What Early Childhood Educators Need to Know about Fetal Alcohol Spectrum Disorder (FASD)



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What Early Childhood Educators Need to Know about FASD

2010

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Andrea Auch, Interagency FASD
Mary Cox-Millar, Manitoba FASD Centre
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Anita Pozaluko, Interagency FASD
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Introduction

This guide is intended for staff, early childhood educators (ECEs) and child care assistants (CCAs), that work in child care programs with children with fetal alcohol spectrum disorder (FASD). ECEs typically have two to four years of post-secondary education in child development. They are often supported by CCAs who have a minimum of 40 hours of training. ECEs and CCAs work in all types of child care programs.

The strategies outlined are general and may also be helpful for other children who share some of the same learning needs. Many of the strategies that will be discussed may also be useful for parents to use at home. Success is often achieved when ECEs and parents work together to create a supportive environment for the child in both the child care program and at home.

The goal of this resource guide is to provide ECEs with a clear understanding of the needs of children with FASD by:

- defining fetal alcohol spectrum disorder (FASD)
- describing the common learning and behavioural characteristics of children with FASD
- suggesting strategies that may be helpful in meeting the needs of these children in a child care program and at home
- suggesting ways of developing and maintaining a strong, supportive connection between families and child care programs.

Throughout this document, the use of the word "parent" refers to caregivers who live with the child and are the primary caretakers. This includes foster parents and legal guardians.

Throughout this document, the term “child care program” refers to a provincially licensed facility that provides one or more of the following types of care:

• Infant	Children 12 weeks to two years of age
• Preschool	Children two to six years of age
• School age	Children six to 12 years of age
• Nursery school	Limited hours or days per week for children six years and under
• Family child care home	Maximum of eight children from 12 weeks to 12 years being cared for in the home of a licensed provider
• Group family child care home	Family child care home providing care for a maximum of twelve children by more than one licensed provider

For more information see www.manitoba.ca/childcare.

It is important to recognize that the effects of FASD vary in range and severity for each individual. *As a result, no two children with FASD learn and function in exactly the same way*. Your knowledge and experience, guidance and encouragement are vital to the child's learning. ECEs may need to adapt, or use selectively, the strategies provided to meet the needs of each child.

Preparing for a new child with FASD to enter the program requires:

- getting to know the individual child
- building a caring relationship with the child
- learning about FASD
- talking with parents and the child about the child's strengths and needs
- knowing how best to communicate with the child
- becoming aware of what adjustments may be necessary in your daily program
- knowing where to get help when needed

By working together, you can create a physical, cognitive, social and emotional environment which will foster the child's early childhood development, self-esteem and readiness for lifelong learning.

What is FASD?

Fetal alcohol spectrum disorder (FASD) is a term that describes a wide range of effects that can occur in an individual who was exposed to alcohol during pregnancy (Chudley et al. 2005). These effects may include physical, cognitive, social and emotional (behavioural) disabilities which last a lifetime. FASD itself is not a diagnostic term, but rather an umbrella term under which three specific medical diagnoses can be made. They are:

- Fetal Alcohol Syndrome (FAS)
- Partial Fetal Alcohol Syndrome (pFAS)
- Alcohol Related Neurodevelopmental Disorder (ARND)

These diagnoses need to be made through a multidisciplinary assessment.

First described in 1973, FASD is a complex disorder. People who live with this disability experience a wide range of effects. Some individuals have severe growth delays, intellectual disabilities, birth defects and characteristic dysmorphic facial features. Others have typical growth, facial features and intellectual abilities, but with lifelong deficits in several domains of brain function.

FASD is often referred to as a "hidden" disability because its physical characteristics can be subtle and may go unrecognized. Many children with FASD are endearing and affectionate and these qualities can mask the seriousness of this lifelong neurological disability.

It is important to note that those with ARND are most at risk of being misunderstood because there are no physical indicators of FASD - they have average growth and typical facial features. The only difference among ARND, FAS and pFAS is the absence of physical characteristics, not the severity of brain dysfunction. The spectrum of brain differences with FASD varies from individual to individual and causes many different learning, behavioural and daily living challenges. Individuals with FASD have many strengths, skills and interests. It is important that their strengths are recognized, nurtured and developed.

Many factors influence the severity and type of effects on the fetus, including the frequency, amount, and timing of alcohol consumed, the mother's ability to metabolize alcohol, the mother's overall health and nutrition, the mother's use of other legal and illegal drugs, the age of the mother and even the fetus's genetics. There is no known safe amount of alcohol use during pregnancy.

The Diagnostic Process

An early diagnosis is beneficial to allow access to education, interventions and resources that support children to develop to their fullest potential. The diagnostic centre for FASD in Manitoba is The Manitoba FASD Centre. The Centre is a multidisciplinary assessment, education, training and research service of the Winnipeg Regional Health Authority Child Health Program.

The Centre provides multidisciplinary assessment, diagnosis and short term follow-up services where there has been confirmed prenatal exposure to alcohol. Diagnostic services are provided for children and youth up to the age of 18. Referrals are accepted from health care providers, families and other agencies with the consent and involvement of the legal guardian. Referrals forms are available on the Manitoba FASD Centre website (www.fasdmanitoba.com).

The Referral Process

Once a request for an assessment has been received, the initial process focuses on acquiring accurate information to support the assessment and diagnosis including: family history, birth history, exposure to alcohol during pregnancy, medical history, developmental history and reports from child care programs and schools regarding development, learning and behaviour. Individuals are assessed by a multidisciplinary team that may include a developmental pediatrician, a geneticist, an occupational therapist, a speech language pathologist, a psychologist and a social worker. Caregivers and professionals who know the individual (family members, social workers, psychologists, education support personnel etc.) may be invited to meet with the diagnostic team during this process. Not all referrals will necessarily result in an assessment for FASD.

The assessment and diagnosis is formulated into a report containing the assessment findings, medical diagnosis and recommendations. A summary report is available (upon consent from the legal guardian) to caregivers, educators and biological families as well as other individuals who work with the individual. The assessment also provides important information about the individual's unique needs and learning style and allows interventions to be tailored to his or her strengths and challenges.

The Centre also offers short-term follow-up with family, school and community resources regarding intervention strategies and available community resources specific to the individual with FASD. An education series for families, caregivers, educators and others living and working with children and adolescents with FASD is offered twice yearly.

For more information on diagnostic services contact:

Manitoba FASD Centre

633 Wellington Crescent

Winnipeg MB R3M 0A8

Phone: 204-235-8866

www.fasdmanitoba.com

Fetal Alcohol Spectrum Disorder (FASD)

FASD IS AN UMBRELLA TERM THAT ENCOMPASSES THREE MEDICAL DIAGNOSES:

• Fetal Alcohol Syndrome • Partial Fetal Alcohol Syndrome and
• Alcohol Related Neuro-developmental Disorder

Fetal Alcohol Syndrome (FAS)

Physical indicators:

Small for age

Distinctive facial appearance:

- Small eyes
- Smooth philtrum (area between the nose and upper lip)
- Thin upper lip

Abnormal brain function

Partial Fetal Alcohol Syndrome (pFAS)

Physical indicators:

Presents some, but not all, of the physical signs of FAS

Abnormal brain function

Alcohol Related Neuro-developmental Disorder (ARND)

Physical indicators:

There are no identifiable physical features specific to ARND

Abnormal brain function

Abnormal brain function, evident throughout the spectrum, includes impairment in at least three of the following brain domains:

- Hard and soft neurological signs (including sensory-motor)
- Cognition (IQ)
- Academic achievement
- Communication: receptive and expressive
- Memory
- Executive functioning and abstract reasoning
- Attention deficit/ hyperactivity
- Adaptive behaviour, social skills, social communication
- Brain structure (MRI, head circumference or size)

Confirmation of maternal prenatal alcohol exposure is required for a diagnosis of FAS, pFAS and ARND.
There is also the diagnostic category "FAS without maternal confirmation of alcohol exposure".

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For more detailed information on the diagnostic criteria, view *Fetal Alcohol Spectrum Disorder: Canadian Guidelines for Diagnosis, published in the Canadian Medical Association Journal*, found at <http://www.ecmaj.com/cgi/content/full/172/5_suppl/S1>.

Jason was born with FASD. Although he was not premature, he was small. He seemed unable to settle and often cried for long periods of time. He slept for very short periods and usually woke up screaming. Jason did not seem to like being held close. He would give a high-pitched yell and stiffen up. He was often jittery and feeding was difficult — taking as long as an hour-and-a-half. He had to be monitored very carefully by health care professionals to ensure that he was gaining weight.

Common Characteristics of Children with FASD

Infants

Some or all of the following may apply to infants with FASD:

- small
- often trembling and difficult to sooth, may cry a lot
- weak sucking reflex
- little interest in food, feeding difficulties (feeding can take hours)
- difficulties adjusting to solid food because of disinterest and poor appetite
- weak muscle tone
- high susceptibility to illness
- unpredictable sleep patterns/cycles
- high sensitivity to sights, sounds and touch
- failure to thrive (may continue to lose weight longer than normal after delivery)
- delayed developmental milestones (ex: walking, talking)
- problems with bonding

As these infants get older, you generally see a high orientation to people and the absence of stranger anxiety. Infants who are alcohol-affected may be difficult to care for. The challenges around sleeping and feeding can be especially problematic and lead to exhaustion for parents and ECEs.

Preschool children

Some or all of the following may apply to preschoolers with FASD:

- feeding and sleep problems
- poor motor coordination, and poor fine and gross motor control
- flitting from one activity/area to another, exhibiting butterfly-like movements
- more interest in people than objects
- difficulty with social skills
- overly friendly and indiscriminate with relationships, may seek out affection

- expressive language may be delayed or children may be overly talkative (but lack richness of speech, thought or grammar complexity)
- receptive language often delayed; even if children are talkative, they may not understand much of what is said to them
- inability to understand danger, often fearless
- low tolerance for frustration and prone to temper tantrums
- difficulty following directions or doing as told
- short attention span
- easily distracted or hyperactive
- difficulty with changes and transitions, prefer routines
- difficulty integrating sensory information, such as sound, touch, light, smells, movement, etc.)

In the preschool years, many new problems can emerge making it increasingly difficult to care for these children. For example, hyperactivity, risk-taking and poor motor skills can often result in these children being exposed to danger or hurting themselves or others. Furthermore, their friendliness and lack of discrimination in relationships can make them vulnerable to abuse.

Carrie is a small four year-old with FASD who attends her neighbourhood pre-school program. She is often smiling and always looks very busy as she moves from one activity area to another. When clean-up time is called, Carrie continues playing. When approached by the early childhood educator, she runs to another area as if she wants to be chased. The ECE guides her hands to put some blocks back on the shelf, but when left alone Carrie goes to the fish tank to watch the fish.

School-age children

Some or all of the following may apply to school-age children with FASD:

- sleep difficulties
- arithmetic skills more delayed than reading and writing skills
- difficulty processing information heard
- difficulty with comprehension (ex: reading)
- on-going expressive and receptive language delays
- poor attention spans and low impulse control become more obvious due to increased demands within the classroom
- difficulty keeping up as school demands become increasingly abstract
- consistent repetition needed to learn a skill or to transfer learning from one situation to another similar one
- on-going sensory integration difficulties, which may lead to behaviour changes or challenges
- "flow through" phenomenon - information is learned, retained for a while, then lost
- in need of constant reminders
- clumsiness related to poor gross motor control

Eight year-old Shane has FASD. He seems to be in constant motion, either swinging his arms or legs, or fidgeting in his seat. He much prefers outdoors play to any type of structured activity. However, during this active play, he is quite prone to accidents. Shane experiences difficulties when expected to move from one activity to another or from one place to another. Sometimes he will have a tantrum as a result. He may understand a concept or a word one day, then have no idea what it means the next.

