent decisions about their deafness, from identification through the adulthood.'

Vision impairment

Understanding the learning need

Vision impairment (VI) includes any form of visual difficulty which cannot be corrected by wearing glasses or contact lenses. It is important to be aware that even if a learner with VI wears glasses, this does not mean that they will see 'normally'. There are many different causes of VI in children and young people, and many learners have more than one sight condition. Disorders in the eye, the retina or the optic nerve, affect the way that visual information is transmitted from the eye to the brain. Damage to the visual pathways in the brain, known as cerebral vision impairment (CVI), affects the way that visual information is processed.

Most learners are born with their visual difficulty, although some develop it later in their lives. A small number of learners have never seen and the implications for their learning can be very different from learners who have some vision. A small number of learners will learn braille. The effects of VI vary; some learners have no central vision or no peripheral vision, some have patchy vision with a mixture of clear and blank areas, while others may see everything as a blur. Examples of the effects of CVI in the classroom include being unable to recognise faces or familiar objects, to perceive moving people or objects, or to discriminate between several items in a cluttered space.

It is important to have the same high expectations of learners with VI, as you would with their peers. There are many factors that influence a learner's development; however, it is important to consider learners with VI do not have access to the same opportunities for incidental learning through accessing visual information in their environment, including social modelling (i.e., copying the behaviour of others). Consequently, their understanding of certain concepts and norms of social interaction may be delayed and/or different to that of their age peers. Speed of reading and working is also likely to be affected – most vision impaired learners will take longer to complete a task, but this should not be seen as reflecting on their ability and potential.

If you have a learner in your class with a VI, you should speak to the learner, their family and/or the Qualified Teacher for Vision Impairment (QTVI) for more information. As the classroom teacher, it is essential for you to understand the practical implications of a learner's visual difficulties on their access to learning. Depending on the nature of their visual loss, any assistive technology they use and any other support they receive in your lessons, you may need to adjust your teaching style to make sure they are fully included in your lessons.

Social relationships

Vision impairment can have a significant impact on learners' social development, limiting their capacity to explore the world around them and to learn the skills of social interaction through play. Learners with VI may, in the early years, behave in a different way from other learners as they learn to explore their environment. Many learners will find it hard to recognise non-verbal cues such as body language and facial expression.

Depending on the extent of their visual difficulties, learners may find it difficult to forge strong social links with their classmates unless you create structured opportunities for them to do so in a sensitive and understanding manner. Strategies to promote their social inclusion may be needed in the playground as well as the classroom.

Local VI services are central to supporting learners and their family and advising schools and families about appropriate strategies to ensure the best learning and life outcomes for the learner with VI. Others in the multi-agency team should include the teacher and teaching assistant, SENCO and Educational Psychologist from the school; the Qualified Teacher of Vision Impairment (QTVI), habilitation worker, ophthalmologist and other health professionals.



Vision impairment

Assistive technology

Assistive technology plays a central role in enabling learners with VI across the age and ability range to access the curriculum independently, avoiding the danger of over-reliance on adult support. This is known as 'learning to access', in contrast to being given 'access to learning'. Laptops and tablets enable learners to read and record by enlarging text and other items of curriculum content while braille devices provide much of the same functionality for blind learners. Most learners who use braille also learn to touch-type and use laptops with screen readers in lessons. Assistive technology also provides learners with access to the many internet-based resources that form an essential part of all teaching and learning. For learners with severe VI and particularly those learning through braille, many learning resources may require modification to make them useful and meaningful. This is a time-consuming and skilled task which is often carried out by specialist TAs under the guidance of a QTVI. You need to communicate effectively with TAs and QTVIs to make sure these resources are available for learners in time for the lessons when they need them. Because changes in technology take place so rapidly it is important to seek up-to-date specialist advice from a QTVI. Information on **Technology and Independent Learning** from the Royal National Institute of Blind People (RNIB) is a useful source.

Case Study

M was born with Oculocutaneous Albinism, with poor near and distance visual acuity. He also has nystagmus (which causes constant movement of the eyes) and photophobia (extreme sensitivity to light).

M can read print no smaller than 36 point. He attends his local secondary school and having chosen his GCSE options in Year 8, he has started his chosen subjects in Year 9, leading to exams over the course of the next 3 years. He has had ongoing input from a Qualified Teacher for Vision Impairment (QTVI) from the local Sensory VI Service since he started at his local nursery.

M receives modified learning materials in hard copy and electronic formats. They are provided by a TA who works with him regularly throughout the week, planning ahead with his QTVI and class teachers. The TA only gives M direct support in practical lessons where there are safety implications, or where there is a high level of visual content. This is part of a planned approach with M's QTVI, SENCO and class teachers to promote his 'learning to access' skills. M uses a range of equipment to access the curriculum and needs time to learn and practise with different devices. He is studying one less GCSE subject to free up time for these sessions. M uses a laptop with magnification software, an electronic handheld magnifier and an iPad with specialist apps.

