

Medway School-aged Core Standards

A practical guide for all staff working
in Medway schools to help children
develop essential skills for learning
and development



**Sensory
processing**

Movement

**Activities of
daily living**

**Speech,
Language and
Communication**

© Medway Community Healthcare, 2023



Contents

Introduction	Page 2
How to use this manual	Page 4
Foundation Skills Grid	Page 6
Sensory processing	Page 7
Movement	Page 18
Activities of daily living	Page 41
Speech, Language and Communication	Page 53
Summary – putting it all together	Page 124
Developing a positive school environment	Page 130
Definition of terms	Page 133



Introduction

It is important when looking for ideas to help children in school to learn that we do not just think of one approach. You will have observed that many internal and external influences affect the way children behave and how they can learn. This can change from day to day and sometimes hour by hour. This manual gives a wealth of ideas to try in the classroom and may help you and your pupils to make the most out of each lesson.

The Medway Core Standards are applicable to **all schools** in Medway, for **all children** regardless of whether they have been given a diagnosis. A named medical condition does not generally change the level of intervention a school will need to provide to help the child to learn. Therefore, it is really important that if you notice a child is having difficulties in school, you use this manual to help identify the child's needs and strategies that you can use, to support their development at home and at school.

Observing the child in all settings will help you understand their sensory needs. Watching them in the playground and during PE will help determine the level of gross motor skills and their ability to attend, understand and communicate with others. If children experience difficulties with their communication, motor ability and sensory processing then any frustration or anxiety could result in behavioural challenges.

The ability to attend, focus, concentrate and participate in school is reliant upon development of the child's:

- sensory systems (how we experience our environment through our senses)
- motor system (how we move our bodies to perform a particular task)
- language and communication skills

The illustrated 'house' on page 10 depicts how each stage of development is dependent on the **sensory foundations**. Gross motor, fine motor, perceptual development and communication skills are depicted in the walls of the house. These must be in place before fitting the roof of the house. The roof of the house depicts all activities of daily living and successful communication. This is only made possible by a fully integrated sensory and motor system.

Traditionally, physiotherapy is used to advise on strategies for motor difficulties, occupational therapy for strategies for sensory and fine motor difficulties and speech and language therapy for strategies in language and communication skills. Ideally all three areas of therapeutic intervention should be combined within one programme of activity. Throughout this manual we therefore encourage teaching staff to combine the strategies suggested into one activity.



This guide gives practical information for all members of school staff to identify children with specific areas of difficulty, together with strategies to address their needs. As the strategies become familiar to schools, the skills of teachers and teaching assistants should be fully utilised to ensure each strategy is delivered using the **JUST RIGHT CHALLENGE**.

The 'just right challenge' is built around giving the pupil as much help as they need to complete the activity with success and then decreasing support as they get better at doing it themselves. For example, if the child would like to engage in a posting activity then you may need to support hand over hand initially or start with a large object and large 'post box hole', gradually introducing smaller, more challenging activities.

It is important to support the child to successfully complete the very last part of the activity and then once they have succeeded they will be more motivated to try it again by themselves.



How to use this manual

To support the child's learning, we enclose a foundation skills grid which you can use to isolate any individual child's difficulties and ensure you are providing the correct activities/strategies to help that child to progress in the classroom.

To use the grid:

1. Identify your concerns from the teacher observation and concerns list and note the number.
2. Refer to the corresponding number on the development difficulties grid in the top bar. The vertical coloured boxes will indicate the possible causes of that child's problems.
3. Use the relevant sections in the manual to find out more about these difficulties and possible strategies or activities to support the child.

Example:-

- Child has difficulties with being **distractible and does not pay attention number 13** on the teacher observations and concerns list.
- Go to foundation skills grid – look along the horizontal list of numbers for **number 13** and look down vertically at the coloured boxes. These indicate potential areas of weakness.
- Refer to the relevant topic sections as indicated for **13** which are visual perception, ocular motor control, body awareness, attention and listening, visual support, use and understanding of language, understanding spoken language, auditory memory and social development.
- You will have already undertaken teacher observations in PE and in the classroom and will have started to formulate your hypothesis of what may be the underlying problem. From the list of suggested activities, you can formulate a programme or differentiate the curriculum to address these specific learning needs.



Teacher's observations and questions

1	Child is over responsive to sensory input
2	Child is under responsive to sensory input
3	Child is seeking sensory to sensory input
4	Child has poor balance
5	Child has poor co ordination
6	Bumps into people trips and falls
7	Cannot sit still /fidgets
8	Problems changing for PE
9	Slouches over desk / falls of chair
10	Poor handwriting / pencil skills
11	Poor pencil grip
12	Problems copying from board/ book
13	Distractible and does not pay attention
14	Swaps hands for fine motor skills
15	Adults cannot understand the child's speech
16	Child struggles to answer questions
17	Difficulties making friends and difficulties with social interaction
18	Limited expressive language
19	Difficulties remembering and carrying out instructions
20	Doesn't ask for help
21	Child finds it difficult to cope in certain situations
22	Difficulty transitioning from one activity or one setting to another
23	Aggressive behaviour towards others
24	High anxiety
25	Low mood



Foundation skills grid sheet

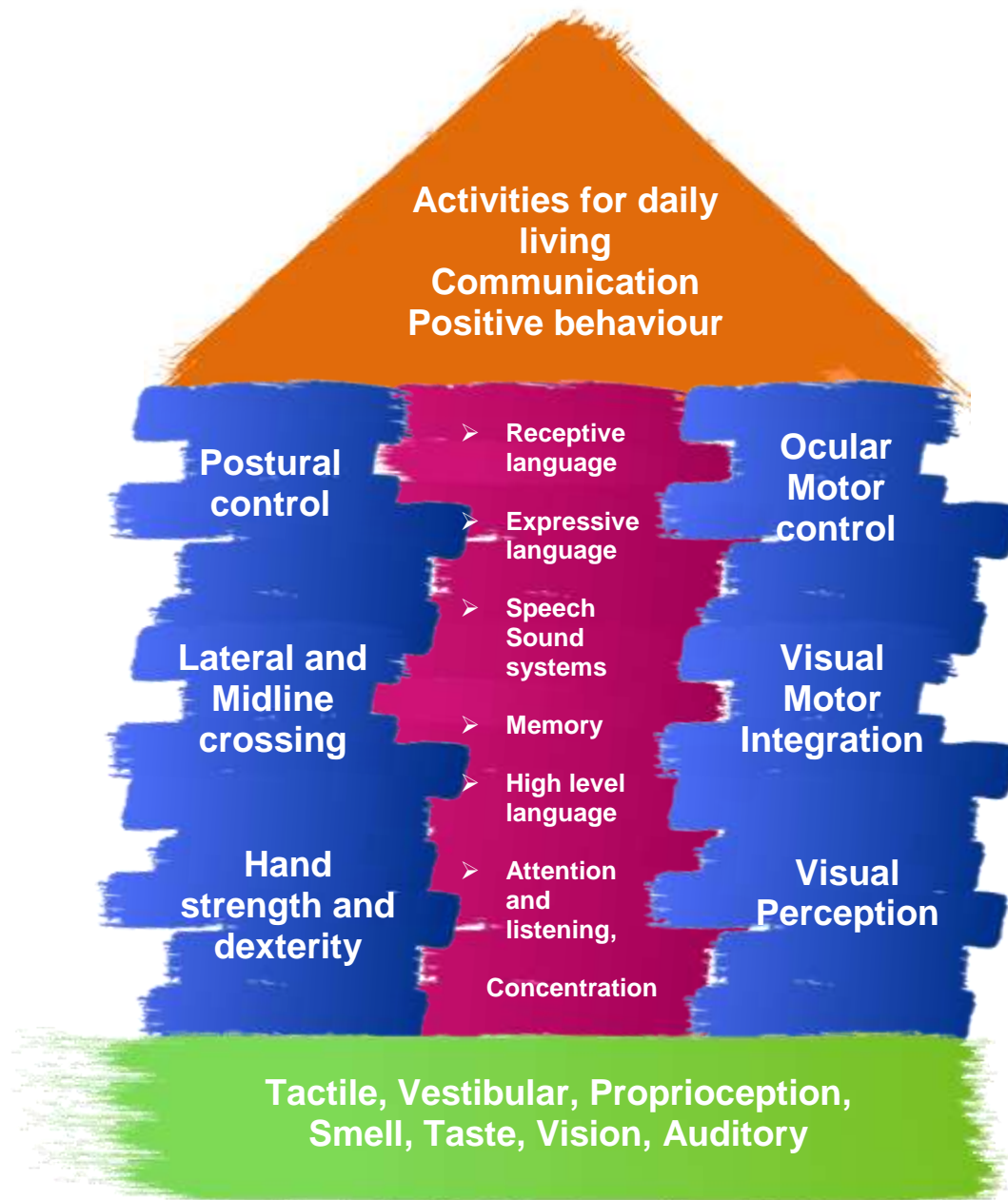
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Sensory difficulties 1,2,3	Green	Green	Green						Blue							Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Postural stability 4				Blue		Blue	Blue		Blue	Blue	Blue				Blue										
Balance 5				Blue		Blue									Blue										
Co-ordination 6					Blue	Blue																			
Bilateral integration 7					Blue			Blue						Blue						Blue					
Visual motor integration 8					Blue				Blue	Blue	Blue														
Hand strength and stability 9									Blue	Blue	Blue														
Dexterity 10									Blue	Blue	Blue														
Visual perception 11					Blue	Blue	Blue	Blue	Blue	Blue		Blue	Blue												
Ocular motor control 12				Blue								Blue	Blue												
Laterality and mid line crossing 13									Blue	Blue	Blue			Blue											
Body awareness 14					Blue	Blue	Blue	Blue	Blue		Blue		Blue		Blue		Blue		Blue				Blue	Blue	Blue
Foundations of communication 15	Green	Green	Green				Green	Green	Green							Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Attention and listening 16							Green	Green	Green	Green		Green	Green			Green	Green	Green	Green	Green	Green	Green			Green
Visual support 17							Green	Green	Green			Green	Green			Green	Green	Green	Green	Green	Green	Green	Green		Green
Use and Understanding of language 18							Green	Green	Green			Green	Green			Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Understanding spoken language 29							Green	Green	Green			Green	Green			Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Using spoken language 20															Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Auditory memory 21												Green	Green			Green			Green	Green	Green	Green	Green	Green	Green
Speech sound production 22															Green			Green							
Social Development 23	Green	Green	Green										Green			Green	Green	Green	Green	Green	Green	Green	Green	Green	Green



Sensory processing

The way our bodies interpret sensory information is called sensory processing, we all process sensory information.

In everyday life we have the ability to take in, sort out, process and make use of information from the world around us. This allows us to make an appropriate response to meet the demands of our environment. These include movement, emotional responses, behavioural responses, ability to concentrate and social responses.



There are seven senses:

- Touch
- Vestibular - which is the ability to detect movement
- Proprioception - which is the ability to sense the body's position
- Sight
- Sound
- Smell
- Taste

Sensory information goes from the sensory organs within the body to the brain where it is organised and understood, allowing us to carry out an appropriate action or behaviour. For example, the bell will ring to signal end of play and the child will interpret what hearing the bell means. The child will line up with their class and enter school appropriately.

All senses affect our ability to learn, communicate and develop. The senses of **touch, vestibular and proprioception** have been proven to particularly affect a child's ability to learn and function within the school environment.

Sense of touch

There are two types of touch.

The first touch system is protective, e.g. flinching away from a hot plate, this is a fight or flight response.

The second touch system is discriminative and tells us where and what is being touched (without using vision). E.g. knowing what objects are in your pocket through touch.

Sense of movement (known as vestibular)

This is our balance and movement sense; it tells you which way up we are and how fast we are moving; i.e. forwards or backwards or fast or slow.

This allows a child to co-ordinate both sides of their body, for example, to walk along a corridor without bashing into the walls either side or without having to trail hands along the wall for reassurance.

Sense of body position (known as proprioception)

The sensation that we receive from our muscles and joints allow us to feel the position of our body without looking. For example, when this system works well a child can adjust their position on a chair without falling off.



Sense of sight

This is the ability to take in visual information and use appropriately. For example, a child can read from the board and copy down a piece of work.

Sense of sound

This is the ability to process auditory information. For example, a child can filter out background noise to focus on a teacher giving instructions.

Sense of smell

This is a powerful sense and often underestimated. For example, if a child is over sensitive to smell, a seemingly subtle smell can be a major distraction.

Sense of taste

This is part of our protective system. Children who are sensitive to tastes often have difficulties eating.

Sensory processing - dysfunction

Children with sensory processing dysfunction can present with behaviours and actions that cause barriers to learning at school and can affect their emotional and social development.

The three categories that these behaviours tend to fall into are:-

1. Over responsive
2. Under responsive
3. Sensory seekers.

The child may not show all the characteristics of a category, and can appear to sometimes change between the categories.

Over responsive (child tries to avoid)

- Does not like messy play
- Reluctant to hold hands /wash hands
- Hiding under desk when fire alarm goes off/or stressed
- Does not want to go into hall /dining room/playground
- Easily startled
- Will only eat soft/bland food
- May be unwilling to try new foods and /or may gag when eating even small quantities
- Will overly complain about smells /noises /lighting more than their peers
- Avoids lining up, or pushes other children when lining up
- Over anxious children (often avoid group activities)
- May refuse/dislike P.E activities which require lots of movement

See page 14 for more information



Under responsive (child is passive or unaware)

- Passive, doesn't notice their environment
 - Doesn't react to touch/noises/instructions
 - Often won't respond to their name (described as 'dreamers') and are not often spontaneously verbal
 - Weak/loose pencil grip/light spidery writing
 - Flop on chairs
 - Last to try anything
 - Unaware of a messy face, or that clothing is not neat or back to front
 - Does not complain of pain when they fall over
 - Appears lethargic and quiet in class
 - Often forgets what task they were doing/needs constant prompting
 - Over fills their mouth with food, this may result in gagging
 - Often solitary in play and won't naturally join in with group activities
- See page 17 for more information

Sensory seeking (child seeks)

- Seek out hugs/jumps/crashes into walls, may bite/hit
 - Fidgets/always gets up from their seat, may rock/flap
 - Rushes all tasks, over excitable after PE or playtime
 - Loves strong smells/tastes/highly textured food
 - Always touches people and hangs onto people/objects
 - Often uses loud voice, enjoy humming/making noises
 - Mouths/chews items (pencil/clothing/etc)
 - Heavy/strong grip on pencil, heavy writing (rush work)
 - Can appear to lack concentration, constantly moving quickly between activities
 - Persistently interrupts their learning environment
 - Runs instead of walking
- See page 21 for more information



The next pages have some simple strategies to try in class. Try the strategies that are from the category that most closely describes the child.



1 Over responsive child

Children that are over responsive are more sensitive to sensory stimulation than other children. They may feel overwhelmed with information with difficulty filtering, so that they feel bombarded with all that life throws at them. Children will show behaviours of “fight, flight or freeze” that may be seen through trying to control the environment or withdrawing. They may cover their ears, avoid touch or be seen to be fearful to any gross motor activity.

Strategies to try in class

These strategies need to be carried out at regular intervals throughout the school day in order to organise the sensory systems and maintain the child’s calm alert state.

1. Teach child self-joint compression.
2. Try chair push ups



3. Do wall press ups
4. When helping a child that involves touch use firm pressure to provide a calming touch response. Avoid unnecessary everyday light touches e.g. ruffling hair, patting their arm to say “hello”
5. Give the child warning of what is about to happen using language or symbols/sign appropriate to the child’s needs.



6. Visual time tables can be useful to help over responsive children to organise their time.



7. Give the child a time limit on an activity, this gives them control e.g. “we are going to touch the paint for five seconds”.



8. Use a time out card/sign so the child can tell you if they need a change of activity.
9. Consider providing a quiet area in the classroom with cushions/bean bags with minimal visual distraction on the wall or a dark den ; consider lighting and seating arrangement in class.
10. Discuss and work out with the child what they can do to calm themselves. Help them become in charge of helping themselves reach the calm alert level to aid their learning.
11. For older children, have a key word/phrase that tells them that they are becoming too excitable and that they need to do the activities that help them to be calm.
12. Consider positioning the child at the front of the class to reduce the amount of auditory and visual stimulation.
13. Consider using a work station to reduce visual stimulation. Consider using a cardboard box to block out the rest of the class activities. Draw a thick black line around the piece of work you want completed.
14. Use low level lighting in class or sit them away from the window
15. Use head phones to block out loud noises or listen to quiet music if working independently



2 Under responsive child

Children who are under responsive to sensory stimuli are often quiet, passive and disregard key information. They may appear initially to have a hearing problem but when tested their hearing is fine, the issue is their ability to process sound quickly or accurately. They may be self-absorbed and difficult to engage. They may be clumsy, have poor body awareness and often have cuts and bruises that they are not aware of.

Strategies to try in class

These strategies try to 'wake up' the sensory systems so that the child is able to learn. We are aiming to keep children at the calm alert stage for learning.

1. Use vibration/weighted, snake/cushion, pens



2. Use weighted pens
3. For drawing/writing, put a piece of corrugated paper/sand paper under their work
4. Write using a chalk board
5. Use textured items, e.g. spiky pens
6. Use a posture pack (a wedge cushion and sloped writing board)



7. Use scissors with card or textured paper/straws/putty
8. Perform hand exercises before carrying out fine motor activities. (See fine motor stability and dexterity in motor skills section)
9. Perform hand massage – Child to massage own hands to wake up their hands, particularly encouraging a cupped shaped by rubbing thumb from middle to the right and from middle to the left



10. Encourage the child to massage their own face using finger tips on their cheeks (using a round and round-again movement)
11. Sit the child by a window where there is fresh air and bright lights.
12. Encourage frequent movement breaks with heavy work e.g. be hand-out monitor / sharpen pencils / move chairs / equipment.
13. Have regular exercise breaks e.g. jumping on a trampoline, if possible, encouraging running, sliding, climbing and swinging at break time
14. Have cold water available in a water bottle



3 Sensory seeking child

Children who are sensory seeking actively crave sensory information. They are children who are seen to be on the go all the time. They constantly move running, crashing, bumping, jumping and have a need to touch everything. They won't respect other's personal space and may be over affectionate. These children are not regulated by more sensory input and need calming deep pressure activities to regulate their sensory systems.

Strategies to try in class

This child needs to be able to keep calm and organise themselves so they are ready to learn. We are aiming to keep the child in a calm alert state for learning.

Strategies to try;

1. Regular movement breaks throughout the school day, in addition to play times and P.E. E.g. ask child to hand out work, collect books, bring you sticky tape. Using a maze activity that you design within your classroom would be beneficial. Ensure your activity stations include jumping, crab walking, balancing and wall press ups.

2. Teach child self-joint compression:



- 2.1. Finger Tip push (five times)

- 2.2. Squeeze your hand into a fist then stretch out (five times)

- 2.3. Link wrists and push together (five times)



2.4 Squeeze your arms (five times)



2.5 Shoulder squeeze - number 1 (five times) OR Shoulder squeeze - number 2 (five times)

Number 1



Number 2



or

2.6 Finish with a Bear hug



3. Use fidget toys



4. Chewy tubes on the end of a pencil or **Chewelry** around wrist or neck



5. Wear a heavy rucksack at play time or when moving between classroom areas.
6. Apply weight through the child's shoulders by placing hands on the child's shoulders and applying gentle, downward pressure could consider trying a wheat bag positioned around the shoulders or a weighted snake across the child lap. Small wrist weights may help when writing.
7. Try a move and sit cushion



8. Consider using a work station to reduce visual stimulation. Consider using a cardboard box to block out the rest of the class activities. Draw a hick black line around the piece of work you want completed. For more details see Task schedule on page 9.



9. Try activities listed in the body awareness/proprioception sheet in the motor skills section.



4 Movement: Postural stability

In order for a child to gain postural stability and balance the body takes in lots of sensory input from the position of the head, receptors in the joints and from vision. Just try balancing on one leg with your eyes closed. It's much harder work than balancing on one leg with your eyes open!

Children who have never crawled, or who have limited pre-school gross motor experience such as regular outside play, may often have problems maintaining good posture.

Children who have low muscle tone combined with “bendy” hypermobile joints may have difficulties maintaining posture and can be seen slumping over the desks or cannot sit unsupported on the floor. Most of these children do not have a medical condition, nor do they need specialist help, they just need to **practice** with lots of play on large apparatus and time spent outside in vigorous activity.

You may notice that they:

- fidget
- have poor balance - fall/stumble/trip
- bump into things
- slouch and fall off the chair
- have a poor pencil grip

Good sitting posture

Shoulders back and back straight
Forearm supported with shoulder in a relaxed position
Table at elbow height with arm by side
Knees at 90 degree
Feet flat on the floor
Hips at 90 degrees



Activities to try:-

During PE classes the two exercises below are excellent for testing a child's core postural control.

The first is called Superman and tests the child's back muscles. Without strong back muscles it is difficult to keep the spine in good alignment and children will tire very quickly. From the age of five the child is able to get into this position but may



struggle until 7 years to maintain any length of hold. By 8 years children should be able to hold this position for several seconds.

The second exercise is called Hedghogs. It is important to ensure the child has good chin tuck and is able to put themselves in this position without help. Children that cannot hold the position and roll to one side often have poor abdominal muscles which are key to keeping the spine in alignment. This position should be held for at least 20 seconds by the age of 6 years.



Activities to help strengthen core muscles

- Crab walking
- Building a bridge
- The plank
- Scooter boards

Strategies to help maintain an upright sitting position

- The use of a wedge move and sit cushion can offer a positional prompt to help children maintain an upright position.
- Fixing a band around the bottom of the chair legs can act as a prompt for children to stay upright.
- A tilted work surface will help
- Frequent movement breaks are needed so that different muscle groups can work
- Try and think of alternative ways of working. A time standing may help and younger children often work very well in an upright kneel position at a lower table for a short while.
- A roll in the small of the child's back may be needed if none of the above strategies work.



- Some children do benefit from having arms on the chair and one chair that is more supportive within the classroom is useful, this allows children to change chairs throughout the day.



5 Balance

Balance is the ability to make postural adjustments to maintain the body's alignment regardless of the child's position or the environment they are moving in. Balance and posture work together and form the basis of being able to sit still and concentrate. Good balance and stability are essential for the control of eye movements necessary for reading and writing.

Children with balance problems may;

- frequently fall over
- avoid playground equipment
- are unable to hop, skip or jump
- One leg standing is difficult, and this impacts on their walking and running.

Activities to try:

- “Big Boots” Have some oversized wellington boots in the classroom. Children love trying to walk in big boots. Get them to kick some small balls or leaves in the playground.
- “Tightrope walking” Invest in a long thick rope. Get children to balance on the tight rope. Alternatively mark out a long line on the floor
- “Stomp walking” Mark out on the floor a series of circles or use hoops. Get the children to stomp their way around the marked course. The loudest stomping gives maximum deep pressure and the sound reinforces the activity.
- Scooters. A variety of scooters help children to actively balance. Encourage the use of use both legs
- Pop bubbles with your toes. This can be done in standing but if this is too difficult try high kneeling and direct the bubble so the child has to really stretch to pop the bubbles.
- Balance with the help of a ball. Practice balancing on one leg by supporting the raised leg on a ball. To make this more difficult try throwing a bean bag so the child has to stretch and adjust their balance.



Strategies

Build balance activities in to the school day. After every seated activity try a simple balance exercise.

Adjust any group activities so that the child with difficulty balancing can achieve the task. The brain learns quickly with movement tasks if the child succeed so the skill is to ensure the task is at the just right challenge.