- difficulties related to poor fine-motor control (ex: handwriting, dressing, etc.)
- weak social skills and difficulty with relationships (ex: problems in sharing, taking turns, cooperating, reading social cues and following rules)
- may show a preference for playing with younger children or adults
- poor memory
- problems with time management due to the lack of a sense of time
- lack of understanding consequences of behaviour
- inappropriate demands for bodily contact

Most children with FASD have difficulty with school, because it tends to be a very stimulating and complicated place. The demands of the classroom are often very difficult for them to handle.

Positive Characteristics

The characteristics listed thus far are the most common ones that pose problems for children with FASD. However, these children also share some positive traits. For example, children with FASD are often:

- friendly, cheerful, loving, affectionate
- caring, kind, concerned, compassionate
- gentle, nurturing towards younger children
- funny, with a great sense of humour
- persistent and hard working, with a sense of determination
- curious
- creative, artistic, musical
- fair, cooperative
- interested in animals
- interested in activities like gardening and constructing
- highly verbal, good storytellers

Sometimes when having difficulty with certain children, it's hard to notice and remember all their skills and abilities. However, focusing on their positive traits is important for two reasons. First, it helps you to have a positive attitude and recognize the potential in each child. Second, a person's strengths can often be useful tools to help overcome or compensate for things they find more challenging.

When Children with FASD are in a Child Care Program

Child care programs are places where developmental delays and social interaction issues often become apparent. A high quality, inclusive program is responsive to the individual abilities and needs of each child. Genuine inclusion ensures active and meaningful participation by every child in the daily program and with one another.

Some children require supports to reduce or eliminate barriers in order to take part in learning opportunities and fully engage in experiences with their peers. In 2009, Manitoba Regulation (62/68) was amended. Child care facilities must:

- Provide a daily program that is inclusive of children with additional support needs
- Develop an Individual Program Plan (IPP) for each child enrolled in the Inclusion Support Program that is reviewed and updated at least once per year
- Have an inclusion policy
- Make staff aware of the inclusion policy and a child's IPP

For support in writing an inclusion policy for your child care program, see *Writing an Inclusion Policy: A Guide for Child Care Centres and Homes* available through your child care co-ordinator or www.gov.mb.ca/fs/childcare/publications.html

Each child's development and needs must be considered within the context of their family. Parents of a child with FASD are the experts regarding the child's strengths and skills. ECEs should access this knowledge to promote the child's development. Understanding that the parents are the most valuable contributors to the child's success is an important perspective for ECEs to have. ECEs need to remember that the child's behaviour is not a result of poor parenting or a bad environment, but rather, of the brain differences that characterize FASD.

The child care program will consult with the child's parents and the professionals involved to establish goals and create an Individual Program Plan (IPP) for the child as required by the Child Care Regulation. Families are encouraged and supported to share their priorities and goals for their child, participate in decisions about inclusion options, and participate in the development of their child's IPP. All staff should be aware of the child's developmental goals and the supports needed to achieve them, and these should be incorporated into the daily program.

The Inclusion Support Program provides funds for licensed, non-profit child care centres, nursery schools, family and group child care homes to reduce or eliminate barriers to allow a child with additional support needs, including children with FASD, to meaningfully participate in an early learning and child care program. For more information on the Inclusive Support Program and funding, contact your child care co-ordinator.

To provide the consistency that's so important to children with FASD, parents and ECEs must work closely and be very supportive of one another. By sharing strategies, parents and ECEs can help each other interact more effectively with the child. The child will benefit from the consistent routines and smooth transitions created both at home and in the child care program.

When the Child Starts at the Child Care Program - The First Connection:

Consider a gradual enrollment plan. For example, have a plan for the parent(s) and the child to visit the child care setting. The first visit would be an introduction to the ECE and to the children. The length of stay would be based on the child's individual ability. This should occur more than once. Then a half day morning on the first day then half day afternoon on the second day eases the child into the expectations and routines. This can be an effective enrollment plan for any child.

In addition, an intake meeting should be held before the child's start date, or shortly after, to ensure a smooth transition into the child care facility.

When a child enters a child care program, parents should make a point of telling the staff or care provider about what works at home. The more the ECEs know about the child's behaviour, their likes and dislikes, and usual routine, the better. This information can help ECEs make some aspects of the child care experience consistent with the child's home routine, thus preventing potential problems. Staff should focus on the child's abilities and strengths, rather than on the difficulties. Parents should also share relevant information and professional reports on the child with the program staff. This helps the staff better understand the child's unique needs and goals.

Parent-ECE Communication:

Once the child enters the child care program, there should be a process in place to ensure regular sharing of information between the parent(s) and the staff. Ideally, they should be communicating on a daily basis.

A communication book - some type of notebook in which parents and ECEs write details about the child - is most commonly used. For instance, the ECE might write down what the child ate at the program, whether they napped, what activities they participated in, and things about the day that went particularly well. Parents might include details about the child's time at home, especially how the child spent the time before coming to the program. Include information around daily routines/events, the child's strengths and accomplishments made throughout the day as well as areas that may have been challenging. This can be an effective form of communication, since drop off and pick up times are often busy, making it difficult for parents and staff to adequately update each other in during these times.

Regular team meetings are also important and should include everyone involved with the child. These meetings can be used to assess a child's progress, establish new goals and discuss intervention strategies. Each member of the team will have a unique perspective that will add to the overall picture of how to best support the child. Team meetings are necessary any time a child transitions to a child care program.

The person leading the meeting should use an organized approach to ensure that everyone's input is given always beginning with the family first. It is useful to start with an agenda or a list of topic areas relevant to the child being discussed. Some examples are:

- social development - ability to take turns, interact with others and tolerate frustration
- attending - ability to focus, complete a task and follow directions
- communication - ability to understand language, express thoughts and respond appropriately to cues
- cognitive development - targeted concepts
- activities of daily living - dressing, toileting, eating and sleeping routines
- sensory integration - ability to tolerate sensory information, any over-sensitivities or under-sensitivities to the environment
- special interests/strengths - likes and dislikes related to activities, routines, materials, friends etc.
- sleeping and eating - information related to sleeping patterns/difficulties as well as eating or feeding issues.

For each area, the team should discuss the child's progress and the strategies being used. As goals are met, new ones should be set. If goals are not being met, the team should consider why not, as well as discussing new strategies that could be tried.

Information Gathering:

When parents and ECEs first meet, the following issues should be discussed.

General Information:

- What does the ECE need to know about the child (ex: health difficulties/challenges, medications)?
- What are the parents' priorities and desires for their child?

Communication Adaptations:

- What strategies have the parents found useful for their child?
- Does the child receive any therapy services from a speech-language pathologist, occupational therapist, physiotherapist, counsellor or other specialist?
- Has the child attended any other child care program?

Behaviour:

- What are the child's challenges and how may these affect their child care experience?
- What are the child's interests, favourite activities or hobbies?
- What causes the child to become overwhelmed?
- What should be said to other children who ask about the child's differences?

Assessment and Evaluation:

- What reports, or other information about the child should be shared with the program?
- In what developmental areas has the child experienced particular success?
- In what developmental areas would the parents particularly like the child to succeed?

Home and Child Care Program Connection:

- Is there any additional information the program should have about the child (ex: recent changes, history of living arrangements if adopted or in foster care)?
- How can a consistent approach between the home and the child care program be maintained?
- Does the parent have any questions about the program?

Professional Services for Children with FASD

Some of the professionals who may be involved with a child with FASD are listed below, along with each person's typical role. These professionals will participate in team meetings and contribute their expertise when developing and reviewing the goals for the child's Individual Program Plan.

Occupational Therapist (OT): One of the roles of an occupational therapist is to assess an individual's physical and sensory needs. Because children with FASD commonly have problems processing sensory information and using motor skills, a referral to an OT is often made. The OT can assist with the difficulties the child is having with fine and gross motor development, activities of daily living and sensory processing. The OT can suggest environmental adaptations to accommodate the child's unique needs. A multi-sensory approach is often used incorporating movement, music and various sensory modalities. A child may be put on a "sensory diet" which refers to a controlled program of sensory input designed to suit the needs of a particular child. Increasing the child's ability to pay attention and to remain calm is often a focus of the OT's work.

Speech Language Pathologist (SLP): Children with FASD commonly experience a wide range of speech and language difficulties. There may be articulation difficulties, limited vocabulary, inappropriate use of language, difficulties with the rate of speech, poor receptive language and excessive talking. Early assessment, diagnosis and treatment by a SLP are important. Often the SLP will provide direct treatment, as well as guide child care staff or family in working on the child's speech and language. Placement in a preschool program may be recommended to help the child develop language skills, especially when there is the opportunity to practice within a social setting with peers.

Physiotherapist: Physiotherapists can be involved with any person experiencing a gross motor problem. However, when a physiotherapist sees children with FASD, it tends to be for difficulties with balance and posture. Since these problems occur for just a small percentage of children affected by alcohol, a physiotherapist is often not involved. When physiotherapy is necessary, the child is usually assessed in the home or child care setting. The physiotherapist suggests activities and exercises and then monitors the child's progress.

FASD Outreach Program: Staff are available in home, preschool programs, locations in the community and assisting transitioning to school. The service is designed to address the environmental and behavioural issues affecting the child's functioning. The team also provides education about the effects of prenatal alcohol exposure in both general, as well as child-specific terms.

For families who live outside of Winnipeg, short-term consultation is available with the team, providing they are able to travel into Winnipeg. This provides them with an opportunity to broaden their knowledge base and problem solve around behaviour issues.

Interagency FASD Program: Staff work together with families in Winnipeg whose children (infant to age six) were exposed to alcohol before birth. They work with the family in their homes as well as other settings, such as child care programs and schools, to enhance their understanding of the child's needs. They offer services such as information on FASD, observations and feedback describing how the child may be functioning, ideas and strategies to improve functioning, advocacy for families related to child care, housing, and other issues of daily living, support during the diagnostic process and assistance to families in accessing community resources and programs.

General Guidelines: Caring for Children with FASD

The following guidelines suggest an overall approach to supporting children affected by alcohol.

Determine the child's developmental level and work with them at that level.

Adapt your expectations to correspond with their developmental level. Don't assume they will be able to do what other children their age can do.

Identify their strengths, skills and interests and use these to help them learn.

Change the way you interpret their behaviours - Recognize that their behaviour is a result of the brain damage they've suffered. They are not misbehaving on purpose because they're lazy or unwilling to follow directions.

Prepare for transitions which are often difficult for these children who don't like to change what they're doing.

Model appropriate behaviours so that the children have a visual and concrete example of how something should be done.

Keep instructions simple, concrete and give them one at a time to compensate for the short-term memory difficulties seen in most children with FASD.

Identify behaviours which indicate frustration (ex: anger or avoidance), and help children find the source of the frustration and ways to deal with it.

Teach specific social skills by supervising the children with friends and by teaching appropriate responses in context.

Understand their various ways of communicating - They may not be able to tell you how they are feeling so you may need to interpret their behaviour (ex: increased activity = over-stimulation; aggression = frustration, difficulty understanding; withdrawal = feeling tired).

Encourage a multi-sensory, concrete approach to learning because if something is not understood through one of the senses, it may be understood through another. Learning must be hands-on.

Expose children to supportive environments where their strengths are recognized, so they can experience success.

