Foetal Alcohol Spectrum Disorder

Focus on Strategies

Building Bridges with Understanding Project

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Introduction

Children with Foetal Alcohol Spectrum Disorder (FASD) have permanent brain damage causing learning difficulties in the areas of social and emotional development, hyperactivity and attention disorders, understanding rules, cause and effect, receptive and expressive language, and problem solving and numeracy. They will not follow general patterns of learning or be able to generalise rules and principles learnt from one situation to another. They may dance the developmental ladder, often displaying strong verbal skills which can mask poor understanding of their environment and what is being asked of them. Educating and caring for these children, therefore, needs a unique approach that relies on **reflective practice** and **adaptive teaching techniques**.

The following strategies may help to overcome these learning difficulties and improve outcomes for children with FASD. The strategies are based on a collection of ideas from a range of international literature, and are designed in such a way that practitioners can select those strategies that will work best in their setting with the children they are supporting. It is not suggested that all of the following strategies will work in all settings or with every individual child or group of children.

Remember that all children learn differently and have their own unique strengths and challenges. The best approach is to **keep trying different strategies** until you find the ones that work effectively with an individual child, but remember that, often, what works one day will not necessarily work the next.



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Above all, be realistic about your expectations of children with FASD. Provide constant supervision, clear boundaries, consistent routines and a structured environment; use simple concrete language, and be prepared to repeat instructions and rules. The basic guidelines provided overleaf will ensure that the learning environment provided will engage the child with FASD and enhance their potential for achievement through directed early childhood intervention.

Guidelines for developing successful early childhood interventions for children and young adults with FASD

(Otherwise known as the Eight Magic Keys developed by Deb Evensen and Jan Lutke)

1. Concrete terms Children with FASD do well when parents and educators

use words with double meanings, idioms, etc. Because the social-emotional understanding of children with FASD is far below their chronological age, it helps to 'think younger' when providing assistance, giving instructions, etc.

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2. Consistency Due to the difficulty that children with FASD experience in generalising learning from one

situation to another, they do best in an environment with few changes. This includes language. Educators and parents should coordinate with each other to use the same words for key phrases

and oral instructions.

3. Repetition Children with FASD have chronic, short term memory problems. They forget things they want to

remember, as well as information that has been learned and retained for a period of time. In order for them to commit something to long term memory, it may need to be repetitively re-taught.

4. Routine Stable routines that do not change from day to day will make it easier for children with FASD to

know what to expect next, and will decrease their anxiety, enabling them to learn.

5. Simplicity Remember to keep input short and sweet. Children with FASD are easily over stimulated,

leading to 'shutdown', at which point they can take in no more information. Therefore, a simple

environment is the foundation for an effective learning plan.

6. Specific language Say exactly what you mean. Remember that children with FASD have difficulty with abstractions,

generalisations and 'filling in the blanks' when given an instruction. Tell them step-by-step what to

do. This will help them to develop appropriate habit patterns.

7. **Structure** Structure is the 'glue' that enables a child with FASD to make sense of the world. If this glue is

taken away, things fall apart. A child with FASD achieves and is successful because his or her world

provides appropriate structure as a permanent foundation for learning.

8. Supervision Due to their cognitive challenges, children with FASD bring a naivety to daily life situations.

They need constant supervision, as with much younger children, to develop habit patterns of

appropriate behaviour.

Adapted from 'Making a Difference', Yukon Department of Education, Canada, 2006

Social skills/play skills

Every Child Matters outcome: Be healthy Links to EYFS (Early Years Foundation Stage): Personal, social and emotional development

- Children with FASD can practice social and play skills through one-to-one work with a peer with adult support.
- Children with FASD may often choose to remain at one activity for a long period of time (perseveration). This may be because it makes them feel calm. If you want the child to move on to other activities, s/he may need support to do so. Provide a visual cue (e.g. signing, a photograph) that indicates the change of activity, and use a visual timer (e.g. an egg timer) to count down the time to the end of the activity.
- Teach the child appropriate words to identify his or her feelings. Feelings are abstract, so a child with FASD will need to use body cues (e.g. the look on a person's face when angry or sad; what their stomach feels like when they are scared, etc). Label the emotion for the child when it is obvious that s/he is experiencing it. When a child is showing they are happy, you can say, "You're happy," and show them a symbol for 'happy'.
- Use words and gestures to praise children for displaying appropriate social skills.
- Ensure that staff provide role models for appropriate social behaviour in their interaction with the children and each other.
- Encourage simple turn taking games.
- Plan small group work, and support social skills within this.
- Read stories that focus on appropriate social skills.
- Develop role playing scripts for some common social situations (e.g. taking turns). Share the scripts with parents, and
 reinforce them in your setting. This will help the child with FASD to act more appropriately because s/he will know what
 to do next. A role play script will be needed for each new situation. Do not expect the child to generalise from one
 situation to another or even from one room to another.
- Use 'talking items' (e.g. a child holds a teddy or toy to indicate it is their turn to talk). This helps with visualisation of whose turn it is now.
- Children with FASD will not automatically know how to play with some toys, particularly those that require them to perform a sequence of acts (e.g. dressing a doll). Putting your hand over theirs, show the child explicitly how to play appropriately and creatively with a range of toys if this is the case.
- Children with FASD will exhibit parallel play long after early childhood, and will find cooperative play challenging. This is because, as children get older, more time is spent in negotiating game plots and each other's roles. This will be difficult to understand for a child with FASD, and they will need the support of an adult to join in.
- Pretend play requires children to act against their immediate impulses and follow the rules of the game. This will be
 difficult for children with FASD who tend to act impulsively and may not remember rules. Adult support and scaffolding
 will be essential to support children with FASD to participate in pretend or symbolic play, which is an important part in
 the development of 'theory of mind' (knowing and understanding what others may be feeling or thinking).

Social skills/play skills

Every Child Matters outcome: Be healthy Links to EYFS: Personal, social and emotional development

Activities to help with social skills

1. Pass the Beanbag

This is a useful self-awareness game which can help children to gel as they are encouraged to share information about themselves. Children sit in a circle and pass a beanbag round. As each child receives the beanbag, they say their name. The activity can be extended by putting pictures of food or animals in the centre of the circle and asking the child with the beanbag to pick up their favourite.