6 Co-ordination

Coordination is the bringing together of posture, balance and movement and is an expression of the body's ability to integrate all these elements. Without the ability to coordinate the body's movements successfully the child will always struggle to attend to a task as the effort to do this takes up all capacity and learning is slow.

You may notice that children with this problem:

- are unable to catch a ball



- bump into things
- frequently fall over their feet
- are unable to use a knife and fork
- find writing difficult
- kick a football



Activities to try:

All of the exercise for core strength and balance promote improved coordination. Try and encourage the child to take on sports that have some repetitive movements or sequences. Swimming and martial arts are good for coordination. Try and find the activity the child most wants to improve. For example propelling them on a swing, riding a bike, kicking/catching a ball and work on these until the child can see success. This may take several weeks.



Strategies

When practicing ball skills up size the ball. A weighted ball appropriate to the child's size is a good way forward. We have had success when using a ball with a bell inside (Can be purchased from web site for partially sighted) The sound help the child orientate.

Bike riding can be encouraged with the use of a no pedal cycle which promotes balance with coordination.

Propelling on a swing requires the task to be broken down into easy to reach goals. For example, start with the child bringing the legs forward by kicking a bolster on the forward motion.



7 Bilateral integration

Bilateral integration is the ability to perform an activity which requires the right and left sides of the body to perform differently, but at the same time. You may notice that children have problems with:

- putting shoes on and tying shoelaces
- doing buttons up
- holding a knife and fork
- writing



This is an important foundation for the development of co-ordination between the right and left sides of the body, mature hand dominance and effective two-hand co-ordination.

Problems in this area also impact organisation and planning.

Activities to try:

- high marching
- 'Spotty dogs' – stride jumps with right arm and left leg alternating with left arm and right leg
- Left arm touches left shoulder, right arm extends to side with palm up. Swap. Repeat with palms down.
- Left hand on hip, right arm pointing forward. Swap. Keep going.
- Hands out in front. Clench right hand, open left hand. Swap and keep going.
- Tap 2 fingers on the palm of the opposite hand. Turnover and tap on back of hand. Keep going. Swap hands.



- Clapping games. Clap together then to each other. Then clap right hands together, then left. Then opposite (Familiar playground clapping games).
- try tapping alternate feet while making circles with your finger in the air (while sitting down)
- also in sitting, try tapping a finger on the table and at the same time tap the opposite
Foot in rhythm...right finger, left foot, left finger, right foot. Keep going.



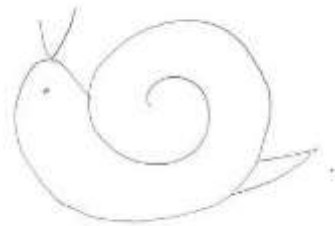
8 Visual motor integration

This is the ability to combine the understanding of what is seen with motor (generally fine motor) control.

Difficulties in this area result in problems with pencil and scissor control and letter formation.

Activities to try:

- draw snails (swirls) starting in the middle and moving out not going over the line. Draw swirls in both directions.
- copy drawn designs and patterns using graph paper as a guide for sizing
- copy designs with blocks or sticks for the child to copy underneath
- try paper weaving or sewing cards
- line up dominoes on their narrow end keeping them all the same distance apart
- try worksheets such as mazes, following a line when it crosses others down the page (who caught which fish)
- trace all pre-writing patterns keeping consistent sizing and spacing



- lay a large rope in a loopy pattern on the floor. Direct the child to step in the loops without touching the rope.



9 Hand strength and stability

This is the strength within the small muscles of the hands and fingers.

Difficulties in this area can result in poor endurance and control with fine motor activities, increased force with gripping small objects, poor pencil grip, and using large movements of the arm over small intricate movements of the fingers.

Activities

- Finger wrestling – make a circle with thumb and index finger tips touching, with all other fingers up out of the way. Link with someone else's circle and try and break theirs. **Do not** let the circle collapse or the other fingers help by stabilising against them.



- Flicking – Keep wrist flat on the table and tuck tip of index finger behind thumb. Flick with index finger aiming a marble into a goal.



- Use large tweezers or spring loaded chopsticks and hold them in a tripod grip (the same as you would hold a pencil). Pick up small objects keeping forearm rested on the table.
- Weave an elastic band between each finger and thumb. Then try and pull all fingers apart as far as possible and hold for a count of 5.
- Place hand flat on table with palm down. Place a marble between each finger to hold. Keeping fingers straight and aligned slowly lift up the hand. Release marbles dropping them into a container one at a time.



Page 28



- Stand behind a line with a pack of cards. Hold one card at a time between your index and middle finger with your fingers and wrist in towards your body. Now flick the card away from you and see how far it went.
- Hold a small ball of play dough in your palm using only your ring and little finger. Squash it into your palm keeping all other fingers as straight as possible.

Strategies

- Make a figure '8' elastic band around child's wrist and pencil shaft to hold it back in web space
- Use pencil grips (ultra pencil grips)
- Use a sloped desktop to rest forearm and encourage wrist extension during pencil activities.



Pencil aerobics

Daily exercises to get a child's fingers and body ready to write.

Pop corn ride:

Bounce your body up and down whilst sitting on your chair. Try 15 bounces.

Pencil pickup:

Put your pencil down facing right, pick it up and be ready to write.

Put your pencil down facing left pick it up and be ready to write.

Pencil push-ups:

Hold onto the pencil and be ready to write.

Using your fingers only, walk up the pencil and when you get to the end walk back down. Repeat 5 times.

Finger pull:

Try this with a partner. Make a circle with your thumb and finger tips. Link your circles then try to pull your partner's circle apart.



Finger lift:

Put your palm flat on the table. Lift your thumb off the table and then let it touch the table.

Now try with the rest of your fingers.

Then try with your other hand.

Piano keys:

Try this with a partner. Place your hands on the table (palm down). Now copy your partner who is pretending to play the piano – by lifting one finger at a time from the table.

Finger football:

Using crumpled pieces of paper, make small balls with your index finger and thumb. (Make sure the index finger is above the thumb, as it is in a pencil grip).

Flick the paper ball into a goal.

Also, try to dribble the ball along a one inch thick line. (Masking tape makes a good removable line).

Tents:

With forearm and hand flat on the table, slide the fingers back, keeping the fingers straight. The knuckles should lift up in the air. Hold this position for 10 seconds and repeat 5 times. Once this becomes easy, make the 'tent' and then move the thumb in/out while keeping fingers straight.



10 Dexterity and manipulation

Dexterity and manipulation are the fine adjustments made to move and turn objects within the hand which is required for fast and accurate hand use.

Difficulties in this area result in slow and awkward hand movements (e.g.: when picking up objects).

Activities

- Pick up a coin using your index finger and thumb. Using only this hand, move the coin to hide it in your palm. Continue to pick up coins one at a time until you cannot hide anymore in your palm.
- If the child was able to complete the first activity, pick up and hide the coins in your palm; then move one coin at a time from palm to fingers to post.



Hold a pencil ready to write. Hide your other hand behind your back. Walk your fingers up to the other end of the pencil, turn around in hand so you are holding the other end.

- Hold a pencil in the air and turn it using your fingers to make a helicopter. Turn 5 times one direction, then 5 times the other direction. If easily able to turn, try turning only using the tips of your thumb, index and middle finger.
- Place hand flat on the table with palm down. Keeping forearm on the table, lift up knuckles to make a tent (keep fingers straight). Move each finger up in turn to 'open a window'.
- Hold a small ball (ping pong size) against a wall with all fingertips. Walk the ball up and along the wall using tips of all fingers.
- Place the child's hand flat on the table facing palm down. Place a coin on top of each fingernail. Try and flick off just one coin at a time.



Practice the following animal walks using only movements of the fingers

- Dinosaur – hold up index finger for the 'head' and walk along the table using tips of other three fingers and thumb as its 'legs'.
- Slug – with hand flat on the table, raise up your knuckles and push your hand back down so they straighten again.
- Spider – place hand flat on the table with fingers spread apart. Slide tips of all fingers together forwards and backwards to make the 'spider' wiggle.



Exercises to do before and during handwriting

These exercises are designed to **release tension** in the fingers and arms and to **increase the awareness** of these body parts and their **movements**. Ideally, they should be done **before** starting written work and **during** long writing tasks (every 10 – 15 minutes).

The entire class can do them, or for an older child, they can be completed underneath the table and against the chair if the child is concerned about drawing attention to themselves.

- To relieve tension: **Choose x1**
 - roll shoulders 3 times in each direction.
 - rub palms against thighs.
- To increase awareness and muscle tone: **Choose x1**
 - press the palms together like a prayer and hold.
 - link fingers in a monkey grip and pull apart.
 - place the 'heels' of the palms on the sides of the chair seat and put weight down through the hands. Try to do a 'chair' push-up and lift the bottom off the chair.
- To improve finger isolation: **Choose x1**
 - press the thumb firmly to each finger and hold for a few seconds.
 - flicking each finger against the thumb.
 - pretending to play the piano against the table top: thumb to little finger and back again.
- check posture: Body square; feet flat; bottom back (in chair); shoulders back and down, head up.
- ideally, the child should be able to initiate doing these exercises both at home and in class. At first, he/she may need prompts and positive reinforcement to help these strategies become a habit.



Pencil grasp patterns

Functional grasp patterns

Tripod grasp with open web space: The pencil is held with the tip of the thumb and index finger and rests against the side of the third finger. The thumb and index finger form a circle.



Quadripod grasp with open web space: The pencil is held with the tip of the thumb, index finger, and third finger and rests against the side of the fourth finger. The thumb and index finger form a circle.



Adaptive tripod or D'Nealian grasp: The pencil is held between the index and third fingers with the tips of the thumb and index finger on the pencil. The pencil rests against the side of the third finger near its end.



Immature grasp patterns

Fisted grasp (or palmar supinate grasp): The pencil is held in a fisted hand with the point of the pencil on the fifth finger side on the hand. This is typical of very young children.



Pronated grasp (or digital pronate grasp): The pencil is held diagonally within the hand with the tips of the thumb and index finger on the pencil. This is typical of children ages 2 to 3.



Inefficient grasp patterns

Five finger grasp: The pencil is held with the tips of all five fingers. The movement when writing is primarily on the fifth finger side of the hand.



Thumb tuck grasp: The pencil is held in a tripod or Quadripod grasp but with the thumb tucked under the index finger.



Thumb wrap grasp: The pencil is held in a tripod or Quadripod grasp but with the thumb wrapped over the index finger.



Tripod grasp with closed web space: The pencil is held with the tip of the thumb and index finger and rests against the side of the third finger. The thumb is rotated toward the pencil, closing the web space.



Finger wrap (or inter digital brace grasp): The index and third fingers wrap around the pencil. The thumb web space is completely closed.



Flexed wrist or hooked wrist: The pencil can be held in a variety of grasps with the wrist flexed or bent. This is more typically seen with left-hand writers but is also present in some right-hand writers.



11 Visual perception

Visual perception is the ability to use what we see to recognise, recall, discriminate and put meaning to what we see.

Difficulties in this area can affect handwriting (reversals, sizing, spacing, and formation), scissor skills, dressing and copying from a board.

Activities

- Candid camera – ask the child to close their eyes and describe something (what someone is wearing, colour of the curtains)
- 'I Spy' – say the colour, size, shape or first letter of something in sight. Have the child try and guess what it is
- Copycat – use a pegboard divided in half. On one half make a design with coloured pegs and ask the child to copy it on their half
- Missing pieces – Draw shapes with a piece missing. Draw a variety of pieces and have child try and identify the missing piece
- Visual thinking – Draw an unsymmetrical shape and ask the child to draw it on its side.
- Other activities:
 - mazes and puzzles
 - word/letter searches
 - spot the difference and find
 - the hidden picture games
 - dot-to-dot

Strategies:

- position the child in the middle of the class, facing the board
- where possible, give hand-outs to minimise copying from the board
- allow time to write ideas first to structure and sequence stories
- use of a handwriting slope
- use colour coded paper to keep all letters inside one colour
- use windows with reading/writing



12 Ocular motor control

Ocular motor control is the smooth and coordinated movements of the eyes which are required to find and track moving objects, scan objects, maintain eye contact and to shift focus quickly from one object to another. Problems with ocular motor control can cause difficulties with copying from a board, maintaining visual attention to task, coordination and depth perception.

Activities

- The child sits and keeps their head still. Their eyes follow a moving object in the following directions (isolating eyes from head): horizontal, vertical, diagonal and circular.
- The child sits and keeps their head still. Have the child quickly shift focus between two objects following your verbal cue. Look at pen, look at me, look at pen look at me, etc.
- On a sheet of paper have a sequence of pictures, numbers, letters. Have child follow along the line and circle a particular picture/number/letter.
- Using two torches, have the child follow your torch movements with their torch, staying just behind you but never passing.
- Hold a suspended ball on a string above the child's head with the ball at eye height. Swing the ball in front of the child's eyes for them to follow from side to side, encouraging them to keep their head still.
- Place a bead on a string tied to something at each end. Encourage the child to push the bead along with one finger, from one end to the other, without removing their finger from the bead.



Strategies

- position the child in front of the board in the classroom
- write small amounts of work on the board at a time
- use an individual sloping board on the desk
- alternate copying/writing tasks with less visually demanding tasks
- schedule eye relaxing (closing) exercises between tasks.



13 Laterality and midline crossing

Laterality is the ability to use a preferred hand for activities that require fine manipulation and high degrees of accuracy and power.

Midline crossing is the ability to spontaneously cross an imaginary line in the middle of our body i.e. taking right hand across to left shoulder.

Difficulties in this area result in confusion over hand dominance and swapping from left to right, reversals in handwriting and poor posture at desk.

Laterality activities

If a child does not have a clear hand preference they will need to do activities using both hands.

Games using both hands symmetrically (doing the same movement)

- ball throwing and catching

Games using both hands reciprocally (doing alternate movements)

- pulling self along a rope
- marching with arms swinging alternately

When a consistent preference for one hand emerges, they then need to do activities with that hand that use fine manipulation and control, while the other hand stabilizes the object.

Games refining accuracy and power to one hand

- threading beads
- posting coins
- sorting deck cards
- using a hammer

Midline crossing activities

- Have the child lift up their right knee and touch it with their left elbow, then lift up their left knee and touch it with their right elbow. Continue this sequence of movements 10 times.
- Have the child hold their hands together over one shoulder and swing their arms across their body to their other shoulder, tapping a balloon suspended in front of them.



- Encourage the child to draw large shapes on a large paper or board, holding the pencil/chalk with both hands, then with their preferred hand:
 - draw large rainbows back and forth
 - trace over a large '+' (horizontal line at shoulder height)
 - draw a large 'X'
 - draw a large 'T'
 - draw a large figure '8' on its side
- Place a pot/bucket in front of the child and scatter small objects (i.e. coins) across the table. Time the child to put all the objects/coins in the bucket one at a time.
- Sitting cross legged on the floor, roll a ball or push a car around the body using only one hand. Do 5 full laps, and then swap hands going in the other direction.

Strategies

- Always give objects to the child in their middle so they have to choose which hand to use.
- Always encourage the child to draw left to right across the page but don't force them to choose dominance if they are not ready
- Avoid allowing the child to pick up objects with one hand and pass them to the other in their midline
- Tape a small cross on child's desk as a reminder for their trunk posture to prevent them compensating and leaning to one side



14 Body awareness/proprioception

Proprioception is the sensation we receive from our muscles and joints that allow us to 'feel' the position of our body (body awareness).

Difficulties within this area often make children appear awkward, rely on their vision and have difficulties judging force.

Activities

- Wall press ups – the child stands facing the wall, arms out with their hands on the wall. Keeping their body straight, the child leans into the wall until their nose is only inches away and then pushes back straightening their arms.
- Two children stand back to back. One child pushes the other slowly across the room.
- The child lies on their back with their eyes closed. When the adult says a body part the child must move it without looking.
- Two children stand facing each other with their palms together and push towards each other. The children need to keep their arms straight and shoulder width apart.
- The child is to jump with their feet together in all directions, following a short verbal sequence given by an adult. Include jumps forwards, backwards, side to side and diagonally. Then try jumping on different surfaces.
- Place floor spots along the floor at varying distances apart. The child is to jump along adjusting their body for the changes in distance.
- Spread a long rope along the floor, making large loops. The child should walk along with their left foot stepping to the right side of the rope and their right foot stepping to the left side of the rope.



Strategies

- have the child hand out other children's books or worksheets to allow them movement and resistance work
- allow the child a fidget toy. Every child has their own preference over tactile or oral fidget toys and needs to use what they find best. Commercially available "chewies" for the end of pencils, silent whistles/blowers, stress balls, or even blue tac can be used.
- Performing press ups against a wall or from a chair are good to help calm and organise a child when they are having difficulty being still
- Use theraband around the legs of the table to give the child resistance with their legs (their legs can push against this) to help them sit and concentrate
- Allow short movement breaks during sedentary activities



Activities of daily living

The term behaviour is often used to refer to 'good' or 'bad' behaviour as if our behaviour is only part of what we do. In terms of behavioural theory, the term behaviour refers to everything we say or do.

- A person is behaving all of the time.
- Activity is often thought to be the same as behaviour.
- A person is behaving even when they are doing nothing.

The phrase "challenging behaviour" has become part of the everyday language within educational contexts and was first introduced as an attempt to place the emphasis on the service to meet the needs of the person, rather than suggesting that the difficulty was intrinsic to the person.

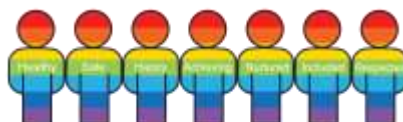
'Severely challenging behaviour is behaviour of such intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit or deny access to the use of ordinary community facilities.' (Emerson, 2001,)

Research suggests that people are still likely to see challenging behaviour in terms of a particular behavioural category e.g. self-injury, aggression and stereotypy (Hastings et al.1997; McKenzie et al.1999). The term challenging behaviour can often be misinterpreted or misapplied, being seen as referring to behaviour that is deliberately awkward and defiant.

The causes of challenging behaviour can be as complex as defining the term and is often a combination of several of the following factors: behavioural, cognitive, biological (*sensory, movement and communication*), environmental and psychological. Challenging behaviour can be identified through assessment as having a function for the person.

There are five main types of behaviour function:

- **Avoidance/Escape**
- **Obtaining a tangible object**
- **Attention Seeking**
- **Sensory Avoidance or Seeking**
- **Pain**



Behaviours can interfere with our ability to effectively function in society. They can be due to a difficulty in processing sensory information from our environment.

Behaviours include, avoiding tasks, object, situations, people and activities, attention seeking, personal needs or wants e.g. food or warmth and can lead to challenging behaviour. These behaviours are often accompanied by a difficulty with communication.

When dealing with challenging behaviour you may have to treat the sensory processing difficulties as well as providing an appropriate means of communication with behavioural strategies.

The behaviours often become learnt behaviours and are very effective for the child, reinforcing the negative behaviour.

Children often become overwhelmed if they are unable express how they are feeling. [Refer to communication section page 68.](#)

Challenging behaviour and Pro-active strategies

Ensure that the environment is not over whelming by turning the lights off, using a calm quiet voice, having clear walls to reduce visual stimulation ensure that the task is manageable and something that motivates them. The just right challenge.

- Provide sensory input at regular intervals throughout the day. Please see the sensory processing section. Page 28.
- Reward **all** positive achievements throughout the task e.g. **Good Sitting!**
- Ensure success of task through the Just Right Challenge.
- Avoid giving lots of choices.eg Give the child the choice of two activities one they can achieve and one they can't. The child will choose the one they can achieve. Therefore experiencing a positive outcome. When trying to develop skills further make the choices one they find challenging and one they can't achieve thus encouraging the child to try something more challenging.
- Avoid long sentences.
- Give clear instructions one at a time followed by a descriptive praise.
- Use a star chart or motivating reward system.
- Place pebbles in a jar as a reward. Establish how many need to be in the jar before giving a reward.
- Use a countdown process to try and get the child to co-operate with you. e.g. five more and finish "54321 and finish"
- Ensure you are calm when dealing with challenging behaviour so the behaviour does not escalate. You may consider using other staff to support the situation and the child.
- To extinguish the behaviour, deliberately avoid looking at the child while the behaviour is occurring and then look back when the behaviour stops.
- To calm a child, try weighted blankets, a dark den.



- “No” can be a trigger word, try offering another activity or change the word “No” to “Stop.
- Use and “First and Then” board
- Use the gesture “Good waiting” or wait cards.
- Use a visual time table.
- Teach a visual way for child to identify/communicate about their feelings.
- Create a ‘safe space’ for child to use when overwhelmed.
- For children finding an activity difficult for example messy play, use hand over hand activity for the count of 5. Then finish and allow the child to do a motivating task. Increase the time gradually each time.
- Ensure the child has the correct mode of communication eg verbal, objects or pictures
- Promote active engagement in structured/personalised activities eg, gym time.

Reactive Strategies

- Firstly, ensure the child is safe and either remove the child or yourself from the situation for a limited time.
- Divert to preferred activities that child finds motivating.
- Change style of interaction; tone of voice, reduce demands, change schedule.
- Use active listening.
- Use strategic capitulation.

Stage 1

Behaviour definition is always the best starting point when looking at how to respond to challenging behaviour.

D.A.S.H (Define, Ask, See, Hypothesize)

Defining the behaviour – in observable (seen or heard) and measurable (can be counted or timed) terminology

e.g. threatens peers with bodily harm, screams obscenities at peers.

Ask – about the behaviour by interviewing staff, child, & parent/carer, incorporate information from these interviews, review records, summarize where, when and why behaviours occur.

See – the behaviour, observe the behaviour during classes/activities.

Hypothesize – a final summary of when, where and why the behaviours occur.



Stage 2

Ask and See - ABC's.

Commonly these defined behaviours would be measured in the context of the "ABC" model, although sometimes only an "AB" model might be used:-

Antecedents - What could be observed to have happened before the target behaviour occurred?

Behaviour - The behaviour observed.

Consequences - What could be observed to take place following the behaviour?

The information about **Antecedents** can be used to identify factors that make a behaviour more likely to occur (although it is not much help at identifying factors that make the behaviour less likely to occur as it focuses primarily on situations when the behaviour is present)

The description of the **Behaviour** can be used to identify changes in the pattern of the behaviour itself (such as intensity, duration, sequence of actions etc.)

The information generated about **Consequences** can provide detail about responses (or lack of responses) to that behaviour that may be seen to be reinforcing the target behaviour.

Historically, much of the focus of intervention following such "ABC" analyses concentrated on adjusting the consequences following that behaviour. The emphasis now has moved to a much greater focus on the antecedents.



How are ABC charts used in your school, or with the students you support?

Example completed ABC chart:

Other Questionnaires that can be used for completing a functional assessment include:

QABF – Questionnaire about Behaviour Function

MAS – Motivation Assessment Scale

ABC Behaviour Chart

This ABC chart can be used to record behavioural concerns.

- 'A' stands for antecedents, that is, what happens immediately before the behavioural outburst and can include any triggers, signs of distress or environmental information.
- 'B' refers to the behaviour itself and is a description of what actually happened during the outburst or what the behaviour 'looked' like.
- 'C' refers to the consequences of the behaviour, or what happened immediately after the behaviour and can include information about other people's responses to the behaviour and the eventual outcome for the person.

It can also be a good idea to keep track of where and when the behaviour occurred to help in identifying any patterns.