Establish partnerships between home, child care program and school. This keeps things consistent for the child.

Understanding the Needs of Children with FASD

The Impact of Brain Domain Dysfunction on Learning and Behaviour

Children with FASD are as different from each other as any group of children. Each child presents a complex individual portrait of abilities and challenges. Children with FASD must be recognized as individuals rather than as members of a homogeneous group. FASD can affect individuals in varying degrees, from mild to severe.

Behaviours that result from the effects of FASD can be challenging and often try the patience of the most dedicated and experienced ECEs. The response of children with FASD to corrective methods can be frustrating since these children are often inconsistent. In one circumstance they may respond positively to feedback. On the next occasion, the same feedback may result in a negative response. Children with FASD often have difficulty with cause and effect reasoning and adjusting to new or unfamiliar situations. This can result in ECEs misinterpreting the behaviour and responding in a way that may create a more difficult situation.

Focused observation is important to gain an understanding of how the children experience stress, relieve tension, cope with obstacles and react to change. It provides valuable information on how they meet their needs, how hard they actually try and how to build a supportive environment that leads to success. Additional support can be provided by demonstrating specific social skills and providing for practice within the social context with peers. A multisensory, whole-brain approach offer children the greatest opportunity for understanding. Skills and concepts are best learned within the context of daily life. A calm, nurturing, predictable learning environment is vital.

Children with FASD bring gifts to your child care program just like any other child. When you build a relationship with each child and observe them during play, you are able to develop a plan that draws on the child's strengths to support their needs.

Understanding Brain Differences

How this section works

This section is designed to help ECEs plan appropriate supports for children by identifying the challenges associated with impairment in each area of child development – physical, cognitive, social and emotional. Within each of these four areas, nine brain domains are examined during the diagnostic process. These are explained in detail, with an emphasis on the commonly associated disabilities found in children with FASD. Understanding what

brain differences exist will help ECEs appreciate why certain strategies should be used.

For each brain domain, strategies that have proven successful are suggested. Some of these may work with a particular child, some may not. Each child is unique so ECEs must be creative and persistent in finding their own successful strategies for each child.

By developing learning environments that respond to the specific needs of children with FASD, ECEs can provide an important link in the chain of support needed to assist these children to succeed in the early learning and child care program, at school and the community.

PHYSICAL

In this area, the brain domain examined during the diagnostic process is sensory-motor, which will be broken down into motor skills (gross and fine) and sensory processing skills.

Motor Skills

As with any child, children with FASD will develop physical motor skills at their own pace. Children with FASD have a wide range of gross and fine motor skills. Some excel in physical motor skills, particularly in individual sports such as swimming, skiing, running, skating and rollerblading. Success in these areas is a great way to build self-esteem and develop lifelong leisure pursuits. Involvement in cooperative play may be more challenging, not necessarily due to poor motor skills, rather due to poor memory for rules, impaired judgment and problem-solving skills and immature social skills. Children may require more support and understanding as well as repetition, practice, pre-teaching and individual coaching to succeed in cooperative play.

Some children with FASD have significant problems with gross and fine motor development that can interfere with daily functioning at home, the child care program and in the community.

Gross Motor Skills

Children with FASD may experience difficulty with:

- poor co-ordination (including eye-hand co-ordination)

  The co-ordinated movements required for physical activities such as running, dancing, or playing ball games may be delayed. Physical therapy can be helpful provided the goals set for these activities are realistic.

- abnormal muscle tone (usually tightness in the arms and legs and low muscle tone in the trunk).

  Poor central or postural stability of the core body or trunk muscles can affect children's balance. Often, static or stationary balance is more affected than moving or dynamic balance. The child may constantly be on the move around their environment to help maintain an upright posture. They will often depend on momentum to keep themselves upright. An analogy of this would be to try riding a bike very, very slowly. It is much easier to ride a bike fast to maintain balance or prevent falling over. To help compensate for poor postural stability, children with FASD will often hold their neck and shoulder area stiff to help improve their stability. This can interfere with use of their arms and hands during fine motor activities and cause them to expend a great deal of energy trying to remain seated. Children with FASD may constantly move in their chairs, avoid sitting or only remain seated for short periods of time. Children often will try to lean against a wall, furniture or other people for support in a constant effort to keep upright.

• poor body awareness.

Poor sensory processing of information from the muscles and joints (poor proprioception) results in decreased understanding and feel of body position and movements. Children may have difficulty using the right amount of pressure or force to do a job. For example, they may not control their muscles appropriately to hold a pet gently, tag a friend without hurting, or throw a ball with the appropriate amount of force to a partner.

As a result of poor body awareness, decreased muscle control and poor coordination, children often seem clumsy, careless or physically aggressive. They may bump into peers and furniture, trip over their own feet when walking, and play in an apparent rough or aggressive manner, sometimes hurting peers or breaking toys. This is not intentional or defiant behaviour, rather a result of impaired motor skills and poor body awareness caused by neurological impairment.

STRATEGIES:

- Incorporate music and dance into activities.
- Act out stories and use dramatic play.
- Alternate active and quiet activities throughout the day. Children with FASD need frequent periods of gross motor activity to help them focus for quiet or structured activities.
- Provide activities that require the child to get in and out (ex: a hula hoop on the floor), move up and down (ex: small ladder and slide), and climb on and off (ex: child's car, rocking chair, cushion on the floor).
- Imitate a variety of animal walks (ex: walk like a bear on all fours, hop like a bunny, jump like a frog, stiffen limbs to walk like a penguin, slide on the floor like a snake).
- Activities that require the child to use their large muscles in their arms such as pulling a small wagon, pushing a stroller, vacuum with a small toy model, crawling on the floor playing with cars and trucks, throwing and catching a soft, light ball, carrying a bag.
- Provide activities to improve balance and co-ordination skills. This could involve climbing over, under, through; jumping or hopping on one or two feet; balancing on a large ball or balance beam; throwing, hitting or kicking a ball at a target; skipping or galloping along a line; jumping rope or bouncing on a trampoline (under supervision).
- Playing "Simon says", action songs, and follow the leader games (ex: raising arms about the head, down to touch the floor, arm circles, bending at the waist from side to side, going up on tippy toes, rolling on the floor).
- Increase upper body strength through the shoulder joint by using weight bearing activities. Try wall pushups or wheelbarrow walking. Encourage climbing monkey bars or gym bars; drawing, colouring or painting at or above eye level; or pushing a large rubber tire up and down the hall.

- Ensure children are provided with stable seating when at a table. The best seating position for these children is to sit on a properly fitted chair which lets their backs rest against the chair back. Hips, knees and feet should be at about 90 degrees of flexion with feet resting solidly on the floor or a footstool if the chair is too high. Chairs with armrests are good for children with low muscle tone in their trunk.

Structured, organized activities which provide children with heavy work to their muscles such as pushing, pulling or climbing tend to have a calming effect. Running or moving in all directions in a loud, large space tends to disorganize the child and tends to increase the activity level even more.

Caution: Closely supervise children using climbers, other gross motor equipment or during the above activities as they often don't have a sense of danger and have poor body awareness.

To set up a specific exercise program to meet the individual needs of the children contact an occupational therapist.

Fine Motor Skills

Children with FASD may have difficulty sustaining fine motor activity without adaptation to reduce the demands on their muscles. As they learn motor skills, the motor skills may become automatic, but it often takes longer for children with FASD to reach this automatic state. Even then, there may be days when they forget a skill that they have previously learned.

Several of the neurological outcomes of FASD may include:

- immature grasp and manipulation patterns (including crayon, scissor grasp and the ability to manipulate small objects);
- decreased hand strength, low muscle tone in hands, instability of joints in hands, all of which may cause children to tire faster than their peers while engaging in fine motor activities such as drawing;
- fine motor tremor;
- poor bilateral hand use - using one hand for movement and the other as a helping assist;
- no established hand dominance by age five, rather a switching of hands during an activity such drawing or painting.

STRATEGIES:

- Have children pick up small items with the tips of their finger and thumb (ex: cereal "o"s, raisins, macaroni, beads, puzzles).
- Play with play-doh, plasticine and other materials which promote squishing, squeezing, poking, pulling and rolling.
- Provide toys that encourage placing and positioning (ex: shape sorters, putting people into cars or houses, caring for dolls, playing cars).

- Provide art activities that include crayons, markers, finger paints, scissors, squeezing a bottle of glue and stiffer construction paper.
- Expect that children with FASD may need more time than their peers to complete a task.
- Provide hand strengthening activities (ex: using a hole punch, spraying with trigger-type spray bottles, kneading, poking and rolling play dough and clays of various densities and squeezing sponges or squishy balls).
- If using computers, use software that is appropriate for their developmental level.
- Watch to see if children grip their pencils, crayons, markers, paint brushes etc. too tightly, which is tiring. Use soft slide-on grippers. Molded grips can also help develop a more efficient tripod grasp.

Sensory Processing Skills

Sensory Processing Disorder (SPD) is a complex disorder of the brain that affects many children with FASD. These children misinterpret everyday sensory information such as touch, sound, movement and smell. Some children feel bombarded by sensory information while others seek out intense sensory experiences.

"Children with [FASD] may be under or over sensitive to their surroundings. They may not be able to communicate their responses to the environment clearly and directly, not having a language to say what's different for them. They will more likely communicate their response to their environment through their behaviours . . . environments need to be modified to support people with [FASD]. Behaviours often change as environments are modified . . . (Malbin).

Child care settings can be overwhelming places for children with FASD because there are many things to see, movements to observe, sounds to hear, things to smell, and things to feel (from accidental bumps, to the feeling of clothing on one's skin). The overwhelming feeling of being bombarded by all this sensory information may affect children's inner sense of calm and their ability to organize themselves and process the information being presented. Consequently, children may appear disorganized, confused, emotionally upset, scared, shut down or become out of control. ECEs may interpret this behaviour as hyperactive, defiant, resistant, avoidant or aggressive. In reality, their nervous systems are having difficulty making sense out of the world around them.

- When considering the environment for children with FASD, always start with the set up of the physical environment.
- Predictability and routine are of utmost importance.
- Less is best for children with FASD when it comes to visual stimulation in the environment.

When children become overwhelmed by all the sensory stimuli around them, a safe quiet place or calming space should be available for them to retreat, calm and organize themselves. It is not meant as time out or

punishment, but a safe place to calm down. Initially, they may need permission or guidance to use this space. This must be done in a positive and supportive manner. The aim is to teach children to self regulate by going to this safe place on their own when needed. This is a skill which will benefit them throughout their lives. It must be a safe, inviting place to retreat before their behaviour escalates and becomes out of control. There is no set pattern for constructing a calming space; anything cave-like, such as a small playhouse, a tent or the area under a table, would work. Bean bag chairs have also been found to be effective.



Once in the quiet space, children should be provided with a sensory helper to calm them down. The sensory helper will vary from child to child. It can be anything from a warm fleece blanket, to looking at a book, drawing or doodling on paper, listening to music or soft soothing sounds, manipulating a hand held toy, or watching a slow-moving oil and water toy. Deep back massages or squeezing children's hands and feet can also be helpful if they tolerate this. Please check with the child's occupational therapist for some safe and appropriate suggestions for calming the nervous system.

The following sections describe visual, auditory, tactile and movement strategies that may help manage the sensory experience of children with FASD. The effectiveness of these strategies can vary from child to child and also can vary on a daily basis.

