

Understanding and addressing the needs  
of children and young people living with

# Fetal Alcohol Spectrum Disorders (FASD)

A resource for teachers

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of children and young people living with**

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**A resource for teachers**



**KIMBERLEY**  
SuccessZone

Schools: Join the conversation,  
exchange & collaborate

*Share the success*

*Understanding and addressing the needs of children and young people  
with fetal alcohol spectrum disorders in schools*

Published by National Curriculum Services on behalf of the  
Kimberley Success Zone.

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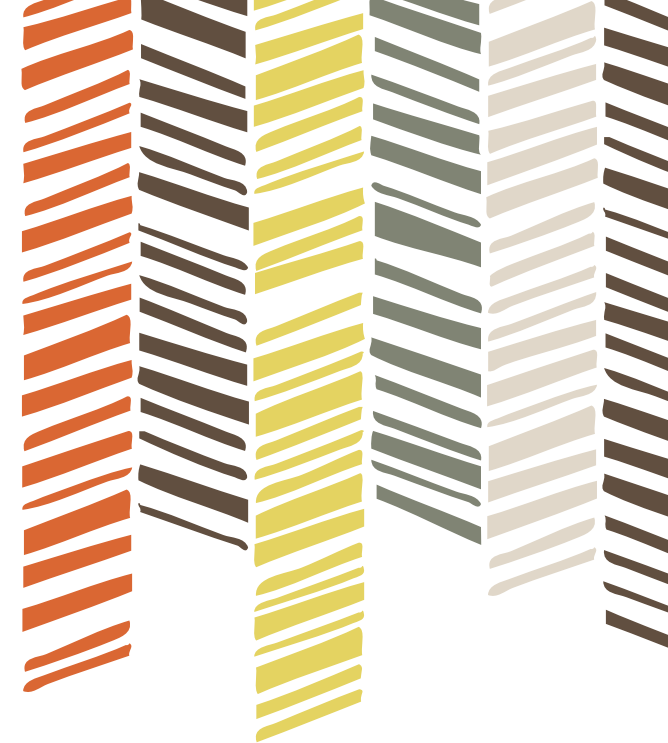


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The resource was researched and developed by **Jane Weston** and **Sue Thomas** who acknowledge the inspirational work being done to address such complex needs and improve outcomes across the Kimberley.

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## About the authors



### **Jane Weston**

Jane Weston is an experienced teacher, writer and project manager. She has worked on a range of national education initiatives, and has extensive experience developing resources for teachers and school leaders in areas of considerable educational significance, including Indigenous education, values and peace and conflict resolution curriculum areas.



### **Sue Thomas**

Sue Thomas has worked and lived in the Kimberley as a teacher, principal, researcher, education consultant and Coordinator of Kimberley Success Zone for a period spanning three decades. She has worked on a number of national Indigenous education projects and is currently building a professional learning community to raise awareness and connect people working to address the needs of children and young people living with FASD.



# Background

## Two overlapping initiatives

### ■ Kimberley Success Zone (KSZ)

Managed by National Curriculum Services (NCS), KSZ was set up to support all Kimberley Government, Catholic and Aboriginal Independent Community (AIC) schools to improve outcomes for their Aboriginal and Torres Strait Islander students. It investigated ways of accelerating improvements for Aboriginal and Torres Strait Islander students and captures and shares leading practice. KSZ endeavours to enhance Kimberley educators' professional knowledge and expertise through professional learning opportunities, the sharing of relevant knowledge and expertise, by developing resources, and building dynamic learning communities that stimulate professional conversations. [www.ksz.edu.au](http://www.ksz.edu.au)

Fetal Alcohol Spectrum Disorders (FASD) have been identified as an area of growing significance requiring urgent action in the Kimberley, and more widely across Australia. This resource builds on the momentum begun by the work of the Marulu leadership team and seeks to raise awareness, knowledge and understanding of the impact of FASD and Early Life Trauma on children and young people in all schools and their communities across the Kimberley.

### ■ The Marulu Strategy

The Marulu Strategy is a community initiative to overcome FASD and Early Life Trauma in the Fitzroy Valley through prevention, education, diagnosis and family support. In 2009, the Marulu Strategy Leadership Team, in collaboration with The George Institute for Global Health and Sydney University, agreed that a prevalence study was needed to document the extent and nature of FASD in the Fitzroy Valley.

The Lililwan FASD Prevalence Study commenced in 2010 as a partnership between Nindilingarri Cultural Health Services, Marninwantikura Women's Resource Centre, The George Institute for Global Health and Sydney University. Parents and carers of 108 children born in 2002 and 2003 took part in the study. The prevalence of FASD was shown to be amongst the highest rates in the world. These children presented with a range of physical, cognitive, behavioural, emotional and learning difficulties. Results from the study indicated that high numbers of school-age children face enormous challenges with learning as a result of prenatal exposure to alcohol.

These results indicate that such prevalence has significant impact on a large proportion of students in our classrooms and as educators we need to recognise and respond to the challenge of addressing the diverse needs of these students.

The goal of the Marulu Strategy is to 'make FASD history', as they are entirely preventable. A number of initiatives are currently being scaled up across the Fitzroy Valley to respond to the increased understandings and knowledge derived from the Lililwan prevalence study. Nindilingarri Cultural Health Service is implementing a range of prevention strategies. Marninwantikura Women's Resource Centre is coordinating prevention, education and diagnostic services from the Marulu Unit and providing support services for families and communities living with FASD. The Marulu Unit is designing responses that support families of children and young people living with FASD throughout their lives. Schools are looking at ways to support the education of children and young people living with FASD and enhancing the prevention programs that educate adolescents about the impact of alcohol on the unborn child.

Fetal Alcohol Spectrum Disorders (FASD) have been identified as an area of growing significance requiring urgent action in the Kimberley, and more widely across Australia.

# Audience and purpose

This practical education resource is designed to support school leaders, teachers, Aboriginal educators and the broader school community to recognise, understand and work effectively with students living with FASD in schools. While the resource is written for teachers and school communities in the Kimberley region of Western Australia, the materials are also relevant for all school communities across Australia meeting the complex needs of students with this challenging and often difficult to diagnose set of disorders.

Schools in the Kimberley play an important role in developing greater engagement with their school communities. Strong relationships with key professionals, the community and families create successful community engagement frameworks that underpin the comprehensive strategies required to address the complex needs of these communities.

The accurate data now available about children and young people living with FASD provides us with evidence to inform responses and plan strategies to address the needs of these children. Due to the sensitive nature of the issues around FASD, and the relative lack of awareness and knowledge of the impacts of FASD in the broader national community, this resource will be of interest in a range of settings.

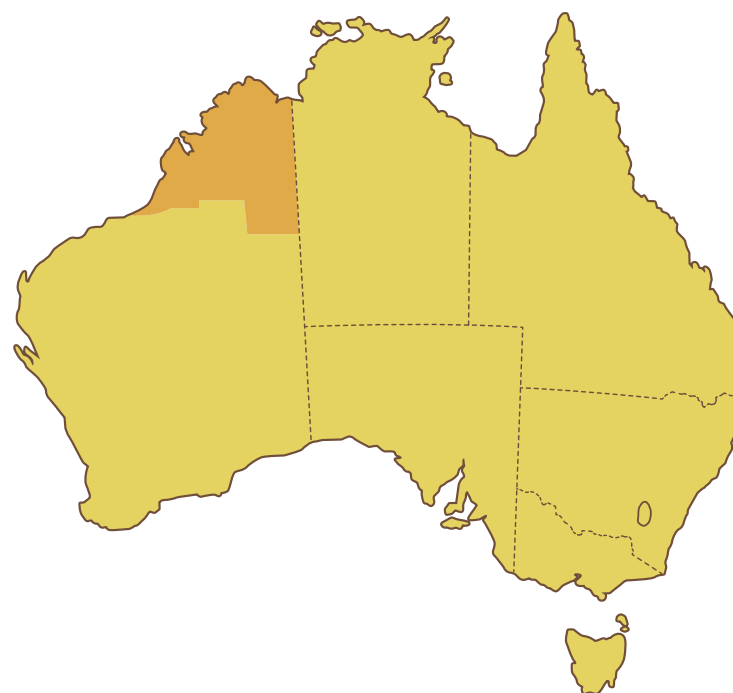
This resource seeks to provide teachers and the communities they serve with an understanding of the needs of students living with FASD by:

- defining FASD
- describing the common learning and behavioural characteristics of children living with FASD
- presenting evidence-based strategies that may be helpful in meeting the needs of these children and young people in schools and classrooms, and
- providing links to further resources that will assist teachers with more comprehensive advice and support.