*Although over the years M has been well-supported by the VI team, GCSEs are the first external exams he has sat since the SATs in Year 6. His teachers are keen to make sure that they teach him appropriately so that his normal way of working matches the **access arrangements** he will receive in his GCSE exams.*

Following discussions between the QTVI, SENCO and classroom teachers the following strategies have been agreed:

- Class teachers to read the functional vision assessment carried out by the QTVI so that they understand M's visual preferences.
- M to be seated away from direct sunlight to minimise the effects of his photophobia. Blinds to be drawn where appropriate.
- Teachers to use learners' names when leading class discussion so that M knows who is being spoken to.
- Class teachers to speak aloud anything they write on the IWB.
- Any class demonstrations to be supported by clear verbal description (for example, not 'if you watch, you'll see that this is what happens when I do that').
- All IWB presentation materials to be made available to M via his laptop/tablet.
- All curriculum resources shared with M's TA three days in advance of lessons to allow time for them to be modified where appropriate.
- Half termly planning session to be held with each teacher to discuss future teaching plans and curriculum resources, to provide time for specialist resources to be created or obtained externally.
- All proposed support arrangements to be checked for compliance with GCSE access arrangements.

Vision impairment

Environment

An accessible physical environment can do a great deal to reduce barriers to participation and learning for learners with VI, and it will also benefit all other learners. There is a balance to be struck between providing an environment that is safe and accessible for learners with VI and preparing them to take an independent role in a society that is not always designed to meet their needs.

You should ensure that the environment is suitable and safe for learners with VI. This should include an access audit in your classroom and across the school, inside and out, in line with the Equality Act 2010 to ensure a good learning environment.
Key factors to consider include:

- Clear, well positioned and easily visible signage.
- Steps, edges and other transition points highlighted with yellow paint.
- A distinction between quiet and active areas in the playground, and shaded areas for learners with light sensitivity.
- Corridors, cloakrooms and classrooms kept free of obstructions.
- Classrooms kept with a consistent layout with any changes explained.

It is particularly important to consider the lighting in a classroom where a learner with VI is going to work. Consider:

- Is there good ambient lighting in the classroom?
- Does the light fall directly onto the learner's work areas?
- Do the windows have blinds to reduce glare?
- Are reflective surfaces covered to reduce glare?

Teaching Strategies

- Avoid standing in front of windows - this can reduce you to a silhouette and make it difficult for all learners to see you properly.
- Speak clearly and use learners' names at all times.
- Verbalise anything you write or read out from the IWB.
- Make sure you use a contrasting pen/ font for writing on the IWB.
- Consult your QTVI/VI TA about the curriculum materials you plan to use well in advance of the lesson, to allow time for these to be sourced from an external provider such as **RNIB Bookshare** or modified into an accessible formvat locally as required.
- Learners with VI should sit in the best position to see you and the whiteboard, but not separately from the other learners.
- If using assistive technology, learners may need to sit close to a power source.

The challenges presented by a vision impairment suggest that, for many learners, their plan is likely to include targets and/or support strategies in the following areas:

- The development of literacy and communication skills.
- The development of habilitation skills (for example, mobility and independence).
- The provision and maintenance of assistive technology and training.
- The provision of support for the timely adaptation of resources.
- Low vision assessments and prescription of low vision aids/magnifiers.
- Measures to ensure teaching and learning takes place in rooms which provide a good listening environment and have good acoustics.
- Regular input from specialist staff such as QTVI and habilitation worker, both for direct teaching of specialist skills (such as learning to read and write through braille) and for advisory work.
- Specific teaching strategies and resources to ensure access to teaching.
- Appropriate access arrangements for internal and external assessments.
- Any support required to improve self-esteem and social skills
- Measures to develop independence skills including working unsupported in the classroom, the ability to use and maintain equipment and self-advocacy/self-determination skills.

Vision impairment

Resources

A key resource in planning effective provision for a learner with VI is a Qualified Teacher of Vision Impairment (QTVI). QTVIs are qualified and experienced teachers, with the skills and knowledge required to provide quality teaching to mainstream learners and have undertaken additional training to complete a mandatory qualification and acquire expertise in teaching learners with VI. QTVIs work collaboratively with classroom teachers to develop a conducive learning environment, providing guidance to teachers on high-quality teaching strategies to support a VI learner's access to the teaching and learning. They can support classroom teachers in understanding a learner's vision impairment and its implications for their access to learning and wider development. Learners with VI can receive varying levels of support from a QTVI. Some learners will only have monitoring visits, whilst others may have direct teaching intervention.

Many learners with VI will also receive support from a habilitation officer. Habilitation officers are qualified specialists in supporting children and young people with VI to develop mobility and living skills, designed to promote their independence, inclusion and participation in all aspects of life. Habilitation officers work closely with QTVIs, SENCOs and families to ensure that between them they provide holistic support to meet the learner's agreed outcomes.

Assessment

As teachers, it is our responsibility to see that all learners maximise their potential through effective provision that meets their learning needs. It is essential that appropriate access arrangements are in place when assessing learners with VI, during both internal and external assessments. Cognitive ability tests present particular challenges to learners with VI because of the highly visual nature of many of the test questions. You should therefore consult your local QTVI and/or EP before using CATs or similar tests.

Appropriate exam access arrangements are individual to a learner, but may include:

- Assistive technology
- Extra time between 25%-100%, according to individual need
- Modified papers in large print or braille
- Readers
- Scribes
- Supervised rest breaks

All of these arrangements must be evidenced as a learner's normal way of working in exams.

Further Reading

Understanding your Learner's Vision Impairment is a useful resource from the RNIB to support teachers in understanding individual learners' needs.

Cerebral Visual Impairment, also from the RNIB, explores the impact of CVI on learning.