Visual Strategies

Visual stimuli within the room can be very distracting and can easily lead to over stimulation. Children with reduced visual stimulation have much less hyperactive behaviour and are better able to pay attention. Keep the visual environment calm by using soothing or neutral colours (ex: light blue) and keep as much blank space as possible on the walls. Blank wall space is especially important in areas of the room where the child needs to attend most often. Designate one or two walls to display work. Reduce the amount of information on the walls by using easily removable sheets attached with Velcro or curtain rods. This covering can be easily removed when needed.

Natural lighting is preferable to electrical lighting. Windows should have blinds to adjust the amount of direct sunlight or block out outside stimulation. When natural lighting is not available, use non-fluorescent lighting such as full spectrum lighting or incandescent lighting.

Sensitive children see a flicker and hear a hum in fluorescent lighting that the average person does not. Provide ways to dim the lights or turn some off while leaving others on. Outdoors, avoid sunlight reflecting on water or snow – encourage the child to wear sunglasses.

Use cupboard doors or fabric to cover storage cupboards, bookshelves, toy and supply shelves and closets to reduce the amount of visual clutter present in the classroom. Fabric coverings should consist of solid, non-stimulating, soft pastel colours.

Use visual language to enhance comprehension and retention of learning as children with FASD are often visual learners and possess visual processing strengths. Children often find it challenging to follow the steps involved in a routine or task. Break tasks down into smaller, more attainable, visual series of steps. Use a computer program or digital real-life photos to create a visual representation of each step to assist a child to remember everyday skills, routines, tasks and expectations.



- Illustrate the daily schedule with pictures or photos to prepare children for the day including any changes that will occur.



- Arrange toys in an orderly way. Use buckets or containers to organize items and use pictures on the outside of the containers to show what belongs inside. Pictures on the cupboards or shelves can indicate where each container belongs. A simple method is to use the pictures from the box the item came in.

When the child is playing with a toy, ensure all other toys in the area are put away and not distracting. Sometimes it will become too overwhelming for the child to choose a toy if too many toys are visible. Perhaps giving the child a selection of two toys to choose from will make their decision making process easier. Help the child to learn to put away toys before taking another.

- Add picture symbols to written material.
- Use visual timers, (ex: a sand dial or egg timer), to help children prepare for transitions and assist in awareness of elapsed time

Make gradual changes to the environment. When it's necessary to rotate toys or move equipment or furniture, don't do it all at once. Changes can be overwhelming and are best handled slowly, ideally with an adult "walking the child through" the new setting.

Learning and playing becomes more difficult when children become so overwhelmed by the environment, that they tend to tune out or shut down. Children with FASD need more opportunities to calm their nervous systems than the average child, therefore many sensory tools and strategies should be available, depending on which sensory system helps calm them.

Auditory Strategies (Noise and Hearing)

Children with FASD may experience difficulty in screening out background environmental noise. They may become unfocused and overloaded in a noisy environment or anxious when exposed to sudden unexpected sounds (ex: fire alarm).

- Children should be prepared ahead of time for fire drills.
- Use soft relaxing music either for the whole group or individually, using earphones.
- Use ear protectors or headphones to filter out sounds allowing children to focus better.
- Use noise-reducing materials (ex: carpet, fabric curtains, cushions wherever possible and practical.
- If noise cannot be reduced, it will be helpful to take the child to a quieter area for a brief break from the noise, such as into the kitchen to make the juice for snack.

Tactile Strategies (Touch)

Children with FASD may be oversensitive (tactile defensive) or under-sensitive to touch. Suggested ways of managing this include: avoiding crowded spaces, dressing the child in loose clothing, removing tags from clothing, turning socks inside out to avoid a seam rubbing the skin and helping them to express their discomfort by giving them appropriate words to use. Placing a child first or last in line limits the risk of being bumped or pushed. This can be arranged by putting them in a "helper role" for closing the door, turning the lights out, or carrying equipment. Some children seek

out things to touch and need to be provided with many opportunities to rub, scratch and immerse their hands (ex: rice bins, ball pits, water table, various texture puzzles, finger painting, mixing home-made play dough).

The mouth is also a part of our touch system and plays an important part in calming and organizing the nervous system. Some children may benefit from mouthing activities. Activities such as chewing gum, sucking on a candy, sucking on a straw or water bottle often can help children focus and organize themselves. Children are given rules (printed and visual) to help them remember how to use these correctly.

Self regulation refers to children's ability to appropriately attain, maintain and change their level of alertness or attentiveness for a specific task or situation, so they can learn and function appropriately in their environment. A variety of sensory tools or strategies should be available for children to use to self regulate based on what works for them. Use stress balls, soft stretchy key chains or any other soft, manipulative hand-held objects. These tools can enhance learning and attention during circle time or other group activities.

Sense of Body Position and Movement/Balance Strategies

Our sense of body position consists of sensory receptors in our muscles, skin and joints that unconsciously provide information about the position of our body parts. Alcohol affected children often have difficulties with body awareness and body boundaries, causing them to look disorganized, enter other people's personal space, trip or stumble over things, bump into peers or furniture, play destructively or break toys or other objects, because they have difficulty adjusting their muscle movements appropriate to the task.

- Visual boundaries in locker areas can help children organize themselves and their physical space during transitions and while changing into, or out of, outdoor clothing.
- Some children benefit from deep pressure touch such as back rubs to help calm or relax them.
- Mark visual boundaries on the floor using a duct-taped square grid. Carpet squares can be placed within these squares as the textured surface helps to enhance this boundary through touch.
- Incorporating movement breaks throughout daily activities can help them self-regulate. Slow, repetitive movement (ex: rocking, swinging, bouncing) can be calming and organizing, whereas fast movements in all directions (ex: running, spinning, etc.) may further over-stimulate the child.
- An air-filled chair cushion placed on the chair or the floor can provide children with much needed movement within a physical boundary
- Provide children with chairs with arms, which offer more postural support and physical boundaries.

- Provide children individually, or as a group, with many opportunities for heavy work activities (ex: jumping, pulling a sled, carrying a small box of supplies, pushing toys, jumping jacks, climbing on playground equipment and pushing big toy trucks through the sand). These activities engage a part of the sensory system that assists with calming and organizing.

For more information about appropriate environments for infants and toddlers, see the Infant/Toddler Environment Rating Scale – Revised Edition or All About the ITERS-R.

For more information on appropriate environments for preschool children, see the Early Childhood Environment Rating Scale - Revised Edition or All About the ECERS-R. These are excellent resources on setting up the child care program environment, even if they are not being used for formal scoring.

COGNITIVE

In this area, the brain domains examined during the diagnostic process are cognition, learning, memory and attention deficit/hyperactivity.

Cognition

Most children with FASD have reduced cognitive functioning due to their disorder. However, there is a great deal of variability in IQ scores and no one particular pattern of deficits. Some children with FASD are in the cognitive deficient range while others are much above average. The type of cognitive concerns that appear differ depending on a variety of factors including the general health of the mother, the amount of alcohol consumed and the stage of development of the fetus when alcohol was consumed.

Learning

All children begin learning from the time they are born and ECEs can take an active role in this process by playing, reading, singing and providing opportunities for multi-sensory learning and exploration of the environment.

When thinking about learning for children with FASD, think "multi-sensory". ***Using as many senses as possible when teaching new skills will increase the chances of retention.***

The following are strategies that may be incorporated throughout the daily program to support learning and skill development.

Reading:

- Reading is especially helpful if done in small groups.
- When reading use an animated voice (full of expression).
- Point to pictures as you are reading.
- Make comments, and ask questions, "Do you see the red truck", "Look at the little brown puppy", "What is the puppy doing?", or "What do you think will happen next?"
- Choose stories that have a lot of repetition, common themes and shorter length.
- Try to choose books with topics of interest for the child.

Concept Development:

- Use your imagination and natural teachable moments as they present themselves.
- When exploring concepts such as "under", "over", "on" and "off", teach these concepts in a multi-sensory fashion. For example, when learning about "on" and "off" demonstrate with the lights, with music and blocks and have the child put on and take off coats, shoes, etc.
- For concepts such as "near" and "far", "under" and "over", demonstrate by using objects or yourselves. For example, go to the far end of the room and state "I am far", then quickly scoot close to the child and state, "Now, I am near". This can be shown with concepts such as "wet" and "dry", "short" and " tall", etc.
- It is often helpful to use an animated voice full of expression when showing these skills. For example, "This towel is ***WET***." "This towel is ***DRY***".
- Focus on one concept at a time and incorporate it into the daily program. For example, when a child is interested in animals, he/she will learn more about them when ECEs:
  - Focus on one type of animal at a time, for example, tigers.
  - Add tiger puppets and books about tigers to the reading area, small toy tigers in the block area or a tiger costume to the dramatic play area.
  - Make reference to the tiger throughout the day while the child plays with the added items. "Look at the tiger's orange and black stripes. This tiger has yellow and black stripes."

Math/Number Concepts:

- Use hands-on materials to make number concepts less abstract.
- Count when ever possible. For example, count the blocks they have stacked; announce: "Today everyone has one piece of watermelon and three slices of apple for snack", etc.
- Do easy matching and sorting activities.
- Do simple pattern work with beading.
- Use play dough and roll out "eggs", counting as you go.
- Make a cookie out of play dough and roll out little chocolate chips, count how many chocolate chips you are putting on the cookie.

Music and Dance:

- Music and song paired with actions can be a powerful tool for learning. This can be a fun way to learn body parts, numbers and general concepts. The "hokey-pokey" is a great example.
- Songs may need to be adapted. For example, during the hokey-pokey try "Put your hand in, put your hand out" instead of using right and left, as this may be too difficult.
- Music with instruments can be used to work on skills which require following simple directions. For example, "Lets shake, shake, shake the tambourine, and now let's get ready to STOP".
- This is also an opportunity to practice social skills (turn taking, waiting and sharing).
- Musical activities work best with small groups and keep in mind particular instruments may be too overwhelming for some children.
- Sometimes it may be helpful to offer soundproof ear muffs or ear plugs to help to dull the sound, but allow the child with FASD to participate.
- For children with difficulty in the area of gross motor and sensory integration, dance may provide a fun-filled way to work on strengthening these particular areas.

Drama:

- Drama can be used as a tool to work on concept building, language development, sharing and role playing.
- Dramatic play can be used as a tool to illustrate social situations or general expectations regarding behaviour. For example, demonstrate how we line up, how we ask to play with someone, or what we do when someone has our favourite toy.

For additional resources to support these concepts, visit the materials and equipment lists for infant, toddlers and preschoolers available on the Manitoba Child Care Program website:

http://www.gov.mb.ca/fs/childcare/pubs/equipment_todler_en.pdf

http://www.gov.mb.ca/fs/childcare/pubs/equipment_preschool_en.pdf

Memory Skills

Memory skills are often a major concern for children with FASD. They may not be able to respond to questions, they may forget how to do a task that they've done a hundred times before, it may take a week of daily practice to memorize a song, or they may have conflicts with peers while playing because social rules were forgotten. Each of these scenarios represents a different problem with the memory process and each has strategies that will improve learning. If we find the right approach, children with FASD can learn in spite of their memory challenges.

The memory process requires that children focus on, and select, the relevant material to be learned (encoding), then organize the material using short-term and long-term strategies (storage) and then access the material when it's needed (retrieval). Problems can occur at any stage of this process.

It is important for ECEs to carefully observe to ensure that the specific problem area(s) have been accurately identified. For example, some children with FASD may be viewed as having behaviour problems when in fact they need daily reminders and visual pictures to help them remember routines and social skills. Other children may have good memories, but need strategies or cueing to better organize the material so it can be retrieved more easily. For example, the ECE could say, "First we need to put our ski pants on, then we need to?" and have the child answer. Or use leading statements or questions (ex: "We are going outside, and it is cold, what do you need to keep your ears warm?").

