Supporting the Cognition and Learning of Children with SEND in the EYFS

Cognition & Learning Needs

Cognition refers to the thinking skills and thought processes that a child/young person has acquired through their prior experience. Learning needs can vary across subjects and situations. Children with learning needs may learn at a slower pace than their peers despite appropriate differentiation. Learning difficulties can be general or specific and related to one or more areas of the curriculum. Difficulties may be short-term in one or more areas or severe and long term.

One of the key guiding principles of the EYFS is that children develop and learn in different ways and at different rates. Some children will be working below age related expectations in some, or all, of the Prime and/or Specific areas of learning and development within the EYFS framework. Their progress may be slow despite access to quality first teaching. The child's learning needs are at times a barrier to the child accessing the provision and learning opportunities in the EYFS independently alongside their peers. Their difficulties in cognition and learning are a barrier for the child developing skills in the three elements of the characteristics of effective learning – engagement, motivation and thinking which is impacting on their progress. The child may present with difficulties in understanding, problem solving, processing and retaining information, acquiring and embedding general or specific skills and concepts. They may lack independence in exploring the provision through play, attending and focusing, making links and generalising learning.

High quality teaching, differentiated/adapted for individual learners, is the first step in responding to children who have or may have SEND. High expectations should be set by practitioners for every learner whatever their prior attainment. The table below focusses on some areas of difficulties that children may experience in cognition & learning, and some key strategies that settings could implement to provide adapted support for children.

"If a child can't learn the way we teach, maybe we should teach the way they learn"

Contents

What we might see	Possible strategies
Difficulty with engagement: Limited sensory exploration of environment Lack of curiosity in exploring provision Limited interest in observing peers play No evidence of specific interests Limited engagement in open ended activity Limited representation of their experiences in play Little role-play or imaginative play Minimal progression in extending play Avoids challenge and risk taking Reluctance to explore new areas of provision	Consider the environment and help the child to focus by keeping distractions to a minimum. For example, create a quiet comfortable area, block out internal sounds using large furniture and prevent disruptions. Provide developmentally appropriate activities and make sure the child can access them at their own pace enabling the child to achieve success. For example, break down activities into smaller steps and give the child extra thinking time to process what they are being asked to do. Repeat instructions. Provide developmentally appropriate toys e.g. toys that are suitable for the child's developmental age rather than their chronological age. For example, if a child is exploring cause and effect provide pop up toys, toys with buttons etc. Provide activities which are stimulating and encourage children to use all their senses, such as activities to explore touch, taste, textures, smells and sounds. For example, develop sensory baskets of items for a child to explore. Ensure that activities are of high interest to maintain attention. For example, incorporate the child's special interests into the activities being presented, i.e. if a child likes dinosaurs include dinosaurs in a range of activities. Present the same learning outcome in many different ways to consolidate learning and provide opportunities for over learning. For example, if you wanted to teach the child about sorting and matching, you may sort, hold and discuss real items, cut out, sort and stick themed pictures from magazines, complete themed jigsaws or find matching pairs. Put strategies in place to extend concentration and listening. Gradually introduce an activity by building up the time spent on it. For example, during story time the child may join the group for the last 30 seconds, then 1 minute, 2 minutes, then 5 minutes etc. Use large pictures and props

	to maintain interest. Vary the tone of your voice and use exaggerated sounds. Keep sessions shorts. Cue children in to engaging. Cues might be auditory, gesture, visual using objects of reference, verbal or physical touch. Ensure use of name and touch (if tolerated) to engage children before verbal information is delivered. Model and extend play using commentary to engage and to reinforce language. Develop a 'little and often' approach to play and learning through modelling. Use intensive interaction (mirroring). Develop a 'copy box' that has two sets of play equipment and objects that are of interest to the child. Follow the child's lead and copy and name what the child does using the same equipment alongside the child. Incorporate surprise into the routines. For example, pausing and asking what next? Making a different sound before introducing something different. Have objects that promote open ended play opportunities. For example, pinecones and egg boxes instead of cups and plates. Access to peer supported learning, where child is grouped with peers who can provide good modelling of play and learning.
Lacking motivation: Poor attention and difficulty maintaining concentration	Teach good listening skills – identity what children need to do to be good listeners. Reinforce good listening through visuals and modelling. Ensure listening time expectations are in line with child's developmental stage rather than chronological age.