Specific organisations that can offer support and advice:

- **The National Sensory Impairment Partnership**
- **The Royal National Institute of Blind People**
- **VIEW**
- **Guide Dogs for the Blind**
- **Thomas Pocklington Trust**

The Curriculum Framework for Children and Young People with Vision Impairment (CFVI) has been developed to support children and young people with vision impairment access an appropriate and equitable education.

Multi-sensory impairment

Understanding the learning need

Learners with multi-sensory impairment (MSI) have a combination of vision and hearing difficulties which can arise from a wide range of causes. Children and young people may be born with MSI or acquire it following illness or injury. Some learners may have MSI as the result of a progressive condition. Whilst learners with MSI have shared challenges, including independent mobility, communication and access to information, there is a huge variability of need between individuals from mild to profound. The effects of MSI on development are not simply those of hearing impairment plus those of vision impairment. Learners with MSI are acutely deprived of sensory information, because it is much harder to use sensory information that is partial or distorted. Some learners will identify as deafblind, whilst others will identify as a deaf or sight impaired person who cannot see or hear very well.

With MSI, there can be co-occurrence of need across other areas of the four broad areas of need. As the classroom teacher, it is important you get to know the learner. Find out their strengths and interests, their worries, and things they find challenging. Speak to the learner's family, previous teachers, and specialist teachers to better understand their learning needs, which will enable you to develop an inclusive classroom environment that supports the learner's access to language, both academically and socially.

For further information on supporting learners with MSI, we recommend referring to the **Hearing Impairment**, **Vision Impairment** and **Co-occurrence of Needs** sections.

Key considerations

In addition to the scaffolding recommendations detailed in the Hearing Impairment and Vision Impairment sections:

- Every learner is an individual – speak to the learner, their families, previous teachers, specialist teacher(s) and external agencies, to develop an understanding of the learner's individual needs and strategies and interventions that can support their access to learning.
- Plan individual lessons, and the wider school day, with routine and consistency.
- Consider the needs of the learner when creating the classroom environment, ensuring:
    - the learner is seated in a place that best supports any useful sight and hearing,
    - the classroom is organised in a way that provides safe movement pathways, and is kept tidy and organised,
    - the learner has access to assistive technology and tactile resources to support their learning.
- Provide opportunities for both pre-learning and over-learning.
- Break tasks into manageable chunks with sensory breaks as needed.
- Allow extra time for transitioning around the classroom and school.

Specialist Advice

As learners with an MSI have more complex learning needs, a number of specialists will support you in developing provision to meet the needs of the individual. This can include:

- Specialist teachers: Qualified Teachers of learners with MSI (QTMSI), Vision Impairments (QTVI) and Hearing Impairments (QTOD)
- Speech and Language Therapists
- Occupational Therapists
- Physiotherapists
- Educational Psychologists

'Children and young people with MSI need to get as much information as possible from any useful sight and hearing they have and from their other senses. For many children and young people, touch can provide a means of learning about the world and a means of communicating. Some children and young people with MSI become very skilled in using the sense of smell, for example, and use it to identify people and places. Some recognise movement around them because of something as subtle as changes in air pressure on their skin.'

CDC Early Support

*NatSIP have developed **A place to start – Top 10 Tips** to support teachers who are new to working with a learner with sensory impairment.*

Physical disability

Understanding the learning need

Physical disability (PD) is an umbrella term covering a range of conditions and impairments; each individual will have unique needs arising from their disability. The impact may range from mild to severe and affect their ability to take part in activities in the same way as others.

Not all learners with PD have cognitive needs. However, the impact on learning may be complex and can affect one or more of the following areas:

- Mobility and gross motor skills
- Hand function and fine motor skills
- Sensory processing
- Vision and hearing
- Speech, language and communication
- Friendships and relationships
- Social, emotional and mental health
- Health and personal care needs
- Independence
- Attention
- Engagement owing to fatigue or pain



Collaborative working to meet individual needs

In planning provision, the learner's health and safety is the absolute priority – before learning can take place, an individual's physical needs must be met. This requires flexibility and careful planning on how to include a learner's equipment and other requirements into the lessons. Some things to consider:

- Can the learner engage with the teaching input from their specialist seating system or standing frame?
- Which adjustments will enable the learner to access partner and group work?
- How will the learner transfer between activities and/or equipment?
- As the teacher, how are you maximising the use of assistive technology and equipment to ensure equal access to all parts of the curriculum?

A key principle of The Equality Act (2010) is that schools must take reasonable steps to avoid disadvantaging pupils. Schools are allowed to treat disabled pupils more favourably than non-disabled pupils, and in some cases are required to do so by making reasonable adjustments to put disabled learners on a more level footing with learners without disabilities.

To determine and implement reasonable adjustments, you will need to work closely with the multi-agency team supporting the learner to ensure:

- The safe and effective use of a learner's specialist equipment.
- Integration of therapeutic programmes into the timetable to maximise learning time.
- A solutions-focused, holistic approach to remove environmental and social barriers.

As the teacher, if you notice something is not working, it is your responsibility, in partnership with the learner and their family, to work alongside colleagues and the multi-agency team to identify and trial additional modifications and provision. Sometimes the smallest modifications can have the greatest impact.