The material presented has been sourced from:

- local, national and international research and evidence bases
- advice provided by teachers with experience in working with students living with FASD, and
- current effective practice supporting teachers to adjust their teaching programs to meet the needs of this significant student cohort in Kimberley schools.

**Figure 1: Location of the Kimberley region**





# A strength-based approach

The community-driven interventions briefly described in the Lililwan project and subsequent Marulu Strategy demonstrate the power of consultation, collaboration and shared responsibility between communities and a range of allied health, education and other support services.

Latimer *et al.* (2010) comment that the Lililwan project is ‘...an example of researchers reciprocating both the spirit and intent of the community by working to address the challenges of FASD in genuine partnership – one where research is done with the community and not just about the community.’ Australia’s Social Justice Commissioner, Mick Gooda remarked that ‘...a process guided by a relationship underpinned by meaningful, respectful engagement and collaboration will always be more effective and successful than one that is not.’ (Aboriginal and Torres Strait Islander Social Justice Commissioner 2010)

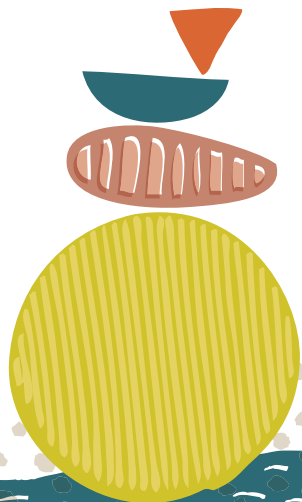
A core message from the success achieved to date through the Marulu strategy is the primacy of respectful, positive and strength-based relationships between community and health organisations, teachers, parents and all those engaged in understanding and meeting the needs of children and young people affected by FASD in our schools.

The advice in this resource is also predicated on the strong belief that all children and young people living with FASD can learn and lead successful and fulfilled lives. The challenges of achieving and maintaining gains may at times seem overwhelming, however, a growing research base tells us that with early diagnosis, strong parent/carer engagement, individualised treatment and personalised learning plans, high expectations can be realised. Teachers who are knowledgeable and open to making adjustments to curriculum programs and learning spaces while maintaining high expectations, can produce great gains with children and young people living with FASD. Many leadership teams and teachers are rising to the challenge and innovating in powerful ways.

The emphasis in this resource is on how deeper knowledge and understanding about what FASD look like can assist teachers and school communities best make targeted adjustments to meet the complex needs of students living with FASD.

This resource does not address specific diagnostic protocols or deal with prevention matters. Other agencies are working in that area. Allied health and other services in the Kimberley vary across schools, communities and regions. Leadership teams, school support services and school psychologists are the appropriate people to navigate access to support services.

... deeper knowledge and understanding about what FASD looks like, can assist teachers and school communities to make targeted adjustments that meet the complex needs of students living with FASD.





## Section 1: About FASD



# What are fetal alcohol spectrum disorders (FASD)?

‘Of all the substances of abuse, including cocaine, heroin and marijuana, alcohol produces, by far, the most serious neurobehavioral effects in the fetus.’

(Stratton, Howe & Battaglia 1996)

‘FASD is an invisible physical handicapping condition. All we may see are behavioural symptoms’

A social worker (Malbin 2002)



Alcohol is a **teratogen**, a substance that can potentially cause a baby in the womb to develop abnormally. There is no known safe amount of alcohol or safe time to drink alcohol during pregnancy.

FASD is the result of the effects of alcohol on the developing fetus. Alcohol is a **teratogen**, a substance that can potentially cause a baby in the womb to develop abnormally. Other teratogens, such as lead, nicotine, mercury and most recreational drugs can also adversely impact the developing fetus. Any time a pregnant woman drinks alcohol, it can influence and damage whatever is developing in the baby at the time. (Yukon Department of Education 2006)

Since Fetal Alcohol Syndrome (FAS) was first defined in 1973, ongoing medical research has delivered increasing evidence about the effects of alcohol on the developing fetus. More recently, the term Fetal Alcohol Spectrum Disorders (FASD) has been adopted as an umbrella term that encompasses all of the terms shown in Figure 2.

Many of the common physical deformities associated with Fetal Alcohol Syndrome occur during the six-week period in early pregnancy when a woman may not yet know she is pregnant. However, a spectrum of disorders can occur depending on the frequency and quantity of alcohol consumption, genetic influences, maternal age and health and the use of other teratogens during the term of a pregnancy. FASD is the one of the major birth conditions in the Western world, though little is really known about the impact and lifelong challenges faced by children, young people and their families.

The complexities of the interactions of these factors means symptoms displayed by individual children and young people with FASD are varied and often difficult to respond to without the help of multidisciplinary health and diagnostic services. Due to growing international evidence on the incidence of FASD, government health policies around the world are recommending that no alcohol at all be consumed if a woman is pregnant or planning to become pregnant. **There is no known safe amount of alcohol or safe time to drink alcohol during pregnancy.**

This warning reflects the serious nature of the impact of drinking and the growing body of knowledge about the lifelong impact on the children, their families and the wider community.

Figure 2: FASD – an umbrella term

## Fetal Alcohol Syndrome (FAS)

The severe end of the spectrum. Children and young people living with FAS might have abnormal facial features, growth problems and central nervous system problems. They may also experience significant challenges with learning, memory, attention span, communication, vision or hearing. They may have a mix of these challenges. Approximately 10% of children and young people with FASD show these characteristics.

## Partial Fetal Alcohol Syndrome (pFAS)

Some, but not all, of the physical signs of FAS.

## Alcohol-Related Neurodevelopmental Disorder (ARND)

Children and young people with ARND will have normal growth and structural development, but have intellectual disabilities and present with significant behaviour and learning challenges. They may also have difficulties with mathematics, memory, attention, judgement and poor impulse control.

## Alcohol-Related Birth Defect (ARBD)

Children and young people with ARBD might also have problems with the heart, kidneys, bones and/or with hearing.

# The importance of early diagnosis

'I just learned that I'm not the problem. I have a problem. I can deal with that.'

15-year-old with FASD (Malbin 2002)

This heartfelt statement of self-understanding about his condition is from a 15-year-old boy who suffers from FASD. It reveals a lot about the impact increased understandings can have and also signals another important aspect of early diagnosis. Instead of seeing himself as 'the problem', this boy has come to understand he has a medical condition which explains why he is not like others his own age. Importantly, his self-understanding brought him some relief from the constant frustration of not being able to keep up with his peers. His observation that '...I can deal with that' is the bridge upon which more self-aware and purposeful steps into his future can be planned. Without early referral and diagnosis, a lack of awareness of a child's difficulties by education professionals and families can lead to consistent unrealistic expectations of them, as well as frustration. Inappropriate interventions can also add to feelings of despair for children and young people, their parents/carers and teachers.

**The disabilities caused by alcohol are incurable and they have a lifelong impact.** Early diagnosis of children and young people living with FASD is vital to their development, education and long-term life chances.

Research shows that with early diagnosis, preferably before the age of six, the required network of professional and social support can be put in place, and can produce significant improvements to the quality of life of a child or young person living with FASD. Schools play a vital role in connecting families and health services in ways that navigate the referral and diagnosis processes.

The stigma associated with FASD diagnosis may be seen by some as a negative label. However, without a diagnosis, children and young people with FASD might be judged as noncompliant, uncooperative or unmotivated, when those behaviours are in fact a symptom of a series of underlying medical conditions. An inaccurate diagnosis may also be harmful. For example, medications for Attention Deficit Hyperactivity Disorder (ADHD) may not help a person whose attention deficits stem from prenatal alcohol exposure and the subsequent damage to their brain.

In conversation with teachers and principals, it is evident that understanding these disorders has a dramatic impact on responses. By addressing the specific needs of children and young people living with FASD in ways that promote understanding and compassion, rather than judgement and frustration, we are all better equipped to succeed.

It is therefore important, that teachers are able to recognise and identify the primary characteristics of children and young people living with FASD.

**Primary behaviour characteristics** are those believed to most clearly reflect underlying brain differences. These characteristics include impulsivity, memory problems, slower processing pace, as well as difficulty with abstracting and predicting skills.