Fleeting attention difficulty staying on task Individual interests not present or identifiable Passive and reduced motivation Little emotional response to success or failure Limited involvement in play Limited perseverance Reluctant to 'have a go' Only engaged in tasks by external reward	Consider noise levels and quiet spaces to promote listening and language development. Teach a song or action to signal listening time. Develop motivation to listen through use of song, music, actions, visuals and movement. Slow the pace of rhymes and songs to ensure the language can be accessed. Ensure rhymes and songs are used regularly with intonation, actions, props, objects of reference and pictures to reinforce the language. Incorporate games and songs that involve waiting watching and listening for a cue. Use song and rhymes to build anticipation and engagement. For example, peek a boo, round and round the garden. Use instruments to initiate a sound for children to copy with their instruments. Use 'Ready… Steady…Go…' activities to develop motivation and interest to listening. Include a range of activities – knocking down tower blocks, marbles down a tube, rolling a ball, toys in a box, releasing a pop-up toy, going down the slide etc. Consider the individual child's interests and motivations and incorporate into the provision. Give choices and watch for signs of preferences, and build in play that the child finds motivating. Transfer elements of child's interest to different areas of provision. For example, a child who likes diggers can be encouraged to engage with books through using books about diggers in the first instance. Have objects of interest in sight but just out of reach to promote the child's motivation to reach to get them. Progress to slightly hiding motivating toys for the child to find. Progress on to treasure hunts in provision.

	Provide high interest cause and effect toys and model the action needed to get a result. Support with language of 'Ready, steady… go' to draw attention and interest.
	Consider group size, peer group and timing of activities to maximise child's motivation, potential for modelling and potential to engage.
	Use books that are developmentally matched to the child and promote interaction with books through touch and sounds.
	Extend existing play through modelling and support with language, introducing variety of objects or toys to further exploration.
	Develop confidence in an underused area of provision through teaching and modelling play in those areas.
	Provide opportunities for errorless learning. For example tape up all the holes of a shape sorter apart from one, provide only shapes that fit the one hole.
	Use regular, targeted and specific praise for progress in independence.
Difficulty applying thinking skills: Little engagement with modelling Difficulty making choices	Use hand over hand, or hand under hand, support to guide a child or provide ongoing demonstration. For example, put your hand on top of the child's/put the child's hand on top of yours, whilst you complete a simple activity such as building bricks, mark making etc. Make sure the child watches what you do and encourage them to imitate you. Gradually reducing the adult support as they gain skill.

Little evidence of transferring or applying learning or skills across different contexts	Provide repetitive activities and over learning to create an automatic response, i.e. repeat the same activity frequently over a period of time.
Not making links between experiences at home and in settings	Create and embed opportunities for high levels of repetition, revisiting, reinforcement and consolidation of skills and learning experiences within the provision across different learning areas of the indoor and outdoor provision.
Skills or learning not retained and built on	Use objects of reference to develop understanding of and anticipation of events. For example, nappy for nappy change. Objects of references should initially be objects used in the actual activity.
Over reliance on same strategy in attempts to problem solve	Use backward chaining of sequences of actions required to complete a task. In backwards chaining you teach the last step first and then gradually add the next step. Teach and model each section of the action. For example, for finger food feeding, teach the steps: adult putting food to mouth, adult helping child hold the food and putting to mouth, child maintaining grasp of food and putting it to their mouth, child taking food from an adult and putting it to their mouth, and finally the child reaching and grasping food from the plate and the putting it to their mouth.
Little perseverance with problem solving	
Not linking cause and effect	
Getting stuck in the same play sequence	Create opportunities for skills to be practised in different contexts of the provision with different staff or different resources so children can progress from acquiring learning in a specific context to generalisation of that learning.
Inflexible approach to play	Very young children benefit from opportunities to repeat and practise different actions. This helps their brain development and learning as they grow and develop. Provide a range of schematic play opportunities for children engaging in repeated patterns of behaviours. The repetition of behaviours enables children to build up understanding and develop concepts. Some common schemas to are:

	• Trajectory - Throwing items in various directions, climbing up and jumping off equipment, swinging, pushing, splashing in puddles, pouring water/sand.
	• Enveloping - Wrapping self in a blanket, covering and hiding items or themselves, covering whole painting with one colour, putting notes in envelopes to post, filling and emptying bags, dressing up.
	• Enclosure - Filling and emptying containers, climbing into boxes, making dens, constructing fences and barricades to enclose themselves or toys.
	• Transporting - Carrying small items round in bags and buckets, moving objects from one place to another, pushing other children and objects round in prams and pushchairs.
	• Rotation - Rolling and being spun round, an interest in wheels/windmills/spinning toys, turning taps on and off, spinning on the spot, rolling down a hill, watching the washing machine, turning lids.
	• Connecting – joining items together, construction toys, arts and crafts where they can glue and stick pieces together, connecting and disconnecting rail tracks.
	• Orientation – turning items and themselves upside down, use tubes/binoculars/magnifying glasses to see things from a different view, bending over to look through their legs.
	Instructions, information and tasks broken down into small steps with reduced language and key word focus.
	Slow the pace at which language is delivered and give children time to process single pieces of information before giving additional language to process.
	Build in pauses to adult instructions and commentary to ensure children are given enough time and space to make a communicative response.
	Match language used to children's developmental stage and their level of understanding of language. Use of objects of reference, visuals, sign/Makaton to support. Objects of reference and visuals used to support language are matched to child's developmental stage.

	Teaching of vocabulary and new skills taught and reinforced in smaller groups.

Tasks broken down into stepped instructions use 'first… and then …' visuals to support.

Use of books to teach vocabulary through picture naming and reinforce the vocabulary using objects of reference.

Reinforce vocabulary and understanding through songs books stories rhymes and games related to topics being explored in provision.

Access to additional and flexible arrangements in a small group and/or individual basis to support individual outcomes.

Use a variety of developmentally matched resources and play equipment to promote learning in the areas of problem-solving, reasoning and concept development.

Ensure opportunities for developmentally appropriate, short tabletop play, facilitated by adults, using jigsaws, beads and patterns, blocks, matching sorting, lotto, etc.

Provide matching and sorting activities using objects relevant to the child i.e. teddies and dinosaurs. Progress to pictures of the objects.

Develop reasoning and problem-solving skills through activities which are broken down into small steps, modelled and scaffolded.

Explore a range of different objects and materials to encourage understanding of similarities, differences, pattern and change. |

	Recap, Repeat and **Reinforce** learning and play opportunities alongside language used and vocabulary taught.
Poor verbal memory: Child struggles to learn or remember information they have learnt.	Relevance and interest: children tend to remember things that appeal to their interests, feeling and experiences. Making picture books with the child as the main character is a fun way to help them remember daily routines. Meaning: linking new concepts to material the child already understands will help them remember it. Chunking: children usually have a short attention span, so breaking information down into smaller chunks will help memory consolidation. Pausing and repeating: the longer the time spent thinking about the material, the more likely it is to transfer to your child's long-term memory. Over learning: continuous practise and revision reinforces the material so that it becomes ingrained, and is easier for your child to recall. Visual prompts: visual memory is better in children; so using pictures, objects and gestures to support verbal information can improve memory. Practical use: getting children involved in activities will help them remember material better than if it was just verbally presented. Activities that involve movement, touch, or smells are a good way to incorporate the different senses, while also making learning fun! Give only one instruction at a time and break longer instructions into smaller steps, usual visual prompts – pictures or objects.

	Play games which develop children's listening skills e.g. Part fill two (to start with) empty plastic bottles to make sound shakers. Use things that make distinctly different sounds - pasta, sand, marbles. Take it in turns to close your eyes and listen as they are shaken, then identify the right one. Share books with a repetitive phrase, e.g. Brown bear, Brown bear (Bill Martin) leaving time for the child to join in. Share books with a repeated cumulative sequence, e.g. The Very Hungry Caterpillar (Eric Carle). On a playmat use the animals/soft toys/play food etc. that the child has chosen; give two key word instructions for the child to follow, e.g. 'Give Teddy a cake' Use outside space to create a short 'treasure hunt'. Give two key word instructions, 'Find the ball in the sandpit'. Collect the 'found' items and at the end talk about where they had been found.
Poor visual perception: Child may struggle with identification of shape, colour, etc. May not be able to use the information to make judgements of size, shape, relationship of one object to another.	Simple post-a-shape shape sorters – taping up some holes to provide opportunities for errorless learning. Select an object from a sorting box. Child must find same shape from box. Gradually build the distance that you place the object, eventually placing it at the most distant point in room from child. Copying a simple shape pattern or picture, 2D to 2D. Guess what? - ask the child to guess the object when only part is visible. A picture of an object could be cut into four pieces and only one part given at a time until the child has guessed what it is.