In general, children with FASD are concrete learners and remember better when they use their senses - touch, sight, taste and hearing. Experiential learning has been shown to be very effective and visual learning is generally most effective.

STRATEGIES:

- Routine, predictability and repetition are the mainstay approaches found to be effective in addressing FASD memory issues.
- Follow a consistent daily activity schedule, keeping the same sequence of events although the times may vary. When changes need to occur, prepare children with FASD ahead of time.
- Make sure each routine of the day also follows the same pattern. For example, the order of things that happen at circle time should remain the same, such as using the same opening and closing song. At home, children should be woken in the same way every morning.
- Use pictures, along with words, to show the order of the daily routine. If possible, use photos of the child doing the various activities. These can be posted on the wall and/or put on a pocket-sized flip chart.
- Hands-on activities, field trips and interaction during everyday events are more likely to become stored in long-term memory than orally presented or abstract information.
- New information needs to be presented at a slower rate and linked to previous information for best recall.
- Help children learn how to locate what they need rather than memorize it.
- Remember to start each day as a "new day". Do not expect the child has mastered a specific task or rule from the day or week before.

Attention Deficit/Hyperactivity

Some children with FASD have serious problems maintaining the focus of their attention, which makes it difficult for them to learn and interact in meaningful ways.

Child care programs can be over-stimulating. This does not mean that the environment should be barren and uninteresting, but it does mean that ECEs should try to keep visual and auditory distractions to a minimum. To reduce visual distractions, toys and materials not in use should be stored in boxes or cupboards. Limit or avoid spinning mobiles hanging from the ceiling and similar distracting decorations. The brightness of the lighting may need to be adjusted. Distractibility often increases with the difficulty of the task.

Young children, as well as school age children, may require an adult to help them self-regulate, as they may be unable to recognize the signs of feeling overwhelmed or over-stimulated. It should be clear, however, that this is not a punishment, and therefore should be presented in a positive manner. If consistent support and guidance is provided at these times, it is hoped that eventually a child may learn to self-regulate. For example, a child with problems of auditory selective attention may learn to recognize when there are too many distractions and go to a quieter play area.

For some children who are hyperactive, periods of physical activity followed by quiet activity helps. For others, however, the physical activity only causes over-stimulation. Children who are hyperactive are usually impulsive. They may say, "I knew I shouldn't do it, but I couldn't help myself." They may strike out verbally or physically at the least provocation. A child may see a toy that they want and act on this impulse, grabbing the toy out of another child's hands, unable to access the skills necessary to slow down and ask, "Can I have a turn to play with the car." This is when it is helpful to have an ECE model for the child what they need to do. For example, "Johnny, do you want to play with that car? Well, let's ask Mark if you can have a turn". Part of the solution is to teach through modeling, role playing and cueing. This would require close supervision.

For some children, medication is a possible solution, but only in combination with ECE support. It is important to note that because of the brain differences in children with FASD, medications often do not work in the same way, or with the same dosages, as for other individuals. It may take a long time to find effective medications.

STRATEGIES

- Use rocking chairs or toys on which the child can experience motion. This helps children release energy. However, be aware that most children with FASD cannot self-regulate and may need to be guided off before they get dizzy.
- A small, child-safe rebounder for jumping can also be used for energy release with supervision.

- A "sit and move" cushion is an inflatable rubber pillow that may provide the extra stimulation needed for them to stay relaxed and seated. For a similar effect, use a bean bag chair or an athletic ball.
- Use carpet squares at circle time so each child has a boundary for his/her space. At home, a towel or blanket can be used.
- Create a defined play space using tape to mark an area on the floor.
- Provide "fidget items" for children to use to relieve stress, which can be clipped onto their pants belt loop. These can consist of little squeeze balls, mini rubic-cubes, or mini animal figures made of stretchy rubber or filled with silica sand.
- Show relaxation exercises such as deep breathing, (imagine blowing up a balloon in their tummy), stretches (pushing up the clouds) and shoulder shrugs.
- Have a listening centre with headphones and audiotapes, story tapes available during free play.
- Limit television and video games as these tend to over-stimulate the child. Also children with FASD often struggle with understanding the difference between fantasy and reality and may not realize that what they see on television is not real.
- Avoid situations requiring long periods of concentration. Make each activity brief, or incorporate short breaks while doing a task that requires intense focusing.
- Assist children to use self-talk to help stay focused (ex: "First I put on my boots, then I put on my coat") and curb impulsive behaviour (ex: stop and think). Model this behaviour in order to encourage the child to do this.
- Some children are calmed by quiet, background music.
- Arrange a quiet area to use when distractions are too great.
- Establish a signal to indicate frustration (ex: the child puts their hand up or taps the ECE on the leg, or uses a code word that has meaning for the child).
- Ask children for feedback about what they find helpful. Make them part of the problem-solving process. For example, "I can see you are having a hard time getting ready to go outside, what would make it easier for you? What would be helpful for you? What can we do to make this work?" Note: it may be necessary to start them off and give them a few ideas.
- If consequences are used for inappropriate behaviour they need to be immediate. They need to be natural (if possible) and consistent. For example, if a child throws a toy, perhaps moving them to a quieter area until they calm down may initially be helpful. Next, asking them to show you "What happened" may produce a better result or more information. Reframe for them what happened and help them identify the feeling. For example, "Oh, so you felt angry (sad, disappointed) because you wanted to play with the truck. It's okay to feel angry (sad, disappointed), but it's not okay to throw toys, someone could get hurt. "Let's go find the toy and put it away gently".

SOCIAL

In this area, the brain domains examined during the diagnostic process are communication skills and adaptive skills.

Communication Skills

Children with FASD usually show some degree of language disability or delayed language development. They often have significant problems in communicating regardless of whether or not their overall development is delayed. Difficulty with language affects social communication and learning.

Expressive Language Development

Children with FASD often develop language skills at a slower rate than is age appropriate. They may not use the vocabulary (semantics) or grammatically complex language structures (syntax) expected for their age. Often they know the word but cannot retrieve it from memory. They may call toast "warm bread" or a flag "a pole with a blanket." They may use a wrong word from the same general category. For example, they might call a sheep a goat. Examples of immature syntax include using the wrong pronoun or verb form, using plurals inappropriately, omitting prepositions and other mistakes that younger children might make.

Receptive Language Development

Children with FASD sometimes have difficulty of processing information (ex: receiving information accurately, interpreting and remembering it correctly and then acting on that information). Problems with listening encompass many aspects that may affect a child's ability to follow directions and complete tasks. For example:

- *Comprehension* — understanding what is meant, especially if different words are used which may mean the same thing.
- *Discrimination* — understanding whether things or words are the same or different.
- *Association and generalization*—Understanding how things are related by their category, function or physical similarities.
- *Sequencing* — doing things in the right order or following a plot.
- *Selective attention* — knowing what is important to notice and to what one should pay attention.
- *Memory* – immediate and long-term memory

Children with FASD may not be able to keep up with the typical pace and complexity of the language of instruction and discussion, remember what has been said and translate that into action. Children may have trouble following when a story is read unless it is accompanied by pictures or a concrete representation (ex: puppets or models). Children with FASD may understand language messages in a concrete and literal way. They may not respond when told, "It's time to get ready for the field trip." This may be too abstract for the child to interpret. Instead they may respond to more precise, concrete instructions (ex: "We are going to the zoo today. You need to put your shoes on."). Instructions like these are more simplistic and there is less room for misinterpretation.

Children with FASD may have trouble understanding the intent of the other speaker. Children with this type of language disability may be described as egocentric because they cannot take the listener's point of view. They may go off-topic because they respond to internal associations or experiences that the listener does not know about. They may use pronouns incorrectly or give so few details that a story does not make sense. Children who have problems not knowing how to respond, or to what they should respond, may experience many conflicts in a day. The child's anxiety may increase, and they may have outbursts. Children who seem to have difficulty responding to a request may actually be unable to understand the task being asked of them. What appears to be willful disobedience may actually be an inability to translate verbal directions into action. ECEs need to be aware that children with FASD often can repeat verbal directions accurately but have difficulty putting the verbal request into action.

Pragmatics

Pragmatics of language refers to the ability to use language appropriately. Examples include such things as a child's ability to take turns, understand conversational rules, greet people appropriately and ask and answer questions correctly. Children with FASD are often described as having cocktail party conversation - speech that is fluent, but empty of content. They may have difficulty starting a conversation and may not respond appropriately in conversational dialogue. Superficial language can mask problems with listening and understanding language. Some children with FASD can have very serious communication deficits but seem very chatty, to the point of talking excessively. It is important to give these children feedback about their expressive language abilities to help them see what they are doing and create insight into how this affects others in a group.

Speech Sound Development

Children with FASD may have articulation problems that make it difficult for them to be understood in conversational speech. Articulation problems are often identified before a child starts school. Speech and language therapy is essential for more severe problems. ECEs may want to consult with a speech/language pathologist to determine how best to assist children at home and school.

STRATEGIES:

- Choose simple materials with illustrations.
- When you start to speak, always use the child's name and make eye contact. They may not realize group instructions are meant for them and may need separate instructions.
- To help ensure that a child has understood a verbal request, the ECE can ask the child to **show them** what needs to be done instead of just asking them to verbally repeat the instructions.
- Use a plain piece of paper to put under each line of reading material.
- Tape-record stories so children can listen and read along.
- Use cues and aids to assist children in following verbal instructions.
- Use verbal cues, (ex: songs or chants) to remind children what to do next.
- Abstract language often is very difficult for children with FASD to understand. Be very concrete as these children usually take things literally and cannot gauge subtleties or understand figures of speech (ex: "What's up?"). Avoid using words or phrases that can mean more than one thing (ex: euphemisms and sarcasm).
- Limit the number of questions you ask. Questions can often be abstract and difficult to answer.
- "Why" questions can be especially hard to understand. Rephrase with "What is the reason?" or with who, what, where, how or show me, etc.
- Be very specific as you guide the child - tell the child what you want them **to do** rather than what you want them **not to do**.
- Be consistent in the wording used for directions outlining daily routines.
- Be brief, speak slowly, pause between sentences and break directions into steps you can give gradually. Try to help the child remember the next step in a sequence.
- Help children learn a skill by teaching it in the environment in which they are expected to perform the skill.
- Give instructions one step at a time. Repeat information as needed. You may need to re-teach information multiple times.
- Break large tasks into smaller steps. Remember to keep instructions simple and concrete, and use the same key words or phrases for particular tasks.
- Use art to make abstract concepts more concrete. For example, have children draw a picture to illustrate an abstract concept like "respect each other". This will help them understand what this abstract concept means to them.

- Social stories are often very useful in helping children understand certain situations or events that otherwise may be too overwhelming or difficult. Social stories provide a visual personalized story that helps walk children through a given situation. They provide reassurance and predictable texts that help children's understanding of a given situation.
- Videotape them acting out the social story, so children can watch themselves successfully complete a task. This can be very powerful.

The following is an example of a social story for an every day task:

How Tommy rides the school bus to school

I take a school bus to school every morning.
I wait for the bus on my front steps at my home.
When the bus stops completely, I can get on the bus.
When I get on the bus, I say good morning to the bus driver.
I find my seat in the front row and sit down.
I put my backpack on my lap and use my hands to hold my backpack.
While I am on the bus, I use my inside voice.
While I am on the bus I will use my hands to hold my backpack on my lap.
While I am on the bus, I will sit in my seat until it is time to get off the bus.
This will keep me safe.
When the bus comes to my school, I take my backpack and walk off of the bus and wait for the grown-up on the sidewalk.
I walk with the grown-up into the school, with my backpack in my hand.
I like riding the school bus to school each morning.