**Secondary behaviours** are often defensive behaviours that are believed to develop over time due to constant failure and frustration and can lead to depression, mental health issues and contribute to students disengaging from education. Some of these might be anxiety, frustration, depression, isolation and other expressions of a lack of self-esteem or confidence. (Malbin 2002)



**Primary behaviour** characteristics are those believed to most clearly reflect underlying brain differences.

**Secondary behaviours** are often defensive behaviours that are believed to develop over time due to constant failure and frustration.

**The disabilities caused by alcohol are incurable and they have a lifelong impact.**

‘Remember by the time he thinks about it, he has already reacted/done it ...’

### CASE STUDY 1

An early childhood teacher expressed her frustration at a pattern of behaviour where a pre-primary student continuously swept objects off the table in frustration and refused to respond to directions when an activity finished.

The teacher repeated her directions, often raising her voice with each attempt. This seemed to exacerbate the situation resulting in the child totally shutting down and the teacher feeling lost and frustrated.

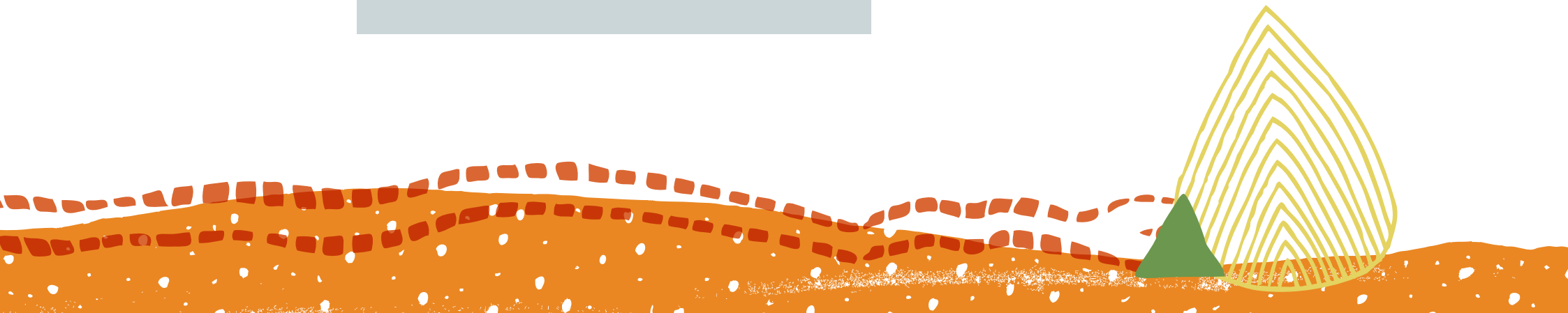
She was unaware that the child had an auditory processing delay and that the repeated directions heightened the frustration and made the situation worse for both of them. Once the child was known to have an auditory processing delay, the teacher responded by giving her time to process the direction, and using fewer words along with hand gestures to communicate the instruction.

She also began to implement consistent routines with visual cues so that the child could predict the process. Once the child understood the process she could respond appropriately and participate fully.

The increased empathy and understanding from the teacher improved communication and made it much easier to build a positive relationship.

The earlier primary behaviours can be identified and a diagnosis made, the more preventable are many of the secondary behaviours.

The scenario described in case study 1 illustrates this point. It underscores how important an early diagnosis of FASD can be in informing teaching practice. Educating and caring for children and young people with FASD needs a unique approach that relies on reflective practice and adaptive teaching techniques.





# Diagnosis and referral

The particular steps and processes required to diagnose children and young people with FASD will vary from school to school, depending on the resources available and local arrangements. Typically, pediatric and allied health services work together in multidisciplinary teams to establish the diagnosis (see Figure 3).

It is vital to obtain a careful and comprehensive medical diagnosis to ensure that as educators we can make appropriate adjustments based on accurate information. FASD, including brain damage and behavioural conditions, affect a child's capacity to learn in different ways. An accurate diagnosis will directly inform the types of adjustments required by educators and others who support children and young people with FASD.

As we have seen, diagnosis can also help the child understand their own strengths and challenges, give teachers and educators insights into why a child responds in certain ways and provide an evidence base from which to plan interventions.

## 1. Screening and referral

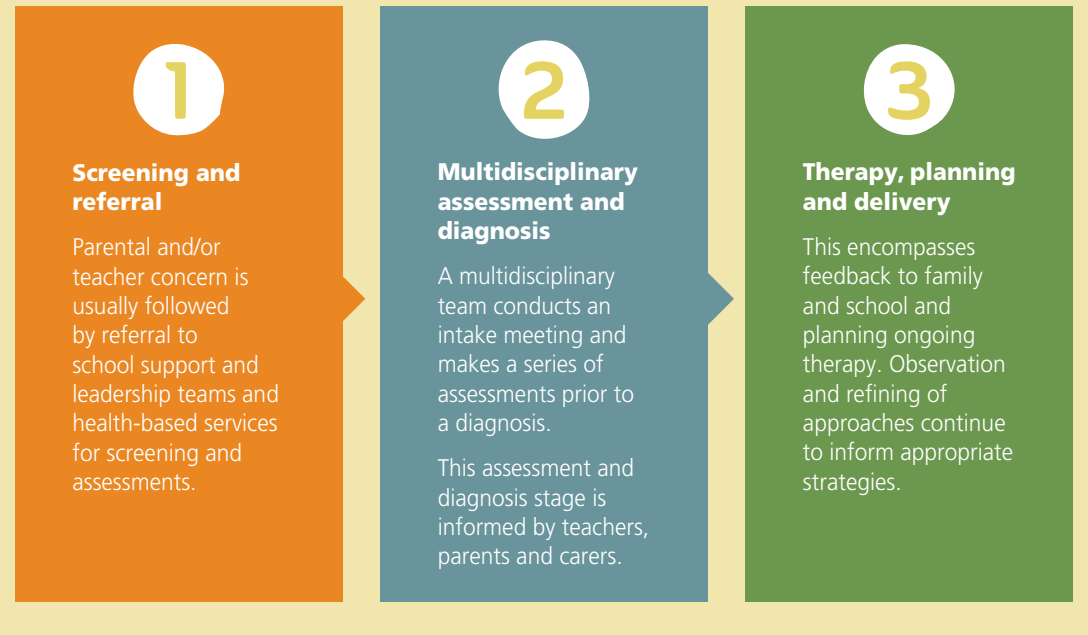
Parental and/or teacher concern is usually followed by referral to school and health-based services for screening and assessments.

A teacher's role is not to diagnose but rather to raise concerns and work with school psychologists and other health professionals to inform a diagnosis.

Teachers play an important role describing what they see, identifying triggers that may stimulate a response and other factors that provide challenges. Others can investigate based on the data teachers provide.

The student profile and documented evidence from describing and monitoring behaviours, inform health professionals to make a diagnosis and provide teachers with appropriate advice.

Figure 3: Three-step approach to diagnosis



The next stage, undertaken by a multidisciplinary team, enables diagnosis. Comprehensive observations from schools can provide important information to increase understandings of children's behavioural and learning difficulties.

**Teachers describe behaviours rather than interpret why these behaviours occur.**

**‘Studies have shown that early detection and early intervention ...can reduce the consequences of FASD two to fourfold.’**

Dr James Fitzpatrick,  
Telethon Kids Institute

## **2. Multidisciplinary assessment and diagnosis**

Once a referral is made, a multidisciplinary team conducts an intake meeting and plans are made for a series of assessments prior to diagnosis.

This assessment and diagnosis stage is informed by teachers, parents and carers, and the quality of the evidence can greatly assist the team of professionals. The information from these meetings is only shared with the school when the parents and carers have given their permission. It is vital to build relationships with the families and make sure there is no shame or judgement, rather a shared willingness to work together to find the best early interventions to assist a child. The impact of increased understanding and influence on their learning throughout their life is significant.

An Aboriginal educator and grandmother cautioned educators to get to know the parents/carers before coming to them with concerns. Her advice was that they see their children as normal and accept them without judgement. So, as educators we need to build relationships with parents and carers and ensure we are understood to be seeking solutions and being supportive rather than judging. Take time to make sure parents and carers understand the process and are fully informed. A diagnosis is informed by the combined knowledge and understandings of parents/carers and teachers.

## **3. Therapy, planning and delivery**

Once a diagnosis is made, this information informs individualised learning plans, enhances understandings of behaviours and guides teaching practice. Teachers plan to adjust their programs in ways that are appropriate for individual student needs.

Many of these strategies are described in Section 2: ‘Taking action – strategies for teacher’.

Schools play an important role in building on the knowledge of what works with individual students and making sure these understandings inform parents, other health professionals and teachers. This information is especially important as children transition from primary to secondary school settings.