Environment

To create a conducive environment, it is crucial that reasonable adjustments are put in place discreetly and professionally, without drawing unnecessary attention to the learner. In addition to considerations covered in collaborative working to meet individual needs, reflect on the following from the learner's perspective:

- **How have you determined preferential seating?** With all planned seating, review sight lines. Are key learning tools visible?
- **Have you considered the language you use?** For example, 'move to' rather than 'stand and line up'?
- How will you manage group and activity changes within a lesson?
- **Are you aware of what to do in an emergency** (as outlined on the learner's 'personal emergency evacuation plan' (PEEP)?



Physical disability

Building Resilience

Physical disability may impact on every aspect of an individual's life, including how they socialise, develop relationships and feel about themselves.

Learners with PD may have additional worries, questions and concerns about themselves that their peers do not. They may have anxiety about a different body shape and how their body works. They may worry about being different and what others may think. They may have a degenerative or progressive condition which means they lose skills.

Regardless of the degree of physical disability, learners with PD are at risk of higher levels of anxiety, social isolation, lower academic achievement and diagnosis of mental illness than their peers. Their teachers play an important role in reducing these risks through inclusive practice which both empowers the learner and supports them to build resilience. Consider these strategies, which can make a big impact to a learner with PD:

- *Learn about the learner's strengths as well as their challenges, and what helps them feel safe in your lessons.*
- *Carefully plan seating arrangements, so that social contact is maximised and unnecessary transfers between equipment is minimised.*
- *Sensitively showcase what the learner can do well with others.*
- *Structure activities to develop specific social skills they need to develop.*
- *Always communicate directly with the learner, never their teaching assistant.*
- *Consider the language you use, e.g., 'wheelchair user' rather than 'wheelchair bound', 'move' rather than 'walk'.*

Regardless of the degree of physical disability, an empowered and resilient learner with PD is capable of achieving academically and making positive choices about their life and learning pathway.

Assessment

Learners with PD may need flexibilities and specific adjustments to homework, assignments and summative assessment tasks, including public examinations. Depending on the individual needs of the learner, adjustments may include:

- Altering assessment arrangements, for example taking a test in another room.
- Adapting materials used in an assessment, for example enlarged or electronic papers.
- Providing assistance during assessment, for example for practical tasks.
- Facilitating the use of assistive technologies.
- Alternative methods of recording, for example a scribe, laptop, or voice to text technology.
- Extra time or rest breaks.

Resources

- Specialist organisations, for example **SHINE** or **SCOPE**.
- The Physical Disability Network (**pdnet**), a free network supporting those who work with learners with PD.



Case Study:

J has achondroplasia, a genetic condition which causes dwarfism. The following provision has been put in place to support his access:

- *A rise and fall chair in each classroom, enabling him to work collaboratively with peers.*
- *Adaptations to classrooms and communal spaces (for example classroom sinks and toilets).*
- *Adaptive equipment (for example, cutlery and hockey sticks)*
- *Early transitions with a peer between lessons to ensure safety in corridors.*

In lessons, teachers support J by:

- *Working with him to identify parts of the lesson he can find challenging and determining provision to support his access to these activities.*
- *Applying their understanding of his needs in planning lesson activities, for example additional time on all assignments due to increased fatigue.*
- *Reviewing plans for classroom outings to ensure full participation.*
- *Maintaining and modelling high expectations - academically, socially and behaviourally.*

Social, emotional and mental health difficulties

SEND Code of Practice Definition

Children and young people may experience a wide range of social and emotional difficulties, which manifest themselves in many ways. These may include becoming withdrawn or isolated, as well as displaying challenging, disruptive or disturbing behaviour.

These behaviours may reflect underlying mental health difficulties such as anxiety or depression, self-harming, substance misuse, eating disorders or physical symptoms that are medically unexplained. Other children and young people may have disorders such as attention deficit disorder, attention deficit hyperactive disorder or attachment disorder.

Environment

Although learners with social, emotional and mental health difficulties (SEMH) may present themselves as forthright or controlling, they are often highly anxious and insecure. They do best in a classroom environment which is calm and orderly, where routines are well established, and behaviour is consistently well managed. Routines can include the way that you deliver your lessons in a particular way, how learners are expected to have the correct equipment ready for each lesson, the way that transitions are managed, or how learners let you know if they need your attention. By carefully and consistently applying the school's behaviour policy in a calm and measured way, learners are likely to see you as being firm and fair to everyone in the class. This will help create a predictable environment, which will reduce learners' anxieties, and help them feel safe.

It can be helpful to have a part of the classroom set up as a 'safe space' where learners can take themselves when they are feeling particularly anxious or vulnerable. Where possible this should be a cosy and comfortable space, with some resources that learners can engage with to help them regulate their emotions. This could be drawing or reading materials, or for younger learners some toys.

Relationships

It is very important that you build a positive relationship with the young person. They may have little or no experience of building healthy, meaningful relationships. Get to know them, be interested in them. Little things that you do (acknowledging them, making positive eye contact, letting them know you have noticed them, finding out their likes and dislikes) show that you are thinking about them and **holding them in mind**. You are modelling being relationally present, and relationally respectful. When learners feel connected, they feel safer and more regulated. What you notice about them will help you to see what their challenges are, what triggers anxiety, escalates stress and dysregulation, which can result in behaviour that is challenging.

Expectations

It is important that you have high expectations for any learner with SEMH in your class. What this is likely to mean in practice is that you will need to provide tailored support and guidance to your learners so that they can achieve as much as they possibly can. This applies to their learning and their behaviour. You must avoid thinking that because of the difficulties they have you should not expect much of them. It is vital to communicate your expectations in a way that encourages and supports learners, rather than leaving them feeling that they can't achieve what you are asking of them.