2. Magic Messages

This game encourages children to use natural actions and gestures. It is also a good game for encouraging observation of people. Children sit in a circle and are told they will be passing a magic message without words around the circle. Start the game by making a simple gesture to the nearest child. That child repeats the gesture to his neighbour and so on along the line. Start off with easy gestures, then increase the complexity (e.g. touch your nose then your ear). Remember the child with FASD may need reminding of the rules and may need prompts and visual aids.

3. Magic Box

This game aims to match appropriate body language to an object. You will need a box with an assortment of pictures or objects. These should include some nice, some unpleasant and some scary items (you have to know your children for this game!). Show the objects to the children, and invite discussion about how each item might make them feel. Put one item in the box, unseen by the children. The box is passed on to the first child who must first mime the emotion they associate with the object (e.g. 'happy', 'scared', 'sad'), and then try to mime what the object is. The rest of the group must try to guess the object. You may have to role play this game individually with the child with FASD before playing it as a group.

4. Gesture Sentences

Seat the children in a semicircle in front of you. Explain that you are going to whisper a simple message to a child (e.g. "Go away!", "Turn around!", "You have a tummy ache"), and that s/he will have to 'show' the message to the group without talking. The rest of the children have to guess what the message is. You may have to role play this game individually with the child with FASD before playing it as a group.

Hyperactivity

Every Child Matters outcome: Be healthy Links to EYFS: Physical development

Many children with FASD have a neurologically based need to move constantly, so it is important to be realistic about how long they can sit still.

Health

- Investigate whether the child's diet or any underlying health problems could be a contributing factor to their behaviour.
- Ensure that the child eats regularly. Watch for behavioural clues to over stimulation or shutdown which may indicate that the child is hungry.

Environment

- Keep the environment structured as far as possible.
- Use full spectrum lighting or natural light instead of fluorescent light.
- Provide a separate area for calming sensory experiences (e.g. vanilla or lavender extracts on a tissue/cloth/favourite toy; lava lamps etc).
- Control computer and TV activities. Children with FASD may have difficulty separating the real world from fictional worlds, and cartoons are especially problematic.

Structured activities

- Allow plenty of time for physical play, particularly immediately before structured activities.
- Break up activities requiring attention with physical activities such as running, jumping or doing physical exercise.
- When asking the child to choose an activity, limit the number of choices available to two or three to avoid them becoming overwhelmed by choice.
- Seat the child on a chair rather than on the floor. If the child needs to sit on the floor, ensure they have a 'spot' to sit on marked with masking tape or a 'special cushion'.
- Plan organised games to increase structure and use energy.
- Encourage the use of 'fidget items' (e.g. a stress ball, Koosh ball, beanbag, spiral shoelace, plastic spiral keyring) to improve concentration.

General

Always give immediate, positive reinforcement.

Coordination

Every Child Matters outcome: Be healthy Links to EYFS: Physical development

Clumsiness and poor coordination can result when children over or under react to the sensory stimuli in their environment. Deep pressure activities can help children with their spatial awareness as well as having a calming effect. Activities to achieve this include:

- Pulling or pushing carts with added weight
- Catching and throwing heavy balls
- · Carrying heavy items such as boxes
- Pulling apart toys (such as Lego)
- Pounding and rolling play dough
- Body stretching (e.g. yoga and dance)
- Gross motor activities (e.g. running, jumping, riding bikes, obstacle courses)
- Hand or foot massage (if this is something the child will tolerate).

In addition, regular movement throughout the day will allow children who need movement to focus and concentrate to stay alert. Activities to achieve this include:

- Bouncing on old mattresses or trampolines
- Swinging on swings
- Rocking on rocking horses and rocking chairs
- Walking and running
- Playground equipment such as slides and climbing frames.

Sleep patterns and eating habits

Every Child Matters outcome: Be healthy Links to EYFS: Physical development

Sleep

- Poor sleep patterns are often a feature of FASD. This will affect behaviour and intellectual function.
- Use neutral calming colours, textures, sounds and scents where the child sleeps.
- White noise, such as that provided by aquariums, can provide a calming effect.
- Natural lighting and soft colours should be used wherever possible.
- Provide a pleasant, predictable sleep routine, which can include such things as a scented bath, hugs and/or stories, before going to bed. Singing to the child or providing a quiet CD can also help to provide a relaxing atmosphere.
- Provide a visual timetable for nap time and bed time.
- Provide items which can help children with FASD to self sooth, such as a weighted blanket (providing deep pressure, which can have a calming effect), a rocking chair and/or a night light.
- Sleeping bags provide a swaddling sensation which may help with some children. They should obviously be of the appropriate weight and thickness for the size and age of the child.
- Heavier flannel sheets on the bed are preferable to light cotton ones.

Eating habits

Children with FASD often have decided food preferences which may affect their nutritional intake. They may try to restrict their diet to foods with similar sensory features.

- At snack times and meal times, remove all unnecessary distractions such as noise and activity, and try to seat the child in the same place every time.
- Observe the child for feeding and sucking problems, and be cautious about holding and feeding an infant at the same time, as this may cause sensory overload. This is because the child may find it difficult to cope with touch and taste at the same time.
- Limit the amount of food given at one time and provide limited choices.
- Use a visual timetable for snack and mealtimes.
- Provide small, frequent meals, and allow extra time for meals remaining seated for long periods will be difficult for a child with FASD.

Complying with routines and boundaries/ understanding danger

Every Child Matters outcome: Stay safe Links to EYFS: Knowledge and understanding of the world

Routines and boundaries are important for all children. However, they must be realistic. Children with FASD will need understanding and adaptive teaching strategies to enable them to access an early years curriculum.