The importance of an early diagnosis for a child living with FASD cannot be overstated. Parents and carers speak of the relief when a diagnosis is achieved, as an explanation is provided for a range of behaviours and learning challenges. It is the starting point for planning to meet needs in a coordinated, compassionate and understanding manner.

# The impact of trauma

## Understanding social determinants and lived histories that impact on communities

Many Kimberley educators come to work in schools and communities very different to where they grew up themselves. There is an ongoing need to engage with local communities, build relationships and develop understandings of the context in which they work and the challenges faced by the communities they now live and work within. Relationships are the key; recognising and building the capacity that exists within the community and working with families and community is essential.

‘What I’m trying to impress on policymakers and government visitors is that people here practise culture and tradition ... they practise law, culture and tradition, and that influences and shapes our thinking. We’re constantly thinking about who we are as Aboriginal people, coming from the past but acknowledging our modern reality. We’re thinking about our journey from contact, what the impact has been for us ... dispossession, dislocation, historical trauma, and no time to heal. It hasn’t been good. It’s been a horrific journey, and while today we’ve been able to build relationships of trust, and we’ve pursued justice and equality, we haven’t achieved paradise’.  
(Oscar 2012)

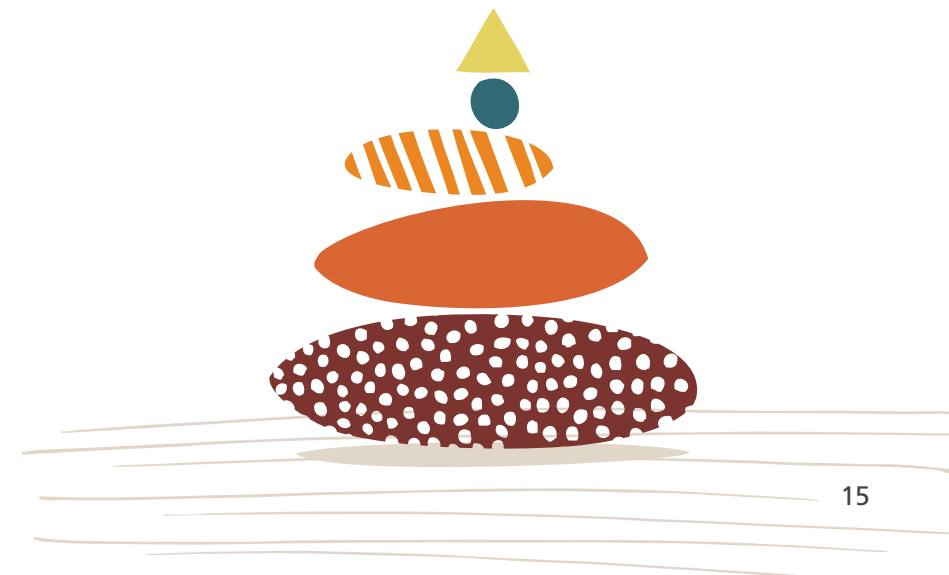
Many researchers have made a connection between high alcohol consumption rates and generational trauma. This type of trauma is a result of lived experiences and when considering the impact of trauma, teachers need to understand the histories of the communities in which they live and work. When trying to understand the high levels of alcohol consumption that have led to the known incidence of FASD in the Fitzroy Valley and beyond, it is important to keep these issues of dispossession, dislocation and generational and historical trauma in mind.

It is also pertinent to acknowledge that Australia has a strong drinking culture that is constantly reinforced through advertising and all forms of media.

The literature on FASD also points to a worldwide lack of awareness and understanding of the impact of alcohol on the unborn child. In remote communities, the limited access to health services, compounding social issues such as disengaging with education, poverty, depression, high rates of suicide, grief and domestic violence also play a significant role. None of these issues are limited to Indigenous people, and the incidence of FASD should not be seen as only a problem for Indigenous communities. However, it should not be overlooked that there are social, historical and environmental factors that put remote Indigenous communities at risk of suffering the damage that alcohol abuse can cause.

FASD is a worldwide scourge, its prevalence largely unquantified due to the lack of awareness and difficulty in diagnosing the condition and its multiple and often compounding symptoms. It is important that judgements and labelling of specific cultural groups do not take place around this issue.

This type of trauma is a result of lived experiences and when considering the impact of trauma teachers need to understand the histories of the communities in which they live and work.



## Early Life Trauma

**Early Life Trauma** generally refers to the traumatic experiences that occur to children aged 0–6. When young children experience or witness a traumatic event, we might think that they are too young to understand, and that there is therefore no need to address the matter. However, research has shown that young children are affected by traumatic events, even though they may not understand what has happened.

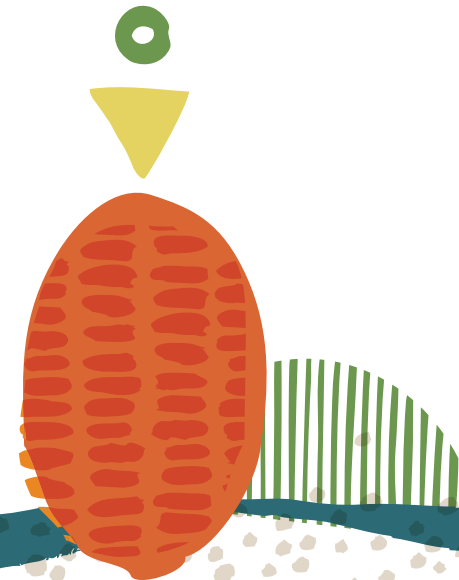


**Early Life Trauma** generally refers to the traumatic experiences that occur to children aged 0–6.

The traumas experienced can be the result of intentional violence – such as child physical or sexual abuse, or domestic violence – or the result of natural disasters or accidents. Young children may also experience traumatic stress in response to painful medical procedures or the sudden loss of a parent/carer or family member.

Children suffering from traumatic stress symptoms generally have difficulty regulating their behaviours and emotions. They may be ‘clingy’ and fearful of new situations, easily frightened, difficult to console, and/or aggressive and impulsive. They may also have difficulty sleeping, lose recently acquired developmental skills, and show regression in functioning and behaviour.

A child with FASD may demonstrate these Early Life Trauma symptoms in addition to the range of symptoms associated with FASD.





## How do fetal alcohol spectrum disorders affect learning?

There is a growing research and knowledge base about the effects of antenatal alcohol exposure on brain structure and function, including memory, cognition, executive functioning (forming, planning and carrying out goal-directed activities), gross and fine motor control, sensory processing, language and behaviour.

While the barriers and challenges to learning are many for children and young people living with FASD, it is important to frame these challenges in a strength-based educational context. Many children with FASD have learning strengths around literacy and practical subjects, such as visual arts, performing arts, sport and technologies. (Blackburn, Carpenter & Egerton 2012)

It is important that teachers cater to the specific needs of each individual child, and build personalised learning plans for this diverse group of students. Often children who have a diagnosed disability are required to have personalised learning plans. Children and young people with FASD, who may or may not have a diagnosis, require supportive practices, such as personalised learning plans and close monitoring and evaluation of behaviours. The best starting point is to ascertain individual strengths.

Best practice teaching for children and young people with FASD focuses on 'engagement' and social and emotional learning. It is important to provide learning opportunities that allow students to experience success. It has been shown that success and strength-based approaches build emotional resilience – vital for children and young people with FASD to grow and better understand the boundaries of their abilities and disabilities.

Some of the difficulties children and young people with FASD may experience are listed in Figure 4 on pp. 18–19.

**'We need to acknowledge that there are people in our community living with unique and complex needs, and that it is upon us to become informed and educated about the appropriate and respectful responses we can provide to those children.'**

June Oscar AO, Chief Executive Officer of Marninwarntikura Women's Resource Centre



**Figure 4: Difficulties children and young people with FASD experience**

#### Developmental difficulties

Significant delays in achieving developmental milestones such as toileting and hygiene skills, in some cases beyond the primary years.

#### Medical difficulties

Medical and health-related difficulties including organ damage, poor sleep patterns, eating and dietary difficulties, small stature, vision and hearing impairments.

#### Learning difficulties

Understanding cause and effect, this impacts on interactions and provides challenges for building strong social relationships and incidence of risk-taking behaviours with serious implications on health and wellbeing.

Speech, language and communication delays/disorders including verbosity, difficulty comprehending, poor social cognition and communication skills, and difficulty using sophisticated language in social contexts.

Cognitive difficulties, including poor short-term memory and poor concentration.