Planning

Good planning is essential to enable all staff to consistently respond to a learner's social, emotional and mental health needs. An Individual Behaviour Management Plan (IBMP) allows staff to avoid known triggers, consider a co-ordinated response to behaviours, and focus on teaching new skills to enable the child or young person to access learning.

Curriculum

Curriculum time needs to be allocated to support learners with their emotional literacy and understanding of the social code. This will allow time to develop learners' understanding of social interactions and expectations, and their own emotional experiences. A circle time model can be used, or personal, social, health and economic (PSHE) lessons. Agreeing ground rules for this type of activity can help participants feel safe. It is helpful to create a regular space where learners can talk openly about their experiences of home and school. Games or role-play can be used to explore issues. A focus on building vocabulary which describes emotions is helpful, as learners with SEMH needs may not feel confident to match the correct language to their emotions, when talking about how they feel.

Assessment

Assessments such as the Boxall Profile, Thrive or the Social and Emotional Adjustment (SEA) Scale can be used to help assess and track learners' social and emotional development. The outcomes from assessments can be used to inform curriculum planning. For example, if 'showing a negativism towards self' is identified, work can be planned to help understanding of where these feelings may come from and highlight strengths and abilities. Any form of assessment only works well within a whole school strategic approach to meeting need and managing behaviour. For measures to better understand and plan for children's mental health, where this impacts on their learning, see Public Health England's Index of Instruments on page 45 of 'Measuring and monitoring children and young people's mental wellbeing: A toolkit for schools and colleges', supported by the Anna Freud Centre.

Social, emotional and mental health difficulties

Case Study

Sam struggled in school. He found it hard to pay attention and to listen, and he was unable to concentrate or focus for very long. *Rebecca (his teacher) said that usually he wouldn't let her, or the teaching assistant help him, even though she knew he became frustrated and gave up on tasks, particularly writing. She worried that he was getting further behind with his learning, and she felt deskilled, hopeless, rejected and frequently irritated by him. Sam could flare up for no apparent reason, and staff described him as 'often controlling and manipulative' and 'sometimes aggressive'. Many of his behaviours were hard to like as he made staff feel on edge and this impacted on how staff felt about him. His off-task behaviour frequently disrupted other children; some became annoyed with him, but some joined in and even encouraged him. He found break and playtimes difficult as he tried to join in games but most often ended by spoiling them. He then took a long time to calm down.*

Sam did not experience reliability and consistency of care. His earliest years lacked nurture and warmth, and he grew up feeling unsafe. Things happened that made him feel frightened, and he witnessed events that left him traumatised. He therefore had no experience of healthy, attuned and reliable relationships with adults. He developed an internal model (an unconscious view) of himself as unlovable and of others (particularly adults) as unreliable and untrustworthy – he lacked a crucial basis for self-esteem and resilience. He had few experiences of adults helping him to regulate his powerful and overwhelming emotions and had to find ways to cope with these on his own. When he started school, he was wary and suspicious of adults; he did not see them as people to turn to at times of stress and did not necessarily expect they would be kind to him. He could not say any of this to anyone, nor was he able to think about it; they were his feelings. What Rebecca and her colleagues felt when working with Sam were the emotional responses to this wariness and suspicion, this uncertainty and unpredictability that he displayed through his behaviour.

Barriers to learning

Learners with SEMH needs can have significant barriers to engaging in everyday classroom learning. The underlying reason for this is likely to be their lack of self-confidence and self-esteem, which may relate to prior experiences of not doing well in classrooms. It might also be that they have significant gaps in their knowledge or skills, due to their SEMH needs, or other difficulties that affect their learning. These feelings may trigger disruptive or challenging behaviour. When you see behaviour that disrupts and actively avoids learning tasks it is worth asking yourself the question, 'Is this something the learner will not do, or is it something they cannot do?' For a learner with SEMH needs it is likely that they cannot do what you are asking of them and will need scaffolding and support. Changing your language changes how you think about the learner's behaviour.

Understanding behaviour as communication

It is helpful to recognise that all behaviour is a form of communication. The behaviours of learners with SEMH are most often manifestations of underlying, unmet needs. For example, these unmet needs may be emotional (frustration, sadness, fear) or physical (hungry, thirsty, aches) or educational (learning gaps, difficulty in knowing which knowledge to apply). These learners will almost certainly not have the capacity to express with words, or the emotional development or self-awareness to think about and process, feelings and thoughts which can be overwhelming. They can only show these in non-verbal ways. **You need to understand that, and to act on that understanding**. Additionally, be aware that your behaviour – verbal and non-verbal – is a communication that will affect all the learners you teach. Always pay attention to how 'challenging, disruptive or disturbing behaviour' makes you feel, how you process that, and what those feelings may tell you about what the learners may be feeling.