Routines

- Routine is important; variation in routine will confuse a child with FASD.
- Whenever possible, structure the day's activities in exactly the same way every day.
- Too much choice may overwhelm a child with FASD. Limit the choice of activity to two or three.
- Provide structured and supervised activities as far as possible, but be aware that children will need 'down time' to prevent their becoming overtired.
- Use visual timetables and other visual cues to help the child to know what is coming next. Use photographs wherever possible, pictures or symbols should be used only when you are sure that the child has a well developed understanding of them. If a planned activity is cancelled, show this by attaching a universal 'no' symbol (i.e. a circle with a red line through the middle) on top of the original activity cue rather than removing the picture as though the activity no longer exists. A 'surprise' activity can be indicated using a symbol (e.g. a question mark).
- Have a 'start' and 'finish' basket for desktop activities (e.g. puzzles), so the child can remove the puzzle from the 'start basket' and, once the activity is completed, s/he can put it in the 'finish basket'. This helps the child to organise themselves, and reduces the chance of their perseverating. Make sure the child knows what to do after they have finished the activity.
- Use photographic aids to encourage compliance. Take photographs of the child following your setting's 'Golden Rules'. When the child is displaying unwanted behaviour, you can point to the photograph of them displaying desirable behaviour backed up with a verbal instruction. For easy access, these photos could be displayed on a wall or on a chain attached to a wrist strap for staff to access instantly.
- You may need a task board to support the child during activities such as snack time and lunch time. These are mini visual timetables focussing on just one task.
- When the children need to line up, always place the child first or last in line to avoid sensory overload. If the child is last in line, they will need the support of a supervising adult.

Language to aid compliance

- Address the child individually by name before giving instructions. A child with FASD will not understand that an instruction delivered to a group of children includes him/her. Limit and simplify language to avoid the child becoming overwhelmed. This will also give the child time to process what is being said to them.
- Gaining eye contact before issuing instructions is essential as the child with FASD needs to pick up on every visual clue
 possible to aid understanding.
- Use positive language tell the child what you want them to do rather than not to do.

- Always use the same words for the same instruction each time it is given. This helps to embed the instruction into the child's long term memory, so that, when it is used again, they will find it easier to recognise it, understand it and comply.
- Use specific language (e.g. at tidy up time say, "Put the cars in the box," not "Tidy up, please").
- If you are interrupted in the middle of giving an instruction to the child, go back to the beginning and start the sentence again.
- End instructions with the word, "now". Never give instructions for any other time frame.
- The ability of a child with FASD to repeat an instruction back does not signify that s/he understands the instruction. Instructions may need repeating more than once, and you may need to reduce the amount of information in your instruction and break it into smaller steps. If this does not work, try adding a gesture (e.g. point to the object you are talking about) or a symbol or picture. If this is unsuccessful, walk the child through the instruction or guide them hand over hand.

Changes in routine

- Forewarn the child of any upcoming changes, and expect to have to repeat this information. Explain what is required next using visual cues (e.g. if the next activity is outside play, hold up the child's coat or boots).
- At times of celebration and special events (e.g. Christmas, birthdays), introduce things like decorations gradually over a period of time to allow the child to adapt.
- Recognise that the child may refuse to participate in an activity or comply due to sensory processing difficulties.
- If a trip is planned, a pre-prepared book containing photographs of the venue, new people and any other significant details will help to prepare the child and reduce the opportunity for them to feel overwhelmed.

Understanding danger

- Use concrete indicators such as danger cones to mark out areas where children are not allowed to enter.
- Use symbols for hot and cold taps (e.g. sun and snowflake, red and blue).
- Put a permanent ink line on the sides of sinks to prevent a child overfilling the sink.

Desirable behaviour

- Children with FASD will not understand the concept of ownership. This can be taught by marking each child's possessions with a symbol that stands for that child alone. The child should eventually learn that if a particular item does not have their symbol (or name) on it, it does not belong to him/her.
- Teach children how to ask about borrowing something, and practice the words. Make this one of the 'Golden Rules' and reinforce it regularly.
- If the child moves rooms as they get older, the same phrases should be used by the adults in the new room so that the child does not have to try to generalise language to remember the rules.
- Try over correcting an unwanted behaviour. For example, if a child always runs from one side of a room to the other, practice walking up and down the room with an adult several times. You may need to repeat this daily.

- As a reward for desirable behaviour, you could provide a 'surprise box'. Fill a box with a variety of toys and natural
 objects that children may access when they have followed routines and rules. Change some of the contents of the box
 frequently so that there is always a surprise element involved. You may find that the child with FASD prefers the contents
 of the box to always stay the same.
- Develop social stories to assist with comprehension and complying with boundaries and rules. Take photographs of the child doing each of the required stages of the activity in an appropriate manner to reinforce the message. Read the story with the child as often as is necessary to reinforce the rule when the child is calm and receptive.
- Ask your Area SENCo about behaviour management training.

Expressive and receptive language

Every Child Matters outcome: Enjoy and achieve Links to EYFS: Communication, language and literacy; creative development; personal, social and emotional development

- Use visual cues, picture cards and signing. Children with FASD are strong visual learners, so these are essential to aid their understanding.
- Do not interrupt when the child is speaking, s/he may forget what s/he was going to say and will have to start again at the beginning.
- Match your communication level to the child's. If the child uses two-word phrases, you can use three-word phrases to expand speech. Only expand by one or two words at a time (e.g. 'coat hook' to 'coat on hook' to 'hang coat on hook').
- Do not expect children with FASD to understand irony, sarcasm or humour.
- Frame questions in a very direct manner (e.g. instead of "Do you know where your lunchbox is?" ask "Where is your lunchbox?")
- Give the child time to think before expecting a reply or instructions to be followed.
- Use puppets and other media to facilitate the expression of feelings and thoughts.
- Stories should be backed up with visual aids as children with FASD are poor auditory learners.
- Treasure baskets are a very visual and concrete way for children to explore through their senses as well as encouraging language. Suggested items for inclusion in treasure baskets are outlined overleaf. Their use should always be supervised by an adult
- Help children to visualise conversation skills. For example, if they continuously interrupt, explain that their words are 'bumping' into your words.
- Squeezing a sponge in the right hand can help to stimulate the left brain, and may help the child to express better what it is they need.
- Teach letter recognition through concrete activities (e.g. make letters with paper, and glue objects to the paper; cut letters out of sandpaper, and encourage the child to follow the shape with their finger; use sand, shaving foam and gloop for tracing letters with fingers).
- Ask your Area SENCo about the 'Introduction to speech and language difficulties' training.