Day, date and time	Antecedent	Behaviour	Consequence	Notes



ABC chart examples

Example 1

Male autistic adult, non-verbal, with sensory difficulties, lives in a placement. His mum visits on weekends and Wednesday evenings

Day, Date and time	Antecedent	Behaviour	Consequence	Notes
Wed 1 Nov	Son calm. Watching TV with staff and other uses	Son ran away from mum. Shut door of room and would not come out. Screamed and lashed out when she came into room	Mum left. Son eventually calmed and was distressed mum was not there.	
Wed 8 Nov	Son calm. Playing with tablet computer in room alone.	Son screamed and covered face when mum entered room.	After trying to talk to son Mum left. Son calmed down.	
Wed 15 Nov	Son calm. Watching TV with staff and other uses	Son ran into bathroom. Would not come out. Screamed and lashed out when mum came into bathroom.	Mum left whilst son calmed down.	Mum tried to come back when son calmed down and the process repeated itself.

Interpretations:

Son is reacting to mum but only on Wednesdays. Does not display this behaviour at the weekends when she visits. After thinking about what is different, she realises she wears perfume on Wednesdays as she goes to a book club after visiting her son. As her son has sensory difficulties, she concluded that he may be reacting negatively due to her perfume.

Strategies:-

After not wearing perfume, her son did not react negatively to her Wednesday visits.



Example 2

Boy 8, who is Autistic, verbal and fairly articulate. Starting new mainstream school, no support in place.

Day, date and time	Antecedent	Behaviour	Consequence	Notes
Mon 3 Sept 11:45	Sitting working at literacy. At table with 3 other children. Started asking repetitive questions about when it would be lunch time.	When bell for lunch went, he wouldn't get out of his seat. After being asked repeated by teacher, he threw himself on the floor crying.	He stayed in classroom with a teacher. Ate lunch there when he calmed down.	First day so first experience of this type of behaviour.
Tues 4 Sept 11:40	Sitting working on numeracy. At table with 4 other children. Started fiddling with sleeves on jumper.	Started to cry when the bell for lunch went. Put his hand on the table and became hysterical. Would not be moved or comforted.	He stayed in classroom with a teacher and when he calmed down he ate lunch at his table.	
Wed 5 September 11:39	Sitting on the carpet for reading time with whole class. Getting fidgety and fiddling with his jumper.	Hid behind book box when everyone got up for lunch time. Would not be moved, lashed out when teacher tried to move him. Crying.	Ate lunch in class room with teacher.	

Interpretations:

Consistent reaction to same event- likely caused by anxiety about lunchtime at school.



Strategies:-

Giving him anxiety reducing tools before he gets over anxious. Consider adjusting how he experiences lunchtime – could he leave for lunch early before it is too busy? Or start lunch in the classroom before joining classmates later in the lunch time? Look at offering him extra support at that time.

Visual supports explaining what will happen at lunchtime, structure added to reduce anxiety. If there are sensory needs, make sure they are met.

Example 3

Girl, 3 who is Autistic and has limited communication. She attends nursery with support 2 days per week.

Day, date and time	Antecedent	Behaviour	Consequence	Notes
Monday 18 Feb 7.30am	Driving to nursery in car with dad.	Suddenly started screaming, trying to get out of her car seat.	Cried all the way to nursery. Calmed down when got to nursery but struggled for the rest of the day.	She has never reacted like this in the car before – normally likes driving
Monday 18 Feb 6pm	Driving home from nursery with mum	Same as this morning!	Cried all the way home and was upset all evening.	

Interpretations:

Something is happening during the journey to upset her. After thinking about what was different about today's drive, parents realised that they were having to drive a different way to and from nursery due to road works. The daughter was screaming at the point the diversion happened as it was a change to her routine.

Strategies

Use visual supports to explain the change and reinforce that the rest of her routine would remain the same. Provide calming activities to play within the car.



Example 4

Girl 14, who is Autistic, very intelligent, attends a mainstream school with no support, has a peer group of female friends.

Day, date and time	Antecedent	Behaviour	Consequence	Notes
Sat 12 April 1pm	Spent morning with friends at local park.	Got home and went to her straight to her room, clearly upset. Cried and broke her belongings.	Was withdrawn for the rest of the day. Sad about the possessions she broke.	
Sun 13 April 4pm	Spent afternoon at the cinema with best friend.	Screamed at mum when asked whether she had fun and then cried hysterically.	Spent the rest of the day in her room.	Couldn't explain why she was so upset when asked.

Interpretations:

These incidents are occurring after she spends time with her friends, particularly her best friend. Seems unwilling or unable to discuss why she is so upset.

Strategies:

Increase communication methods (e.g. worry book, texting) to give her an outlet to express what is going on. Work with her on social skills and understanding and expressing emotions to give her more appropriate ways to express herself.

Stage 3

Behaviour Support Plans –

A positive behaviour support plan can also be referred to as a:

- Behaviour Support Plan
- Behaviour Intervention and Support Plan
- Lifestyle and Behaviour Support Plan
- Multi-Element Support Plan
- Behaviour Management Plan
- Behaviour Support and Intervention Plan



The aim of the behaviour support plan is to make use of information gathered while undertaking any level of functional assessment to design the most effective approach to supporting the person by;

- Understanding why behaviour occurs
- Reduce the likelihood of challenging behaviour
- Ensure skills teaching is a central intervention
- Establish quality of life as an intervention and outcome measure
- Reduce/avoid the use of restrictive interventions (e.g. punishment, exclusion, restraint, seclusion, etc).

The recommendations for each person will be different and will depend upon the factors contributing to the person's behaviour, his/her current environment, the function of their behaviour, and their available supports.

Behaviour support plans should contain a number of proactive and reactive strategies.

The proactive strategies should be the main focus of the interventions with reactive strategies only being used as the last resort and in the least restrictive manner.



Example of a template for a Behaviour support plan with proactive & reactive strategies:-

Student's Name		Date		
Behaviour:		Respondent:		
Questions about behavioural function QABF				
Rate how often the student demonstrates the behaviours in situations where they might occur. Be sure to rate how often each behaviour occurs, not what you think a good answer would be.				
X= Doesn't apply 0= Never 1= Rarely 2= Some 3= Often				
Score	Number	Behaviour		
	1	Engages in the behaviour to get attention		
	2	Engages in the behaviour to escape work or learning situations		
	3	Engages in the behaviour as a form of "self-stimulation"		
	4	Engages in the behaviour because he/she is in pain		
	5	Engages in the behaviour to get access to items such as preferred toys, food or beverages		
	6	Engages in the behaviour because he/she likes to be reprimanded		
	7	Engages in the behaviour when asked to do something (get dressed, brush teeth, work etc		
	8	Engages in the behaviour even if he/she thinks no one is in the room.		
	9	Engages in the behaviour more frequently when he/she is ill		
	10	Engages in the behaviour when you take something away from him/her		
	11	Engages in the behaviour to draw attention to himself/herself.		
	12	Engages in the behaviour when he/she does not want to do something.		
	13	Engages in the behaviour because there is nothing else to do.		
	14	Engages in the behaviour when there is something bothering him/her physically.		
	15	Engages in the behaviour when you have something that she/she wants.		
	16	Engages in the behaviour to try to get a reaction from you.		
	17	Engages in the behaviour to try to get people to leave him/her alone		
	18	Engages in the behaviour in a highly repetitive manner, ignoring his/her surroundings		
	19	Engages in the behaviour because he/she is physically uncomfortable.		
	20	Engages in the behaviour when a peer has something that he/she wants.		
	21	Does he/she seem to be saying "come see me" or "look at me" when engaging in the behaviour		
	22	Does he/she seem to be saying "leave me alone" or "stop asking me to do this" when engaging in the behaviour		
	23	Does he/she seem to enjoy the behaviour, even if no one is around?		
	24	Does the behaviour seem to indicate to you that he/she is not feeling well?		
	25	Does he/she seem to be saying indicate to you that he/she is not feeling well? Does he/she seem to be saying "give me that (toy, food, item)" when engaging in the behaviour?		
Attention	Escape	Non-social	Physical	Tangible
1.Attention <input type="checkbox"/>	2.Escape <input type="checkbox"/>	3.Self-stim <input type="checkbox"/>	4.In pain <input type="checkbox"/>	5 Access to items <input type="checkbox"/>
6.Reprimand <input type="checkbox"/>	7. Do something <input type="checkbox"/>	8. thinks alone <input type="checkbox"/>	9. When ill <input type="checkbox"/>	10. Takes away <input type="checkbox"/>
11.Draws <input type="checkbox"/>	12.Not do <input type="checkbox"/>	13.Nothing to do <input type="checkbox"/>	14. Physical problems <input type="checkbox"/>	14. you have <input type="checkbox"/>
16.Reaction <input type="checkbox"/>	17.Alone <input type="checkbox"/>	18.Repetitive <input type="checkbox"/>	19.Uncomfortable <input type="checkbox"/>	20. Peer has <input type="checkbox"/>
21."come see" <input type="checkbox"/>	22."leave alone" <input type="checkbox"/>	23.Enjoy by self <input type="checkbox"/>	24 not feeling well <input type="checkbox"/>	25. "Give me that" <input type="checkbox"/>
Total	Total	Total	Total	Total



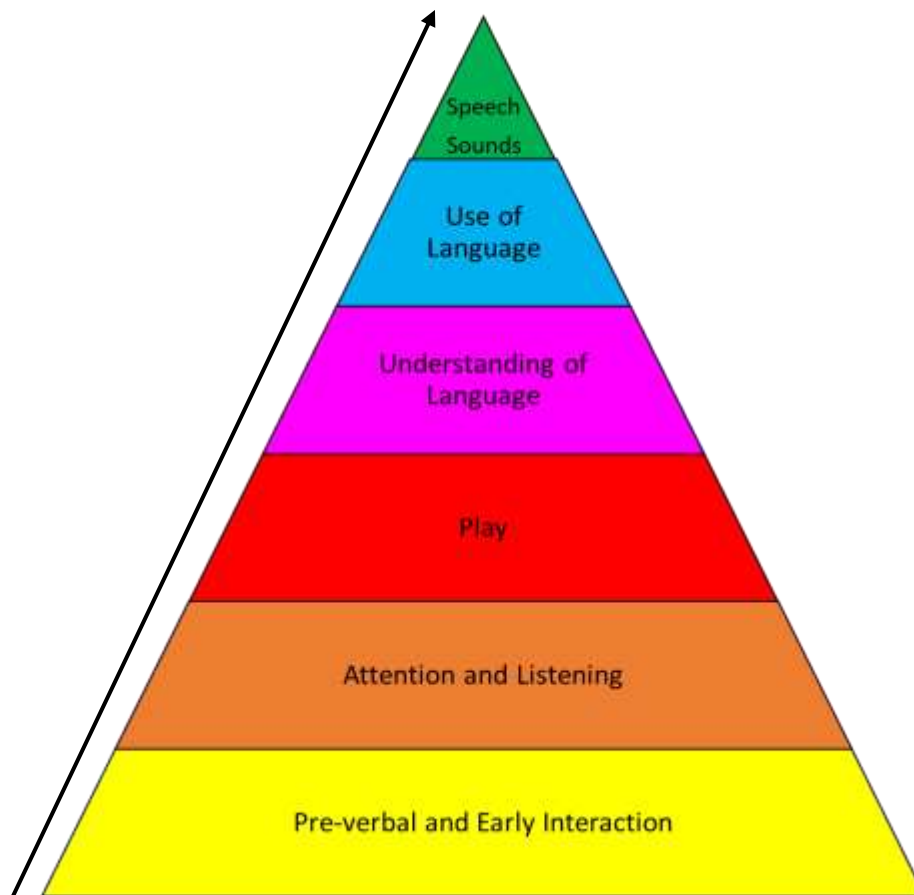
What is speech, language and communication?

Speech: When we use the term 'speech', we are referring to the **production of sounds** to form words.

Language: In the simplest sense, we think of language as being the **understanding and use** of words, sentences and grammar. This involves both receptive language (understanding) and expressive language (use of language).

Communication: Communication involves sharing our thoughts, needs, wants and ideas with another person or people. We communicate using spoken language but also non-verbal means such as gesture, facial expression, body language, eye contact etc. It is possible to communicate effectively without the use of spoken language.

Children develop their Speech, Language and Communication skills at different rates and ages. Typically, children will do this through the development of the skills represented in the Communication Pyramid below. The skills at the bottom of the pyramid act as the foundations for the skills at the top.



Page 53



How to identify Speech, Language and Communication Needs (SLCN)

For some children, SLCN will be identified at an early age due to the child not understanding or using words in line with their peers. For others, these difficulties may not be obvious until the language demands increase when they start school.

The table below is a rough guide of what to look out for in relation to SLCN when children transition from nursery to school.

2 to 3 years	3 ½ years to 5 years	5 years +
2 years or more and cannot say any words or has a very limited number of words.	Finds it hard to produce lots of speech sounds and adults cannot understand what they say.	Find it hard to learn new words or basic concepts of shape, size, position.
3 years or more and only parents or close family can understand what they are saying.	Misses out words in a sentence, uses words in the wrong order or finds it hard to link words together in a phrase or sentence.	Struggles to understand abstract ideas such as time or emotions
Makes little or no eye contact and it's difficult to draw their attention away from something of interest.	Struggles to learn new words.	Has difficulty giving a basic account of something they have done.
Does not respond to simple instructions.	Struggles with following basic instructions in familiar situations.	Has difficulty responding to basic 'Wh' questions such as 'Who?', 'What?', 'Where?'
	Appears to forget instructions or conversations almost as soon as they are said.	Jumps from one topic to another in conversation or talks about one preferred subject and finds it difficult to switch to other topics.
	Finds it difficult to pay attention to instructions or conversation.	Misinterprets language which isn't literal – like "What's up?"
	Provides unusual answers or comments in response to questions.	
	Does not understand how to take turns in conversation.	



15 Foundations of communication

Communication includes much more than just spoken language. Pre-verbal skills are the skills children start to learn before developing spoken language and are the foundations for language development. These skills help children learn how to communicate intentionally and take part in to-and-fro interactions.

Pre-verbal skills include *Adapted from 'Teach me to Talk' by Laura Mize:*

- Reacting to events in the environment
- Responding to people when they talk to, or play with, the child
- Taking turns during interactions
- Developing a longer attention span
- Shifting and sharing attention with others
- Understanding early words and simple directions
- Initiating interactions with others to get needs met or to play

There are lots of ways we can 'communicate' without even using words. This is often called 'non-verbal communication'. Non-verbal communication can be used to add additional information to our spoken language or it can be used on its own for children or young people who have not developed spoken language.

It is important that we accept all forms of communication that children or young people are able to use and 'listen' to any non-verbal communication alongside any spoken language.

Approaches such as 'Intensive Interaction', originally developed for autistic children, can be used to support children with developing pre-verbal skills by increasing their interest, engagement and interaction with others.

Non-verbal communication can include:

- Using gestures such as nodding/shaking our head, pointing, showing size/shapes using our hands.
- Varying the speed, intonation or pitch of our voice to show how we are feeling
- Using facial expressions to add information to what we are trying to 'say' or to show how we are feeling
- Using our body language or posture – understanding personal space or using our body to show how we are feeling e.g. turning away from someone or slouching in a chair.



Total Communication

A Total Communication approach supports all forms of communication and does not purely rely on using words to communicate. This approach supports both a child's understanding of, and use of, language. It is important because it values and acknowledges any communication attempt from the child.

Total communication includes any way that a child or young person can communicate with other people:

- Speech
- Sounds or vocalisations
- Body language and gesture
- Facial expression
- Signing systems (key word signing, Makaton or signalong)
- Symbols and pictures (such as PECS, communication boards and books)
- Photographs
- Objects of reference
- Visual support (such as First and Then boards or Visual Timetables)
- Touch
- Contextual cues
- Voice Output Communication Aids (VOCAs)

Some children will communicate using different methods for different things. A total communication approach focusses on accepting any way that the child communicates with you.

How do I use a Total Communication approach?

A Total Communication approach involves adults modelling a variety of different communication methods and systems. There is no expectation for the child to use any or all of these methods independently. In a Total Communication Approach, you need to make sure that you use the spoken word at all times whilst modelling any other communication systems or strategies.

Why use a Total Communication approach?

Not every child uses talking (spoken language) to communicate with other people. For some children with Language and Communication Needs, their talking will develop alongside their use of Augmentative and Alternative Communication (AAC).

A Total Communication approach:

- Accepts, respects and acknowledges any form of communication a child or young person is able to use
- Supports and benefits the development of spoken language
- Supports children's understanding while they are still learning what words mean
- Enables the child and young person to express their needs, wants and views which can help to reduce frustration and anxiety

Page 56



Who uses a Total Communication approach?

- Anyone can use a Total Communication approach!
- It is often used with children and adults who have Speech, Language and Communication Needs (SLCN). These needs may be linked to another diagnosis such as Autism, Down Syndrome, Cerebral Palsy, Speech Sound Disorders or Learning Disabilities or they may exist on their own.
- You don't need any specialist training to use a Total Communication Approach, you just need to think about how you can support the words you are using in your spoken language with other things available to you in your environment such as objects, pictures, signs, symbols and gestures.



16 Attention and listening

Attention and listening skills are important to support children's language development and learning. Attention and listening refers to being able to listen and focus on specific tasks, sounds or words. Children develop their attention skills at different ages.

The table below shows the different stages of attention for a typically developing child. It can be tricky for some children to develop these skills and they may need extra support to help them with this.

Age in years	Stages of attention and listening <i>Adapted from Cooper, Moodley and Reynell (1978) 'Helping Language Development'</i>
0-1	Fleeting The child is easily distracted and attention flits from one thing to another.
1-2	Rigid attention The child can concentrate on a task of their own choice but cannot tolerate interruption by an adult. They may appear wilful or obstinate.
2-3	Single channelled attention The child cannot cope with doing one thing and listening to an instruction about something else at the same time. They have to do one thing or another. If an adult wants to give an instruction, the child must be asked to stop their activity, listen to the adult and then return to their chosen task.
3-4	Focusing Attention The child is gradually beginning to control their own focus of attention but can still only concentrate on one thing at a time - the task or the unrelated instruction. However, they can now shift their focus of attention from one task to another independently.
4-5	Two channelled attention The child can do a task and understand an instruction at the same time. Their concentration span may still be short but they can now be taught in a group.
5-6	Integrated attention Two channelled attention is now well established across different situations with different people. This means the child can focus on one activity but can also listen to what is being said without stopping their activity and looking at the person speaking.



Supporting attention and listening skills

- Be face to face with the child or young person, where possible, getting down to their level.
- Get the child's attention before giving them an instruction. For example, say their name or gently touch them on the arm. Do not assume that children will be able to follow whole class instructions.
- Keep tasks short and simple so you can praise them for completing an activity.
- Remove distractions, where possible. Children will find it easier to listen in a quiet room with few distractions.
- Use a visual timetable, 'first/then' or 'working towards' board so the child knows what is going to happen and what is expected of them. See '[visual support](#)' section for more information.
- Use a sand timer or egg timer so the child can see how long they have to focus on a set task.
- Use visual supports to help maintain the child's attention e.g. pictures, photos, diagrams, video clips, gesture and practical demonstrations to engage their interest.
- Use verbal prompts to refocus the child if they go off topic. Acknowledge whatever has distracted them and redirect them to the task e.g. 'Now we're doing/talking about....'.
- Consider where the child sits. They may find it easier to concentrate when sat at the front of the class.
- Only give out additional materials (e.g. worksheets, pens) when they are needed, rather than leaving them on the desk as a distraction.
- Try to intersperse table top activities with more physical activities involving movement.
- Provide regular movement breaks to break up the lesson.
- Remember children do not have to sit still or be looking at you, to show that they are listening. Sometimes having a fidget toy or item to fiddle with (such as blue tac) can make it easier for children to listen or focus.
- For older children, using a white board to record key words or create mind maps while listening can be helpful.

REMEMBER: If a child has additional sensory needs it is important to integrate sensory recommendations alongside attention and listening strategies – see '[sensory difficulties](#)' sections for more information.



Developing children's attention

When working on attention and listening skills, you need to start with what the child or young person can already do. If they can sit and listen for 30 seconds, start by keeping activities to 30 seconds and gradually build up to listening for longer.

- Work towards being able to spend 5 minutes doing an activity with the child that they enjoy. If they cannot tolerate 5 minutes, start from what they can do and gradually build up the time from there.
- To help support children to focus on adult led tasks, gradually start to introduce activities that they are less motivated by first and then introduce an activity they enjoy (are motivated by). Use a 'first', 'then' approach to support changes in activities. 'First puzzle then bubbles'. See '[visual support](#)' section for more information.
- Keep your language simple and repeat the plan to support understanding. The 'first' activity can be really short to start with. When they can tolerate this, you can gradually increase the time of the first activity before they receive their 'reward' activity.
- Changing the activity, rather than increasing the time straight away, makes your child more likely to focus for longer. It also helps them to work towards engaging in 'adult led tasks' before doing something they might want to do.
- Using 'first' and 'then' boards can help your child visualise what activities they will be doing and the order they will be in.
- When your child can tolerate doing 2 activities for 5 minutes, gradually increase the time spent on each activity. Then increase the number of activities (introducing new activities with a shorter time span first).



17 Visual support

Visual support is vital for children or young people with speech, language and communication needs. It can be used to help support children's understanding when following instructions, learning new words, learning school rules or to develop children's use of language through choosing boards, communication boards/books and electronic devices.

First and Then boards and Visual Timetables

First and Then Boards (sometimes called Now and Next Boards) and Visual timetables are useful strategies to support children as they can:

- Help children to see what activities they are going to be doing
- Help them to understand the order in which things are going to happen
- Visually represent what is going to happen throughout their day or within a specific activity
- Help to reduce anxiety around the routine of the day
- Help children to engage in learning activities as they have something exciting happening soon after

First and Then boards are most commonly used with pictures or symbols but they can also be used with the written word. It is helpful to keep a set of symbols that you are using to represent different activities but if you don't have these available you can draw pictures on post-it notes, a whiteboard or on a piece of paper.

Always use spoken language alongside visuals. It is important to use the Visual Timetable or First and Then board across the whole day not just for activities that you feel the child will be less motivated by.

Once you have introduced a First and Then board or Visual Timetable, make sure it is accessible throughout the day. At home, you could keep it on the fridge, on a door or somewhere else where the child can always see it. At school, you could stick it to the child's table or on their workstation (if they have one). This will make sure that the child can see it throughout the day and you can draw their attention to it if they want to move on to something else.

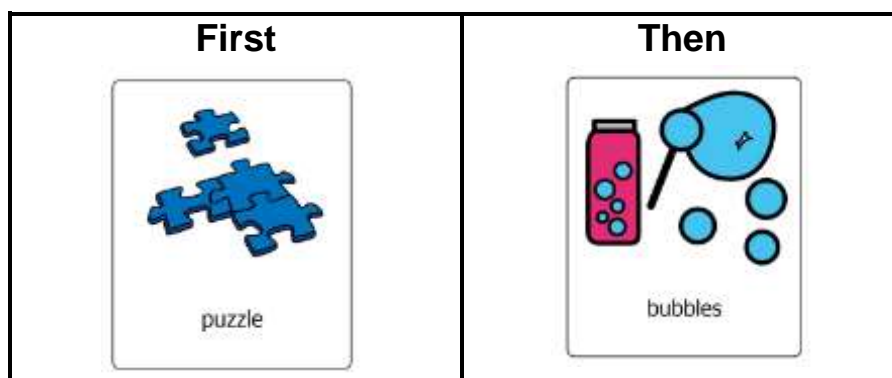
Adults using First and Then boards or visual timetables will first need to show children how they are used. You will need to remove the symbols as they are



finished but eventually, as your child becomes more familiar with how the boards/timetables work, they may start to remove the symbols themselves (or with a small amount of support) once they have completed the activity. This is a good skill for developing their independence.