Difficulty in understanding mathematical concepts, such as time and money.

Frontal lobe damage to the brain associated with FASD, results in impaired executive functioning leading to deficits such as impaired ability to organise, plan, understand consequences, maintain and shift attention, and process and memorise data. This has an impact on independence in a range of situations. Executive functioning impacts on all aspects of daily life.

#### Behavioural difficulties

Behavioural difficulties, including hyperactivity, inattention, aggression, obsessions with people and objects, and agitation, can cause anxiety and frustration for children and young people as well as parents and educators. These difficulties, although often seen as behavioural issues, can also be related to sensory processing disorders (SPDs), requiring occupational therapy input.

#### Social difficulties

Difficulty acquiring appropriate social and emotional skills, which impacts on relationships, friendships, and any activity that requires an understanding of the state of mind of others, the ability to predict how this might affect their actions and responses.

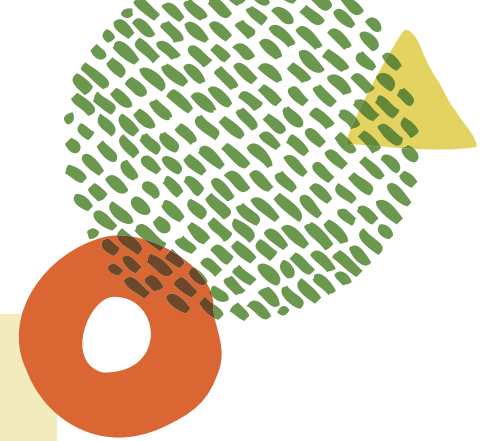
Understanding boundaries: Children and young people can be frustrated by their own behaviour, seemingly unable to control it, leading to challenges in self-esteem and peer relationships.

#### Emotional difficulties

The need to rely on external prompts from adults can result in low self-esteem and frustration.

Children and young people begin to identify the differences between themselves and peers (and vice versa) even in special school settings, resulting in low self-esteem.

Secondary disabilities, such as mental health problems, disrupted school experience, trouble with the law, confinement, inappropriate sexual behaviour, problems with independent living and sustaining employment can result from a lack of identification/ support and intervention when children are in primary school.



### Vulnerability at times of transition

Parents/carers and educators share concern over the social and emotional vulnerability as children and young people living with FASD move through the education system and into adult life.

The overall implications for learning are that there is a need for extrinsic motivation to learn new skills or complete tasks such as life skills, hygiene routines, and school-based tasks, particularly in secondary-aged children. They require repetitive reminders and refocusing from adults. Secondary-aged students living with FASD can spend as little as 40% of time engaged in learning tasks.

As they transition through the school years, children and young people living with FASD are vulnerable to bullying and other difficulties associated with making and keeping friends due to their social and communication difficulties and the sometimes compounding nature of their disability(s). These challenges can also be affected by co-existing disorders, such as autistic spectrum disorders (ASDs) and attention deficit hyperactivity disorder (ADHD).

### Sensory processing disorders

Sensory processing disorders (SPDs) relate to the inability to use information received through the senses in order to function smoothly in daily life. SPDs is an umbrella term covering a variety of neurological disabilities. These include:

- Sensory moderation problems that pertain to how a child regulates his/her responses to sensations. This may result in a child being over-responsive (hypersensitive), under-responsive (hyposensitive), or sensory seeking, and some children may present all of these characteristics at different times.

- Sensory discrimination difficulties that pertain to children who may have difficulty in distinguishing one sensation from another. The eight senses involved are visual, auditory, olfactory (smell), tactile and gustatory as well as the three internal senses – proprioceptive, vestibular, and organic. Each of these senses presents implications for the way we perceive and respond to our environment and perceive sensations such as pain, smell, taste, balance and sound.

### Attachment difficulties

Children with FASD may have experienced less than secure attachments to a primary carer in the first years of life. A solid attachment with a primary carer appears to be associated with a high probability of healthy relationships with others, whereas poor attachment with a mother or primary carer appears to be associated with emotional and behavioural challenges later in life.

### Executive functioning difficulties

Executive functioning refers to a set of mental processes that helps connect past experience with present action. People use it to perform activities such as planning, organising, strategising, paying attention to and remembering details, and managing time and space. Some children with FASD may have well developed executive ability in one or more of these processes and others may demonstrate difficulties with some or most of these processes.

Source: Adapted from Blackburn, Carpenter & Egerton 2012, pp. 29–38.

# What might FASD look like in classrooms?

Teachers and school communities may have limited knowledge and understanding of FASD and the way they affect behaviour and learning. The importance of recognising certain behaviours as markers of a medical condition rather than as evidence of wilful negative behaviour is underscored.

When teachers are able to read behaviours as indicators of the need for a referral to specialist support services, a range of positive interventions can be arranged, including specific additional information for the teacher to facilitate the development of a personalised learning plan and connect them with other ongoing professional supports.

It is important to realise that teachers are not alone in dealing with students living with FASD. They can seek the assistance of school support and psychology services in the first instance, and involve other teachers and school leaders in finding out more about the information and services available to support them. These key supports can also provide ongoing advice and input to meet the needs of individual students.

Children and young people living with FASD can learn, and teachers must be very careful to use the knowledge and increased understanding around FASD and Early Life Trauma to inform their practice of delivering quality education that meets the diverse needs of all students. Great gains can be achieved when teachers learn about the condition(s), network effectively with the available range of support services and adjust both the learning environment and their teaching practice to meet the needs of this cohort of students.

When teachers better understand the behavioural implications of the range of medical conditions that comprise FASD, these understandings lead to a paradigm shift in both teacher expectations and teaching and learning strategies.

The behaviours, misinterpretations and characteristics of FASD list (Figure 5 pp. 21-22) might be useful for teachers to use as a reflection tool when thinking about particular students in their classrooms.

When teachers better understand the behavioural implications of the range of medical conditions that comprise FASD, these understandings lead to a paradigm shift in both teacher expectations and teaching and learning strategies. Teachers have a responsibility to adapt and change what they do in order to respond to and meet the needs of these children and young people living with FASD.



**Figure 5: Common behaviours, misinterpretations and characteristics of children and young people with FASD**

| Behaviour observed                     | Could be misinterpreted as                                 | Should be interpreted as  |
|--|--|---|
| Non-compliance                         | Wilful misconduct<br>Attention seeking<br>Stubbornness     | Difficulty translating verbal directions into action<br>Does not understand<br>May have had limited exposure to Standard Australian English (SAE)<br>May need to have words/processes explicitly taught more than once<br>Needs to become familiar with ways of operating within the school culture to understand expectations  |
| Repeatedly making the same mistakes    | Wilful misconduct<br>Being manipulative                    | Cannot link cause to effect<br>Cannot see similarities<br>Difficulty generalising<br>May require medical screening for conditions, such as fluctuating hearing loss (otitis media)<br>May be multilingual (Kriol and other Indigenous languages) and require additional support with Standard Australian English (SAE)<br>Learning English for SAE as an Additional Language (EAL/D) may require more explicit teaching of content knowledge in SAE |
| Not sitting still                      | Seeking attention<br>Bothering others<br>Wilful misconduct | Neurologically based need to move while learning<br>Sensory overload<br>Not understanding personal space, needing barriers to define appropriate distance<br>Needing expected behaviours explicitly taught<br>Needing alternatives that help to calm them while concentrating   |
| Does not work independently            | Wilful misconduct<br>Poor parenting                        | Chronic memory problems<br>Cannot translate verbal directions into action<br>Does not fully understand what is expected   |
| Does not complete homework/unmotivated | Irresponsible, lazy<br>Unsupportive parents                | Memory deficits<br>Unable to transfer what is learned in class to a homework assignment<br>Inability to link today's decisions with future opportunities<br>Fear of failure, unsure what is required, unable to understand expectations<br>Requires a supportive environment that can accommodate requirements  |

Figure 5 continued

| Behaviour observed       | Could be misinterpreted as   | Should be interpreted as   |
|--------------------------|--|--|
| Often late               | Lazy, slow<br>Poor parenting<br>Wilful misconduct                    | Cannot understand the abstract concept of time<br>Needs assistance to organise<br>Limited resources, such as clocks, phones and other time-keeping devices   |
| Poor social judgement    | Poor role models<br>Wilful misconduct<br>Abused child                | Not able to interpret social cues from peers<br>Not sure what social conventions are appropriate in different contexts<br>Not understanding the implications of actions, so having difficulties with empathy |
| Overly physical          | Wilful misconduct<br>Deviancy  | Hyper or hyposensitive to touch<br>Does not understand social cues regarding boundaries  |
| Stealing                 | Deliberate dishonesty<br>Lack of conscience                          | Does not understand the concept of ownership over time and space<br>Immature thinking<br>Unable to generalise what's wrong from one setting to another setting   |
| Lying                    | Deliberate dishonesty<br>Sociopathic behaviour<br>Lack of conscience | Problems with memory/sequencing<br>Unable to accurately recall events<br>Trying to please by telling you what they think you want to hear  |
| Egocentric               | Selfishness<br>Only cares about self                                 | Only seeing the superficial or concrete level of social behaviour<br>Does not link cause and effect  |
| Volatile                 | Poor parenting<br>Aggressive nature<br>Short tempered                | Exhausted from stress of trying to keep up<br>Extremely over-stimulated  |
| Inconsistent performance | Not trying hard enough   | Chronic short-term memory problems<br>Inability to generalise learning from one situation to another   |

Source: Adapted from Blackburn 2009





## Section 2: Taking action

## Strategies for teachers

The most important element of this shared meta-language is that it allows teachers to discuss individualised learning programs from the strength-based perspective of what children and young people living with FASD can achieve, rather than the deficit model of what they cannot achieve.