Adaptive Skills

Children with FASD may experience difficulty functioning independently and acquiring daily living skills. The term adaptive skills refers to the ability to perform skills necessary to function independently in everyday life. A child can have an average IQ but score low on adaptive behavioural assessments.

Some examples of adaptive skills are:

- eating, feeding self, using utensils;
- table manners;
- performing basic hygiene (ex. handwashing);
- using the toilet;
- taking care of clothing and dressing appropriately;
- sense of direction;
- crossing the street safely;
- knowing home address and telephone number;
- taking care of money, saving, budgeting, banking and shopping;
- literacy skills (ex: basic reading, speaking, and spelling);
- basic housecleaning tasks and care of possessions.
- being on time for school and appointments.

Adaptive skills need to be taught, and the nature of the neurological challenges children with FASD face may make it particularly difficult to master these skills. Some children have the skills, but need cueing to follow the steps in the proper order to achieve the task.

No matter how effective, creative or prolonged the instruction, there is no guarantee that children with FASD will be able to use what is taught without support. It is imperative this area be addressed with expectations that match the child's ability.

The ultimate goal is to help develop children's self-esteem, a critical ingredient for success and resilience. Self-esteem is built when children have concrete evidence of their own competence in terms of either performing the task independently or knowing how to ask for support to achieve the task.

Social skills

According to the Learning Disabilities Association of Canada, social skills are defined as the skills we use in every environment that includes two or more people. Social skills include but are not limited to:

- politely asking permission or asking for help;
- listening;
- reading social cues;
- following directions;
- maintaining focus;
- sharing;
- having manners, for example, saying please and thank you;
- waiting patiently;
- taking turns;
- apologizing;
- accepting consequences;
- problem solving;
- resolving conflict;
- dealing with feelings.

Children with FASD may also require more supervision than their peers to ensure their safety as they learn adaptive and social skills, (ex: road safety and talking to strangers).

STRATEGIES

- Develop consistent routines for each part of the day.
- Review and demonstrate rules as needed.
- Be aware that unwanted behaviour is a cue that some element of the environment needs to be adapted.
- Initiate role-playing – giving children an opportunity to practice specific social skills.
- Be expressive – using gestures and hand signals. Exaggerate facial and body language. When speaking, vary loudness, inflection and tone.
- To teach the child about individual space, place your hand on their shoulder and say, "This is how we stand when we are talking." You can also use the "bubble concept" where we all imagine that we have a bubble around us, and we try not to bump into other people's bubble.
- Talk about the cues people give regarding their feelings, pointing out facial expressions, tones of voice and body language. This can help the child better interpret social situations as well as show them how to express themselves clearly. They may need help displaying their emotions appropriately. This help may include anger-management strategies.
- Assist children in identifying and labeling feelings. This can be done through use of a mirror, story books focused on dealing with feelings, through the use of picture symbols, role playing, or through photographs and the creation of a "feelings poster".
- Maintain consistency with the people who interact with these children. For example, it's best if the child with FASD eats snacks and lunch each day at the same table with the same children, and has other activities later in the day with those same children.

Teaching Adaptive Skills

- modeling, role playing;
- guided practice;
- use of consistent language and process between home and school;
- re-teaching;
- immediate, direct feedback;
- when possible, videotaping the child performing the skill;
- praise for all successes, be specific with praise, and provide guidance when difficulties are encountered;
- use photographs or pictures symbols outlining steps for personal grooming, clean-up, getting dressed, etc.;
- read stories with topics children are interested in exploring;
- remember each day is a new day, and a skill mastered one day, may not be the next.

- consistent routines are extremely helpful when trying to teach skills;
- when addressing eating difficulties, it is important to assess whether the child needs smaller portions, or food cut into smaller pieces. Some children with FASD are not able to tolerate food being mixed together and do better using a plate with dividers;
- modeling and role playing safety in the community can be practiced while indoors. For example, make up stop signs and lights and rehearse what these mean. Set up scenerios for what to do when a car is coming, what to do if a stranger talks to you, etc.

Remembering who owns a particular object is often difficult for children with FASD unless the item is being held by its owner. Therefore, they may feel free to pick up any item and use it as if it were their own. Also, developmental delays may lead them to respond the way that younger children do when they see something of interest — "I like it, I'll take it". For a child in a group setting who is having trouble understanding ownership, it may be helpful to put a coloured sticker, or some other identifying mark on all the child's belongings to act as a visual cue. If the child takes something belonging to someone else, simply return it, reminding them that it belongs to someone else and pointing out that there's no coloured sticker on it.

EMOTIONAL

In this area, the brain domain examined during the diagnostic process is executive functioning and abstract reasoning, often referred to as common sense.

Executive functioning and abstract reasoning

Executive functioning refers to higher-order cognitive processes including inhibition, transitioning, flexibility of thinking, working memory, planning, fluency of thought, predicting, connecting cause and effect, judgment, strategy employment and organization. Executive functioning has been identified as a particular area of weakness for children with FASD and is considered to be a separate brain domain than intelligence or cognition. Children with FASD may have average intelligence, however do not have the capacity to apply this intelligence to everyday functioning at home and in the child care program.

Executive functioning difficulties can be seen in children as early as ages two to five. This can present as difficulty with impulsivity, difficulty transitioning or shifting from one activity or topic to another, poor emotional control, poor working memory, and difficulty planning and organizing themselves to complete a task. As the child grows and develops, executive functioning difficulties become more apparent especially in the areas of impulsivity, shifting, emotional control, working memory, planning and organizing themselves, initiating tasks independently, monitoring and task completion.

ECEs and parents report that children with FASD make the same mistakes over and over no matter how many times they are corrected and given consequences. They seem to have difficulty connecting cause and effect and changing behaviour as a result of consequences. This does not mean that imposing consequences is useless, but parents and ECEs may need to make extra efforts to apply consequences consistently and immediately, with frequent, patient reminders of the reasons for them. Imposing consequences at home for something that the child did at the child care program, or vice versa, will not be effective in teaching the child due to challenges in generalizing from one environment to another.

A word of caution concerning consequences: they must be directly related to the behaviour and used as a means of correcting and not punishing. They must be short, concrete and applied in context. Keep in mind that children with FASD may not necessarily learn from the consequence, or may forget this learning from one moment to the next. This must not be seen as defiant or intentional behaviour or personally directed at the adult, rather a result of their disability. Environmental adaptations should be made to help the child succeed. **Using a more proactive, preventative approach to behaviour before it happens often alleviates the need for imposing consequences.**

Why is there such a problem perceiving consequences? There are a number of possible reasons. First, the behaviour is often impulsive: children with FASD do not think about the possibility of a consequence, or the implications of their actions. Certain rewards or consequences are often effective in the beginning, but then lose their effectiveness. Second, consequences are often uncertain. They are used to prevent an outcome that may happen: "If you throw a snowball somebody might get hurt." "Do not run out in front of traffic because you might get hit." There are many times (fortunately) when dangerous behaviour does not have a consequence, or at least a natural consequence. Nobody gets hurt. The child runs out in the street in front of the truck and does not get hit. At times, it seems that it is not enough to warn children with FASD about what might happen; they need to experiment and find out for themselves. This can lead to serious outcomes. Third, situations are never exactly the same. Children with FASD may not generalize from the behaviour in one setting to the same or similar behaviour in another setting (ex: an expectation learned in the child care program may not be transferred out into the playground). Sometimes they generalize too well: instead of remembering the expectation, they remember the one-time-only exception.

Children with FASD may display a variety of atypical responses to unfamiliar or frustrating situations. Increased anxiety may result in withdrawal, outbursts or other acting-out behaviours that may be harmful to themselves or others. A young child with FASD may have severe temper tantrums and find it hard to adjust to changes. They are often described as innocent, immature and easily victimized.

Other responses commonly observed in children with FASD include:

- easily manipulated and led by others;
- difficulty making and keeping friends;
- overly friendly and affectionate, easily approached by strangers;
- perseverative or stubborn.

STRATEGIES

- Be as consistent as possible in imposing consequences. Make them as immediate as possible and remind children what the consequences are for, keeping in mind that they may not retain this information.
- Social stories or cartoon captions work well to help children problem solve and understand what is expected of them.
- Tasks should be broken down into smaller, more manageable pieces and presented visually in a step by step manner.
- Provide the minimum number of tools required to complete the task (ex: provide a few crayons, not the entire box).

- Help children take another person's point of view (ex: role play or pretend play where the child takes on the role of another individual or character).
- Consider the child's verbal and memory limitations in working through an incident and deciding what an appropriate, natural consequence should be. Using fewer words and more visual cues or demonstration works best.
- Anticipate and prevent problems through close supervision or partnering with peers (ex: buddy system).
- Provide a predictable routine for the day.
- Repetition, repetition, repetition to help with memory skills. Use visual cues, pictures, modeling, visual demonstration to enhance memory skills.

Handling Transitions

It takes careful planning to ensure the children can make smooth transitions from one activity or routine to another. Some of the following may be useful:

- Prepare children by giving a warning but keep it concrete. For example, rather than a "two minute warning", use a sand timer to "show" the passage of time, or tear off the links of a paper chain, one link each minute. When the links are gone it's time to change activities.
- Ease children into transitions by preparing them for what will come next. For example, "First we will (fill in with activity), then we will (fill in with next activity)".
- Use musical cues - have a certain song to mark each time the group moves from one activity to another.
- Turning the lights on and off provides a visual cue for the children to attend.
- Refer children to a visual schedule posted showing the sequence of events.
- Be specific when it is time to clean up. Guide them through their tasks one step at a time.
- Have the child with FASD lead the group to the next activity (ex: carrying the book or prop to circle time).
- Strive for continuity, allowing them to take something from one activity tor area to another.
- Offer structured, limited choices and encourage decision-making. Help the child shape his/her environment.
- Develop "hello" and "farewell" rituals for the child, parents and staff to follow.

Whenever possible, reduce the number of transitions in a day. Consider whether all children need to transition, or if children may have a choice. For example, during circle time, a child may continue their activity where they are, while still listening to a story.

These are major transitions and it is important to handle them well. Parents and ECEs should work together to develop consistent routines, sharing ideas on what works best for each child.

Behaviour Guidance*

It is helpful to look at behaviour as a form of communication. ECEs can benefit from asking the question, "What is the behaviour trying to tell me?" When we have an answer to this question, it will lead and guide how we need to intervene and support a child with FASD. It is helpful to note, "….children who are unable to voice problems about their environment will often "act out" in response to their difficulty". We need to look at what is happening just prior to, or in conjunction with, inappropriate behaviour. When we are able to do this, we often begin to see a consistent pattern emerging. This insight will assist us in adapting the environment in order to best support children with FASD.

Take "James" for instance, when free play is over and clean up begins, James (on a regular basis) moves away from the play area, begins to run around, covers his ears, and does not put his toys away. When asking the question, "What is the behaviour communicating?" we begin to identify that clean up time is a transition. Therefore, noise levels and movement increase, we also recognize there are certain skills required in order to clean up (ex: organizational and planning skills). These typically are areas where a child with FASD may struggle.