Suggested items for a treasure basket:

(NB. all items must be large enough not to present a choking hazard.)

- Paper any size, colour or texture (e.g. tissue, wrapping, brown, greaseproof, bags, news, shredded)
- Ribbon fairly short lengths up to 30cm (12") of any width, colour or texture
- Boxes any size or material
- Envelopes any size, colour or type, including padded
- Cardboard any size or colour; boxes, tubes (not loo rolls), etc.
- Material any size, although either pieces of about 45cm (18") square or very big pieces for draping are best; any colour, pattern or texture
- Wood any size or condition (e.g. logs, slices, blocks, dowel)
- Bangles any width, colour or material
- Empty tins any size, with or without lids, but no sharp edges
- Sticky tape any type
- Lengths of chain any material or size, but about 30 to 45cm (12 to 15") is best
- Balls any size, shape or material (e.g. knitted, wooden, golf, holey, raffia)
- Tubing any material or length (e.g. plastic pipes, see-through plastic present boxes)
- Cooking utensils small and multicultural
- Spoons any size or material
- Bowls any size or material
- Corks must be from wine bottles
- Stones any size or colour
- Brushes any size or colour (e.g. paint, pastry, hair, clothes, scrubbing)
- Feathers any
- Cones any, although as sound as possible, and not sticky with pine sap
- Leaves clean and dry, and not from poisonous plants
- Shells any
- Cushion covers for keeping all the above in, secured with zips, buttons, Velcro or ties.

Source: Barbara Skilton at Worcestershire's Early Years and Childcare Service

Appearing overwhelmed

Every Child Matters outcome: Enjoy and achieve Links to EYFS: Communication, language and literacy; creative development; personal, social and emotional development

- Children with FASD find it helpful to prepare for changes in routine before they occur. If steps in a routine are changed, the child who does not generalise will see it as a whole new routine. Try not to skip portions of routines or combine routines. If a routine is interrupted, start the routine from the beginning.
- Use visual timetables, and always warn the child of an impending change (e.g. a fire drill, a trip or a visitor) in his or her daily schedule.
- Prepare the child for changes in structure using Social Stories. If the child's key worker is going to be absent, prepare them whenever possible for that eventuality and prepare cover staff for the child's additional needs.
- Cut down the number of sights and sounds competing for a child's attention. If you are trying to engage the child with a particular toy, remove other objects from the vicinity. If you are encouraging the child to sign, eliminate background noise.
- Whenever possible, rehearse new events beforehand. This is particularly important for transition times such as moving from early education to compulsory education. This should be planned well in advance and incorporated into an Individual Education Plan (IEP) shared with all professionals involved and the school.
- Use calming techniques. Lavender and vanilla extracts on a tissue/cloth/favourite toy can be very soothing, and lava lamps can help to calm a child.
- Make rooms/spaces visually concrete by using masking tape, hoops and floor mats to map out the child's and/or other children's spaces.
- Limit choices. Too many activities to choose from will be overwhelming, as will too many pencils/crayons, paint colours, etc.
- Store toys and equipment together by type only, not by size or space (e.g. put all dolls together; all trucks together; all reading books together; all colouring books together).
- Put a photograph of the child by his/her peg and any other space belonging specifically to him/her.
- Try to ascertain how the child experiences his/her environment. You can do this by encouraging the child to describe everything s/he can feel through his/her senses at a point in time (i.e. describe everything s/he can smell, what s/he can feel, what s/he can see, what s/he can hear and what s/he can taste). Do not do it all at once, otherwise s/he will become overwhelmed. This will give some clues as to a child's understanding of his/her environment.
- Ensure that toilet areas are friendly and relaxing, as the smell and echo of toilets and bathrooms can be frightening.
- Think about the learning environment which is especially important to the child with sensory processing difficulties. The following could be disturbing for children with FASD, and can cause them to 'shut down':
- o Large rooms without carpeting which may cause echo
- o The sounds of fans, air conditioning systems and humming lights
- o Artificial lighting
- o Extreme temperatures (too hot or too cold).

Attention/concentration

Every Child Matters outcome: Enjoy and achieve Links to EYFS: Communication, language and literacy; creative development; personal, social and emotional development

Develop a set of class or setting rules for 'good listening' such as:

- Sit quietly in your own space
- Look at the person who is talking
- Think about the words
- Only one person speaking at a time.

Use prompts such as:

- Good sitting!
- Good looking!
- Good thinking!
- Good waiting!
- Good listening!

The child with FASD may take longer to learn the rules, and will need constant reminders. Reinforce them with pictures of the child enacting each of the rules to use as a visual reminder.

- Use visual timetables to provide concrete clues to what is happening now and next.
- Seat the child on a chair rather than the floor, or provide a 'spot' or special cushion.
- Always seat the child near to the adult who is talking at story time, circle time, etc. so that s/he can see the teacher's face and gain eye contact.
- Provide one-to-one adult support during structured activities/story time.
- Use puppets to model 'active listening'.
- Eliminate potential distractions such as open windows and doors or scraping chairs (particularly distracting to a child with FASD).
- Reduce the number of visual distractions such as displays, posters and ceiling decorations as these overwhelm a child with FASD.
- Neutral tones rather than bright colours should be used for interior décor, furniture and floor coverings wherever possible.
- Put furniture and activities in the same place consistently to enable the child to map where things are. If things must be changed, change one thing at a time; a total change in environment will overwhelm a child with FASD.
- Children with FASD will require more 'down time' than other children, but this must be structured, so they know what to expect next.

• Encourage the child to use 'fidget items' (e.g. beanbags, elastics, koosh balls, stress balls, spiral shoelaces) which can help with listening skills.