The last ten years have seen an explosion in the research and literature around how teachers can adjust both the physical environment/classrooms, as well as their teaching programs and strategies to best meet the needs of children and young people living with FASD. Teachers in the Kimberley, and by extrapolation teachers in other parts of Australia, can now draw on the lessons learned from colleagues in other parts of the world. The United Kingdom, Canada and the United States of America have all produced extensive support materials that draw on recent FASD research and effective teaching and learning practice. Links to a selection of these resources appears in the section 'Powerful pedagogies and effective approaches' on p. 40.

Best practice in supporting children and young people identified as having FASD by their early childhood centres, is based on principles of consistency, simplicity, structure, repetition, routine, constant supervision and valuing the child's achievements and strengths. (Blackburn & Whitehurst 2010)

In the following pages, some of the core elements of successful school and teacher practice have been drawn together to assist teachers with a significant cohort of children and young people living with FASD in their classrooms.

A range of teaching and learning strategies can assist teachers meet the needs of this student cohort. The strategies are grouped as useful skills and development, rather than learning areas. It is important that teachers use a shared professional meta-language when describing both the symptoms of the condition as well as a language that allows for a common understanding of the nature of the teaching adjustments required.

The most important element of this shared meta-language is to allow teachers to discuss individualised learning programs from the strength-based perspective of what children and young people living with FASD can achieve, rather than the deficit model of what they cannot achieve.

The strategies are not arranged age-related or Australian Curriculum focused. This is because there is a wide variation of developmental age and ability amongst children and young people living with FASD (see Figure 6). It is advised that personalising the learning approaches to individual needs is the best way to proceed with this group. When some strategies are put in place to support individual children and young people with FASD, often all students benefit from the adjustments.

The advice that follows is relevant for Early Childhood educators, Aboriginal educators, trainee teachers, newly qualified teachers, Special Education teachers, curriculum and leadership teams and any of the professionals responsible for supporting educators. The strategies should be seen as interrelated and holistic; they address cognitive, communication and emotional development domains, as children and young people living with FASD need ongoing support in one or more of these domains throughout their learning journeys.





## CASE STUDY 2

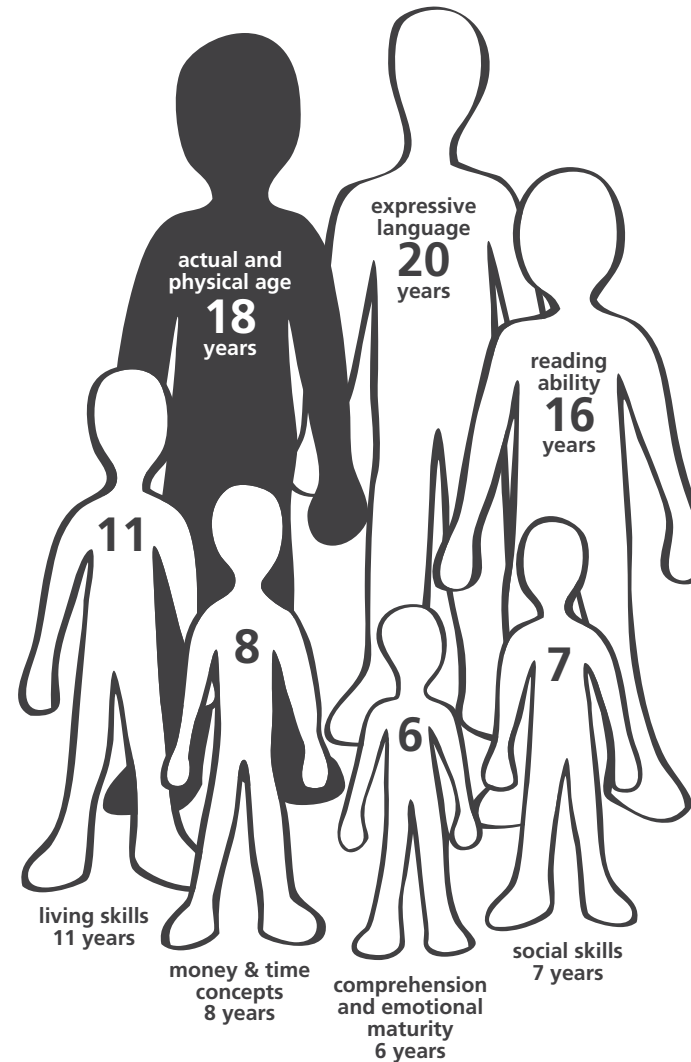
An experienced educator shared her strategies for dealing with students showing signs of distress and frustration and often find themselves in situations where they are vulnerable and the situation escalates into serious conflict or confusion.

In the first instance she uses a thumb sign (thumbs up for 'yes', thumbs down for 'no') to communicate with the child around whether they are safe, then hungry. Her observation is that often children confuse feelings of anxiety as hunger so they go to her office, she puts a timer on and gives them something to eat, a drink of water and a safe quiet space where they can calm down. This familiar routine diffuses the situation and provides an opportunity to learn more about what triggers certain reactions or responses.

Once the timer goes off she asks again using the thumbs up or down gesture, have they calmed down, are they ready for learning and if so they return to the classroom, together with the classroom teacher they reflect on what happened and explicitly remind the child of strategies to try again. Having explicit behaviour management frameworks with consistent language across the school enables everyone engaging with the child to reinforce the same messages.

**Figure 6: The developmental age and ability of an 18-year-old with FASD**

This diagram shows how a child's chronological age and developmental age can vary dramatically at any one time.



Source: Jodee Kulp  
<http://www.betterendings.org>

## Figure 7: Eight keys to working effectively with children and young people living with FASD

An overview of the range of teaching and learning strategies which can assist teachers meet the needs of students living with FASD. A more comprehensive list of strategies can be found on pages 29 to 38.

### Concrete terms

Children living with FASD do well when parents/carers and educators talk in concrete terms, especially children and young people learning Standard Australian English (SAE) as an Additional Language or Dialect (EAL/D).

Refrain from using words with double meanings, idioms, etc. The social-emotional understanding of children living with FASD is often below their chronological age, therefore it helps to 'think younger' when providing assistance, giving instructions, etc. It is also important not to make deficit judgements.

### Consistency

Due to the difficulty that children with FASD experience in generalising learning from one situation to another, they do best in an environment with few changes. This includes consistency of language and routines. Educators and parents/carers should coordinate with each other to use the same words and or gestures for key phrases. Communication books are effective ways of sharing what's happening and advising on language use and behaviours in classrooms and homes.

### Repetition

Children with FASD have chronic, short-term memory problems. They forget things they want to remember, as well as information that has been learned and retained for a period of time. In order for them to commit something to long-term memory, it often needs to be repetitively re-taught.

### Routine

Stable routines and consistent visual cues that do not change from day to day make it easier for children with FASD to know what to expect next, and decrease their anxiety, enabling them to learn.

### Simplicity

Remember to keep input short and sweet. Children with FASD are easily over stimulated, leading to 'shutdown', at which point they can take in no more information. Break down tasks and always communicate the task in the positive: 'we walk inside' instead of 'don't run!'