When looking at the individual plan for this child, it would need to incorporate items such as: James has difficulty during transitions, he is sensitive to increased noise levels and movement, he needs assistance with planning and organization. James needs adult guidance, which means preparation for transitions, (the use of a sand timer may be helpful to indicate when clean up will begin). Perhaps James can use headphones with music during clean up times in order to minimize noise levels. He will also need an adult to break steps down for clean up, for example, "blocks in the box", and "dinosaurs in the red bin". Demonstrating what needs to be done or simply pointing to blocks and box, may be enough of a cue for James to complete the task required. For James, this may be all he needs in order to accomplish the task at hand and feel successful. For ECEs this may be all that is required to eliminate the "problematic behaviour".

Behaviour Strategies within the individual program plan need to include proactive strategies: look at the precipitating event/what is happening just prior to the "problematic behaviour", and ask "What is the behaviour communicating?". It is also helpful to remember that engaging in power struggles with children is usually not an effective approach in de-escalating a situation. For example if a child throws a toy, this is usually an indication they are needing some "calming time", options in addressing this need could be: (if they are willing) gently directing the child to a quiet area, (note what was happening at the time/what lead up to this event) wait until the child is calm, simply relate the rule for throwing, and guide them or assist them in putting the toy away. Another method to use in this type of situation, (especially if there are other children in the immediate area) is to ask them to move to an alternate space, in order for the child with FASD to have some "quiet/calming" time. Again, when the child is feeling calm,

repeat the rule and guide or assist them to put the toy away. This type of intervention beautifully demonstrates the core principles of discipline: which are to provide guidance, instruction, "to teach".

As a follow up to this situation and in keeping with proactive strategies it is important to re-visit why the "event" took place initially, what was happening at the time/what lead up to the "throwing of the toy"? For example, was this a particularly noisy time, were other children crowding into this child's space? How could this have been prevented? What can we change as ECEs in order to best support the child and prevent this from happening in the future?

*Source: Cook, P.,Kellie, R.,Jones, K., & Goossen, L. (2000). Tough Kids and Substance Abuse: A drug awareness program for children and adolescents with ARND, FAS, FAE and cognitive disabilities; Winnipeg, MB: Addictions Foundation of Manitoba, 1st Ed.

Tantrums

There are times when any young child may become verbally or physically aggressive towards themselves or others. This is more commonly known as a temper tantrum.

When this happens, best practices include ensuring the safety of the child and others. It is most effective to have the other children in the area remove themselves until the child's outburst subsides. It is also necessary to remove objects around the area that may cause harm to the child. An ECE needs to be present and remain alert yet calm. We cannot stop a tantrum from happening once it has begun. We can only ensure safety and assist the child in de-escalating and moving into a more thinking/rational state.

Sometimes adults feel they need to physically stop the child. This can increase the chances of physical harm to the child or adult, does not teach the child self-control in the long term, may incidentally reinforce the tantrum, is not respectful and often leaves the adult with bad feelings of using size and strength to control a smaller person. Furthermore, we need to realize that eventually we will not be able to physically stop a child who has grown over the years. Now is the time to teach the child the strategies they need for life. We do not want to model physical control over people who are smaller than us.

Child care programs have behaviour management policies that guide how ECEs deal with aggressive behaviour. In situations where the child requires guidance that does not fit with the program's behaviour management policy, the program needs to consult with their child care co-ordinator. In these situations, often a specialist and a team meeting is required to form or update a thorough individual program plan. Problem solving is required to find out the purpose of the tantrum and how tantrums can be prevented.

STRATEGIES:

The strategies given here are certainly not unique for children who are alcohol-affected. They reflect the style of guidance recommended for all young children. However, consistency, firmness and a positive approach are especially important as children affected by alcohol may be impulsive and hard to direct.

- Decide which limits are most important, be firm when teaching limits, and consistently enforce them.
- Post the rules to be followed using pictures and words.
- Try to step in and redirect misbehaviour before it gets worse.
- Try to ignore negative behaviour whenever appropriate, in order to avoid giving it too much attention and thereby prolonging it.
- To guide the child, give two acceptable choices and if necessary, help the child choose.
- Avoid using threats. Teach and guide children.
- Recognize a child's cues that they are beginning to feel overwhelmed and guide them to a quiet, calming space.
- Address misbehaviour without belittling the child. The behaviour may be challenging, but the child is not doing this intentionally.
- Use weekly themes illustrating positive behaviour, for example, a lesson on sharing, turn-taking or "being gentle with our hands".
- Use a multisensory approach when teaching behaviour expectations. For example, have children trace their hands, cut them out, then brainstorm positive ways they use their hands (to hold, hug, throw balls, eat, etc.). Assist them to draw a picture or write these ideas down, post them up and refer back to them as necessary, especially for reminders like "We use a gentle touch".
- As the ECE changes their response to the child, the child's behaviour may worsen in the short term. ECEs need to be persistent and patient. Any progress made toward the desired behaviours must be reinforced. How should ECEs be reinforcing these behaviours? Interactions with children should be four times positive acknowledgement to each correction.
- If anger is a problem, consider safe places and ways for the child to physically express their anger (ex: screaming, kicking a ball, spaces where they can be alone). Develop a written behaviour plan, incorporating the previous strategies, to deal with anger outbursts for all staff to follow to ensure consistency.
- Avoid rough-and-tumble activities if they cause over-stimulation.
- Give specific praise and encouragement, and give it often. (ex: "Thank you for sitting" or "You are listening closely")

- Instructions may need to be repeated many times to help the child stay on task.
- Acknowledge the child positively just for being who they are, and not in relation to any behaviour.
- Discuss cause-and-effect relationships to increase the child's understanding.

Attitudes

The attitudes of the adults involved with a child affected by alcohol are important determinants of the child's success. Generally, the more positive we are about a situation, the more likely it will turn out well. So, when dealing with children affected by alcohol, keep the following points in mind:

- Every child can learn with the right approach. Remember that children with FASD will require ongoing support, so set your expectations accordingly.
- These children need structure but not control. Recognize and avoid power struggles.
- ECEs need to be calm, gentle and firm.
- Remember children with FASD have a disability. They are not willfully misbehaving.
- Nurturing and physical warmth are very important.
- Focus on each child's strengths.
- Accept them as individuals.
- Don't take it personally if the child misbehaves.
- Have realistic expectations for the child (not based on generalized assumptions) and try to keep the expectations consistent between home, the child care program and school.
- Keep your knowledge current by attending workshops or inviting someone from the field of FASD to provide information at staff or team meetings.
- Consult with other staff or your supervisor after a challenging interaction with a child. This time for reflection may help you to evaluate if you handled the situation in the best way possible. Your colleagues may be able to assist in problem solving or suggest a different strategy to next time with the child.

Consider Developmental Age*

Society usually bases learning and behavioural expectations on what is typical for children, youth and other adults at a particular chronological age. We expect others to "act their age".

However, individuals with FASD may experience developmental delays in certain areas. These delays mean that children with FASD will not reach as many of the expected developmental milestones as quickly as their peers. As a result, the ability to learn and do many "age appropriate" tasks is affected and their behaviour may appear immature. However, if we stop to consider the developmental ages that these children have reached, behaviour that appeared inappropriate from a chronological perspective many actually be developmentally appropriate.

Children with developmental delays do make progress . .. but not always at the same rate (or the same level) as their chronological peers. We need to acknowledge and celebrate achievements that may seem like "small successes" when they are compared to these children's peers. These achievements are, in reality, large steps on the developmental timeline for students with FASD.

Debra Evensen and Diane Malbin have created a chart to illustrate the importance of having developmental age-appropriate expectations. (See following page).

*Source: Adaptation reproduced from Peggy Casser, Challenges and Opportunties: A Handbook for Teachers of Students with Special Needs with a focus on Fetal Alcohol Syndrome (FAS) and partial Fetal Alcohol Syndrome (PFAS) (Vancouver, BC: District Learning Services, Vancouver School Board, 1999).

Behavioural Expectations of Students with FASD

Age Appropriate vs. Developmental Age Appropriate

Chronological Age Expectations

TYPICAL 5 YEAR OLD . . .

- Follow 3 instructions
- Interactive, cooperative play
- Share
- Take turns

TYPICAL 6 YEAR OLD . . .

- Listen, pay attention for an hour
- Read and write
- Line up
- Wait their turn
- Remember events and requests

TYPICAL 10 YEAR OLD . . .

- Reads books without pictures
- Answers abstract questions
- Knows right from wrong
- Gets along with others, solves problems
- Learns inferentially, academic and social

Developmental Age with FASD

5 YEARS GOING ON 2 YEARS . . .

- Follow 1 instruction
- Take naps
- Sit still for 5 – 10 minutes
- Parallel play
- My way or no way

6 YEARS GOING ON 3 YEARS . . .

- Pay attention for almost 10 minutes
- Scribble
- Need to be shown and reminded
- Acts impulsively
- Needs adult reminders for tasks

10 YEARS GOING ON 6 YEARS . . .

- Beginning to read, with pictures
- Mirror and echo words, behaviours
- Supervised play
- Learn from modeled problem solving
- Developing sense of fairness

Mealtime and Sleep Strategies

MEALTIME:

Eating problems are common for children with FASD. Some children eat to excess. Others don't eat enough. Some children eat slowly and many will use food for comfort. Mealtimes are often full of distractions and these children can become easily over-stimulated. Here are some tips for managing this time:

- Allow the child enough time to eat. A child with FASD may eat slowly because of poor muscle control. Some children also have a sensitive gag reflex.
- Have a consistent routine and sequence of events. This may include using the same seat, dishes and cutlery for the child with FASD.
- Ensure the child is in a chair in which their feet touch the floor, or place a stool underfoot.
- Seat the child where they are least likely to become in conflict with another child and where distractions are minimal.
- Having the child serve others may avoid difficulties they might encounter while waiting to be served. It also gives them an acceptable reason for getting up during mealtime.
- Sometimes when waiting is required, providing the child with a "fidget item" will help reduce the difficulties often associated with waiting.
- Have consistent expectations for table behaviour. However, recognize that handling forks and spoons may be difficult and finger foods may be needed for a longer period of time.
- Be realistic about the amount of food you expect children to eat.
- Some children have difficulties organizing themselves when eating, or may not like foods touching each other. They often manage better when allowed to use a plate with dividers (for example, plates which are divided into 3 sections).
- Watch for children's response to strong flavours and record this information. Some prefer them and others react negatively.
- Similarly, watch for their reactions to food additives and sugar, and reduce these if necessary.
- Some children are extra-sensitive to food temperature or texture. You may need to modify foods if this becomes an issue. For example, if coarse textures are disliked, try finer or pureed foods.

SLEEP ROUTINES:

The transition to sleep, whether it is for a nap or for the night, can be a difficult one. The following tips can help it go more smoothly:

- Use a set order of events that will help prepare and calm the child. For example, assist the child to choose a book, get their blanket from their locker, lay on their mat. Leave enough time to go through all the steps and be sure the pattern is followed by whoever puts the child to bed.
- Keep the room dark or use one low light. Keep the nap area free of clutter and materials that may be over-stimulating.
- Use relaxing music, white noise of a fan, or a sound therapy device to block out other noise.
- Some children respond well to a deep pressure back massage prior to bedtime, while some find touching too over-stimulating.

Transition to School for Children with FASD

Integration of children with FASD into nursery and Kindergarten classrooms involves a carefully planned transition providing parents with an opportunity to participate as equal partners in facilitating the child's entry to the school. Ideally, this planning should begin one year prior to school entry.