	Jigsaw puzzles – of varying degrees of difficulty to suit individual child.

Matching shape to silhouette – using the correct orientation.

Turning cards up and trying to match cards (similar to 'Snap').

Ball sequences e.g. bounce then throw in air.

Encourage the child to sort out objects or things such as socks or plates by colour type and shape.

Ask the child to find a small object hidden within a picture, e.g. "Where is the dog?"

Search for objects on command (look for all the teddies/trains/balls).

I spy (something round, something red).

Untangle a loose knot of different coloured yarns.

While looking at a picture in a story book, say, "I see something that is yellow, green and red." Ask your child to identify what you are looking at.

Rope games – jump in between two ropes, jump over the rope, crawl under the rope.

Steppingstone games - jump on the red steppingstone, jump next to blue steppingstone.

Throw a bean bag onto a target, in front of target, on top of a target etc. |

How can I assess/show progress for Cognition and Learning?	
Area of learning	What we might see
Sorting and Matching	Matches items of the same colour i.e. puts a red brick on a red mat.

Sorts objects by colour i.e. puts red bricks together, green bricks together.

Matches/sorts by size – if two large balls and two small balls are offered the child may select two matching sizes.

Sorts by type – the child may collect all the trains/diggers/cars/baby dolls/play food etc. whilst playing.

Matching animals to sounds – when an adult asks what animal says moo, the child looks towards/points/selects the cow model/picture or when an adult makes an animal sound the child looks or points to the corresponding animal picture/model.

Matching corresponding photographs/pictures. |
| Understanding of cause and Effect | Briefly follows moving stimulus (audio or visual).

Holds an object in each hand and brings them together in the middle, e.g. Holds two blocks and bangs them together.

Anticipates repetitively presented stimulus i.e. a Jack in the box, game of peek-a-boo. |

	Looks briefly after object disappearing from their field of vision.
	Reaches out for, touches and begins to hold objects i.e. light toys, sound toys, instruments, tactile objects.
	Responds to cause and effect by pressing buttons or switches on a toy.
	In an everyday environment repeats action which obtains sensory feedback.
	Repeats action when first attempt unsuccessful i.e. switches/ ICT toys, problem solving with real objects (opening lids etc.).
	Early problem solving – modifies action or tries new strategy when old one fails i.e. switches/ ICT toys - Problem solving with real objects (opening lids etc.).
	Does two different actions in sequence to get a reward i.e. switches/ ICT toy.
Understanding of shape and space	Explores filling and emptying containers i.e. sand, water, objects, materials, posting activities.
	Looks backwards and forwards between two objects (knows two objects are present).
	Makes lines and towers with blocks in play situations.
	Combines two construction items.
	Attempts, sometimes successfully, to fit shapes into spaces i.e. shape sorters, inset puzzles, objects into containers.
	Beginning to understand the concepts of 'Now' and 'Next'.

	Selects tools for purpose in play situation i.e. mark making. Follows a visual timetable to anticipate familiar activities. Begins to show an understanding of the concepts big and small. Uses construction materials to create their own simple structures and arrangements i.e. junk modelling, Lego, Playdough etc. Copies simple patterns and makes arrangements with shape.
Engagement	Engagement is multi-dimensional, and encompasses awareness, curiosity, investigation, discovery, anticipation, persistence and initiation. By focusing on these seven indicators of engagement, educators can ask themselves questions such as: "How can I change the learning activity to stimulate Robert's curiosity?" "What can I change about this experience to encourage Shannon to persist?" The Engagement Profile and Scale is a classroom tool developed through research into effective teaching and learning for children with complex learning difficulties and disabilities. It allows educators to focus on the child's engagement as a learner and create personalised learning pathways. It prompts student-centred reflection on how to increase the learner's engagement leading to deep learning. https://www.solgrid.org.uk/eyc/send/send-needs/ for more information.