### Specific language

Say exactly what you mean. Remember that children with FASD have difficulty with abstractions, generalisations and 'filling in the blanks' when given an instruction. Tell them step-by-step what to do. This will help them develop appropriate habit-forming patterns. Keep instructions concise and broken into achievable chunks.

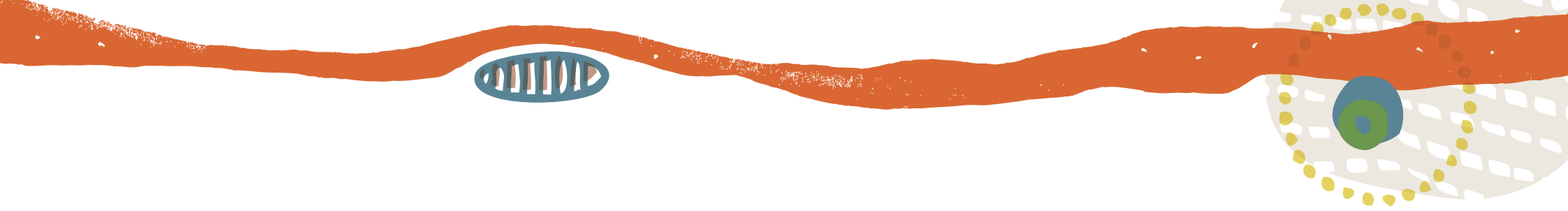
### Structure

Structure is the 'glue' that enables a child with FASD to make sense of the world. If this glue is taken away, things fall apart. A child with FASD achieves and is successful because his or her world provides appropriate structure as a permanent foundation for learning.

### Supervision

Due to their cognitive challenges, children with FASD bring a naivety to daily life situations. They need constant supervision, as with much younger children, to develop habit patterns of appropriate behaviour and ensure safety and wellbeing at all times.

Source: Adapted from Blackburn 2009; Yukon Department of Education 2006



### Whole school approaches

Successful 21st century schools build their professional learning and development around a functioning community of practice, where teachers are constantly planning together, sharing strategies and successes, reflecting on their practice through planned interactions with other teachers and support staff, and constantly innovating around the results of these activities.

In the context of addressing the needs of children and young people living with FASD, a vital component in a whole school approach is a successful team approach involving representatives from all of the main agencies working with the children and their families.

### CASE STUDY 3

Fitzroy Valley District High School has recently implemented inquiry base learning (IBL) across the primary classrooms (K-6). The leadership team along with key IBL experts developed a two-year curriculum map or learning framework which is drawn from the Australian Curriculum. This incorporates the general capabilities and cross-curriculum priorities and guides teachers to implement inquiry methodology in a sustainable way.

All staff have undergone extensive training and are working together to implement the Australian Curriculum through IBL. One teacher talks about the high levels of engagement and reduction of FASD behaviours in her classroom when students are such a part of the learning, are engaged and making connections from one learning cycle to the next.

The dynamic learning communities being created and the reflective practice taking place is very impressive.

<http://www.youtube.com/watch?v=yASuATAgOOY>

# Personalised learning

A number of national and international education developments support the need for increased personalised learning. This paradigm shift has been unfolding for some years, and is becoming embedded in mainstream teacher training. Personalising learning for children and young people living with FASD is at the core of improving the life chances of this vulnerable group of students. Noted education researcher and writer, David Hargreaves (2006) points to the vital role teachers play when he observes:

‘Personalised learning requires teachers and schools to respond to the needs of individual students in a very targeted manner.’

Children and young people living with FASD will need specialised support to personalise their learning.

The Australian Curriculum, Assessment and Reporting Authority (ACARA) National Curriculum, includes advice about meeting the needs of students with disabilities. This advice includes the requirement that

All students with a disability are able to participate in the Australian Curriculum on the same basis as their peers through rigorous meaningful and dignified learning programs. Principals and schools should give consideration to reasonable adjustments to ensure that students with disability are provided with opportunities to participate in education and training on the same basis as students without disability. Before any adjustments are made consultation takes place between the school, student and parents or carers.

<http://www.australiancurriculum.edu.au/StudentDiversity/Students-with-disability>

ACARA also provides specific advice about how to personalise learning at [www.australiancurriculum.edu.au/StudentDiversity/Illustrations-of-personalised-learning](http://www.australiancurriculum.edu.au/StudentDiversity/Illustrations-of-personalised-learning).

The advice is built around the notion of adjustment within a differentiated curriculum. Kimberley educators have been adjusting their teaching and learning approaches to meet the cultural and linguistic needs of a diverse cohort of students for a number of years. The advice also echoes the literature about how to best address the needs of children and young people living with FASD and Early Life Trauma, with its focus on engagement within a strength-based pedagogy.

The key elements of personalised learning in the context of children and young people living with FASD are:

- realistic, ambitious and achievable objectives
- challenging personal targets
- rapid intervention to keep students on track, and
- constant and responsive assessment to monitor and maintain progress.

Many schools across the Kimberley are building **Stronger Smarter** (<http://strongersmarter.com.au>) school cultures and creating learning environments with high expectations to best meet their school and community needs. This means having high expectations of all staff and supporting them to deliver quality teaching and learning to all students, building on a strength base and expecting and getting quality outcomes from all children. Working with community, including families, other support and health services to achieve the best possible outcomes.

With significant numbers of students living with the effects of FASD and Early Life Trauma in most classrooms, it is vital to ensure the Stronger Smarter approach is inclusive of this cohort of students. Deficit thinking models automatically result in lowered expectations, often unconsciously. It is important for educators to maintain high expectations and ensure they deliver high quality education that meets the diverse needs of the students they teach.

It is important to maintain high expectations of ourselves as educators and ensure that we deliver high quality education that meets the diverse needs of the students we teach.



# Strategies to support cognitive and communication development

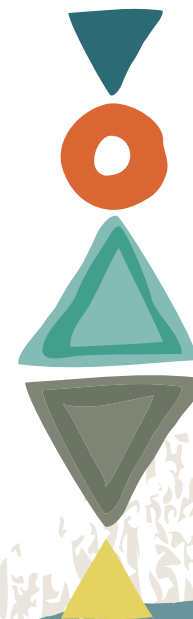
Children and young people living with FASD and Early Life Trauma often experience developmental delays that affect the way they are able to function in the classroom. Often underlying medical issues affect their ability to engage with mainstream curriculum. Sensory processing difficulties (SPDs) can lead to inattention, hyperactivity and distractibility. Often these issues accelerate in the secondary school setting as the delays become more apparent. Students living with FASD often prefer the company of younger students due to these developmental delays. Again, it is important that teachers are able to recognise and identify the behaviours that point to SPDs and provide appropriate support to help children and young people with FASD progress through the curriculum – addressing their needs while maintaining high expectations.

The following teaching strategies support cognitive and communication development, and are based around:

- communication
- literacy skills
- abstract concepts
- money/time
- number sense
- memory and following rules, and
- sensory processing difficulties.

## Communication – break it down

- Provide opportunities for small group work. This will provide a secure environment in which the children and young people may feel more confident to ask and respond to questions than they would in large group situations.
- Provide a space for children to work alone without distractions.
- Where possible, enlist the support of Aboriginal educators in the classroom to interpret and reinterpret Standard Australian English (SAE) instructions in students' first language – Kriol or Aboriginal English.
- Break instructions into chunks. Keep instructions as short as possible, provide them one at a time, and reinforce with visual cues as prompts.
- In order to build self-esteem, break tasks into small achievable steps starting with what the student can already do.
- Provide tactile examples of what you are teaching. Allowing the student with FASD to touch, see, and/or feel something will help him/her to succeed in learning what you are teaching. This can be particularly helpful for practical sessions such as science, where the need to touch and feel objects can lead to dangerous situations. Providing a one-to-one session with the student before the session, in order to enable safety messages are understood, can reduce impulsivity and reduce risks.
- Use the student's own life experiences and knowledge when teaching new ideas. This will give them a reference point for their learning and make connections with their prior learning.



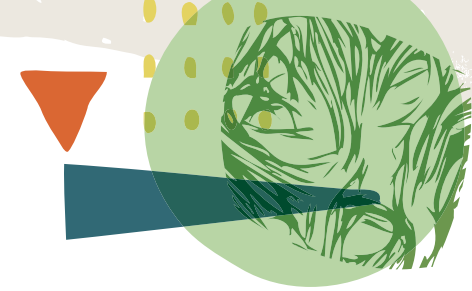
Literacy blocks with consistent routines are effective ways to embed targeted teaching in everyday classrooms. Building a repertoire of techniques that are predictable provides scaffolding to all children but especially children and young people with FASD and Early Life Trauma.