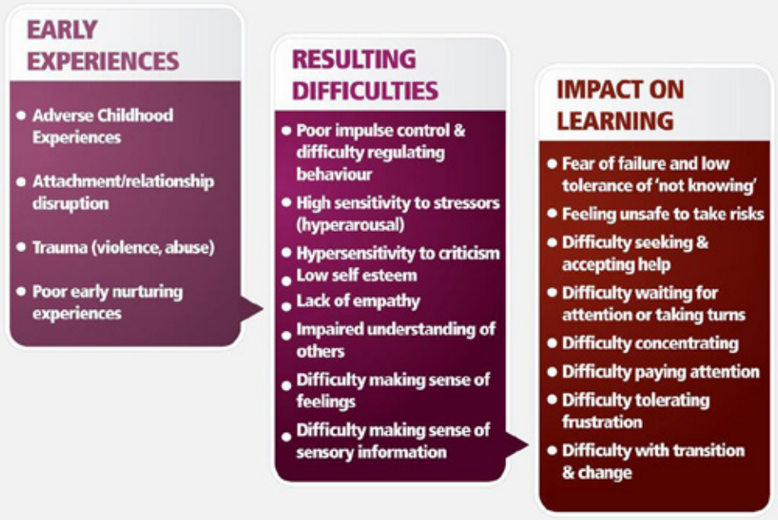
Teaching strategies

- Find out all you can about the learner's background to help you understand how you might better understand what they are communicating to you through their behaviour.
- Pay attention to small social or learning behaviours and praise it immediately – 'It's lovely to see that you are looking at me, and are ready to start your maths' or 'Thank you for being so kind when you picked up that pencil and put it back in the correct place'. It is likely you will get more positive behaviour as a result.
- Engineer success by teaching and rehearsing the social code.
- Avoid learners becoming ashamed or embarrassed by what you say. This may trigger a negative behaviour response.
- When responding to behaviour difficulties try to stay calm and not raise your voice. This will let learners know that you are managing your own emotions and are not losing control.
- Be confident to notice small misdemeanours and quietly comment on these. This will reduce the likelihood of situations escalating.
- In a secondary school when learners are finding it hard to engage in lessons, arrange a 45-minute meeting with other subject teachers. Talk together about the learner, what is going well and what difficulties there are in different lessons. Agree some shared approaches that all teachers will use. Arrange another meeting after 4 weeks to review the impact of these approaches, and to modify the plan if needed.
- Plan ways to help learners manage unstructured times, such as transitions between lessons, and break times. Giving a learner something to look after for you, can help them feel that you are thinking about them even when you are not with them. Providing an alternative space from the playground or dining area might make break times easier for them to manage.

Social, emotional and mental health difficulties

Experiences affect development

Early experiences are vital to healthy emotional and physical development. Infants and young children are completely dependent on adult care. Secure attachment relationships with a reliable, consistent and attuned primary parent or carer are essential to children's development from an early age and continued nurturing of those relationships is vital for good emotional and psychological health. A child looks to their parent or carer to keep them safe and secure. Where this does not happen easily, or when a child feels they have to be the one to keep a parent safe and secure (for example, where there is domestic abuse in the household) then a child may have difficulties forming attachments, which can impact on other aspects of the child's mental health and wellbeing. The child in the case study above was not able to make a positive attachment; his mother had been unable to bond with him from when he was born (due to her own postnatal depression) and as a family they were isolated from other adults who may have been able to provide consistency of care and attention.



Adverse Childhood Experiences (ACEs) are a range of early experiences, which, particularly if they occur in clusters, may result in childhood trauma. They include physical, emotional and sexual abuse, physical and emotional neglect and domestic abuse, or living in a household where there is a parent who suffers from substance misuse. They include situations when a parent is in prison, or where parents are separated or divorced. Individual circumstances and contexts will of course be very different for children, and outcomes can vary depending on the supportive environment the child has – protective factors will support children to cope with Adverse Childhood Experiences and can be as important as the ACEs themselves in influencing outcomes. Emotionally available and attuned adults in school are a significant protective factor and our role as teachers can therefore be transformational for some of our most vulnerable learners.

Living with ongoing, repeated and complex trauma (even if experiences are pre-verbal) can result in children growing up with continual stress. This results in high levels of cortisol, which creates a neural system on permanent hyper-alert. Neuroscience demonstrates that brain development can be impaired or delayed in crucial areas such as emotional regulation, impulse control and executive functioning (reasoning, reflection, making connections and learning). The graphic above shows the possible outcomes for learning when children have had difficult early experiences and resultant SEMH needs.

The Six Stages of Crisis

The Six Stages of Crisis shows the stages of escalating stress and distress to a point when the learner is least able to self-regulate, from early triggers, through crisis and on to eventual recovery of a calm, more regulated state. It is important to identify what triggers result in escalating behaviour, as that helps you to make sense of what is often puzzling. Identifying triggers through careful observation means that you can think about pre-empting those situations that cause changes in behaviour and understand why they give rise to the reactions you see. This will help you plan for, predict and de-escalate problematic times (for example, changes and transitions, certain subjects and groupings, proximity to adults). You can then target support to where it is needed most. You will often feel you are **managing behaviour**, but by carefully **managing situations that give rise to behaviour**, you can lessen or remove the trigger, reducing the need for the behaviour. Viewing behaviour as a symptom and the trigger as the cause of the symptom is a helpful approach.



Neurodiversity and co-occurrence of need

The neurodiversity paradigm

The term ‘neurodiversity’ does not feature in the Equality Act (2010) or the SEN legislation including the SEND Code of Practice (2015).