How to introduce First and Then Boards

- Create a board with First and Then in a grid
- Make sure you have symbols or pictures available for the activities that you are going to be doing



- When you introduce a First and Then board for the first time, you should make sure that the 'Then' activity is more motivating than the 'First' activity.
- For example, you may want to offer 'First' puzzle, 'Then' bubbles. Remember, to start off with, both activities should still be ones that the child likes.
- The 'First' activity can be very short followed by the 'Then' activity being completed.
- Once the 'First' activity is finished, remove the symbol and say 'Puzzle has finished' so that your child can see that it is finished. Move the bubbles symbol to the 'First position'.
- Once your child is familiar with 'First and Then' boards, you can gradually increase the amount of time spent on the 'First' activity before moving onto the 'Then'. You can also start to put learning activities in the 'First' activity before the motivating 'Then' activity.



Top Tips for First and Then boards

- If your child tries to move on to the motivating activity (Then), draw their attention back to the First and Then Board and say 'First X, Then Y'. If your child finds this challenging, you may need to reduce the amount of time that they spend on the first activity. Make sure that this is on the adult's terms and that you still use the First and Then board.
- It can be helpful to introduce activities that have a very clear end (such as an inset puzzle, a short picture book or matching activities) to start off with so that it is clear when the activity will be finished. This can be helpful for children that have difficulties with their attention and listening skills.

How to introduce Visual Timetables

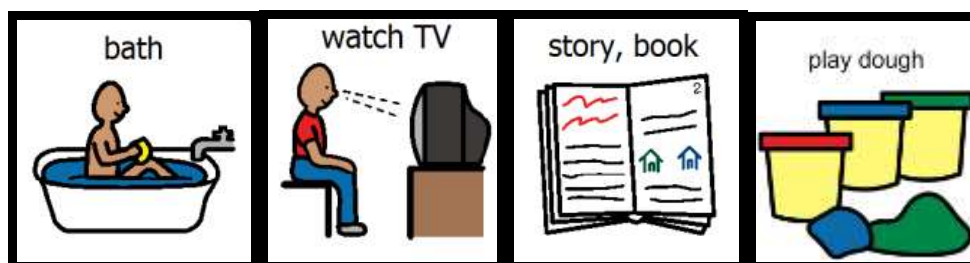
Visual Timetables can be used for

- A whole class of children
- A small group of children
- The whole family

Many children with Speech, Language and Communication Needs (SLCN) may need and benefit from their own personalised visual timetable, even when a whole class timetable is available.

Visual timetables can be used either in a top down or left to right format. It is often better to use a top down format, particularly for children who have not yet learnt that reading goes from left to right.

- Create a large strip of paper with Velcro down the centre of it (or across the middle if right to left).
- Make sure you have symbols or pictures (with Velcro on) available for the activities that you are going to be doing that day.



- Make sure that you have a finished box, bag or envelope at the end of the timetable that the symbols can be put in.
- At the start of the day or individual activity, place the symbols on the timetable in the order that they are going to happen.
- When you start an activity, show your child the symbol by pointing to it and say 'it's time for X'.
- When the activity has finished, say 'X is finished' and place it in the finished box.
- Tell your child what the next activity is by showing them the symbol and say 'it's time for X'

Top Tips for Visual Timetables

- If your child asks when a favourite activity is going to happen, show them the visual timetable and point to the activities that are going to be happening in a certain order.
- Make sure to include symbols like 'choosing time' or 'free time' so that your child can still choose what they do at certain times of the day.
- Always make sure that the timetable is up to date; all activities that are finished should no longer be on the timetable. If a child looks at the timetable, they should know what is currently happening by looking at the first symbol on the timetable.
- It is useful to have finished box or envelope at the end of the timetable so that children or adults can put the finished symbols in this box.
- Once your child is familiar with how a visual timetable works, it is beneficial to introduce symbols such as 'Surprise' or 'Special Activity'. This supports them to work towards accepting that that they will not always know exactly what will happen next but provides them with a familiar structure at the same time.
- Remember, for some children who are able to read or who are older, you can use a visual timetable using just the written word. You could write this on a whiteboard and rub off the word once the activity is complete so that your child knows what they need to do next.
- Visual timetables can also be used for set activities if there are lots of elements that need to be completed such as getting dressed or brushing your teeth.
- Visual timetables can be used alongside other forms of visual supports.



Choosing boards

A choosing board shows the choices available to your child using pictures, symbols or printed words depending on what is most meaningful for your child. It can help your child to express a preference or request for something from a choice of two or more options. This is especially useful when the choices might not be things they can see; such as activities (going outside, pouring water) or when toys are out of sight or reach.

Choosing boards can help to develop your child's understanding of spoken words and promote independence and empowerment. It also gives them some control over their day.

How to use a choosing board

- Consider using a board where you are able to attach the symbols. The easiest way to do this is using Velcro on the board and on the back of any pictures or symbols. This gives your child the option of giving you the visual or pointing to it to communicate their choice.
- Start by offering 2 choices and gradually increase the number of symbols you use as this becomes easier for them. Be mindful of the maximum number of choices that are on offer on this board.
- Always gain your child's attention first and point to each of the symbols in turn identifying what they are. For example, if offering a choice of activities, point to each symbol while you say the word it represents i.e. point to the symbol for bubbles and say "bubbles". Remember to keep your language simple.
- When your child indicates their choice, give them the item or activity they have requested straight away.
- Remember children can make 'choices' in different ways so look out for them using a range of 'non-verbal' communication skills as well as spoken language. Children can make a choice through spoken words, a look (eye pointing) or a gesture (reaching, pointing, moving their body/head towards a choice) to let you know what they want.
- Do not use choices that are 'not available' to them. If something is not available for some reason (e.g. you have run out of bubbles or it's too cold/wet to play outside) either do not add it to the choosing board (if you are using detachable symbols) or put a red cross through the symbol using a white board pen (not a permanent marker) to show this is not available.



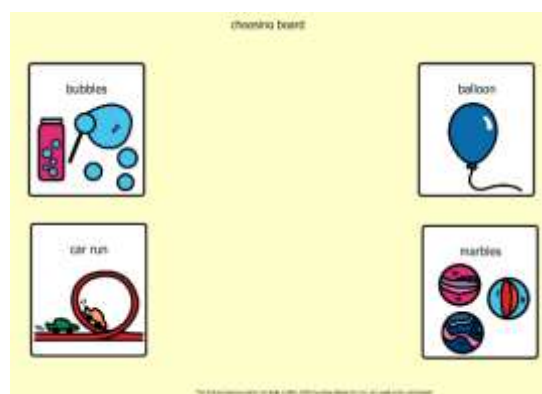
When offering the choices, you can say 'no bubbles today' while shaking your head to support understanding.

- If your child finds it difficult to point to their choice, encourage them to make their choice by looking at the item they want to request (eye pointing).

Introducing symbols or pictures

- You can use symbols or pictures on a choosing board, just make sure you use a consistent picture/symbol to represent each different activity or toy. There are different types of symbols available. Talk to your child's school or nursery to see what they use and if they can share symbols with you to use at home so that you are using the same ones.
- When using symbols or pictures, make sure your child understands what object/activity the symbol relates to. For instance, if introducing a toilet symbol show your child the symbol each time they use the toilet (or are taken to the bathroom) so they can develop an association of the symbol with the activity.
- Each time you add new activities or choices to the choosing board, make sure you demonstrate the activity while showing the child the symbol before you add it to the board.

Examples of choosing boards



Using technology

There are also some apps available where you can take photos of objects/activities and create choosing boards on your phone or a device:

- Sounding Board by AbleNet available on iPhone
- Choice Board-Creator by Techno Chipmunk Innovations designed for iPad



Working Towards Boards

A working towards board supports children to be able to engage in short activities by collecting tokens for each part of a task to exchange for a reward. Working towards boards are a type of visual support that helps the child to:

- See how many steps they need to complete in order to get a reward
- Understand that rewards are not always immediate
- Help your child engage in learning activities as they have something motivating happening once they have completed a certain amount of tasks.

Working Towards Boards are most commonly used with pictures or symbols but they can also be used with the written word.

How to introduce Working Towards Boards

Working Towards Boards are used for children on a one-to-one basis.

- Make sure that you have a board ready with available symbols for a motivating item that the child chooses.
- Ensure that you have tokens to place on the board to fill each box (which should be the number of steps needing to be completed before the reward).

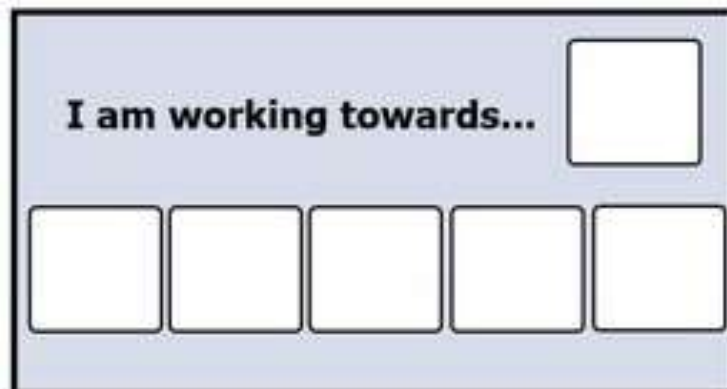


- First, let the child choose what they will be working for and place this symbol, draw a picture or write the word in the large box. This should be a motivating item or activity.
- Initially start off by breaking down a larger task into small steps. The child only has to complete one small step before a token is awarded. Once the



child has completed the first step, give them a token to place on one of the smaller boxes (these are usually made with Velcro backing).

- Each time the child completes another step, give them another token to place on their Working Towards Board.
- Once the child has collected enough tokens (five in the example above) they are then able to have their 'reward' that they have been working towards. You may need to start off with a smaller number of steps (e.g. three or four) before getting the reward.
- The reward will be different for each child and it is important that they have chosen this themselves so that it is motivating for them. It could be bubbles, time on an iPad, a favourite toy or a story etc.
- Working Towards boards should first be completed fairly quickly (within an activity) however you may be able to gradually build up so that they can complete elements of a routine (learning or home) before they get the reward.
- Once your child is familiar with how a Working Towards Board is used, you can increase the length, demand or difficulty of the small steps that they need to complete for each token.



Top Tips for Working Towards Boards:

- Be consistent with your expectations so the child knows what they need to do before they get a token.
- If you don't have a Working Towards Board printed, you can use a whiteboard or piece of paper by drawing out the number of boxes (the tasks that need to be completed) and drawing/ writing what the child is working towards. Once the child has completed each part, you can tick or place a sticker/ stamp in each box to show how many parts are left of the activity before the reward.
- Working Towards Boards can be used alongside other Visual Supports.

Task Management Boards

Task management boards are a type of visual support used to show a child what needs to be done to complete a task. They consist of a set of instructions using pictures, symbols and/or the written word to support which represent each small part of the activity that needs to be completed.

Task Management Boards are most commonly used with pictures or symbols but they can also be used with the written word for children that are able to read.

Why use Task Management Boards?

A task management board supports children and young people by helping them to see when a task is complete. They also are also helpful for:

- Supporting memory
- Promoting independence
- Helping organisation, planning and sequencing
- Supporting understanding
- Reducing anxiety
- Providing a clear end to a task

How to introduce Task Management Boards

Task management boards can be used as a whole class, in small groups and on an individual basis.

- Adults to create a list either written or in symbol format of the tasks that need to be completed in the order that they should be complete in.



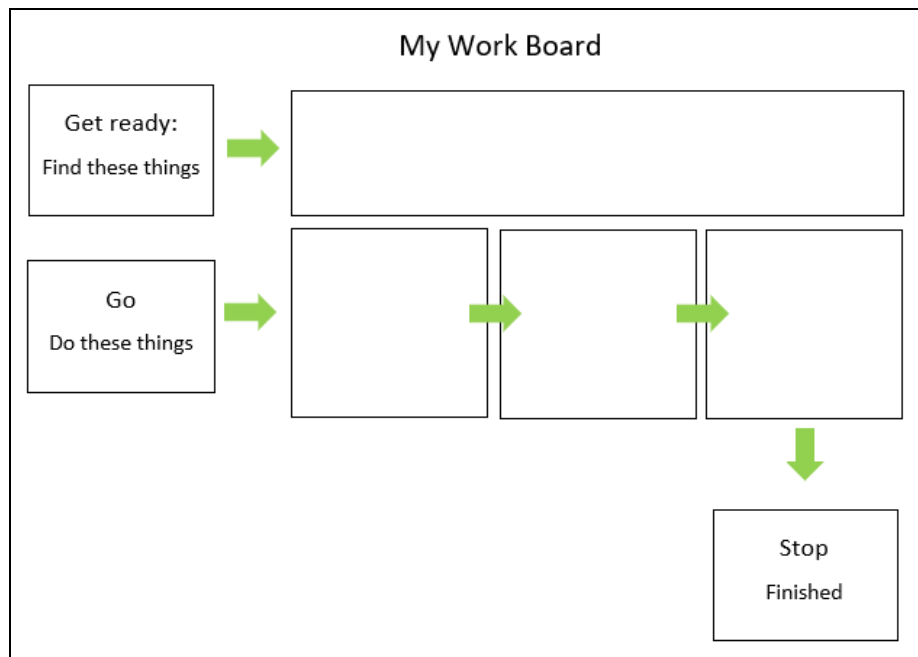
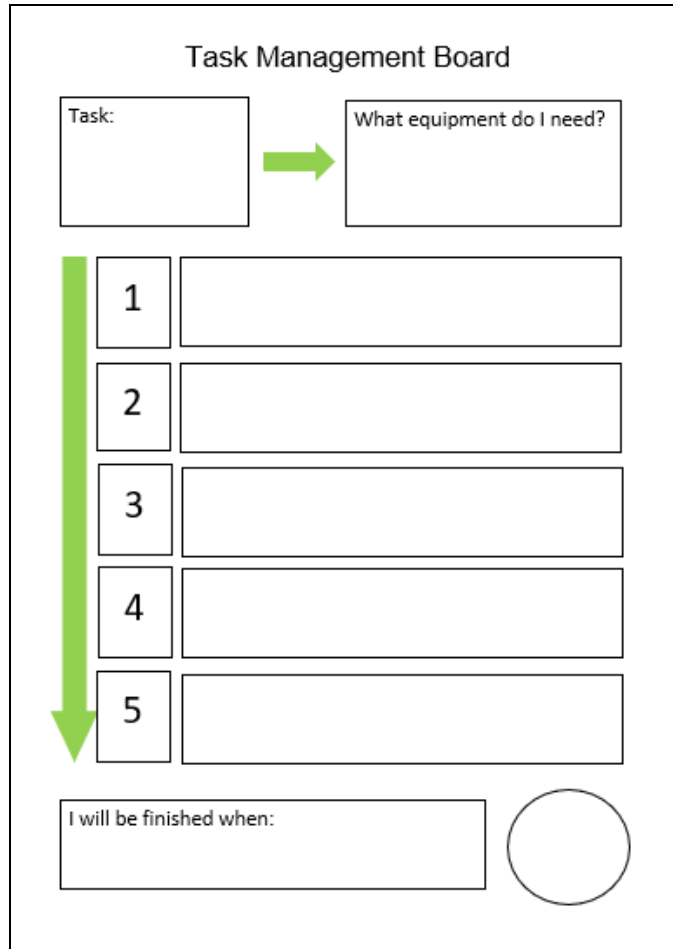
- These can be broken down into very small steps and may include things like equipment that they need to collect.
- Begin by fully supporting the child with the whole task management board, talking them through each step and ticking each step off/ removing it once completed.
- Once they have developed confidence in and understanding of the task management board, gradually increase their independence with this. First checking in with them as they get started, occasionally throughout the lesson, towards the end and then leading up to them completing the whole task on their own.

Top Tips for Task Management Boards:

- Be consistent in using Task Management Boards, if they are supporting children to be able to be more independent and complete tasks, keep using them!
- Don't worry if you forget to make a task management board, you can always quickly write down instructions or draw pictures on a piece of paper or a whiteboard.
- If task management boards are working at school, these can be sent home with homework to support children to complete these activities too.
- Create a laminated sheet with boxes that can be filled in by a teacher or teaching assistant before each lesson or task. This will save you time with making lots of boards.
- Some children may not automatically tell their teacher or parent when they have finished a task so they may need a visual support which prompts them to 'tell the teacher I've finished'.



Examples of Task Management Boards



18 Use and Understanding of Language

Communication is a very complex process including a range of different skills which all affect, and are dependent, on each other. It is easy to take for granted how many different skills are needed for effective communication.

When thinking about 'using and understanding language' we often talk about a child's '**receptive language**' or comprehension which means their 'understanding of language'. The term '**expressive language**' refers to their 'use of language'. Remember that 'expressive language' could be in the form of spoken language, signing or picture/symbol based communication systems.

A child with typically developing '**receptive language**' and effective attention/listening and memory skills will be able to:

Hear, listen and attend to language

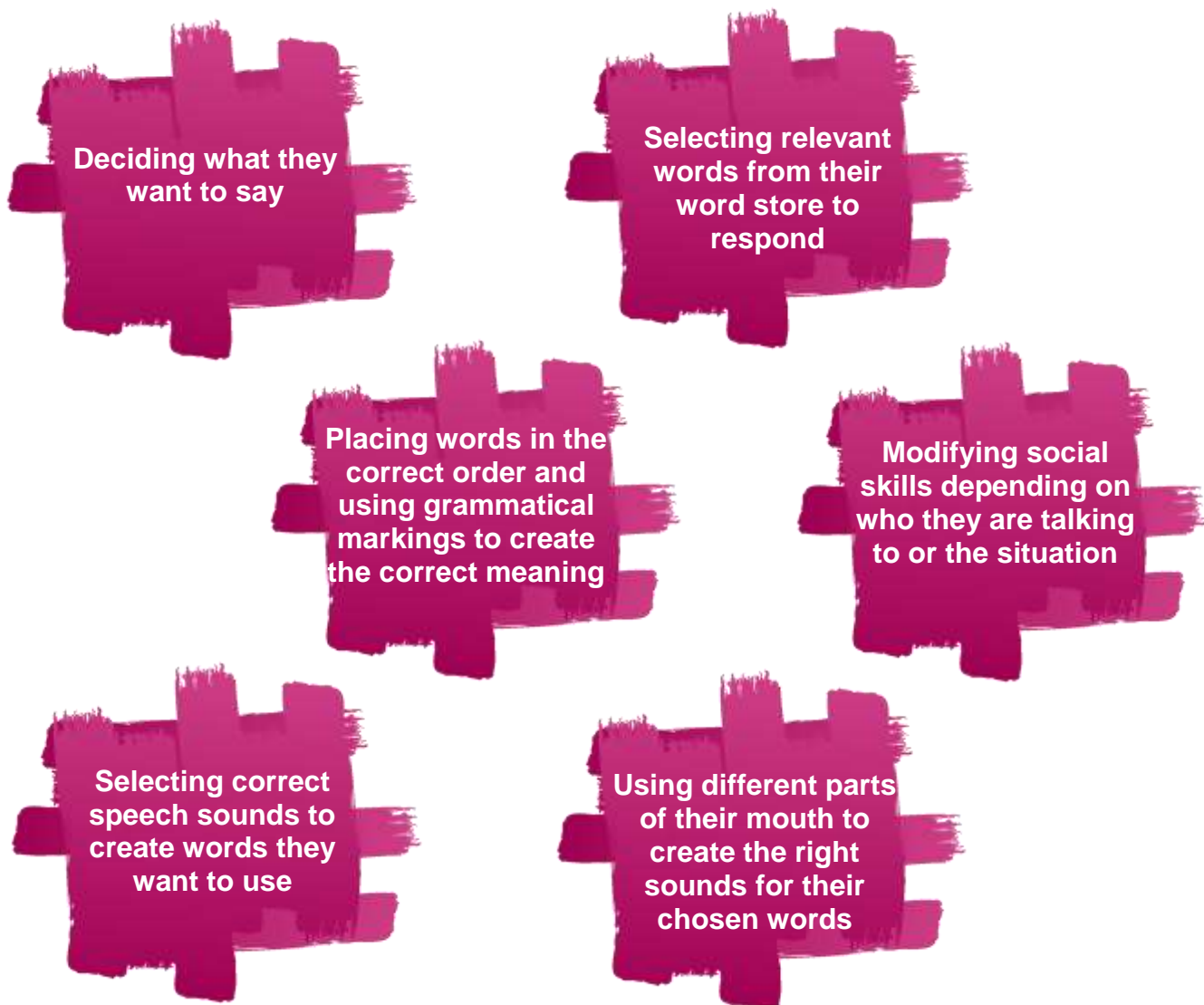
Store and recall information using their memory skills

Effectively store and recall new words

Understand the meaning of words, phrases and sentences



They will then be able to **respond** to this message using their '**expressive language**' skills, memory skills, social skills and speech sounds by:



Thinking about all of the skills that we have to use to be effective communicators gives us a holistic view of how children are communicating. This can be a useful way to work out where any breakdowns occur.

As all of these areas interact with each other to create effective communication, it can often be difficult to separate one skill from another. However, looking at the child's current skills and the impact of any difficulties in the classroom can help to identify appropriate strategies for support.



19 Understanding spoken language

Children develop their understanding at different rates and ages. In order to understand what someone has said, the child or young person needs to understand the words/vocabulary used, be able to follow a certain amount of information in a sentence/phrase, understand any concepts or questions words used and understand any grammatical markings that may affect the meaning of the words.

Vocabulary can include understanding the names of things, places and people; words that describe actions and concept words such as those that describe positions, size, sequences, time or emotions/feelings.

Question words include concrete questions such as 'who?', 'what?', 'where?', more abstract questions such as 'when?' and problem-solving questions such as 'how' or 'why?'

Grammatical markings are the changes we make to a word that affects its meaning. This could include understanding:

- pronouns (I/me/my/mine, we/us/them, he/she/they, his/her/their)
- regular and irregular plurals (horses, mice)
- small supporting words such as auxiliaries and determiners (a/the/are/is),
- tense markings used to talk about the past, present and future
- direct and indirect objects in a sentence (e.g. 'the girl pushed the boy' versus 'the girl was pushed by the boy')
- modifying clauses or phrases (e.g. 'The girl, wearing the green shirt, won the race')
- non literal language or idioms (e.g. 'What's up?', 'A show of hands').

Information carrying words (or key words) are often used to identify how much information a child or young person can follow in a spoken phrase or instruction. An information carrying word (ICW), is a word that carries *meaning* in an instruction. For a word to count as an ICW or Key word the child has to make a 'choice' of some sort to complete the instruction correctly.

Often we do not need to process every single word in order to understand what someone has said. For example, in order to respond correctly to the instruction "Go and get a cup from the kitchen" (which is 8 words) we only actually need to understand 1 word: '**cup**' (assuming we know that cups are usually kept in the kitchen). If the words are accompanied by gestures, such as pointing, or by the speaker looking at what they are talking about, we may not need to understand **any** of the words as we can use the extra cues given to understand the instruction.



Information carrying words

Consider the instruction “Put the pencil in the box”. It is essential that we are aware of the context of this instruction before we can assess how many ICWs are in the instruction.

Scenario 1: The child is asked to “put the pencil in the box”. You have been pointing to the box to show them how to put it in. In this scenario, the child does not have to understand any words as there is **no other option** than to put the pencil in the box; you are also supporting him by using gestures.