Spiral shoe lace

© fasdsolutions

- Plan short simple activities that have a clear beginning and end, and guide the child through the task until it is completed, so that s/he gets used to being rewarded for its completion.
- Provide a surprise box (see Routines/boundaries on pages 9 to 11).
- Use 'special time' or an activity of the child's choice as a reward.
- Ask your Area SENCo about the Listen & Learn programme (Fidget).

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Attention/concentration

Every Child Matters outcome: Enjoy and achieve

Links to EYFS: Communication, language and literacy; creative development; personal, social and emotional development

Activities to help with attention and listening

1. Sound location

Hide a noisy toy or clock with a loud tick somewhere in a quiet room and see if the child can find it by listening carefully to where the sound comes from.

2. Stop and go

Find a noisy toy or musical instrument. When the toy or instrument is being noisy the child can run around the room and when it stops, they must stop. You may need to rehearse the cue for 'stop' several times before the child learns what is meant. Expect to have to repeat the rules each time this game is played.

3. Matching sounds

Fill some opaque containers each with different small objects such as paper clips, dried rice, dried beans, coins or small pet bells. Make two of each so that when you shake the containers you can find the ones that sound the same. Make sure the containers are sealed so that small pieces do not fall out as this could be a choking hazard.

4. Copying 'loud' and 'quiet'

In a small group, take turns to make loud and quiet sounds. Talk about the different sounds (e.g. "That was a big, loud sound").

5. Hot and cold game

Hide an object in the room. Direct a child to the object by beating on a drum, loudly as they get close to it (hot) and quietly as they move away (cold).

6. Sound lotto

Use a manufactured game or make up your own sound tape/CD with a few pictures for the child to identify and match to different sounds. Keep to simple everyday objects such as cars and household items that the child will know well.

Short term memory

Every Child Matters outcome: Enjoy and achieve

Links to EYFS: Communication, language and literacy; creative development; personal, social and emotional development; problem solving, reasoning and numeracy

The environment

- Label resources/storage with pictures or photos.
- Use large, permanent ink arrows to indicate in which direction to turn controls on electrical and electronic equipment.
- Use red/green ('stop'/'go') colour codes on push buttons on tape recorders, etc.
- Use a 'left-right' technique to aid memorisation of important skills. For example, lay the table left to right, do puzzles left to right, etc.

Practice

- Provide clear, precise, short instructions.
- Only give one instruction at a time.
- Be clear about what your learning objective is and demonstrate it visually.
- Only teach one new thing at a time (e.g. good sitting).
- Use constant repetition and reinforce with visual cues.
- Differentiate language and vocabulary to match the child's developmental level.
- Break tasks down into small steps, and use photographs to depict each step in a sequence so the child knows what comes next.
- Always teach new skills by starting at the child's development level. Start with what you know the child can already accomplish to raise their self-esteem.
- Make up songs to help the child remember routines for getting dressed/undressed, toilet time, etc.
- Always encourage the child to get dressed or undressed in exactly the same way each time (e.g. briefs, left sock, right sock, t-shirt, shorts, left shoe, right shoe).
- Maintain the same daily routines for activity changeover time (e.g. toileting, snack times, registration).
- Sensory input is important to children with FASD. Use multisensory approaches to teaching and learning as much as possible.
- Ensure that everyone, including parents, uses common language and methods, and always uses the same language for instructions.
- Use backward chaining to teach new tasks. Partially complete the activity for the child, then allow him or her to finish it. Gradually add on previous steps until the child is able to complete the entire activity. This works well for activities where a routine is involved such as getting dressed, as the child experiences achievement without having to remember all the steps at once.
- Having a conversation about an activity or event, at the time that they occur, helps children to construct a personal history about themselves and assists with long term retention of information.

- The capacity of the working memory (short term memory) is affected by word length, phonics and how fast a child speaks (children who speak slowly retain less information generally). Use short, simple words and sentences, and try to avoid using words that sound similar in the same sentence (e.g. hat, rat, tap).
- Individual Education Plans (IEPs) should always start with where the child is developmentally (see attached development chart).
- Targets should focus on the child's interests.

Development chart

Appropriate expectations of children with FASD according to chronological and developmental age

developmental age	
Chronological age	Developmental age
 Age 5 Go to school Follow three instructions Sit still for 20 minutes Interactive, cooperative play, share Take turns 	 Age 5 going on 2 Take naps Follow one instruction Active, sit still for 5 to 10 minutes Parallel play My way or no way
 Age 6 Listen, pay attention for an hour Read and write Line up on their own Wait their turn Remember events and requests 	 Age 6 going on 3 Pay attention for about 10 minutes Scribble Need to be shown and reminded Do not wait gracefully, act impulsively Require reminders about tasks
Age 10 Read books without pictures Learn from worksheets Answer abstract questions Structure their own playtime/breaktime Problem solve independently Learn inferentially, academically and socially Know right from wrong Have physical stamina	 Age 10 going on 6 Beginning to read, with pictures Learn experientially Mirror and echo words and behaviours Require supervised, structured play Learn from modelled problem solving Learn by doing, experiential Developing sense of fairness Easily fatigued by mental work
 Age 13 Act responsibly Organise themselves, plan ahead, follow through Meet deadlines after being told once Initiate, follow through Have appropriate social boundaries Establish and maintain friendships 	 Age 13 going on 8 Need reminding Need visual cues, role modelling Comply with simple expectations Need prompting Kinaesthetic, tactile, lots of touching In your space Forming early friendships
 Age 18 Verging on independence, have a life plan Maintain a job and leave school Relationships, safe sexual behaviour Budget their money Organise/accomplish tasks at home, school 	 Age 18 going on 10 Need structure and guidance Limited choice of activities Live for 'now'; little ability to project into future Giggles, curiosity, frustration Need a financial allowance

Need to be organised by adults

Adapted from 'Making a Difference', Yukon Department of Education, Canada, 2006

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and work

Disruptive/impulsive/aggressive behaviour (including outbursts)

Every Child Matters outcome: Make a positive contribution Links to EYFS: Personal, social and emotional development