The neurodiversity paradigm has been proposed as an effective approach to understanding and including learners with special educational needs and disabilities.[1] It is a relatively new term and there are some differences in the use and definitions of this emerging concept. It has some commonalities with the special educational needs paradigm. Both are based on social justice concepts of equality and diversity. Both intend there to be a focus on an individual’s strengths as well as needs and have moved away from a ‘within person’ medical model of difficulties to an interactive perspective. In both paradigms of neurodiversity and special educational needs the focus of intervention is to remove barriers and make adjustments in the environment to enable the learner to access social and educational opportunities. This contrasts with the medical model of diagnosis where treating or fixing the learner is the focus. The neurodiversity paradigm acknowledges the need for a more proactive and inclusive way of planning for an individual learner’s needs rather than a reactive approach where adjustments for differences or diagnoses are made after planning for a neurotypical population. ‘Neurotypical’ means having a ‘majority brain’ where the neurocognitive style fits within the dominant societal norms.[2]

Neurodiversity and the role of teachers

Awareness of the term ‘neurodiversity’ is growing within the education sector. The Teachers’ Standards and SEND Code of Practice set out the roles of teachers in relation to all learners. The legislation reflects an interactive view of learners’ needs and progress, including the understanding that a learner’s environment and the teaching they receive make a difference to their experiences and outcomes. Identifying and valuing the strengths, interests, difficulties and differences of individual learners is pivotal and enables them to feel valued for who they are.

What does neurodiversity mean?

Neurodiversity is a term that applies to everyone. We are all cognitively different. Neurodevelopmental differences including dyslexia, ADHD or autism, or indeed those who have a number of overlapping or co-occurring differences are part of universal neurodiversity. This paradigm of neurodiversity is being used more commonly to nurture the idea that these differences are a valuable variation, an important part of human diversity, something to be celebrated rather than cured. It recognises that everyone with a neurodevelopmental difference is an individual, not part of a labelled group who will all behave, react or learn in the same way. It focusses on celebrating what people with additional needs can do rather than what they struggle with, to fully realise their potential in school, employment and life.

Neurodiversity means there are many ways for brains to be ‘wired’. Differences in wiring are a natural part of human variation. They are evident in the infinite diversity of neurocognitive functioning. The neurodiversity paradigm view is there is no one right or normal type of neurocognitive functioning. Each mind and cognitive style are unique and equally valid.[3]

The term neurodiversity encompasses all types of cognitive functioning, including learning differences. Such neurodevelopmental conditions may overlap and in the medical model lead to more than one diagnosis. The neurodiversity paradigm, however, considers that people’s minds and brains cannot be split into discrete pieces. They need to be understood as a whole. This contrasts with people’s differences in cognitive style being defined in terms of multiple labels, diagnoses and disabilities.[4] Strengths and difficulties associated with a particular cognitive profile depend on context as well as the brain’s ‘wiring’. Some cognitive (in other words thinking) capacities and approaches are adaptive in certain environmental contexts but are disabling in others. Each of these is understood as equally valid.

What are learning needs in relation to neurodiversity?

Quality Teaching: Understanding learners as individuals

The neurodiversity paradigm values diversity and the focus on a learner’s strengths. For you this emphasises the need to:

- Understand the world from the individual learner’s point of view.
- Ensure that all learners are understood as individuals and valued for who they are.
- Understand that all learners are different in the way they think and learn; accept and value neurodevelopmental differences.
- Anticipate neurodiversity in our class population and plan proactively for this.[5]

The Teachers’ Standards are consistent with the above, including but not limited to:

- Having a clear understanding of the needs of all learners.
- Adapting teaching to respond to the strengths and needs of all learners.
- Using approaches which enable learners to be taught effectively, including those with special educational needs and disabilities.
- Building an emotionally safe environment. This would include providing learners with different needs opportunities to experience higher levels of success so they can develop confidence and take risks with their learning.
- Being able to use and evaluate distinctive teaching approaches to engage and support all learners.

Neurodiversity and co-occurrence of need – Attention Deficit Hyperactivity Disorder

Attention Deficit Hyperactivity Disorder (ADHD)

Most diagnoses of ADHD are given during the school age phase of education. The behaviours associated with ADHD are high activity levels, poor inhibitory control and short attention spans. Hyperactivity is more common in younger learners and evidence shows that it tends to decrease as learners get older, whereas the inattentive type (less movement, but obvious concentration absences) is seen less in pre-schoolers and tends to emerge over the school age period.

During the school age period, learners are usually identified and referred for ADHD assessments because of classroom disruptiveness and academic underachievement. The symptoms of inattention increase, and the levels of hyperactivity start to decrease. The fidgety behaviours calm but the brain is **cognitively hyperactive,** increasingly in need of satiation, jumping from one thing to another.

In adolescence these symptoms of inattention persist for longer and have a slower decline rate than hyperactivity and impulsivity. Learners with ADHD are at risk of underachievement if they are not supported with these needs. It is essential that needs are understood and supported throughout a learner's school career. Understanding ADHD means understanding **Executive Functioning** and all the information above will be helpful and **relevant** to adults working with children and young people who have this condition.

Clear guidance on what constitutes ADHD can be found in the **ADHD Diagnosis** area of the NHS website.

Relationship

Learners with ADHD will surprise you with the rapidity of their thinking and the connections they can make, and frustrate you with the repetition and patience that is required to ensure they keep on track and stay organised. We need to work harder to make sure that we communicate the positives about the work, effort, enthusiasm and energy of these learners, and do not solely focus on what they have not been able to complete. Actively work to list the strengths of learners with ADHD and share these with them. Recognise this difference through role-modelling your inclusive ethos. ADHD is a difference in functioning. As educators, we need to understand this, and then identify and support the executive function difficulties that are blocking their progress.