Scenario 2: The child has a bean bag and ball and is asked to “put the bean bag in the box”. In this scenario, there is a choice of a **bean bag** versus **ball** and a **box** versus a **bag**. As a result, there are 2 ICWs in this instruction and the child will need to understand the meaning these words to be able to follow the instruction successfully.

Scenario 3: There are red and blue bean bags and red and blue balls, a box and a hula hoop. The child is asked to get “put the **red bean bag under the box**”. As a result, there are 4 ICWs in this instruction and the child will need to understand the meaning of all of these words to be able to follow the instruction successfully.

The length of an instruction can also be affected by the number of ‘parts’ a child has to follow e.g. ‘Get your pen **then** write your name’ would be a **two part instruction** which is harder to follow than a one part instruction.



What do we expect typically developing children to understand?

The table below demonstrates the development of understanding of language for a typically developing child. Children or young people who have difficulties with their understanding of language could have gaps or breakdowns in any, or all, of these areas and need additional support to help them develop this understanding.

Age	Understanding Language Information adapted from ICAN Ages and Stages/Primary Talk
0-1 year	<ul style="list-style-type: none"> • At approximately 6 months, recognises • parents' voices • By 9 months, understands common words/phrases in real life activities e.g. <i>'bye bye', 'brush', and 'all gone'</i> • At 10 months, responds to their own name by stopping and looking • By 12 months, starting to understand common words/phrases, signs/gestures
By 1 year	<ul style="list-style-type: none"> • By 12 months, are able to understand simple 1 ICW instructions e.g. <i>"Where's your <u>tummy</u>?", "Give to <u>daddy</u>?", "Stop"</i> • Understands simple words in context e.g., <i>hat, drink, daddy</i> • Understands more words than they can say
By 18 months	<ul style="list-style-type: none"> • Understands up to 250 everyday words • Understands some two-word phrases, e.g. <i>'give me', 'shoe on'</i> • Recognises and points to objects and pictures in books if asked • Gives named familiar objects to adult e.g. coat, car, apple, book
By 2 years	<ul style="list-style-type: none"> • Understands 250-500 everyday words including around 15 action words e.g. <i>wash, eat</i> • Understands simple 2 ICW instructions e.g. <i>"get <u>mummy's shoes</u>", "tell <u>dad tea's ready</u>", "give the <u>apple to pig</u>", "give the <u>banana to cow</u>"</i>
By 3 years	<ul style="list-style-type: none"> • Understands 3 ICW instructions e.g. <i>'Put the <u>strawberry on teddy's plate</u>', 'Put the <u>orange in dolly's bowl</u>'</i> • Understands pronouns 'his', 'her' and 'mine' • Understands simple position concepts: 'in', 'on', 'under' • Understands size 'big' and 'little' • Understands 'what', 'where', 'who' questions • Understands past tense • Understands a simple story when supported with pictures
By 4 years	<ul style="list-style-type: none"> • Understands 4 ICW instructions, e.g., <i>'Make the <u>big cow jump on the chair</u>', 'Make the <u>little cow sleep on the table</u>'</i> • Follows instructions with 2-parts, e.g., <i>'Get your coat and wait by the door'</i> • Can answer simple 'when' questions • Understands almost 3000 words including simple opposites, e.g. <i>hot/cold, long/short</i>, negatives <i>'not/don't'</i> and some colours • Understands future tense



Age	<h2 style="text-align: center; color: #800040;">Understanding Language</h2> <p style="text-align: center; color: #800040;">Information adapted from ICAN Ages and Stages</p>
<p>By 5 years</p>	<ul style="list-style-type: none"> • Understands 2 to 3 part spoken instructions: e.g. “Finish your picture, then sit on the carpet and look at a book” • Understands a range of related words to describe concepts: e.g. soon, early/ late; soft/hard and smooth • Knows words can be put into groups/categories • Can answer ‘how’ and ‘why’ questions • Understands a simple story without the need for pictures • Understands sequence terminology, e.g. <i>first... next... last</i> • Understands basic conversations with individuals and in groups
<p>5-7 years</p>	<ul style="list-style-type: none"> • Understands complex 2 to 3 part instructions: e.g. “Finish your picture from yesterday then with a partner, choose one of the topic books and talk about it quietly on the carpet.” • Compares words, the way they look, sound or mean: e.g. “There are two words: ‘sea’ at the beach and you ‘see’ with your eyes.” • Can guess the word from clues or give others clues using shape, size, function, etc.
<p>7-9 years</p>	<ul style="list-style-type: none"> • Listens to key information and makes relevant, related comments: e.g. “So all mammals are warm blooded, have fur or hair and their babies all drink milk.” • Identifies clearly when they haven’t understood: e.g. “What’s maize?” or “Get a blue what?” • Able to infer meaning, reason and predict: e.g. “It’s getting very hot in here,” means open the window
<p>9-11 years</p>	<ul style="list-style-type: none"> • Follows longer instructions that are not familiar: e.g. “Put the stripy folder that’s on top of the cupboard into the bottom drawer of my desk.” • Understands different question types: e.g. open, closed, rhetorical questions that don’t require a response. • Understands simple jokes and simple idioms but can’t really explain why they are funny or what they mean: e.g. ‘You can’t have your cake and eat it’. • Makes choices from a wide and varied vocabulary: e.g. ‘Leap’ instead of ‘jump’, ‘terrified’ instead of ‘frightened’ • Uses sophisticated words but the meaning might not always be accurate: e.g. “My bedroom was meticulous.” • Knows that words can have two meanings and uses them appropriately but can’t always explain how they are linked: e.g. ‘Hard’ (rigid object and tough person)



Supporting children's understanding in the classroom

Consider the environment

- Reduce distractions where possible. Children with difficulty filtering out information may find it easier to have their own workstation.
- Think about where the child sits in the classroom – being towards the front of the classroom can support children to focus and retain information.
- Work in small groups or 1:1 when teaching new ideas and concepts.

Adapt your own communication

- Gain the child's attention before giving instructions.
- Allow plenty of time to process and respond to spoken language.
- Repeat, rephrase and simplify your language.
- Give single step instructions where possible.
- Use multi-sensory approaches to teach new vocabulary, concepts and ideas – enable the child to 'experience' the language whenever possible.
- Adapt learning activities to the child's language level.

Check understanding

- Ensure the child understands all the vocabulary used including any concepts such as size, shape, texture.
- Make sure children have lots of opportunities to recap and recall new ideas to support them to store new information effectively.

Use visual support

- Use gesture, signing and visual cues to support children in following instructions.
- Use a working towards board or task management board when carrying out specific instructions (see visual support section).

Consider use of non-literal language

- Children can be quite literal in their understanding. It is important to consider that it may be difficult for some children to infer meaning (e.g. 'read between the lines'); they may also experience difficulties understanding non-literal language such as idioms and sarcasm, especially if they have not heard the phrase before.
- Ensure specific information is given and seek clarification the child has understood what has been said.

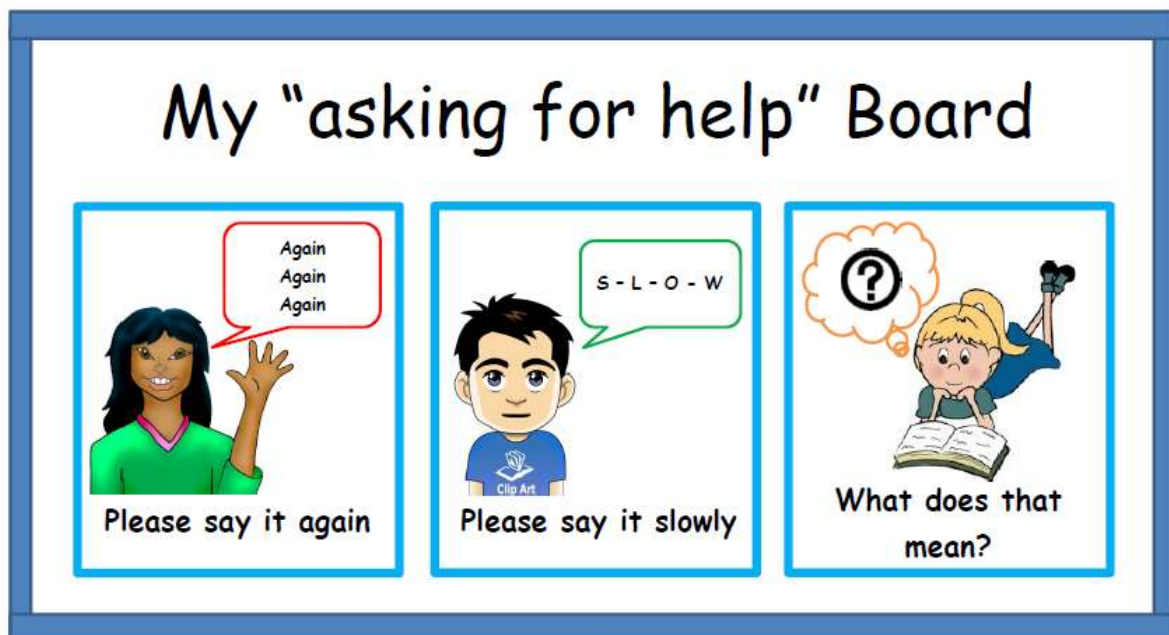


Monitor and praise progress

- Focus on what the child can do and build on this, rather than focussing on their difficulties
- Enable the child to achieve success at whatever level they are able to - this will make them more motivated to learn new ideas.

Asking for help/seeking clarification

- Remember children do not always seek clarification when they have not understood something. It is much easier to agree with something 'Are you OK?' then disagree and ask for help.
- Check children's understanding by asking them to repeat back instructions in their own words.
- Consider simple visual support to enable the child to indicate when they need help e.g. Traffic light system: Red- need help, Green – I'm OK
- For older children, visuals such as the example below may be useful to help children remember to ask for help.
- Some children will need explicit teaching and practice using this type of visual in a 121 or small group setting before transferring this to the classroom.



Understanding questions

Children begin to understand different types of questions at different ages or stages of their development.

Usually children will understand more concrete questions first such as 'Who?', 'What?' and 'Where?' and then develop understanding of more abstract questions such as 'When?'.

Questions involving 'How?' and 'Why' are some of the most complex types of questions we can ask as they involve children using their 'inferencing' skills and problem solving skills to work something out, that they can't see or hear, from the clues they have been given.

Blank Level Questions

The Blank Levels (Blank, Rose and Berlin, 1978) is a useful framework for thinking about questions in four different levels. We can use this framework to determine the 'type' of questions a child can currently understand. This allows us to adapt questions when we need answers, to an appropriate level, to enable children to respond.

We can then provide support to help them move up to the next level to develop their understanding.

View the framework on the next page to see a description of the type of questions at each blank level and examples of how this could relate to an activity like 'making a sandwich'.

Blank Level	Question type	Example
1	<ul style="list-style-type: none">• Show me..../Point to....• Naming things• Find a matching object	<ul style="list-style-type: none">• "Show me the bread"/ "Point to the cheese"• "What's this?" (tomato)• "Find another one like this" (pointing to a slice of bread)
2	<ul style="list-style-type: none">• Describing the function of an object• Sentence completion• Things that go together• Sorting/categorising• Describing	<ul style="list-style-type: none">• "What do we use to cut?"• "You're cutting the...."• "Knife and ...?" [fork], or "Bread and ...?" [butter]• "Tomatoes are red. What other foods are red?"



	<p>objects/scenes</p> <ul style="list-style-type: none"> • Answering who, what, where questions 	<ul style="list-style-type: none"> • “Can I have a red/blue plate please?” • “Take two slices of bread” • “Do you want a big or little plate?” • “What is Mrs Jones doing with the knife?” • “What will we use to cut the bread” • “Who said they liked ham?” • “Where would we buy bread?”
3	<ul style="list-style-type: none"> • Following a set of directions • Give another example BUT with an extra condition • Arranging pictures in a sequence • Telling a simple story/narrative • Predicting what might happen • Describing emotions • Defining a word 	<ul style="list-style-type: none"> • “Put a slice of cucumber on a blue plate” • “I need a plate but not a red one” • Child is able to order three pictures, for example, going to the fridge, making the sandwich, eating the sandwich. • “How did Susie make her sandwich?” • “Elliot doesn’t like tomatoes – what is he going to do?” • “How does Lizzie feel?” • “What does sharp mean?”
4	<ul style="list-style-type: none"> • Answering “Why?” or questions • Solving a problem 	<ul style="list-style-type: none"> • “Why do we have to wash our hands before eating?” • “Why did we have to throw that bread away?” • “How can we reach the bread on the top shelf?”



Blank level questions can be incorporated into the curriculum throughout lessons and can be used when talking about pictures, reading a story or carrying out an activity/ experiment.

- Level 1: Show me X?
- Level 2: What is X doing?
- Level 3: Tell me how you did that?
- Level 4: Why do we do X? / If we can use X what else could we use?

Consider using questions from each level during learning activities to support children's understanding.

If a child is struggling to respond to a question, consider the following:

- Is it the vocabulary you have used?
OR
- Is the question type too difficult? (e.g. they are not yet understanding questions at that level)

Think about ways you can rephrase a question to make it easier for a child to respond e.g. 'How did you rip your shirt?' (Level 3 question) could be rephrased to: 'What happened to your shirt?' (Level 2 question)

Once you have identified the types of questions that the child finds difficult, practise working on these questions using pictures, stories, videos and real life experiences in structured tasks. Make sure you are also modelling the questions in everyday activities so that the child can transfer their understanding to real life.

How can we support understanding of questions?

- Pause after answering questions to see if the child is able to respond
- If they do not, you can model an answer to the questions to show them how to respond.
- Alternatively, you can offer 'forced choices' to the question to give them ideas of how to answer it e.g.
 - 'What's the weather like today?' (pause) 'Is it sunny or cloudy'
 - 'Where do we eat our lunch?' (pause) 'In the classroom or the dinner hall'

Visual support

Visual support is a good way to support understanding of different question types. There are lots of different systems available (such as colourful semantics, Blacksheep press narrative programme, shape coding etc) just make sure you are



consistent with the system you use. It would be useful to adopt a whole school approach to using the same system across school.



The symbols above are boardmaker symbols using the colourful semantics framework

Ideas for supporting 'Wh' questions

WHO questions

- Show the child that 'Who?' means we are looking for a person or animal. Start by using visual support with 'Who' pictures (e.g. using visual prompts like colourful semantics).
- Encourage the child to find 'Who?' is doing something in a picture by choosing from the visual prompts to answer the question e.g. 'Who is jumping?'....'The boy'.
- Do lots of modelling in real life and pictures e.g. 'Who is eating?' leave time for the child to answer the question and if they do not respond or give different information provide the answer for them e.g. 'Johnny is eating'. 'Who is jumping?' 'The girl is jumping'.
- Complete 'detective' games where you have to find 'Who' is doing certain things in the classroom e.g. 'Who is cutting?' 'Who is talking?' etc.
- Model the target 'wh' question in everyday activities throughout the day.

WHERE questions

- As above, show the child that "Where?" questions mean we are looking for a place/location.
- Start by using visual support to prompt answers to 'where' questions when looking at pictures e.g. 'Where are they?' Giving picture options for responses e.g. the beach, the park, the classroom.
- Model the language throughout the day 'Where are we?' 'The classroom or the playground?' 'It's lunchtime, where do we eat lunch?' 'In the dining room or the classroom'. 'Where do we clean out teeth?' 'In the bathroom or the kitchen' etc.
- As the child becomes more confident, gradually reduce the visual and verbal support until they can respond to these questions independently.



WHEN questions

- Show the child that ‘When?’ questions mean we are looking for the time that something happens.
- Remember to think about the different ways we can respond to a when question e.g. this could relate to a time of day, part of the day, a time of year, a festival/celebration period (e.g. birthday/Christmas) or a season etc.
- Use activities outlined above but focussing on ‘When?’ questions instead.

WHY/HOW questions

- Encourage the child to think about “how” something happened or “why” they think something might happen. You can use real life activities or sequencing pictures to generate ideas.
- Use “how”/“why” questions during classroom activities. These types of questions might be tricky for children to start with so support them to come up with appropriate responses by offering forced choices (e.g. “Do you think it’s because XX or XX?”) and then gradually withdraw the amount of support given to come up with appropriate answers.
- Talk about what might happen ‘if’ something else happens e.g. ‘What would happen if the dog escaped?’, ‘What would happen if it was raining on sports day?’ etc. Practise coming up with lots of different ideas and then support the child to choose the most appropriate idea to answer the question.

Useful resources:

- Black Sheep Press Narrative packs can be useful for working on different ‘Wh’ question types: www.blacksheeppress.co.uk
- Twinkl provides useful resources that can be used as visual prompts to support ‘wh’ questions: www.twinkl.co.uk
- Language for Thinking (Speechmark): is a structured approach (similar to blank levels) that can be used to assess and support understanding of different question types.
- Test of Abstract Language Comprehension (TALC), Primary and TALC2 Secondary age, is an ELKLAN assessment using Blank level questions to identify a child’s level of understanding. It also includes a range of questions at each level related to specific activities and core school subjects.



20 Using spoken language

In the same way as understanding of language, children's spoken language can develop at different rates and ages. The table below demonstrates how spoken language can develop for a typically developing child.

Children or young people who have difficulties with developing their spoken language could have gaps or breakdowns in any, or all, of these areas and need additional support to help develop their language.

Age	Understanding Language Information adapted from ICAN Ages and Stages/Primary Talk
0-1 year	<ul style="list-style-type: none"> • Uses speech sounds (babbling) to communicate with adults; says sounds like 'ba-ba, no-no, go-go' • Stops babbling when hears familiar adult voice • Uses gestures such as waving and pointing to help communicate • Begins to use single words e.g. 'mummum', 'dada', 'tete' (teddy)
18 months	<ul style="list-style-type: none"> • Still babbles but uses at least 20 single words correctly, although may not be clear • Copies gestures and words from adults • Constant babbling and single words used during play • Uses intonation, pitch and changing volume when 'talking'
2 years	<ul style="list-style-type: none"> • Uses up to 50 words • Begins to put two or three words together • Frequently asks questions e.g. the names of people and objects
2-3 years	<ul style="list-style-type: none"> • Uses 300 words including descriptive language, time, space, function • Links four to five words together • May stutter/stammer when thinking about what to say • Able to use pronouns (me, him, she), plurals and prepositions (in, on, under)
3-4 years	<ul style="list-style-type: none"> • Uses sentences of four to six words, e.g. 'I want to play with cars', 'What's that thingy called?' • Uses future and past tense. • May continue to have problems with irregular words, 'runned' for 'ran', 'swimmed' for 'swam' • Able to remember and enjoys telling long stories or singing songs



<p>4-5 years</p>	<ul style="list-style-type: none"> • Uses well formed sentences, e.g. 'I played with Ben at lunch time' but there may still be some grammatical errors • Frequently asks the meaning of unfamiliar words and may use them randomly
<p>5-7 years</p>	<ul style="list-style-type: none"> • Uses newly learnt words in a specific and appropriate way: e.g. "Dad, you know when you have lots of lions together it is called a pride of lions." • Asks lots of questions to find out specific information including 'How' and 'Why'. • Uses different ways to join phrases to help explain or justify an event: e.g. "I'm older than you so I will go first." • Tells stories that set the scene, have a basic plot and a sequence of events.
<p>7-9 years</p>	<ul style="list-style-type: none"> • Listens to key information and makes relevant, related comments: e.g. "So all mammals are warm blooded, have fur or hair and their babies all drink milk." • Uses a range of words related to time and measurement: e.g. century, calendar, breadth. • Uses a wide range of verbs to express their thoughts, or about cause and effect: e.g. "I wonder what she's thinking," or "If we run we should get there on time but we might arrive late." • Joins in discussions about an activity using topic vocabulary: e.g. "I saw some chicken eggs hatching in the incubator on the farm last Friday."
<p>9-11 years</p>	<ul style="list-style-type: none"> • Uses long and complex sentence structures: e.g. "I will come with you only because it means you will stop going on at me." • Uses questions to help conversations flow. • Sentences average about 7 to 10 words - longer in stories than in conversation. • Knows when a sentence is not grammatically correct and can explain rules of grammar. • Tells elaborate entertaining stories which are full of detailed descriptions. • Everyday language is detailed and not always about their immediate experience. • Incorporates a subplot in telling stories and recalling events, before resolving the main storyline. • Uses complex joining words: e.g. meanwhile, therefore.



What might a child do who has spoken language difficulties

Spoken language difficulties can look different for every child. They may have difficulties with their understanding as well as their spoken language or have difficulties in just one area. Here are some of the things you might notice a child doing that could indicate spoken language difficulties:

- Use short sentences and have difficulty using more complex language
- Use objects of reference to help ask for what they want e.g. showing you a cup when they want a drink
- Use gesture to support their spoken language e.g. pointing to things they want or doing actions to get their message across
- Talk around the main subject and have difficulty with knowing what information is the most important/ relevant to include
- Put words in the wrong order due to difficulty with sentence structure
- Use non-specific or simple vocabulary (e.g. 'it', 'that', 'something', 'do') due to gaps in their vocabulary or word finding difficulties
- Tell stories that are hard to follow due to difficulties with ordering their thoughts and sequencing ideas
- Avoid spoken tasks due to an awareness of their own difficulties
- Find it hard to explain or justify ideas due to difficulty with complex ideas and higher level language skills like problem solving and inferencing
- Take lots of time to plan and formulate their ideas in order to express their thoughts
- Have difficulty putting their ideas down on paper as language difficulties are often reflected in literacy skills



How can we help support children with their spoken language

First you need to identify the areas of difficulty for a child. It is often difficult to separate understanding and use of language as a child first has to 'understand' new words, concepts or ideas before they can use them.

Below are some of the typical areas that you might identify a child needs support in:

- Gaps in vocabulary
- Difficulty with sentence structure
- Difficulty with sequencing ideas
- Difficulty with forming a narrative or story to tell you about something that has happened
- Difficulty with using grammatical markings such as:
 - use of pronouns
 - plurals (horses/mice)
 - past/present/future tense
 - use of the little words such as determines/auxiliaries (is/are)
 - difficulties with marking possession (e.g. 'the boy'**s** book)

Once you have identified the areas of difficulty for a child you can use the following ideas to support them.



Supporting vocabulary development

Vocabulary is important in both spoken and written forms. It impacts on a child's ability to share their ideas effectively and develop their reading skills.

If a child is struggling to develop their spoken language and is only using single words or very short phrases you might want to refer to the Preschool Core Standards to support them to expand their vocabulary by using strategies such as modelling, labelling and extending.

For children with severe difficulties in developing their spoken language you may need to consider other forms of visual support such as commenting boards and communication books to provide alternative ways for them to communicate either alongside or in place of spoken language.

If a child has gaps in their spoken vocabulary it is important to think about what vocabulary is most important for them on a day to day basis. For children with very limited vocabulary you might need to focus on basic everyday vocabulary first such as:

- Action words: jumping, getting, giving, playing, waving, hopping, climbing etc
- Names of people that are important to them as well as people categories such as boy, girl, man, lady, baby etc.
- Names of places that are important to them such as home, school, park, Nanny's house and more specific locations such as classroom, playground, bedroom, bathroom etc.
- Clothes/toys
- Animals
- Food
- Objects of interest to the child
- Colours

For children with more advanced language but who still struggle to access the curriculum due to specific gaps in their vocabulary, it can be difficult to identify where to start. Using the **STAR word approach** can be a helpful way to identify these gaps and provide ideas to help children store and recall new vocabulary effectively.