- Use one-to-one adult support, particularly when there is an activity that may cause the child to become over stimulated.
- Support the child in working through schemas (patterns of linked behaviours which children can generalise and use in
 different situations). For example, if children show an interest in running around the room, they could be displaying a
 rotation schema. Find activities that allow this exploration of play to flourish, such as circular train tracks, circle games,
 etc. Your Area SENCo will be able to provide more information about schemas.
- Give jobs/responsibility to the child to divert their attention from events which may cause frustration.
- Use 'thumbs up' or 'thumbs down' (with actions) to describe desirable or undesirable behaviour straight away. To develop awareness of cause and effect with behaviour show the child a simple sequence of symbols (e.g. 'kicking' and 'sad').
- Provide a physical activity such as digging or sweeping which will provide muscle work and may help to calm a child who is feeling angry.
- Discuss and explain the child's and other children's feelings to help the child to acknowledge their feelings and give a name or label to that feeling. For example, if a child is hitting out or kicking toys or furniture, instead of asking them to stop, say, "You're very angry, aren't you?", thus providing them with a way to describe their emotions. Back this up with alternative strategies for coping with their anger, such as kicking a ball outside for five minutes.
- Develop an 'angry box'. Fill a box with objects and items suitable for children to express their anger or things that will help to calm them, such as calming music or stories or bubble wrap to pop. This will work best if you help the child to identify their feelings and label them as 'anger' first, so that they can access the box themselves when they are feeling angry.
- Develop a comfort corner where children can be encouraged to go when they are feeling anxious or aroused (before the
 outburst occurs). Equip this with beanbags, cushions, blankets, dark sunglasses, calming music with headphones, etc. and
 ensure it is secluded with the use of screening.
- Use a sensory room/sensory input to calm a child having an outburst. This could be as simple as a small tent or box turned on its side. Equip this with headphones to block out noise, dark sunglasses to block out light, soft cushions and quilts, and a tape player with calming music. Drops of vanilla or lavender on toys, cushions and blankets will also help.
- For some children, allowing the behaviour to run its course, after ensuring the child is in a safe place, may work.
- Time out should be used only for very short periods of time and in the same place every time. Consider the use of 'time out' or 'cool down' chairs. This is unlikely to change the behaviour of the child, but will allow time for anger and frustration to subside.
- Use one clearly understood consequence for all misbehaviour, to avoid confusion and enable connections to be made between cause and effect.

Common misinterpretation of behavioural responses in children with FASD

Every Child Matters outcome: Make a positive contribution Links to EYFS: Personal, social and emotional development

Behaviour observed	Could be misinterpreted as	Should be interpreted as
Non-compliance	Willful misconductAttention seekingStubborn	 Difficulty translating verbal directions into action Does not understand
Repeatedly making the same mistakes	Willful misconductManipulative	Cannot link cause to effectCannot see similaritiesDifficulty generalising
Not sitting still	Seeking attentionBothering othersWillful misconduct	 Neurologically based need to move while learning Sensory overload
Does not work independently	Willful misconductPoor parenting	Chronic memory problemsCannot translate verbal directions into action
Does not complete homework /unmotivated	IrresponsibleLazyUnsupportive parents	 Memory deficits Unable to transfer what is learned in class to a homework assignment Inability to link today's decisions with future opportunities
Often late	Lazy, slowPoor parentingWillful misconduct	 Cannot understand the abstract concept of time Needs assistance to organise
Poor social judgement	Poor parentingWillful misconductAbused child	 Not able to interpret social cues from peers Does not know what to do
Overly physical	Willful misconductDeviancy	Hyper or hyposensitive to touchDoes not understand social cues regarding boundaries
Stealing	Deliberate dishonestyLack of conscience	 Does not understand concept of ownership over time and space Immature thinking ('finders, keepers')
Lying	Deliberate dishonestySociopathic behaviourLack of conscience	 Problems with memory/sequencing Unable to accurately recall events Trying to please by telling you what they think you want to hear
Egocentric	SelfishnessOnly cares about self	 Only seeing the superficial or concrete level of social behaviour Does not link cause and effect
Volatile	Poor parentingAggressive natureShort tempered	 Exhausted from stress of trying to keep up Extremely over stimulated
Inconsistent performance	Not trying hard enough	 Chronic short term memory problems Inability to generalise learning from one situation to another

Adapted from 'Making a Difference', Yukon Department of Education, Canada, 2006

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Problem solving, reasoning and numeracy

Every Child Matters outcome: Achieve economic well being Links to EYFS: Problem solving, reasoning and numeracy

- Use visual aids and equipment to make learning concrete. Abstract concepts are difficult for children with FASD to comprehend.
- Accept that learning will not take place by rote. It is more likely to occur through spontaneous activities such as songs and rhymes.
- Teach time by association. Measure periods of time by, for example, the length of time it takes to tidy up or fill a container with sand or water.
- Always use the same language when talking about time or numbers (e.g. do not use 'zero' one day and 'nought' the next).
- Make the passing of time easy to visualise by using paper or plastic chains (paper clips are ideal). Each link can represent a period of time from one to five minutes. The adult removes one link every one to five minutes, so the child can see time passing. The objective could be to complete a task by the time all of the links are gone. The child must be able to see each link being removed with a reminder that 'time is passing'.
- Teach colours through sensory input (e.g. to teach the colour red, wear red clothes, paint with just red paint, use only red paper for craft activities, serve tomatoes, apples and other red fruit at snack time).
- Teach numbers with songs and rhymes. Many children with FASD respond well to instructions and information being imparted through the use of music.
- Teach cause and effect with simple toys, such as inset puzzles, which make a noise when a piece is located correctly, spinning tops, fragranced bubbles, cogs and gears, etc.

Problem solving, reasoning and numeracy

Every Child Matters outcome: Achieve economic well being Links to EYFS: Problem solving, reasoning and numeracy

Activities to help with attention and listening

Activities which include music/rhyme and sensory input will work well, as will activities involving role play.