Environment

Wherever possible, with the knowledge that learners with ADHD are highly distracted, create spaces in your classroom environment that will minimise visual or auditory interruptions. Well-organised classrooms are very supportive. Learners with ADHD struggle to organise themselves effectively, but if their regular classroom has clear routines and labelled spaces for resources, once learnt, these are set and become one less thing for them to try to hold in mind.

Strategies

Do not put unrealistic restrictions on their freedom to move; get comfortable with allowing a learner with a diagnosis of ADHD to be treated differently, help your class to understand that we all come in different packages, and that equality and equity does not mean we all get treated the same, but that we all get the same treatment: inclusion in the lesson.

Learners with ADHD are drawn to intense stimuli. Involve them in jobs that require movement whenever you can. It can also help to add a layer of physical challenge to routine tasks, for example, ask the learner with ADHD to write or type their responses to prevent them from blurting out answers. Ask them to balance on one leg when asked to proof read their work. The physical challenge would need to fit with the age of the learner and the classroom environment to ensure it does not create more distraction than help.

Extended time on tasks and briefer tasks are also helpful strategies to apply. Learners with ADHD are frequently at risk of not completing tasks due to distraction affecting working memory and organisation needs. They can therefore lose out on feeling the satisfaction of finishing and getting feedback on the whole piece of work. Accommodate this need by breaking down longer tasks into smaller sections and give each section deadlines or time-boundaries for completion. This can lead to the learner feeling satisfaction of completing a task. Further information can be found at **Understood.org**.

Assessment

ADHD is a diagnosis that can only be given by a specialist professional following a formal assessment. The type of professional that carries out this assessment can be dependent on the area you live in, but in most cases these assessments are carried out by paediatricians, psychiatrists, clinical psychologists and specialist occupational therapists.

Neurodiversity and co-occurrence of need

Supporting Learning and Inclusion

It is important we do not feel overwhelmed by the diagnoses and range of needs of learners in a typical classroom. An inclusive, neurodiverse-friendly classroom enables us as teachers to meet the needs of all learners. Key components of creating this inclusive classroom are:

- Celebrating neurodiversity
- Making reasonable adjustments
- Recognising and addressing vulnerabilities

Celebrate Neurodiversity

- Understand the world from the point of view of the learner. Be sensitive to those in your class who may have a particular need or diagnosis and discuss how neurodiversity might be addressed with families as well as key professionals and your SENCO.
- Work within careful professional boundaries and ensure that diagnoses are made only by the appropriate professional. Consider how each individual learner is celebrated and respected by the class community for being who they are.
- Consider making neurodiversity awareness a whole-class or whole-school focus by teaching all learners about it. Celebrate successful individuals who are neurodivergent. Have resources (posters, books) that positively reflect neurodiversity.
- Enable a **growth mindset** for all learners. A growth mindset means that we learn through our experiences, including our mistakes, and believe that we can improve our thinking, abilities and qualities through our efforts.[6]
- Provide opportunities for learners who have differences to demonstrate their individual strengths.
- Carefully consider the way in which you build trusting relationships with the learners in your class. Some learners need their relationships with adults to be more consistent, with communication adjusted to meet their individual needs.

Reasonable adjustments and additional support to improve outcomes

Individual needs of some learners may not be immediately visible, or only become apparent in certain contexts. These contexts may include demands within a lesson, e.g., accessing learning through print, or at different points of the school day, e.g., unstructured social situations.

Reasonable adjustments and additional support can include:

- A calm and safe environment.
- Attuned use of voice and gesture.
- Increased waiting time.
- Speaking at an appropriate pace, using facial expression to support the messaging.
- A considered approach to your use of language when teaching: vocabulary, short sentences, pauses, checking understanding, personalisation in questioning, avoidance of ambiguity.
- Use of visual supports to structure and organise the learning environment, for example labels, lists, task break-down prompts, and timetables.
- Use of concrete resources to support abstract concepts.
- Use of timetabled motor breaks to support attention.
- Mitigate sensory overload.

Recognise and address vulnerabilities including emotional wellbeing, mental health and safeguarding

Neurodivergent learners are likely to experience increased vulnerability. Understanding the implications of multiple vulnerabilities requires a carefully considered response to ensure that the approaches are appropriately integrated and provide a synthesised, holistic response for the individual learner. Effective collaboration as part of a multi-agency team will enable you to effectively support the learners. The multi-agency team will support the learner, their family and relevant colleagues. In certain instances, the team may include the Designated Safeguarding Lead, SENCO, Health Professionals and wider external agencies.

Multiple diagnoses and the teacher's role

*Some learners may have involvement with outside professionals which can help to provide some background and diagnoses. They and their reports can help with understanding individual needs and inform teacher assessment. Reports and conversations with other professionals are of course confidential. Some children in every class may have more than one diagnosis, such as autism and ADHD and/or Developmental Co-ordination Disorder (DCD). The class teacher's role is to work with families, read outside professional reports and integrate information from these into the SEN support plan. Teachers have specific training in and professional understanding of the educational context, pedagogy and the curriculum. This is essential and pivotal in this planning. Teachers continue to have the professional responsibility for day-to-day teaching and inclusion of all children in their class, including those with SEND. The **SENCO** can support other teachers with this process and may on some occasions request input from **external agencies and professionals** such as the speech and language therapy service, specialist teachers or an educational psychologist.*