The STAR word approach

The '**STAR**' approach is taken from Word Aware developed by Stephen Parsons and Anna Branagan (2014) and is a helpful way of developing children's vocabulary by focussing on the sound and the meaning of new words.

S – select	pick the most relevant words to teach
T – teach	introduce new words to the whole class
A – activate	bring the word to life to help children remember and understand the word
R – review	transfer the word to the student's long-term memory

Words are divided into three groups:

- **Anchor Words** – everyday words children might use
- **Goldilocks words** – words that are not too easy and not too hard (e.g. 'just right) everyday adult words
- **Step on words** – topic specific words that we might not use in our everyday language

SELECT

Traditionally in the **STAR** word approach, adults would focus on 'teaching' the goldilocks level words to the whole class.

However, for many children with difficulties with their spoken language they will also have gaps in their **Anchor** words that mean they find it difficult to access explanations in class for new vocabulary. This means they miss out on learning and become disengaged in the topic.

A useful way to approach this is to identify topic vocabulary for the next term's topic, identify any gaps in the basic vocabulary children will need to access the topic and **PRE-TEACH** these words to help the child access the topic in the classroom.



To do this you could come up with 5-10 new topic words for next term e.g. if the topic was 'Rivers', topic vocabulary for a YEAR 6 child might include words like:

- origin
- waterfall
- current
- course
- valley
- source (related to a river)
- rapids
- mouth (related to a river)
- tributary
- meander

You can then take each topic word individually and work out what words you might use to 'explain' this new vocabulary to a child. It is THIS vocabulary that you need to focus on first.

See example below. The underlined words are the original topic vocab words provided by the class teacher, the other words are all the words the child would need to understand to be able to access explanations of the topic vocabulary in class.

Anchor words	Goldilocks words	Step on words
Everyday language for a Year 6 pupil	Everyday language for an average adult	Not used in everyday adult language and/or particularly topic specific
water hot cold small (smaller) big (bigger) large (larger) beginning middle end start finish place fast slow river stream either side land high low fall hills between runs (related to water) large sea lake	<u>origin</u> riverbank slopes <u>waterfall</u> steep flow/flowing height dip mountains land winding curve bend part of <u>current</u> swiftly natural <u>course</u> lower <u>valley</u>	<u>source</u> (related to a river) <u>rapids</u> <u>mouth</u> (related to a river) <u>tributary</u> <u>meander</u>



Once you have created your list, you can go through all the anchor and goldilocks words with the child to identify the ones that you might want to **SELECT** to work on first.

Filling in these gaps first will help the child access the explanations in class of the new topic in the future. This also helps to identify gaps in everyday vocabulary that we might otherwise miss and assume a child can use/understand.



TEACH

Children need to learn lots of information about a word in order to remember how the word sounds and what it means. Consider the following strategies when teaching or 'pre-teaching' new vocabulary:

- Use a multi-sensory approach when teaching vocabulary – where possible enable students to 'experience' the vocabulary using as many senses as possible.
- See it - use pictures, photographs, objects and symbols
- Hear it – used in the classroom in stories and in real life situations
- Say it – on its own and in a sentence
- Read it – in texts, reading books
- Write it – on its own and in a sentence
- Create word maps to identify:
 - the function of the word (what it does)
 - location (where you might find it)
 - attributes (what it looks like)
 - sound features (what sound it starts with, how many parts/syllables the word has, words that rhyme/sound the same or are opposites)
- Use mind maps to 'Act out' the word – how could the word be represented through actions, gestures etc
- Create a song, rap or mnemonic to help children remember the word (e.g. rhythm **has** your **two** **hips** **moving**)
- Draw a picture in a topic vocabulary book and add all the information you have learnt about the word around it
- Create wall displays of new words
- Create Word Storms – when you think of as many words as you can that are linked with the new target word – this is a good small group activity. Record the ideas on a flip chart or paper. You could use this information later to create a mind map for the topic as well.
- Remember to think about 'multiple meanings' of the same word e.g. 'wave' could mean a 'wave' in the sea or 'waving' at someone. You can create a 'multiple meaning' tree and draw branches off the tree with different pictures for the different meanings of the word
- Use venn diagrams to link words in categories and talk about which words belong together in the same circle, which ones belong in both circles and which words belong in a different circle/group.
- When teaching more abstract words link it to a concrete example (e.g. 'dissolve': show sugar dissolving in hot water).



ACTIVATE

- Model, model, model – use the word in context throughout the day and during topic activities to help the child ‘hear’ and ‘see’ the word used correctly.
- Play word games to help consolidate learning:
 - what am I?
 - lotto games focussing upon specific categories
 - Category naming games
 - What can it do? pick a word and think of 5 things it can do or it is used for
 - Word association games – One player starts with a word, the next person has to say a word that is related to the first word in some way, e.g., *Egypt – mummy – dad- beard- Santa Claus- Christmas.*
- Create a topic vocabulary or category book and support the child to ‘store’ all their new words in the book. Support them to use/navigate through the categories or topics to find words during class topic work.

REVIEW

- A child needs to hear and use a word many times before it transfers into their long-term memory.
- Use lots of recap to help children recall and retrieve words that you have previously worked on.
- Use **mind maps** to help children pull together a range of topic words and link them together
- Use a **word pot** where you put all the new words for the topic you are working on and pull one out of the pot that you have previously taught to review and recap it.
- Provide opportunities for children to use their new words on a regular basis to support them to recall and store the words effectively.



Useful resources

- Hayden, S., and Jordan, E. (2015) *Language for Learning in the Primary School*. Routledge.
- Parsons, S., and Branagan, A. (2021) *Word Aware: Teaching vocabulary across the day*. Speechmark.
- Branagan, A., Cross, M and Parsons, S. (2020) *Language for behaviour and Emotions: A Practical Guide to working with Children and Young People*. Speechmark.
- Twinkl (2021) *Twinkl*. Available at: www.twinkl.co.uk
- Speech Link Multimedia Limited (2021) *Language Link*. Available at: www.speechandlanguage.info.

Word-finding difficulties

Word finding difficulties occur when a child ‘knows’ a word but is struggling to recall or retrieve it, to use it in their spoken language. This is similar to the feeling that we have when the word is ‘on the tip of our tongue’.

When a child is experiencing ‘word finding difficulties’, they may struggle to retrieve the word at all, they may talk around the word to describe it (e.g. you know the thing you use on your hair), use an action or gesture to get their meaning across or they may use a word that ‘sounds’ similar or has a similar meaning e.g. ‘sister’ in place of ‘brother’ or use lots of fillers in their talking ‘umm, errr’, to get them extra thinking time.

Supporting children with word finding difficulties

Supporting children to learn and store words effectively using the STAR word approach can help with the effective retrieval of words.

Sometimes children can have lots of words in their ‘word store’ but the words are not organised effectively (like a messy filing cabinet) so working on category knowledge, identifying word associations and links with other words can help them store new words more effectively which in turn helps with their recall of the words.

When children are struggling to find the word they want to say or use in the classroom, it’s like they have got stuck in a traffic jam on their way to the word and need to find a different route to get there. Sometimes we can help them find the word by providing a prompt or cue so they can take a different route to the word:



- Try cueing them in by repeating the sentence they have just said, e.g. 'so the man was playing...?'
- See if they can give you the first sound of the word. If you think you know the word they are looking for, you can prompt them with the first sound e.g. 'does it start with a 'sss' sound?'
- Encourage them to 'show you' the word using sign or gesture or by drawing a quick picture
- See if they can give you 'other' information about the word such as 'what you do with it', 'where you find it'
- See if they can come up with a similar word to help get their meaning across and then you might be able to cue them into the target word from there



Sentence Structure

As children's spoken language develops, some children can struggle with putting words together in a sentence. This can be related to gaps in a child's understanding or vocabulary (e.g. not having enough action words/verbs in their word store) but it can also be due to difficulties with understanding how different words have different 'functions' or 'jobs' in a sentence which can affect what order we put words in within a sentence.

There are various programmes available which can support children to develop their sentence structure including colourful semantics, shape coding and language through colour. Most of these programmes focus on using a consistent system such as colours or shapes to teach the child what each part of the sentence means and how they can combine these colours/shapes in the right order to create a sentence.

In colourful semantics, each part of the sentence has a colour. The basic elements are outlined below but there are also more advanced stages for describing words, problem solving, time concepts and more advanced grammar.

- "WHO" (orange)
- "WHAT DOING" (yellow)
- "WHAT" (green)
- "WHERE" (blue)

When using colourful semantics, or similar systems, you will need to work out what level the child is currently at by listening to the words they use to describe what is happening around them or what they can see in an action picture.

If you ask them what is happening in a picture and they use the 'what' e.g. 'ice cream', then you might ask them 'Who is eating the ice cream?' and give them a choice of colourful semantics prompts for 'who' e.g. 'is it the boy or the girl?'. If they use the 'who' + 'what doing' e.g. 'girl kicking', then you might ask them 'what are they kicking?' and give them visual prompts 'Is it a ball or a tree?'



This is known as a Subject + Verb phrase (SV)





This is known as a Verb + Object phrase (VO)



This is known as a Subject + Verb + Object phrase (SVO)

Colourful semantics comes with a range of visual prompts for each part of the sentence so you can use a sentence strip (as outlined above) and encourage the child to add the visual prompts to the strip to build their sentence.

When children can create a sentence using the subject, verb and object (SVO), you might want to start introducing the 'Where' (place) the action happens as well:



These visual systems can be used on a one to basis, in small groups or as a whole class approach. For example, using colour boards to represent each element (i.e. 'WHAT', 'WHO') and using these to display topic related vocabulary. You could then ask the children to place new vocabulary on the correct board, e.g. when talking about the Romans, you could put Julius Ceaser on the "WHO" board, and "(to) conquer" on the "WHAT DOING" board.

Resources:

- Colourful Semantics. Available at: <https://www.integratedtreatmentservices.co.uk>
- Ebbels, S. (n.d) Shape Coding™ system. Further information/training available at: <https://www.moorhouseschool.co.uk/shape-coding>
- Black Sheep Press (2021) Black Sheep Press. Available at: www.blacksheepress.co.uk.
- Twinkl (2021) Twinkl. Available at: www.twinkl.co.uk

Narrative

Narrative is an important language skill that enables children to talk about stories or events that have occurred in their day to day lives. This can be as simple as talking about what happened on the playground, telling you how they hurt themselves or talking about what they did at the weekend or on holiday.

- By the age of 3 years, a child will typically use their narrative skills to talk about what they can see and do.
- By the age of 7-8, a child will have developed mature narrative skills; enabling them to tell a logical story, without missing any important information.

The chart below shows the development of narrative skills in typically developing children.



Approximate Age (in years)	Narrative Skills
2-3	<ul style="list-style-type: none"> The child will link story elements together to talk about what they can see and do (these may appear random at times). The narrative will usually contain a character (who) and topic/setting (what/where)
3-5	<ul style="list-style-type: none"> Cause and effect is developing which enables the child to start to tie events and plots together. As skills mature, sentences within narratives contain a central character (who) and a logical sequence of events (beginning, middle and end).
5-8	<ul style="list-style-type: none"> Children will understand elements of a story. They will start to understand character's intentions, motives, and will begin to understand how the ending relates to the rest of the story. They will be able to tell oral narratives with plots, focused around an incident in a story; or a problem in the story which is resolved in the end.

There are many skills needed to create a spoken narrative including:

- Having the appropriate vocabulary for the topic you want to talk about
- Being able to use correct sentence structure or grammar
- Being able to put your ideas in order for your story to make sense
- Including the most important elements in your story to get your message across effectively
- Using higher level language skills to problem solve or decide what might happen next in a narrative

Children who have difficulty with narratives skills may:

- Have reduced vocabulary or key gaps in their vocabulary
- Use short sentences or have poor sentence structure
- Provide limited information and lack of detail in their narratives
- Have difficulties with putting their ideas in order (sequencing)
- Not follow a set structure/format which can make it difficult to follow their ideas
- Struggle with problem solving, working out what might happen next, justifying what has happened, inferring information from clues in a story or picture



Narratives can either be in written or in verbal form but children who have narrative difficulties will often have difficulty in both areas. If children have difficulty with developing narrative, it is likely they will require help with other language skills as well (see previous chapters on understanding and using language).

Key elements of a story

In order for a story to make sense to the listener, the child needs to include key elements in their narrative. For simple stories this could be:

- Who
- What
- Where
- When something happened

For more advanced narratives such as retelling a story or talking about film you have watched, you might need a more complex structure such as:

- The characters (who)
- Setting (where)
- Problem
- Feelings/emotions of the characters or people in the story
- The plan – the plan to overcome the problem
- Action – what happens in the story
- Solution – how was the problem resolved

Helping children to understand these key elements within a narrative can help them to plan and create more effective narratives in their spoken language using relevant information.

When working on developing a child's narrative skills it is best to start with simple narratives that they are familiar with so this might be a familiar routine such as getting dressed, cleaning their teeth or making a sandwich. You can use photos of them completing this routine to help them develop a narrative to go alongside this.

When they can achieve this, you could move on to using familiar stories such as 'The three little pigs' or 'Dear Zoo'. When this becomes easier, you could move on to creating narratives of recent experiences such as a trip to the zoo or a trip to the beach, using photos of the trip to help them create their story.



Sequencing pictures are also a good way to generate ideas for building stories but it is important to remember that these are not familiar experiences for the child so it is best to work on something they have experienced themselves before moving onto more advanced narrative skills using pictures of things that are less familiar.

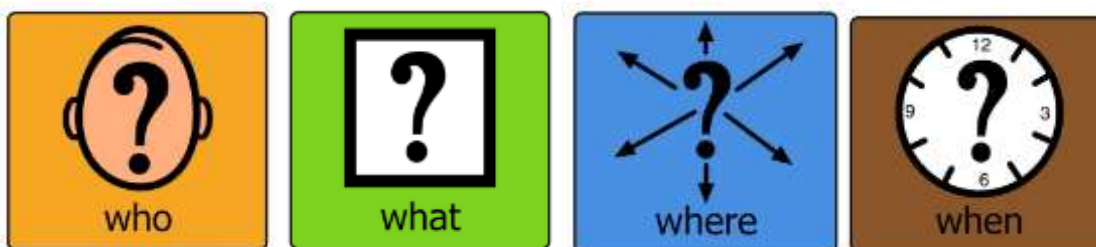
Visual support

Using visual support to represent each of the story elements can be a good way to help children identify what they need to include in their story.

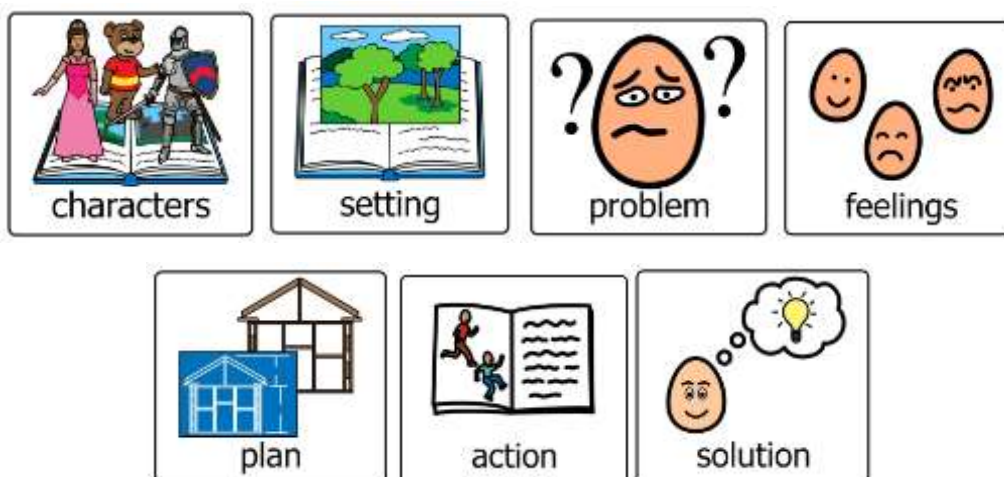
You can use a shared experience (such as going to the beach) with photos to remind you of what you did and then try and put these in order and create a spoken narrative alongside them.

Colourful semantics or Blacksheep press narrative prompts can be a good way to help children identify what they have included in the story and what elements of their story are missing.

Basic story element prompts using colourful semantics



Visual prompts for more advanced story planning



Sequencing



Children may also struggle to get their story in the right order so you might need to start with helping them to sequence pictures first before they start to build a verbal narrative to go with this.

When working on developing a child's ability to sequence a narrative, it is helpful to start with a familiar, everyday activity such as brushing teeth, making a drink, getting ready for PE.

For the chosen activity, use images/pictures to represent each step of the sequence alongside a 'first, next, last' board to help the child put the pictures in order. Initially, the child may require this to be modelled by an adult but then you can gradually reduce the amount of support you give to encourage them to complete the task independently.

FIRST	NEXT	LAST

Discuss each picture individually and ask the child to talk about what they see, or provide a sentence for each picture. Look for clues in the pictures that help you work out what order they need to go in.

When this becomes easier you can extend the length of the narrative to include a sequence of 3, 4 or 5 pictures.

Resources:

- Black Sheep Press Narrative and Sequencing packs (2021) Black Sheep Press. Available at: www.blacksheepress.co.uk
- Language Dynamics Group (2021) *Story Champs®: A Multi Tiered Language Intervention Curriculum*. Available at: <https://www.languagedynamicsgroup.com/story-champs/>
- *Narrative Intervention Programme*, Joffe. V.L. (2011), Speechmark.
- Speech Link Multimedia Limited (2021) *Language Link*. Available at: www.speechandlanguage.info
- Speech Link Multimedia Limited (2021) *Language Link*. Available at: www.speechandlanguage.info.
- Twinkl (2021) *Twinkl*. Available at: www.twinkl.co.uk

What are higher level language skills?

Page 103



Higher level language skills are the ability to use language to reason, predict, infer information, problem-solve, explain and justify. This also includes understanding and using non-literal language and seeing something from another person's point of view/perspective (see social communication section for more detail).

Children with difficulties with their higher level language skills might struggle to:

- Answer why/how questions
- Use clues from a situation or picture to work out what happened or what might happen (inferencing skills)
- Be able to predict what might happen next in a story or social situation
- Work out how something has happened that has not been explicitly explained to them or is not in a picture or text
- Be able to work out what they could do to solve a problem
- Get the general 'gist' of a situation without being provided with all the different details
- Understand sarcasm, humour, non literal language or idioms
- Be able to understand that others do not know what they are thinking or feeling

Supporting children with higher level language difficulties

Think about the language you use on a day to day basis in class and how this could be mis-understood or mis-interpreted by children with the above difficulties.

Try to simplify your language in everyday situations to 'say what you mean' to support understanding. At other times, you can help children to develop their higher level language skills by modelling 'how' to find clues or information to help them work out what someone means.

Use modelling, visuals and real-life situations to:

- Identify clues in a situation or story that might help you work out why something has happened
- Look for comparisons in pictures, videos or real-life situations such what is the same about this and what is different in this situation.
- Use pictures, stories, films and narratives to talk about what might happen next. Talk about what clues you can find to help you come up with ideas and then discuss which ideas are 'most likely' to happen and why.



- Model how to problem solve and respond to ‘how/why’ questions out loud during everyday activities e.g. ‘I wonder why that happened?’ ‘Could it be X or Y?’
- Talk about ‘what is missing’ in a picture that would help you work out what happened.
- Ask the child what they might do in a similar situation and discuss how they worked this out.

Resources

- Black Sheep Press, Mr Good Guess. Available at: www.blacksheeppress.co.uk
- National Autistic Society, Comic strip conversations: <https://www.autism.org.uk/advice-and-guidance/topics/communication/communication-tools/social-stories-and-comic-strip-conversations>
- Parsons, S. and Branagan, A. (2016) Language for Thinking: A structured approach for young Children. Speechmark
- Twinkl (2021) Twinkl. Available at: www.twinkl.co.uk



21 Auditory memory

Auditory memory involves being able to take in the information we hear, process that information, store it and then recall the information when you need it. Many children with language difficulties also find it difficult to remember and recall information.

Examples of how we use auditory memory skills:

- During everyday conversations to remember what someone has said and be able to respond to it
- Listening to stories or events that have happened and being able to recall them at a later date
- Being able to recall whole class verbal teaching to be able to work independently after the lesson
- Completing a mental maths test
- Taking a message to the office or another adult in school
- Remembering what you need to do for homework
- Remembering to tell your teacher that you need to leave early today or that you are having school dinner

Being able to complete these tasks effectively relies on an organised system which involves:

Short term memory

- holds the information we hear to allow us to process it
- receives information from our senses (e.g. sight, sound, smell)
- sorts through the information to help us focus on the most important parts
- tries to make sense of the information received
- lasts 20 seconds

Working memory

- for information to move into our long term memory we need to do something with the information i.e. 'use' it – this involves our working memory
- we can use different strategies to support our working memory such as visual support, writing things down, using mnemonics, keeping lists/journals etc.



Long-term memory

- holds all our knowledge of the world
- new information is added to our long-term memory all the time
- information needs to be carefully organised so that it can be found when needed
- we need to use/revisit the information in our long-term memory to help us store and recall it when needed

How do we remember things?

- By doing it or feeling it - Kinaesthetic
- By hearing it - Auditory
- By seeing it - Visual

Some children may have strengths in one or more of these areas but using all three methods, through multi-sensory learning, is the best way to support a child to transfer information to their long term memory, enabling them to store and recall it when they need it.

How can we help children with auditory memory difficulties?

- Repeat and revisit information on a regular basis
- Encourage children to repeat what they have learnt or heard
- Make lessons as active as possible – doing, seeing, feeling will help children to remember.
- Use visuals such as real objects, pictures, symbols, word maps, mind maps etc.
- Help children to visualise what they need to remember – make it as real as possible
- Encourage the child to explain what they have learnt to someone else
- Get the children to act it, draw it, write it down
- Create mnemonics, rhymes, raps
- Make lists, use calendars or journals
- Relate it to a real situation they may have experienced
- Use finger counting to help a child recall what they need to do/remember
- Use task planners to break down activities into simple steps to support memory



Using memory strategies

We cannot expect children to use memory strategies independently from a young age. We need to model and demonstrate these to support them in everyday activities:

- A child under the age of 4 years old will not realise they need strategies to help their memory
- A child 5-6 years old will often name things out loud to support their memory
- By 7 years old they will realise that strategies are available to help them but can't use them independently or spontaneously and will need an adult to help them
- By 10 years old a child can spontaneously repeat information to help support their memory
- By 11 years old a child can use memory strategies independently such as repeating things silently, chunking and grouping information without prompts from an adult

22 Speech sound production

What are Speech Sounds?

Speech sounds are the building blocks of words and are the top of the communication pyramid. Speech sound development is important because a change in a single sound can completely change the meaning of the word. For example, if a child hasn't yet developed their "k" sound, then they are likely to call a key, a "tea" – this completely changes the meaning of the word and may cause confusion to the listener.

To be able to use speech sounds correctly, we need to be able to discriminate (hear the difference) between sounds. If we do not realise we are producing a 'different' sound to the target sound then we are unable to change the sound we produce.



When describing speech sounds we need to think about:

- **Is it a 'noisy' or 'quiet' sound?**

For some sounds our vocal cords vibrate which makes them noisy (e.g. b/d/z) and for some sounds our vocal cords do not vibrate which makes them quiet (e.g. p/t/s)

- **What is the place of articulation?**

This is related to 'where' the sound is made in our mouth. Some sounds are made at the 'front' of the mouth (e.g. p/t/s) and some are made at the "back of the mouth (e.g. k/g/ng)

- **How is the sound made?**

This involves how the air escapes to make the sound. Some sounds are long and hissy (e.g. s, f, v, sh), some sounds are short (e.g. b, t, g); some sounds are made by the air being directed through the nose (m, n, ng).