- 1. Provide each child with a simple instrument such as an egg shaker or maraca and play music with a simple rhythm. Encourage the children to listen to the music and use their instrument to keep to the beat by tapping the rhythm on different body parts.
- 2. Sing a variety of counting songs backed up with props. Be prepared to repeat the same songs until the child knows them well. The child with FASD may need to re-learn songs they appear to know well, as their memory is inconsistent.
- 3. Construct multisensory number and shape sacks for children to explore aspects of mathematics. Some examples are:
- A sack or box focussing on triangles, which could include a small book about triangles, a tetrahedron, several 2D triangles, a pin board with some elastic bands, and a template for drawing triangles
- A sack for the number three, which could contain 'Goldilocks and the Three Bears' three bowls, three bears, three spoons and a tape of the story to emphasise 'threeness'
- A sack for developing positional language, which could include a well known children's character, such as Bob the Builder, a suitcase and a variety of items that Bob needs to pack for his holiday. Encourage the children to tell you which item will be packed first, next, last, underneath, on top of, or next to another item.

Children could explore the sacks during free play as well as them being resources for practitioners to use at circle time or for small or large group work.

- 4. Bring multisensory dimensions to well known stories. For example, read 'Handa's Surprise' to the children, either as a small or large group, using puppets of the animals in the story and real fruit as props. After the children have talked about the colours, shapes and quantities of fruit, they could smell and taste all the fruit from the story.
- 5. If you have access to a protected outside area, allow the children to fill a bucket with soil and collect stones, sticks and leaves with which they can make a mud monster. The children can then compare the sizes and shapes of their mud monsters.
- 6. Pretend shops with realistic resources provide endless opportunities for concepts related to numeracy, reinforced with concrete props (examples are provided overleaf). Bear in mind that the child with FASD may need adult support to participate in any role play situation.

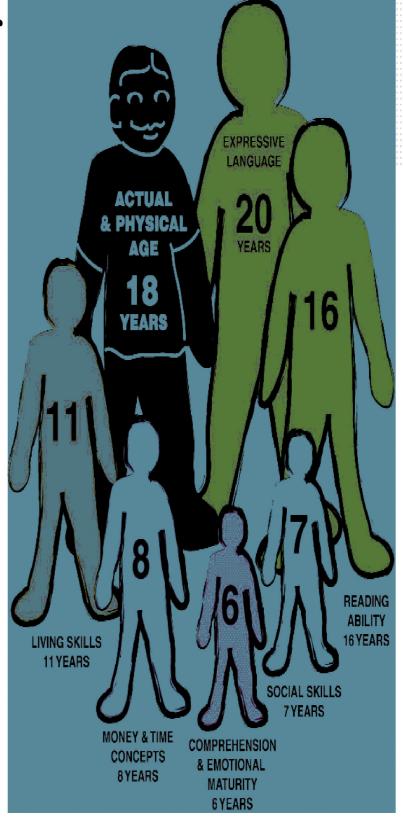
Problem solving, reasoning and numeracy

Every Child Matters outcome: Achieve economic well being Links to EYFS: Problem solving, reasoning and numeracy

Role play, shops and numeracy

Resources required	Numeracy activities possible
Tins of food, play food items, counter, till, money, swipe for cards, food trays, healthy biscuits and snacks to sell, baskets	Quantity, money, shape, size of items
Plants, trowels, plastic flowers, seed packets, watering cans, seed trays, sieve, bags of compost	Counting flowers, plants, seeds, money to pay for goods, quantities of compost to fill pots; using mathematical language (e.g. full, half full and empty)
Builders' trays, sand, gravel, spades, wheelbarrows, hard hats, buckets, wood, nails, play and/or real bricks, trowels, cones, small cars, clipboards, tape measures	Matching and counting equipment, measures; using mathematical language (e.g. full, half full and empty) – spadefuls to fill a bucket, stocktaking and ordering
Cones, tubs, scoops, sprinkles, flakes, sauces	Counting, matching, money, including change
Letters, stamps, scales, measures for envelope sizes, parcels, uniforms	Comparisons of size and weight, cost of stamps, distance travelled between where something is posted and its destination
	Tins of food, play food items, counter, till, money, swipe for cards, food trays, healthy biscuits and snacks to sell, baskets Plants, trowels, plastic flowers, seed packets, watering cans, seed trays, sieve, bags of compost Builders' trays, sand, gravel, spades, wheelbarrows, hard hats, buckets, wood, nails, play and/or real bricks, trowels, cones, small cars, clipboards, tape measures Cones, tubs, scoops, sprinkles, flakes, sauces Letters, stamps, scales, measures for envelope

An 18 year old with FASD





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Recommended resources

The following resources will assist with further research about supporting children with a range of needs in early years settings. Please refer to Information Sheets 9 and 10 provided in this pack for a full list of suggested resources.

Books

Bayley, R. and Hughes, C. (2004) *Special Educational Needs in Practice: Exploring emotions*. London: Step Forward Publishing.

DfES (2007) The Early Years Foundation Stage: Setting the Standards for Learning, Development and Care for Children from Birth to Five. Nottingham: DfES Publications. [Online at: www.standards.dfes.gov.uk/eyfs/ accessed: 20.11.08]

Garner, M. and Featherstone, S. (2004) *Including Children with Attention and Behaviour Difficulties in the Foundation Stage*. Husbands Bosworth: Featherstone Education Ltd.

Glen, A., Cousins, J. and Helps, A. (2003) Behaviour in the Early Years: Tried and tested strategies. London: David Fulton.

Hutchinson, N. and Smith, H. (2004) *Intervening Early: Promoting positive behaviour in young children*. London: David Fulton.

Carpenter, B. and Egerton, J. (eds) (2005) *Early Childhood Intervention: International perspectives, national initiatives and regional practice*. Coventry: West Midlands SEN Regional Partnership.

Carpenter B. and Egerton, J. (eds) (2007) New Horizons in Special Education: Evidence-based practice in action. Clent: Sunfield Publications.

Qualifications and Curriculum Authority (2008) Every Child Matters at the Heart of the Curriculum. London: QCA. [Online at: www.qca.org.uk/libraryAssets/media/ECM.pdf accessed: 20.11.08]

Bibliography

The following literature has been useful in compiling the strategies in this document:

Abel, E.L. and Sokel, R.J. (1987) 'Incidence of fetal alcohol syndrome and economic impact of FAS-related anomalies', Drug and Alcohol Dependence, 19, 51–70.