- The sending agency (child care program, preschool etc.) collaborates with the parents to initiate the transition process by completing the *Guidelines for Early Childhood Transition to School For Children with Special Needs* found at www.gov.mb.ca/fs/childcare/transition_protocol.html. The sending agency also acts as a liaison between the family and school division. The transfer of information and reports happens after the *Authorization for Exchange of Information* form is signed by the parents.
- The Special Education Department receives the transition information from the sending agency and coordinates an intake meeting to be held at the school.
- Information about all aspects of the child's development is shared, including health and medical needs, communication, play and social skills, motor skills, readiness skills, sensory issues, safety, behaviour issues and skills of daily living.
- The outcome of the intake meeting is a transition plan that includes referrals to the school based clinicians and school registration. Opportunities for visits prior to school entry can be arranged to help with the transition process.
- The school team and parents will continue to meet throughout the year to establish, review, and make changes to the individual education plan (IEP) for the child. Parents are encouraged to work closely with the school team members by keeping communications ongoing.

Common Misconceptions About FASD:

The following list outlines 10 commonly held misconceptions or myths about FASD and the individuals who live with this disability. Clarifying these misconceptions will help people better understand the true nature of FASD.

1. MYTH: Children with FASD will outgrow it.

There is no known cure, and FASD does not go away over time. The characteristic facial and physical features that some children have may become less noticeable as they age and mature. But while the specific characteristics and challenges of FASD may change as the individuals age, those with FASD require a lifetime of supports.

2. MYTH: There is no benefit in receiving a diagnosis. This diagnosis will brand them for life.

Rather than labeling, a diagnosis provides an understanding of how to best support a child. A large part of the diagnostic process includes developing strategies and interventions, specifically designed for the unique needs of the child and the family, to help the child learn and succeed. A diagnosis may provide access to additional community supports and services. Research has also shown that receiving a diagnosis may mitigate, or help reduce, the development of subsequent secondary disabilities such as unemployment, mental health problems, trouble with the law, inappropriate sexual behaviour, and disrupted school experience (Streissguth, Kanter et al. 1997).

Many individuals who have received a diagnosis express relief in discovering that there is a medical reason why they often struggle more than their peers, and that it isn't their fault or from lack of trying. This has helped many to develop a more positive self image.

3. MYTH: Diagnoses of pFAS and ARND aren't as serious as FAS.

Although individuals with pFAS and ARND do not display some of the physical or facial features that are present in someone with FAS, in all three cases, brain damage has occurred. The cognitive, learning and behavioural impacts will be different for all individuals because each person is uniquely affected by alcohol use, but any diagnosis means that the brain has been affected by alcohol use during pregnancy. Regardless of the specific diagnosis, children with special needs require accommodations.

4. MYTH: People with FASD have low IQ's.

This is sometimes true, but not always. FASD affects every individual differently and people will experience strengths and challenges in different areas. Some individuals may have an average IQ, but experience difficulties with impulsivity, staying on task, judgment, problem-solving, relationships, sensory integration and/or time management. Many students with FASD score higher on IQ tests than is representative of their ability to function in the classroom or in real life situations.

5. MYTH: Children usually plateau at grade 4 in their ability to learn.

At about grade 4, there is a change in the way that all children learn in the classroom. The curriculum lessons become more abstract, children are expected to work more independently, and the method of teaching becomes less interactive and more lecture style.

The new materials, expectations and teaching approaches are very challenging for students with FASD and they may appear to stop progressing or learning. If teaching can remain interactive, visual and concrete, and support is provided, students with FASD can learn in all grades.

6. MYTH: The behaviour problems associated with FASD are a result of poor parenting.

No. Brain damage caused by prenatal alcohol exposure leads to information being processed differently. Memory difficulties, poor problem-solving abilities, sensory stimulation issues and a poor understanding of reality often lead to behaviour problems. Children may respond inappropriately to a particular situation and feel frustrated, embarrassed or angry.

7. MYTH: The mothers of these children must be alcoholics; social drinking wouldn't cause FASD.

We do not know how much alcohol a pregnant woman can safely drink. However, we do know that the more alcohol a pregnant woman consumes, the greater the risk to the developing fetus. Drinking regularly, even one drink daily, is considered to be high risk. Drinking five or more alcoholic beverages on one occasion, called binge drinking, is also high risk. Many women who aren't addicted consume these amounts of alcohol. There is no known safe amount of alcohol during pregnancy.

8. MYTH: FASD is only an issue for certain populations.

Women of all different backgrounds, ethnicities and income levels use alcohol.

The 2004 Canadian Addiction Survey found that 76.8 percent of all Canadian women use alcohol. A 1998 survey of Canadian university students found that 87.5 percent of female students used alcohol in the past 12 months, 41.1 percent of students reported harmful drinking, and 29.3 percent reported dependant drinking.

A 2005 report by the Public Health Agency of Canada, *Report on Maternal and Child Health in Canada* found that roughly 14 percent of mothers reported drinking alcohol during pregnancy. Another study found that women in the highest income brackets were most likely to have used alcohol during their last pregnancy. Among those who used alcohol heavily (12 or more times per week) there were no age or income differences *(Windows of Opportunity: A statistical profile of substance use among women in their childbearing years in Alberta*. 2004, Alberta Alcohol and Drug Abuse Commission).

Some women are treated differently by social service providers and researchers, which has led to the assumption that certain groups have higher rates of FASD. For example, poor women and women of colour are more frequently screened for substance use when accessing perinatal care than are middle-class and Caucasian women. (Nancy Poole and Colleen Anne Dell, Girls, Women and Substance Use, 2005. Canadian Centre on Substance Abuse).

9. MYTH: The mothers of children with FASD could have easily chosen not to drink during pregnancy. They damaged their children through callousness or indifference.

Alcohol addiction is often related to complex and long-term issues involving abuse, mental health problems and violence and is difficult to overcome.

Pregnancy is a critical time for women to stop or reduce their use of alcohol. In order to do so, they need respect, understanding and caring support. Many pregnancies are unplanned, and often women are unaware they are pregnant until they are well into their first trimester. Since most women drink alcohol regularly, the developing fetus may have already been exposed to alcohol. Discontinuing use of alcohol, ensuring adequate nutrition and reduction of stress will help to ensure the best possible outcomes.

10. MYTH: A woman who has FASD will have children with FASD.

The only cause of FASD is alcohol use during pregnancy. There is no genetic link for this disability. If a woman with FASD abstains from alcohol during her pregnancy, her baby will not have FASD.

FASD Resources in Manitoba

If you have more questions about fetal alcohol spectrum disorder, call FASD Information Manitoba at 1-866-877-0050. This toll-free telephone line provides confidential information to callers throughout Manitoba. When you call this number between 9:00 a.m. and 4:30 p.m. from Monday to Friday, you will speak to a person who can respond to your questions.

People call with questions such as the following:

- *What can I do about my child's behaviour?*
- *How can we make our child care program a better place for children with FASD?*
- *What resources are available in our area?*
- *Can you send me printed information about FASD?*
- *Where can I refer parents for more support for their children?*

The Healthy Child Manitoba website www.gov.mb.ca/healthychild also maintains a listing of resources and agencies in Manitoba in the following areas:

- FASD diagnostic services
- Outreach and support services for children, youth and adults
- Family support services
- FASD prevention services
- FASD information and resources

FASD Websites

Manitoba FASD Centre
www.fasdmanitoba.com

This website provides information on assessment and diagnosis processes and referrals for Manitobans, education and training opportunities and local FASD research.

Manitoba Coalition on Alcohol and Pregnancy (CAP)
www.capmanitoba.ca

CAP is a provincial network working together to share information and resources, co-ordinate activities and plan together to address issues related to FASD. This website provides local information on upcoming education and training opportunities and information on FASD programs, services and resources.

Canadian Centre on Substance Abuse (CCSA)

www.ccsa.ca/fas

The CCSA maintains provincial directories for FASD related service, supports and trainers. They also post upcoming conferences and workshops and have research articles and other resources on prevention and intervention.

FAS Bookshelf Inc.

www.fasbookshelf.com

Provides a list of FASD videos and books for purchase, plus links to other websites.

For copies of this resource contact:
Healthy Child Manitoba Office
Phone: 204-945-2266 or 1-888-848-0140
A pdf is also available on-line at www.gov.mb.ca/healthychild/

References

Alberta Alcohol and Drug Abuse Commission. *Windows of Opportunity: A Statistical Profile of Substance Use among Women in Their Childbearing Years in Alberta.* Edmonton, AB, Canada: Alberta Alcohol and Drug Abuse Commission, 2004.

Chudley, Albert E., Julianne Conry, Jocelynn L. Cook, Christine Loock, Ted Rosales, and Nicole LeBlanc. *Fetal Alcohol Spectrum Disorder: Canadian Guidelines for Diagnosis. Supplement to Canadian Medical Association Journal* 172.5 (March 1, 2005): S1–21S. Available online at <http://www.ecmaj.com/cgi/content/full/172/5_suppl/S1>.

Committee on Alcohol and Pregnancy (1996). Fetal Alcohol Syndrome/Effects- Booklet 2: Parenting Children (0-12 years) Affected by FAS/E; Winnipeg, MB.

Cook, P., Kellie, R., Jones, K., Goosen, L. (2000). *Tough Kids and Substance Abuse: A drug awareness program for children and adolescents with ARND, FAS, FAE and cognitive disabilities. Winnipeg:* Manitoba Community Services Council Inc.

Doctor, Susan. (1994). Fetal *Alcohol Syndrome/Fetal Alcohol Effect/Fetal Drug Effect: Educational Implications. San Jose:* Family Education Foundation.

Frank Porter Graham Child Development Institute (1998). *Early Childhood Environment Rating Scale – Revised (ECERS - R) and Infant/Toddler Environment Rating Scale - Revised (ITERS- R).* University of North Carolina.

Graefe, Sara, 2nd ed. FAS. (1998). Parenting *Children Affected by Fetal Alcohol Syndrome – A Guide for Daily Living.* SNAP. Vancouver: Society of Special Needs Adoptive Parents, 1150-409 Granville St., Vancouver, BC

Healthy Child Manitoba, et al. *Guidelines for Early Childhood Transition to School for Children with Special Needs*. Rev. ed. Winnipeg, MB: Healthy Child Manitoba, 2002.

Lasser, Peggy. Challenges and Opportunities: *A Handbook For Teachers of Students with Special Needs with a Focus on Fetal Alcohol Syndrome...* Vancouver School board, 1999.

Poole, Nancy, and Collen Anne Dell. *Girls, Women and Substance Use*. Ottawa, ON: Canadian Centre on Substance Abuse, 2005.

Psychological Assessment Resources, Inc. *Behaviour Rating Inventory of Executive Function – Preschool Version*. Lutz, Florida, 1996.

Public Health Agency of Canada. *Make Every Mother and Child Count: Report on Maternal and Child Health in Canada*. Ottawa, ON: Public Health Agency of Canada, 2005. Available online at <http://www.phac-aspc.gc.ca/rhs-ssg/pdf/whd_05epi_e.pdf>.

Malbin, Diane, *Trying Differently Rather Than Harder*, Fetal Alcohol and Fetal Alcohol Effects Workshop.

Malbin, Diane V. *Trying Differently Rather Than Harder: Fetal Alcohol Spectrum Disorders*. 2nd ed. Portland, OR: Fetal Alcohol Syndrome Consultation, Education and Training Services (FASCETS), Inc., 2002.

Mayer, Lorna, ed. (1999). *Living and Working with Fetal Alcohol Syndrome/Effects. Winnipeg: Interagency FAS/E Program.*

Writing an Inclusion policy, *A Guide for Child Care Centres and Homes. Manitoba Child Care Program.* August 2009. Available from your child care co-ordinator or at manitoba.ca/childcare; or www.gov.mb.ca/fs/childcare/pubs/writing_inclusion_policy_aug_2009_en.pdf