Developmental Norms

There is a typical developmental pattern when learning speech sounds. This means that *all* children will use certain types of speech sound errors as they are learning to talk. See table overleaf for a description of typical speech sound development.

Most of the time, these difficulties resolve by themselves as children get older but for some children they need specific support to overcome a delay in their speech sound development – this is when their sounds are following the same order of development but are delayed. Children can also have a speech sound disorder which means their speech sound development is not following the usual pattern of development. This could be related to ^{Page 104} they have learnt/stored speech sounds (phonological difficulty) or the way that they are producing sounds (articulation difficulty).



Typical development of Speech Sounds

Age	New sounds typically present	Typical speech sound errors
1 -2 years	<ul style="list-style-type: none"> • p • n • w • h • b • m 	<ul style="list-style-type: none"> • Stopping: Long, hissy sounds such as /s/ and /f/ are made as short sounds like /t/ and /d/ e.g. sea → tea • Fronting: Back sounds /k/ and /g/ are made at the front of the mouth and become /t/ and /d/ e.g. car → tar • Final consonant deletion: Missing sounds off the ends of words e.g. cat → ca_ • Weak syllable deletion: Missing out the quietest syllable in the word e.g. banana → nana, elephant → efant • Cluster reduction: Two (or more) consonants are reduced to one e.g. spoon → poon, clown → cown, splash → bash • Gliding: When 'liquid' sounds such as /r/ are replaced with other 'liquid' sounds such as /w/ e.g. rain → wain
2-3 years	<ul style="list-style-type: none"> • t • d • g • k • f • ng • y 	<ul style="list-style-type: none"> • Stopping : Long, hissy sounds such as /s/ and /f/ are made as short sounds like /t/ and /d/ e.g. sea → tea • Weak syllable deletion: Missing out the quietest syllable in the word e.g. banana → nana, elephant → efant • Cluster reduction: Two (or more) consonants are reduced to one e.g. spoon → poon, clown → cown, splash → bash • Gliding: When glide sounds such as /r/ are replaced with other glides such as /w/ e.g. rain → wain <p>In addition, by age 3 years children should have a good awareness of rhyme and rhythm</p>
4+ years	<ul style="list-style-type: none"> • v • z • ch • s • l • j • sh • Consonant clusters (e.g. sp, cl, br) are emerging 	<ul style="list-style-type: none"> • 'r' may still be produced as 'w' up until age 6 years • 'th' may still be produced as 'f' or 'd' up until age 6 years (or beyond, as a regional variation) <p>In addition, by age 4 years children should have a good awareness of syllables and sounds</p>



General strategies to support children with speech sound difficulties

- If a child makes an error with their speech sounds in their everyday talking, repeat back the sound or word correctly e.g. child “dat”, adult “yes a cat”. It doesn’t matter if the child doesn’t repeat it.
- Avoid correcting the child directly or asking them to repeat.
- Always acknowledge children’s attempts at words and sounds with praise and encouragement e.g. good try.
- Try and be face to face, whenever possible, while talking to the child
- Slow down your own speech rate
- If you don’t understand what the child has said - **DON’T GUESS!** Instead encourage the child to describe what they are trying to say in a different way or show you what they mean (e.g. showing you, pointing, gesture).
- DO NOT expect them to be able to use a sound in their everyday talking that they are able to say on its own or in single words.
- Point out target sounds in a reading book, when out and about or on treasure hunts.
- Talk about sounds that are ‘loud’ and ‘quiet’ or made at the ‘front’ or ‘back’ of our mouths.

Direct work on speech sounds

Before working on speech sounds, you first need to identify what the child’s errors are. Completing a **Speech Link assessment** (available in schools) will help you identify which sounds the child is struggling with. You can then use the following activities to work on their target sounds.

When working on speech sounds, it is best to practice sounds “little and often”, for example 5 to 10 minutes a day is ideal but AT LEAST 3 times a week.

- **Discrimination:** Before being able to correct an error sound, a child needs to be able to hear the difference between the target sound (the sound that you want to work on) and the error sound (the sound they are currently producing in it’s place). For these activities you can introduce two sound cards (the target sound and the error sound) and the child has to listen and select the correct sound card when you say it by placing an object such as a car, frog, bean bags, or even ask the child to jump onto the correct sound.



- **Auditory bombardment** can also be used at this stage, either within a short story/or as part of an activity, adults should consciously and repeatedly use words that contain the sound being targeted to increase exposure and/or awareness of that sound.
- **Production:** The child then needs to work on producing the target sound on its own (in isolation). They may need support to understand 'where' you need to put your tongue/mouth to produce the sound and 'how' to make the sound.
- **Blending:** Once they can produce the sound on its own, they then need to be able to blend it with a long vowel sound e.g. consonant + vowel and vowel + consonant. This is sometimes called CV and VC combinations e.g. e.g. s – ee, f – ar, oo – s, eye – f
- **Single word:** They then need to use the sound in simple single words – this could be at the beginning, middle or end of a word depending on where their difficulties are e.g. 'sea, sand, sock' then longer words: 'salad, suitcase' etc.
- **Short phrase:** They can then work on using the target sound in 2-3 word phrases e.g. 'blue sock', 'hot sun', 'I got soup'
- **Sentences:** When they can maintain the sound at phrase level, they can move onto using the word in a sentence. Using a carrier phrase is easier than creating the sentence themselves so start with this and work towards more independent sentences e.g. 'I got a...X', 'I see a...'
- **Multiple target words:** When they can use the sound in sentences, challenge them to use multiple words with the same target in a sentence/story e.g. 'I can see the sea and the sand'. You can also play games like 'I went to market' with the target sound.
- **Conversation:** play games like 'guess who' or 'who am I' and encourage the child to 'think' about their target sound during conversation.
- **Generalisation:** monitor the sound in the child's everyday talking for 5-10 minutes a day and provide feedback to them to help them self correct.

Think of learning sounds as building a wall. **Listening** is the cement in the wall that enables the **sound production** (bricks) to be laid. You need to make sure the cement (listening) and bricks (sound production) are established at each level before moving on to the next level so a child should be able to produce the target sound 8/10 times correctly at each level, without prompting, before moving onto the next level.



REMEMBER: If the child can say the sound on its own but is not yet using it conversation, they are not being lazy!

It takes a long time to create new pathways for a sound so that the child doesn't have to actively think about using their 'new sound'. If you try and substitute one sound for another sound in your everyday talking you will see how difficult this is to do.

Speech sound games

- Use a flash-light and pretend you are on a treasure hunt. Let the child name the picture they find.
- Memory game - Use two copies of the target sound cards. Place the two sets of cards face-down on the table. Take turns to turn over two pictures at a time. Name them as you turn them over. Try to find matching pairs.
- Make large flowers/ lily pads and stick target pictures to them. Let the child jump from leaf to leaf; naming the pictures they jump on it.
- Feed a hand puppet. Name the flashcards as you give them to the puppet.
- Fishing- Attach paper clips to the cards and spread them on the floor. Give the child a stick with a magnet tied to the end with a string. Ask the child to "catch" a card. Name each card as you catch it.
- Hide and Seek – Hide the cards around the room. Ask the child to name each card as they find it.
- Board games – Play games such as Pop up Pirates, where the child can earn daggers as they name the sound/word. Then play the game as a reward at the end.
- Snap – Make 2-4 copies of the sound cards and play a game of snap, naming each card you put down.
- Skittles – Place a flashcard under each skittle. Throw the ball. Label the flashcard under each skittle you knock down.
- I spy – search for objects that start with the sound you are practicing.
- Sound Sorting: Introduce sound sorting activities, where the child begins to acknowledge sounds at the beginning and ends of word. Use pictures or objects in a feely bag. Encourage the child to name the object by saying "You found a...". Repeat the correct production of the word back to the child if they have produced incorrectly before trying to work out the initial sound. If the child chooses the incorrect sound at the beginning of the word then produce the incorrect word back to them - most children can recognise the incorrect word and will find this most amusing.



Phrase/formatted sentence level activities

- Make a big/little version of the target pictures using or draw big and little versions of some of the target words, play fishing or pairs with the pictures and describe the pictures you catch/turn over e.g. 'little cat' or 'big key'.
- In fishing or pairs games, take it in turns to catch a fish or to turn two pictures over saying 'I've caught a'. Or 'I've got a
- Where's the spider/treasure? Cut out 10 pictures containing the target sound. Ask the child to name the pictures and to place them on the table. Draw a spider or a treasure chest on a small piece of paper (it might be best to draw this on a small piece of paper or tissue so that you can't see it through the target pictures – alternatively stick the target pictures to card. Take it in turns to hide the treasure or the spider under a target picture. The other person then needs to ask questions to find out where it is e.g. 'Is it under the ...? When the spider is found, the picture is taken away. The game ends when there is only one picture left.
- I went to see.....(variation of shopping game). Choose 10 pictures containing the target sound. Choose someone whose name contains the target sound (e.g. if you are working on 'f' at the beginnings of words – Fiona the Fairy. If you are working on 't' at the ends of words – Pat the Cat). Say 'I went to see (e.g. Fiona the fairy) and I took a(e.g. a fish) ' choosing one of the target pictures. The next person then says 'I went to see Fiona the fairy (or whatever character you are using) and I took a fish and a(e.g. a firework). The winner is the person who can remember the most items,

Independent sentences/stories

- Generating sentences: use lots of pictures containing the target sound. Put all the pictures in a long line. Take in turns to throw a dice and then to walk along the pictures e.g. if you throw a 4, move on 4 pictures. Use the picture you land on within a sentence e.g. if the target was 'table', you might say 'the teddy is sitting at the table'. The winner is the person who reaches the end of the line first.
- Silly Stories: Use 10-15 pictures containing the target sound. Place them on the floor or table and take in turns to pick up two pictures and then to make up a silly sentence containing the two targets e.g. for fox and fork, you might say 'the fox ate his lunch with a fork'. You could turn this into a longer activity e.g. take in turns to pick up one picture at a time to continue the story.



- Use a range of pictures containing the target sound – put these in a pile. Play a game like pop-up-pirate or fishing (whatever interests the child). Take in turns to take a picture off the pile and to include it in a sentence and then to have a turn of the game.
- Who Am I? This game provides an opportunity to practise using the target sound within more general conversation. Use a commercial version of this game, or find some pictures of animals or other characters. Choose a character each – don't tell the other person what you are! Take in turns to ask questions to find out what the other person is. You can only answer with yes/no. The winner is the first person to guess accurately.
- Guess who is another good game for practising use of target sounds within more spontaneous speech.
- Stories: Encourage your child to re-tell a familiar story or to talk about a topic they like for a set period of time, trying to remember their target sounds. You might like to choose a story which has a character containing your child's target sound e.g. if they are working with 't' at the ends of words, postman pat, or 'Barney' if they are working on 'b' at the beginnings of words.

Generalisation to everyday talking

- Once a child can use their target sounds 80% of the time in structured tasks, you can start to support them to transfer this to their everyday talking.
- Choose some words containing the target sound which are used often for your child to try to remember when they are talking. Names of family members, favourite toys or favourite foods might be good choices. If your child is at school, they could have a written reminder of their words on their table. Give the child praise when he/she remembers to use their sounds in these words.
- Use 'catch me using' my target sound in my everyday talking charts. Look out for times when the child is using their new sound independently and praise them or put a sticker/smiley face on their chart to give them feedback about this.
- Choose 5-10 minutes a day when you listen out for their target sounds in their everyday talking. Give them feedback if they forget to use these sounds correctly during this time to encourage them to self-correct to support generalisation.



Developmental speech sound errors

Adapted from Caroline Bowen's Elimination of phonological processes

The table below outlines typical speech sound development patterns and when we would expect to see these processes resolved by, in typically developing children.

Typical Error patterns	Descriptions	Examples	Gone by approximately	
Voicing	When 'quiet' sounds are produced as 'loud' sounds	pig ⇔ big	3 years	
De-voicing at the end of words	When 'loud' sounds are produced as 'quiet' sounds	pig ⇔ pick	3 years	
Stopping	Producing 'long' sounds as 'short' sounds	fish ⇔ tish soap ⇔ doap chair ⇔ dair	From 3 years to 4 years 6 months (dependent on specific sounds)	
Final consonant deletion	When the final consonant sound is missed off the end of a word	bus ⇔ bu cat ⇔ ca	3 years 3 months	
Fronting	When a sound produced at the back of the mouth is produced at the front of the mouth	car ⇔ tar ship ⇔ sip	3 years 6 months	
Consonant harmony	Repeating a consonant sound in a word	dog ⇔ dod	3 years 9 months	
Syllable reduction	Missing out syllables in words	ba-na-nan ⇔ na-na e-le-phant ⇔ e-phant	4 years	
Reducing blends/ Cluster reduction	Missing off a consonant when there are two consonants together	snail ⇔ _nail blue ⇔ b ue	4 years	
Gliding		r ⇔ w y ⇔ l	red ⇔ wed yellow ⇔ lellow	5 years



23 Social Development

Social communication refers to the skills that children need in order to use different language in different situations with different people of different ages and familiarity. Some skills within this area include:

- Using non-verbal communication
- Turn taking
- Starting, maintaining and ending a conversation
- Listening skills
- Varying pitch, volume and speed of talking

All Autistic children will have some differences with their social communication and interaction. It is important to remember that other children, who are not Autistic, may still have some differences in how they socially communicate with other people.

Children who may experience differences with their social communication:

- Children who are learning English as an additional language
- Children with Speech, Language and Communication Needs (SLCN)
- Children with specific diagnoses; such as Developmental Language Disorder (DLD)
- Children with speech sound difficulties

The table overleaf outlines the development of social communication skills in typically developing children.



Age	<p style="text-align: center;">Social Communication Information adapted from ICAN Ages and Stages/Primary Talk</p>
0-1 year	<ul style="list-style-type: none"> • Tries to copy adult speech and lip movements • Takes 'turns' in conversations (using babble)
18 months	<ul style="list-style-type: none"> • Likes being with familiar adults Likes watching adults for short periods of time • Although increasingly independent, happiest when near familiar adult • Perseveres if someone doesn't respond to them
2 years	<ul style="list-style-type: none"> • Becomes frustrated when unable to make them self understood – this may result in tantrums • Follows adult body language including pointing, gesture and facial expressions • Does opposite of what is asked
2-3 years	<ul style="list-style-type: none"> • Holds a conversation but jumps from topic to topic • Interested in other's play and will join in with some children • Expresses emotions towards adults and peers using words, not just actions • Uses people's names to their attention • Sense of humour is developing
3-4 years	<ul style="list-style-type: none"> • Understands turn-taking as well as sharing with adults and peers • Enjoys playing with peers • Initiates conversations • Have imaginary friends • Able to argue with adults or peers if they disagree- uses words, not just actions
4-5 years	<ul style="list-style-type: none"> • Chooses own friends • Generally co-operative with playmates • Takes turns in longer conversations • Uses language to gain information, negotiate, discuss, ask questions • Joins in and organises co-operative role play with friends. • Can pretend to be someone else talking.
5-7 years	<ul style="list-style-type: none"> • Takes turns to talk, listen, and respond in two-way conversations and groups. • Keeps to a topic but easily prompted to move on if it takes over. • Copies others' language and begins to be aware of current peer language. • Uses and experiments with different styles of talking with different people
7-9 years	<ul style="list-style-type: none"> • Uses formal language when appropriate in some familiar situations • Understands conversational rules • Gives more detail if needed. • Uses tone of voice, stress on words and gestures naturally to add meaning • Uses language for full range of different reasons
9-11 years	<ul style="list-style-type: none"> • Uses different language depending on where they are, who they are with and what they are doing • Communicates successfully; shares ideas and information, gives and receives advice, and offers and takes notice of opinions. • Realises when people don't fully understand and tries to help them.



There are some theories which are useful to think about when identifying children with specific social communication differences:

Theory of Mind is the ability to understand that other people have different feelings, thoughts, experiences and beliefs that are different to our own.

This typically develops from the age of four years old. It's important to remember that some typically developing reception aged children will not yet have established Theory of Mind.

For example, for a child that has not yet developed theory of mind, if there is a disagreement at break time, the child may not tell you what happened because they assume that you already know, even when you were not there.

Central Coherence is the ability to get the overall 'gist' of a situation or story rather than focus on specific details. This can be both a challenge and a strength for children.

For example, a child may focus on detailed information in a story such as what someone was wearing instead of telling you about their whole weekend and what they did.

However, they may seem to be able to complete tasks which require a high level of detail (remembering every detail of a video or story) with little to no support or much quicker than their peers.

Executive Functioning is the ability to connect past experiences with current or future situations. Difficulties with executive functioning can make some everyday activities challenging for a child. Executive functioning includes the ability to prioritise, plan and sequence activities as well as time management.

For example, a child may find it difficult to get themselves started on an activity without being told explicitly what to do. Instructions like 'do your work' might need to be rephrased to 'first write the date, then write the title'.



What might a child do who has social communication differences?

Children with social communication differences may:

- Talk about their own topics of interest in high levels of detail
- Talk share their personal experiences with both friends and less familiar adults (e.g. headteacher)
- Have difficulties understanding humour and sarcasm
- Have differences in their use of and understanding of non-verbal communication (such as facial expression, gesture or eye contact)
- Play on their own or watch their peers from a distance
- Have difficulties maintaining friendships or get into regular disagreements in the playground
- Have difficulties in identifying their emotions or emotions in others

How can we support children who have social communication differences?

Social communication skills are best supported in real life situations but may need to be supported by adults working with the child to help them to develop functional social communication skills.

- Reduce language to short simple sentences
- Give them time to process information or instructions by leaving silence and space for them to answer.
- Give clear expectations and instructions using visual support alongside this
- Try and reduce use of non-literal language or support the child to understand what other people mean.
- Use Social Stories™
- Use Comic Strip Conversations™

Social Stories™ are short descriptions of a particular situation, event or activity, which includes information about what to expect in each situation and why.

Social stories can be used to:

- develop self-care skills e.g. how to clean your teeth
- help someone to understand how other people might behave or respond in a particular situation
- cope with changes to routine and unexpected or distressing events e.g. absence of teacher, moving house and thunderstorms
- provide positive feedback to a child about an area of strength or achievement in order to develop their self-esteem.

The goal of a Social Story™ is to share accurate social information in a patient and reassuring manner that is easily understood by the child.

The goal of a Social Story™ is never to change the child's behaviour but is there to support them to understand what usually happens in certain events.



Tips for Writing Social Stories™:

- Always write in the first person – “I...”.
- Avoid using definite language such as *always*, *never*, *must*. If a child takes language literally this may lead to problems with them sticking rigidly to the ‘rules’ of the story.
- Use drawings, photographs or pictures to visually support the story.
- You could write the story with the child and have them decorate it. This will help the child take ownership of it.
- Make sure the story is kept somewhere that you and the child can easily find it.
- Read the story regularly, not just when the situation arises.
- Remember that Social Stories™ are written for an individual following specific guidelines but they are not a list or rules.
- For more information, see Carol Gray’s website <https://carolgraysocialstories.com/socialstories/>

Every Social Story written should be individualised for each child, you can find plenty of examples online but remember to personalise these for each child that you work with

Comic Strip Conversations™ are simple visual representations of conversations that can be used to show:

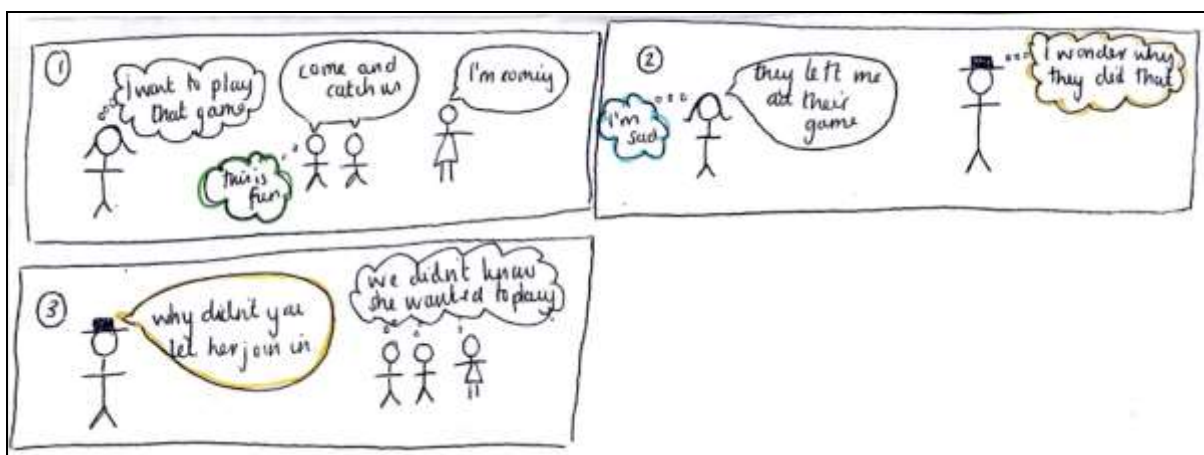
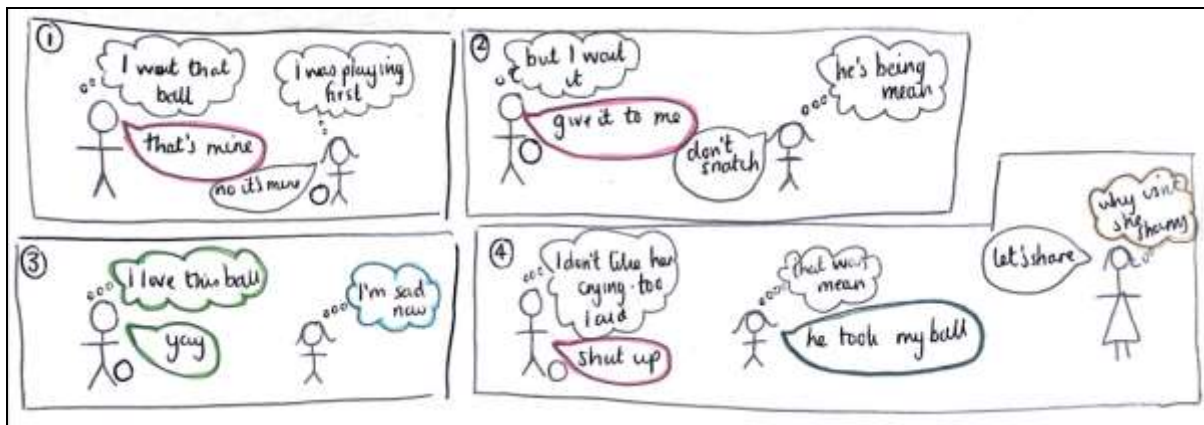
- things that are actually said in a conversation
- how people might be feeling
- what people’s intentions or thoughts might be

Comic Strip Conversations™ use stick figures and symbols (speech bubbles and thought bubbles) to represent abstract aspects of conversation. They also use colour coding to represent the emotional content of a statement or message.

- **Green**- good idea, friendly happy
- **Red**- bad idea, anger, unfriendly,
- **Blue**- sad, uncomfortable
- **Yellow**- frightened, anxious
- **Black**- facts, truth
- **Orange**- questions
- **Brown**- comfortable, cosy
- **Purple**- proud
- Combinations – confusion



A Comic Strip Conversation™ should be completed after the situation occurs. They are used to provide insight into how everyone involved if feeling in a certain situation. When completing a Comic Strip Conversation™, people draw as they talk to help learn them about the different situations, what people said and how they were feeling.