Autti-Ramo, I. (2002) 'Foetal alcohol syndrome – a multifaceted condition', Developmental Medicine and Child Neurology, 44, 141–144.

Briggs, M. and Davis, S. (2008) *Creative Teaching: Mathematics in the early years and primary classroom.* London: David Fulton.

British Medical Association Board of Science (2007) Fetal Alcohol Spectrum Disorders: A guide for healthcare professionals. London: BMA.

Department for Education and Skills (2007) *Early Support Family Pack*. Annesley: DfES Publications. (Especially the 'Information for parents' and 'Multi-sensory impairment' sections)

Dorris, M. (1989) The Broken Cord. New York, NY: Harper & Row.

Gessner, B., Bischoff, H., Perham-Hester, K., Chandler, B. and Middaugh, J. (1988) 'The educational attainment of children with Fetal Alcohol Syndrome', *State of Alaska Epidemiology Bulletin*, 2 (3), 1–14.

Hayden, S. and Jordan, E. (2003) *Language for Learning: Foundation Stage*. Worcester: Worcestershire County Council and Wyre Forest NHS Trust.

Howe, D. (2005) Child Abuse and Neglect: Attachment, development and intervention. Basingstoke: Palgrave Macmillan.

Jones, S. and Cunningham, L. (2004) FASD Strategies not Solutions. Edmonton, Canada: Region 6 Edmonton and Area Child and Youth with FASD Sub-Committee. [Online at: www.region6fasd.ca accessed: 18.11.08]

Kleinfeld, J. and Wescott, S. (eds) (1993) Fantastic Antone Succeeds!: Experiences in educating children with fetal alcohol syndrome. Fairbanks, AK: University of Alaska Press.

McNiff, J. and Whitehead, J. (2005) Action Research for Teachers: A practical guide. London: David Fulton.

McNiff J., Lomax P. and Whitehead, J. (2003) You and Your Action Research Project (2nd edn). London: RoutledgeFalmer.

Mukherjee, R. (2004) Foetal Alcohol Syndrome: An overview of the literature. London: St Georges Hospital Medical School.

O'Malley, K.D. (2007) ADHD and Fetal Alcohol Spectrum Disorders (FASD). New York, NY: Nova Science Publishers.

Roberts-Holmes, G. (2005) Doing Your Early Years Research Project: A step-by-step guide. London: Paul Chapman.

Saskatchewan Institute on Prevention of Handicaps (2003) *Foetal Alcohol Spectrum Disorder: A resource for professionals*. Saskatoon, Canada: Saskatchewan Institute on Prevention of Handicaps.

Speiker, S. (2007) 'Improving the mental health of infants in foster care', CHDD Outlook, 18 (Spring), 4.

Streissguth, A.P., LaDue, R.A. and Randals, S.P. (1988) A Manual on Adolescents and Adults with Fetal Alcohol Syndrome with Special Reference to American Indians. Washington, DC: Indian Health Service.

Streissguth, A.P. and Kanter, J. (eds) (2002) The Challenges of Foetal Alcohol Syndrome: *Overcoming secondary disabilities*. Seattle, WA: University of Washington Press.

Streissguth, A.P., Barr, H.M., Kogan, J. and Bookstein, F.L. (1996) Understanding the Occurrence of Secondary Disabilities in Clients with Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE): Final report to the Centers for Disease Control and Prevention (CDC), August 1996. Seattle, WA: University of Washington, Fetal Alcohol and Drug Unit.

Tindle, E. (2002) 'Raising an FAS/FAE child: helping carers cope', Australian Journal of Guidance and Counselling, 12 (1), 50–62.

Qualifications and Curriculum Authority (2008) Every Child Matters at the Heart of the Curriculum. London: QCA. [Online at: www.qca.org.uk/libraryAssets/media/ECM.pdf accessed: 20.11.08]

Yukon Education (2006) Making a Difference: Working with students who have Fetal Alcohol Spectrum Disorders. Yukon Department of Education, Special Programs, Canada: [Online at: www.education.gov.yk.ca/pdf/fasd_manual_2007.pdf accessed: 20.11.08]

In addition a number of conferences attended have informed the strategies in this document:

- Supporting the FASD child in a Pre-School Setting, Woodstock, Oxfordshire, FASD Trust
- Binge Britain: Significant Harm for the Unborn Child, Ormskirk, Liverpool, Parents for Children
- Tackling the Challenge of FASD, London, NOFAS-UK.

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3 Bears Pre-School, Wychavon

Avonvale Special Needs Pre-School, Wychavon

Abacus Nursery School, Bromsgrove

Abbey wood First School, Redditch

Cookley Primary School, Wyre Forest

Fairfield Day Nursery, Worcester

Gorse Hill Community Primary School – Nursery Class,

Worcester

Ducklings Day Nursery, Bromsgrove

Holly Trees Day Nursery, Redditch

Kidderminster Road Home Nursery, Bromsgrove

King's Hawford Kindergarten, Wychavon

In-B-Tweenies Pre-School, Wyre Forest

•

Jacky Howard, Childminder, Redditch

The Lenches Pre-school Group, Wychavon

Lickey Hills Primary School, Bromsgrove

Little Angels Nursery UK Ltd, Redditch

London Road Playgroup and Pre-School, Worcester

Mount Carmel Pre-School, Redditch

Pauline Smith, Childminder, Wychavon

The Playhouse Pre-School, Wychavon

Playspace Nursery, Malvern

Poppins Day Nursery, Worcester

Sidemoor Pre-School, Bromsgrove

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St. Oswalds Nursery and Wrap Around Care, Wyre Forest

Sugarbrook Pre-School, Bromsgrove

Theresa Murphy, Childminder, Wyre Forest

Upton Pre-School, Malvern

Walnut Cottage Nursery, Malvern

WANDS Nursery, Wychavon

Westlands First School, Wychavon

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