Five Point Scales are used to help children visually explore how they might be feeling in different situations. A five-point scale should be individualised to each child and is used to help them identify how they are feeling in situations. In the first column, you would identify what the child does when they feel these ways. In the second column, you can identify what the child can do to support them, or what an adult could do to help too.



5	Very angry Shout, stomp, raise voice, hit	I need a quiet place I need to be left alone
4	Getting angry	I can go to my room I need time on my own
3	Worried, anxious	I can ask for some space I can ask for help
2	A little bit worried	Have a break Talk to an adult
1	Happy, calm and relaxed	

Some schools may already be using their own visual system to support children to manage and recognise their own emotions. It doesn't matter what system you use but be consistent with it and tell parents about this too. Visual supports for recognising emotions and feelings are best used across home and school settings.

Some other useful resources for supporting emotional regulation include:

- The Incredible 5 Point Scale, by Kari Dunn Buron and Mitzi Curtis
- The Zones of Regulation: A Curriculum Designed to Foster Self-regulation and Emotional Control, by Leah M. Kuypers
- The Colour Monster by Anna Llenas



Summary – putting it all together

When devising a suitable programme for the child in your class it is important to consider the sensory strategies suggested as well as the movement ideas and to link both with the appropriate level of communication. One combined programme ensures the child is not overwhelmed.

Knowing exactly where to focus effort helps you and your pupil to get results quickly.

Case study: Joshua

Joshua is 6 years old and is in mainstream school. He is falling behind in all his academic work and is very much a loner. He finds it very difficult to attend and therefore carry out the teacher's instructions in class.

The teacher cannot get him to line up and go into the dining hall for lunch; consequently the teacher has had to make other arrangements whereby he sits in the classroom to eat his food. He will only eat yogurts and pasta and mum is getting quite worried about this.

The teacher is concerned as she is unable to get Joshua to hold a pen correctly and his writing is not developing. Joshua will not allow hand over hand to assist with a task.

He will not allow anyone at school to touch him. He can't seem to answer simple questions when asked by the teacher and can't explain what's happened when he has had a difficult time with other children.

Joshua seems to be a very anxious boy. The teacher is unable to get him to try new tasks or experiences, he likes everything to be organised and within his control, if the plan for the day changes he gets very upset.

Mum has been into school to talk to the teacher as Joshua has stated that the other children keep pushing him. The class teacher is monitoring this.



Action

- The teacher sets up a visual timetable
- The teacher talks to Joshua and they devise some heavy work activities that provide linear movement and deep pressure input. He is allowed time out in an area in the class where he can hide under blankets and cushions at regular intervals throughout the day
- Joshua does chair sit ups at regular intervals throughout the day
- Joshua has chosen to sit at the front of the class, where there is less visual input from other children in the class
- Joshua has been taught self-joint compression to help with his over responsiveness to touch
- Use of working towards boards, task management boards, checklists or timers may help Joshua understand what is expected of him in learning activities and support his attention and listening in the classroom
- Joshua may benefit from modelling of an 'asking for help board' to help him seek support in the classroom
- The teacher needs to chunk her language so he can understand the instructions, asking him to repeat what he has to do and once completed, give him the next part of the task.
- Joshua would benefit from writing social stories with the teacher about difficult situations and how to make friends.

Joshua said he now feels more in control of his day with his time table and gets less frustrated with other children when they touch him. However, he is still unable to eat with the other children in the dining room. This will need further assessment.



Case study: Mandy

Mandy is eight years old and attends a mainstream school. Mandy is a very quiet girl and is often seen in the playground on her own. She finds it really difficult to make friends and children are often saying to her they don't understand what she is saying. Her teacher reported that she is no trouble in class, although she is described as a bit of a dreamer. Mandy's reading and writing skills are affected by her difficulties with speech sounds, she is often really upset when spelling tests are happening.

Mandy was seen by the SENCO at the school after the teacher noticed that Mandy was not keeping up with her handwriting compared to the rest of the class.

Mandy's hand writing was very inconsistent, she applies very little pressure and in places this makes it very difficult to read. When Mandy is writing or carrying out any fine motor activities she slumps over the desk, propping her head up with her arm.

When the school spoke to mum about their concerns they discovered that Mum found it very difficult to motivate Mandy. In the morning she needed constant prompting to get up and dressed and that she finds it very difficult to do her shoe laces and buttons.

The school thought that possibly Mandy's sensory system was under responsive and that perhaps she needed some activities to wake up her sensory system.

Action

- they taught her how to do chair sit ups which she did with the whole class at the start of a lesson
- they taught her hand massage which she was able to do herself
- she sat with a vibrating cushion in the back of the chair which she was able to use throughout the day.
- They tried an angled board and a weighted pen
- Mandy needs to work on her speech sound system



- The teacher needs to work with her on social stories to help with making friends and how to ask for help in the classroom. The teacher needs to use a total communication approach (including spoken language, gesture, symbols, pictures etc) to show Mandy how she can use different types of communication to get her message across

The school noticed that Mandy's hand writing was more legible and that her posture was greatly improved.

They also noticed that she seemed to be responding more in class by putting her hand up to answer questions.

When the teacher spoke to mum about the outcomes mum purchased a vibrating cushion for home to help wake up Mandy's sensory system in the morning.



Case study: Ben

Ben is 4 ½ years old and has just started in reception class. The teacher notices that Ben always gets into trouble with his peers. He constantly runs around the class, poking and pushing other children for no reason. The teacher is unable to get him to sit down for any length of time and engage him in any table top activities. At story time he messes around, sitting up against other children, pulling their hair and generally disrupting the whole group.

When Ben does engage in table top activities, for example building a tower with building blocks, he ends up throwing them around the room shouting “I can’t do it.”

The teacher talks to mum and hears that Ben is always playing rough and tumble with his older brother at home but that it always ends in tears. Mum reports that he doesn’t seem to know when to stop.

Mum also states that although Ben appears tired she cannot get him to go to sleep and when he does go to sleep he wakes several times throughout the night, disturbing the whole family.

At meal times he will only eat chicken nuggets and chips and always uses his fingers. Throughout the day he constantly chews on the sleeves of his jumper and will not take his jumper off even when it is extremely hot.

Action

- The teacher with mum’s permission gets Ben to wear a rucksack with books in it.
- Prior to story time she gets Ben to do some heavy work e.g. crab walks and wall push ups
- The teacher sits Ben on a “move and sit” cushion for table top activities and during story time
- He is given a squeeze ball to use as a fidget toy
- He uses a wheat bag across his lap when he is doing fine motor activities
- The teacher sets very tight boundaries around an activity that it is expected of Ben giving a beginning middle and end, making sure that the task is achievable and is of the “just right challenge”



- If it appears that Ben is not focused on a task, she places weight through his shoulders and applies gentle downward pressure.
- Needs firm boundaries and possible use of reward charts
- Use of behaviour strategies

With the rucksack the teacher notices that Ben is a lot calmer and he runs around a lot less in class.

At story time, when using the fidget toy, Ben has stopped pulling other children's hair to the same extent as before.

Generally Ben is a lot calmer and has developed a friendship with another little boy in class. However, he is still chewing his jumper. The teacher decides to refer Ben to the occupational therapist after discussions with mum, who will carry out a full assessment.



Developing a positive school environment

Checklists

General environment around the school

- Use appropriate visual support around the school e.g. visual timetables, working towards, task management boards, pictures/symbols on food/snack menus, use of signing etc.
- Give clear visual/tactile prompts
- Give small amounts of information at a time
- Communication systems, if used, should always be with children throughout the day this could include communication boards, books, devices etc
- Ergonomically friendly environment set up for individual children
- Transition cards to be used as reminders
- Wait cards
- Use visual timers throughout the day including assembly and playtime
- Provide a separate area at playtime assembly or lunchtime for those that can't cope.
- Ensure the training is given to all staff involved with the child including lunch-time staff and play monitors

Playground

- Calm area
- Sensory garden
- Playground equipment (swings etc.)
- Visual marks on the ground for lining up to enter school after break/lunch etc.
- Buddy area/bus stop/friendship stop
- Child mentors

Classroom

- Visual timetables (use with all the class)
- Fidget toys
- Symbols around the class (labels/pictures on areas/items, 'rules' e.g. good sitting/looking/listening, toilet symbols etc)
- Consider the lighting
- White noise/calm music
- Movement/regular breaks
- Textured food/snacks



- Consider table layout to reduce distractions
- Use objects of reference e.g. a cup to indicate snack time, a plate to indicate lunchtime, a ball to indicate playtime etc.
- Have one focal point so that the child does not have to twist and turn
- Reduce visual distraction (e.g. posters on walls)
- Calm/quiet areas in classroom (“chill out” space)
- Do not use blinds – consider frosted window cover that allows the light in
- For registration time allow alternative to verbal response e.g. raising hand/card

Assembly

- Floor markers for where to sit (e.g. rubber spot/carpet square)
- Positioning – put a seat either at the end of a row, next to the teacher, at the back or front depending on the individual child
- Consider use of ear plugs/ear defenders

Corridors

- Try to keep corridors clear of clutter
- Transition (try using “**heavy work**” e.g. chair press-ups, wall press-ups prior to walking along the corridor)
- Visual tracking along the corridor – e.g. coloured line along the floor or rails along walls
- Have the child wear a heavy item e.g. a rucksack with books in, or carry heavy items, push a trolley or push open a heavy door as they walk along the corridor
- Ensure consistent lighting (not fluorescent, changing or flickering light)
- Consider use of ear plugs/ear defenders

Dining hall (as for assembly hall)

- Allow extra time /quiet area / alternative area
- Ensure the table and chair are at the correct height
- Ensure equipment and communication system is with the child
- Use visual tacking for queuing and a wait card if appropriate
- Carry out mouth/hand massage prior to lunch in readiness for eating, if recommended
- If de-sensitising is recommended, bring a chewy tube to lunch in readiness for eating
- Consider use of ear plugs/ear defenders



Toilet area

- Toilet card passes
- Symbol sequences for toileting and hand washing
- Correct height toilets/accessible/feet planted
- Consider the types of tap handle
- Changing facilities for children who are not toilet trained e.g. hoisting, toileting equipment, nappy disposal etc.
- Hand rail for standing (not laying down changing), foot prints by WC for visual guidance on where to position feet

Home time

- Flexibility to leave early or later than others
- Social story/routine in lead up to home time



Definition of terms

This glossary has been put together based on the terms used in therapy reports you may receive from MCH Child Health service. It is intended to be used as a guide.

Gross motor skills

These are the abilities required in order to control the large muscles of the body used to walk, run, sit, crawl and perform other activities. Children who have difficulties in this area may well avoid doing activities which involve using gross motor skills ie PE. The child may present with 'bad' behaviour or become the class 'clown' in order to cover up the lack of skills. There are many reasons why gross motor skills may be poor and these areas are further explored in this hand-out.

Gross motor control

This is important for us to control our body parts (especially our hands). To produce necessary movements with fluency and speed requires adequate muscle strength.

Core stability

Core stability describes the ability to control the position and movement of the central portion of the body. Core stability training targets the muscles deep within the abdomen which connect to the spine, pelvis and shoulders, which assist in the maintenance of good posture and provide the foundation for all arm and leg movements. Children who have difficulties in this area will slump in their chair and over their desk; struggle to sit unsupported at carpet time; lean against and prop themselves on furniture, staff and other children.

Shoulder stability

Shoulder stability describes the ability to control the arms and use them freely. Shoulder stability training targets the muscles which are located between and support the shoulder blades. Without shoulder stability children will be unable to use their arms freely and will 'fix' their arms on the desk restricting their arm movements further. Weight bearing exercises are good as they strengthen around the shoulder which is important for controlling hands when performing small activities i.e. pencil control.

Postural control

This is used to describe core and shoulder stability and describes the ability to maintain the body in an appropriate manner for executing daily tasks such as walking, sitting etc.



Low tone/low endurance

This is the lack of supportive muscle tone (usually with increased mobility at the joints). The child with low tone has limbs that are floppy, appear to not be attached to the body, and have awkward movement patterns. This lack of muscle tone results in poor ability to act in a sustained state of alert performance. The child will struggle to sit or stand for any length of time.

Hypermobility/double jointed

A greater than normal range of movement in joints. This leads to poor control of limbs and poor endurance. The child will tire quickly, as their muscles have to work extra hard to maintain joint stability, and will often struggle to keep up with their peers.

Body awareness or proprioception

This is sensation we receive from our muscles and joints that allows us to 'feel' the position of our body; difficulties with this often make children appear awkward, rely on their vision (copying the movements of others) and have difficulties judging force. These children will often be very fidgety and struggle to sit still and focus. They will frequently trip, fall, bump into furniture, walls, door frames and other children and adults. Crowded class rooms, playgrounds and corridors can be a nightmare for these children to negotiate and they are often accused of hurting others when their bumps were accidental and they were not necessarily deliberately heavy handed.

Motor planning

This is the ability to have an idea, make a plan and organise ourselves to sequence movements. This is a building block to helping us learn new skills. Motor planning will be difficult if a child has poor body awareness. You have to know where your body is before you can move it as necessary, ie in order to follow instructions in PE, negotiate an obstacle course etc.

Body co-ordination

This is the ability to achieve effective, co-ordinated and graded body movement and is needed for all motor skills.

Praxis

Motor planning that depends of somato-sensory processing and influences one's interactions with the physical world.



Force control

This is the ability to be able to judge appropriately the level of force required to perform a task such as throwing a ball, placing a cup on the table or holding an object. Too much force will mean, the ball is thrown too hard, the cup is banged onto the table and spills or a delicate object is crushed.

Too little force will mean the ball fails to reach its target having been thrown too softly, the cup may not be close enough to the table and is dropped too early, an object is held too lightly and is easily dropped.

Bi lateral co-ordination or integration

This is the ability of the two sides of the body to integrate together, which is essential for all daily activities such as using scissors, cutlery and dressing skills.

- **Symmetrical bilateral integration** occurs when both sides of the body are performing the same action and mirroring each other. i.e. clapping, jumping feet together, catching a ball, etc.
- **Reciprocal bilateral integration** occurs when one side of the body is performing an action that is opposite from the other. i.e. crawling, walking, running, swimming, etc.
- **Asymmetrical bilateral integration** occurs when both sides of the body are performing different tasks at the same time in order to complete an activity. I.e cutting, throwing a ball, threading beads, etc.

Balance

The state of physical steadiness. Balance is not just used by the child standing on one leg or walking along a beam. It is used for sitting in a chair, standing, walking and going up and down steps or stairs. This requires good postural control i.e. core and shoulder stability.

Midline crossing

Midline crossing is an important underlying skill for good coordination with establishment of hand dominance. It is the ability to spontaneously cross the midline (middle) of the body with both hands and eyes. (If you imagine the child has a line running from head to toe, in line with the nose and navel, this is the midline). Care must be taken to ensure the child is crossing the midline when learning to develop this skill and not just turning their body as this will move the midline rather than crossing it. Children with difficulties in this area will pick up objects on left side of table with left hand; objects on the right side will be picked up with the right hand. This is sometimes seen when writing, the pencil will change hands mid page (although this can be seen with poor hand strength due to tiredness).



Left/right discrimination

This is an extension on the child's understanding of themselves in space and body orientation. Laterality is a knowledge of left and right which becomes an inner awareness that can then be related to the environment.

Directionality

The ability to understand directions (up/down, front/back, left/right) as they relate to function.

Hand dominance

Children develop hand dominance at around 3 – 5 years (but sometimes later). Having hand dominance allows one hand to become the stabiliser and one to be active, which is required to complete many tasks e.g handwriting or using scissors. To work out which hand is dominant ask them to pick up a pencil (from the middle of a desk), ask them to open jar or ask which hand they brush their teeth with.

Eye hand co-ordination

This is the coordinated control of eye movement with hand movement and the processing of visual input to guide reaching and grasping along with the use of proprioception of the hands to guide the eyes. Eye-hand coordination involves the coordinated vision and hand movement to execute a task.

Eye foot co-ordination

This is the co-ordinated control of eye movements with foot movements and the processing of visual input to guide leg and foot movements, for example when kicking a football.

Fine motor skills

These skills are generally the small movements of hands, wrists, fingers, feet, toes, lips and tongue.

Hand strength

There are over twenty-five muscles in your forearm and hand. The muscles in the forearm control your elbow, wrist and finger movements. Smaller muscles within the palm of the hand control the more refined movements of the thumb and fingers. When we look at hand strength, we also need to look at the strength of those small muscles within the hand. In infancy, these muscles are not fully developed.



Babies are able to grip and squeeze first with all of their fingers in unison before they are able to control movement in each finger individually. As infants develop, they are able to control the thumb and fingers individually, rather than as a mass grip or squeeze. When the large and small muscles of the forearm and hand are slow to develop, weakness and in co-ordination may result. The large muscles of the forearm may overcompensate for weak inner hand muscles. As a result, the child will find ways to hold, pinch and grip small objects in awkward ways.

Fine motor control

This is the ability to combine the understanding of what is seen with execution of motor skills.

Fine motor precision

The physical outcome of being able to control a pencil to write, place a coin in a slot or peg into a board. To achieve precision, adequate hand and shoulder strength is required.

Fine motor integration

The neuromuscular activity that makes precision possible.

Manual co-ordination

This is the ability to use and co-ordinate arms and hands to manipulate and control small objects e.g. pens, buttons.

Manual dexterity

Manual dexterity is the ability to move hands with skill and coordination and perform complex tasks. This includes doing up buttons and tying shoe laces.

In hand manipulation

This is the ability to use hands to perform tasks such as moving items in your hand and transferring coins from your hand to your fingers to feed into a slot. To achieve this well the child should be able to manipulate items without turning the hand palm up, or using their body to support the hand.

Pincer grip

A pincer grip enables a child to pick up small items using the thumb and index finger. Without adequate hand strength a child will use all their fingers to "rake" items into the palm or pinch with the thumb against the side of the index finger.



Thumb opposition

This is the ability to turn and rotate the thumb so that it can touch each fingertip of the same hand. Thumb opposition is required for a pincer grip. This allows us to grasp objects of various sizes and operate tools - imagine trying to tie shoes, pull up a zipper or hit a ball with a bat without using your thumbs.

Finger isolation

This is the ability to move each finger one at a time. Infants move all fingers together in unison. As they develop, children learn to move the fingers individually. This ability is very important in the development of fine motor skills.

It contributes to developing an efficient pencil grasp, typing on a keyboard, playing musical instruments, tying shoelaces and many other daily living skills.

Hand arches (or palmar arches)

There are several arches within the palm of your hand that enable the hand to grasp objects of different sizes and shapes. Many of these arches can be identified by the creases in the palm of your hand. These arches direct the skilled movement of your fingers and control the power of your grasp. Separation of the two sides of the hand is made possible by the development of the hand arches.

Upper limb co-ordination

This is the ability to co-ordinate arms to perform tasks such as throwing and catching.

Pencil grip

The most effective pencil grasp is the tripod grip, which allows the fingers to move without using the wrist or whole arm. This means that less effort is used and writing can be more fluent. The forearm should rest on the desk for stability.

Ideation

This is the thought and planning of an idea in the mind, and the ability to visualize the activity. This can be seen when children are playing independently or in groups. A child with poor ideation will be unable to or struggle to play with toys independently and will require adult guidance.



Visual motor integration

This is the ability to combine the understanding of what is seen, such as a word or shape, with fine motor/pencil skills to reproduce it accurately. This is important when handwriting.

Children with difficulties in this area may be able to identify a shape, for instance, and verbally tell you what it is but they will be unable to or struggle to draw the same shape themselves. This can lead to feelings of frustration and poor behaviour.

Visual perception

The ability to recognise, interpret and understand what is seen. It is divided into the following areas:

Visual discrimination - The ability to notice details of objects such as colour, size, shape, pattern, etc. and to determine similarities and differences between objects based on these.

Visual memory - the ability to recall a visual image of objects, forms, etc.

Visual spatial relationships - the ability to perceive the position of two or more objects in relation to oneself and to each other.

Visual form constancy - the ability to recognise that basic shapes and objects are the same despite changes in size, orientation, colour or sequence.

Visual sequential memory - the ability to remember the order of objects, such as letters that have previously been seen.

Visual figure-ground - the ability to distinguish an object from its background.

Visual closure - the ability to recognise an object as a whole when only part is shown.

Ocular motor control

This is the smooth and coordinated movements of the eyes which are required to find and track moving objects, scan objects, maintain eye contact and to shift focus quickly from one object to another. Problems with ocular motor control can cause difficulties for children when copying from a board, maintaining visual attention to a task, coordination and depth perception.



Sensory processing/sensory integration

Our bodies are constantly gathering information about itself and our environment through all of our senses. Normally, we are able to modulate ourselves based on this information received to maintain a calm alert state. However, some children find it difficult to modulate themselves and can find it impossible or difficult to reach or maintain the calm alert state.

Somatosensory system

This is the components of the central and peripheral nervous systems that receive and interpret sensory information from organs in the joints, ligaments, muscles and skin. This system processes information about the length, degree of stretch, tension, and contraction of muscles; pain; temperature; pressure; and joint position.

Sensory modulation

This refers to both physiological responses and behavioural changes. Behaviourally, the term refers to the ability of an individual to regulate and organise responses in a graded and adaptive manner according to circumstances. Physiologically, changes have occurred neurologically which lead to habituation or sensitisation.

Sensory systems

The 'organs' where sensory information is received for processing by the brain are referred to as the sensory systems. They are:

Proprioceptive

This is the sensation we receive from our muscles and joints that allows us to feel the position of our body. Difficulties with this often make children appear awkward, rely on their vision and have difficulties judging force.

Vestibular

This is our balance and movement sense, it tells you which way up you are and how fast you are moving i.e. forwards/backwards and fast /slow. This allows a child to co-ordinate both sides of their body, for example, to walk along a corridor.

Visual

This is the ability to take in visual information and use appropriately e.g. a child can read from a board and copy down a piece of work.



Auditory

This is the hearing sense. We are able to hear many different sounds at the same time, and when we are modulated we adequately concentrate on only the sounds that we need to. E.g. a child can filter out background noise to focus on a teacher giving instructions. If a child is oversensitive they will not be able to filter out sounds and this can lead to distress and confusion.

Olfactory

This is the ability to process information received by the nose. This is a powerful sense and often underestimated. E.g. if a child is over sensitive to smell, a seemingly subtle smell can be a major distraction.

Gustatory

This is the ability to process information received by the tongue. This is part of our protective system. Children who are sensitive to tastes often have difficulties eating.

Tactile

This is the ability to process information received by the skin. There are two types of touch. The first touch system can be protective, e.g. flinching away from a hot plate, this is a fight or flight response. The second touch system, tactile discrimination, tells us where and what is being touched (without using our vision).

Calm alert state

This is the state most conducive to learning and concentration. The body is appropriately receptive to input.

Sensory diet

This is a carefully designed, personalized activity plan that provides the sensory input a person needs to stay focused and organized throughout the day.

Sensory brushing

This is a prescriptive method of providing stimulation to help the mind, brain and body self-organise. It uses a special brush to deliver long, slow strokes to the arms and body and should only be used when advised by a therapist and as instructed.



Joint compression

This is a prescriptive method of providing stimulation to help the mind, brain and body self-organise. It uses a technique of gently compressing a child's joints and should only be prescribed by a therapist and used as instructed.





© Medway Community Healthcare, 2023