- Provide visual aids (such as pictures, symbols, and timetables) to reinforce instructions and tasks (for primary and secondary students).
- Make visual timetables concrete by including photographs of the children doing activities, rather than symbols or drawings (for primary and secondary students).
- As a child's proficiency with reading progresses, you can rely more on the written word.
- Use consistent language throughout the school. For children with more complex communication needs, use hand gestures or other communication supports.
- Use positive language; tell children what you would like them to do rather than what you would not like them to do. For example, say 'walk inside' rather than 'don't run'.
- Avoid confusion by being direct: instead of saying 'Do you know where your pencil is?', say 'Where is your pencil?'
- Identify key words/concepts for a topic and discuss separately before the topic is introduced to the whole class.
- Language used in the classroom should reflect the language used in tests and exams to avoid confusion.

#### Literacy skills – targeted and explicit

Literacy blocks with consistent routines are effective ways to embed targeted teaching in everyday classrooms. Building a repertoire of techniques that are predictable provides scaffolding to all children but especially children and young people with FASD and Early Life Trauma.

- If children have difficulty learning to read, encourage them to build up a sight vocabulary by using a multi-sensory approach such as 'Look, Cover, Write, Check'. Expect to repeat words frequently.
- The ability to build a story by sequencing symbols and pictures is a simple way to build confidence. There are a range of techniques that can be used to build social stories.
- Encourage the enjoyment of books at a level developmentally appropriate to the child; picture books without too much text may be more appealing regardless of age.
- Provide children with a reading journal where they can record their reading at school and home. Ensure that reading targets are broken down into achievable steps (perhaps two to three pages). Provide two or three comprehension questions for them to answer about the text.
- If children have difficulty with directionality of text, use coloured stickers to indicate the correct direction. Explain that we start at 'green' and stop at 'red'.
- Allow opportunities to tell or record stories pictorially as the children may not be ready for lengthy writing.
- Consider colour-coding words for sentence construction. For example, all nouns could be red, all verbs yellow and adjectives green (taking into account the children's own colour preferences). This works well when used with writing frames (a writing frame is a guided response template).
- Use pictorial dictionaries where possible to aid vocabulary development.
- Provide listening posts or DVDs, of a variety of text, literature and social stories.
- Provide a laptop or mobile device and/or scribe if necessary for written work. This can help to improve enjoyment of a task and improve concentration and engagement with the task.
- Mind maps can be used to help organise thoughts and tasks and help embed understanding of subjects and tasks.



- Writing frames or scaffolds can be used for written homework, providing clear structure and concise organisation of what to put on the page and where, making tasks more manageable.
- Consider other methods of recording progress such as drawings, photos, graphs and video for children who find lengthy writing tasks difficult.

### Abstract concepts – make it concrete

- Demonstrate a concept, show rather than tell, and be prepared to repeat the demonstration/instruction.
  - Provide concrete examples of abstract concepts such as number lines, abacus for understanding place value, and real objects for counting in sequence.
  - Use art projects to make abstract concepts more concrete. Use coloured sand to teach students about volume.
  - Use ICT as a visual representation of number rules and mathematical concepts. Computer-based learning programs may work well because they are repetitive and visual and provide immediate feedback coupled with a hands-on learning experience.
  - Teach cause and effect with the use of three-dimensional tactile resources, such as pop-up toys, scented bubbles, jigsaw, and books with sound effects.
  - Use vertical number lines instead of horizontal number lines so children can visually identify that adding results in numbers going up and subtracting results in numbers going down.
  - Plan games and activities involving right and left instructions.
  - Plan physical activities involving mathematical concepts such as number, positional language, colour and shape, as movement can aid memory retention.
- Use consistent language for all concepts and in all classrooms/lessons. For example, do not say 'nought' one day and 'zero' the next.
  - Use one or two maths problems or questions on a page, with plenty of white space between. Too many problems/questions on one page might look overwhelming.
  - Include children's names in word problems.
  - Make mathematical process cards by highlighting examples of mathematical processes (eg multiplication, division, and subtraction) broken down in a step-by-step process for the child to refer to as a reminder.
  - Avoid mixing addition and subtraction, multiplication, and division problems on the same page. Ensure that the operation symbol is in large and bold type so that it is clear what the child is expected to do.
  - Questions and problems involving a story that needs decoding is an extra task that may be overwhelming. Allow extra time and provide adult support.
  - Graph or lined paper can help children to line up mathematical problems more easily than plain paper.
  - Expect learning to take place at a slower pace, make teaching interactive, and allow children to talk through mathematical processes and problems, as this may help with memory.

**Ensure that the consequences of not following rules are consistently applied. This will ensure that the child is more aware of his/her own actions and helps students to make better decisions.**

#### Money/time – make it real

- Use real money and clock faces as they are more concrete and this will allow children to move the hands on the clock.
- Consider the use of a digital clock if children find conventional clock faces difficult.
- Use objects in the classroom and around the school such as calendars, clocks and watches to highlight numbers and number patterns to encourage the ability to generalise.
- Plan role-play sessions involving time and money with shop, restaurant and shopping scenarios. Use real objects so children build a stronger association with real life scenarios, and do not become confused by unnecessary substitutions which they may not link with reality.
- Use sand timers, egg timers, growing plants and daily calendars to help children visualise the passing of time.
- Use timers to help children recognise how long they have to complete a task. For example, instead of a school bell, play a song known to children. When the song ends, everyone knows they need to be in class.

#### Number sense – make it visual

- Relate numbers to meaningful concrete objects to enable children to view numbers as values rather than labels. For example, there are two wheels on a bicycle, three wheels on a tricycle, and four wheels on a car.
- Create a large number line across the classroom which children can physically move along.
- Help children recognise that many things cannot be measured precisely, by providing practice with estimation in a range of situations.

- Provide a range of materials that involve number and number representations such as dice, dominos, playing cards, coins, clocks and rulers.
- Look for ways to incorporate children's own interests and strengths into number work in order to personalise their learning. For example, football teams provide countless opportunities for number work.

#### Memory/organisation executive functioning – reinforce and repeat

- Consider whether non-compliance with rules is due to lack of understanding or because the children have been distracted.
- Provide clear, consistently applied rules across the school to reduce the number of things that need to be remembered.
- Expect to repeat instructions frequently.
- Ensure that the consequences of not following rules are consistently applied. This will ensure children are more aware of their own actions and helps them make better decisions.
- Use short sentences in instructions and lesson delivery to reduce complexity.
- Allow extra time for children to process information. This will help to reduce anxiety, which is known to cause more problems for children and young people with FASD and can result in outbursts, lack of engagement with a task/subject and poor self-esteem.
- Using an animated face, facial expressions and exaggerated gestures will engage the children who are developmentally younger, and aid their memory retention.
- Provide visual timetables in classrooms as a memory aid and to enable children to see what is happening now and next.



- Visual timetables would ideally use photographs of the children as a concrete representation of what is required and what is happening next. When children can read, words can replace images.
- Check the student's understanding of instructions and tasks frequently, particularly in relation to homework.
- When asking children to repeat an instruction you have given, ask them to repeat it in their own words to ensure that they have processed and understood the information.
- Build relationships with parents/carers to communicate progress and share and build on successes.
- Use appropriate incentives that reward children for their individual achievement and motivate them personally.

#### Sensory processing difficulties – calming and moderating

Challenging behaviours triggered by sensory processing disorders need to be handled in a calm and non-judgemental manner. Children and young people with these particular disorders experience high levels of frustration and confusion, and it is important that they do not feel judged or punished.



Quiet space with minimal distractions in the Marulu room at Fitzroy Valley District High School

- Consider asking an occupational therapist to undertake a sensory profile if children seem frequently switched off, or easily overwhelmed by texture, noise, light, smell, movement, sound, temperature, crowded places, or too much dialogue, as they may be hyposensitive or hypersensitive, or both at different times.
- Some teachers report that turning off fans and intense fluorescent lighting reduces agitation in some students.
- Consider whether diet or hunger are contributing factors or if there are any underlying/undetected health issues.



- Remove as many distractions from the learning environment as possible.
- When making changes to wall displays in the classroom, make the changes one at a time, so as not to make the familiar become unfamiliar too quickly.
- In some instances, it may be useful to use curtains to block out sections of a room in order to reduce distractions and interference.
- Consistently seat children in the same place, ideally where the teacher can easily see them (and vice versa). Maintain eye contact – some children will be better placed near the front and others may need to be at the back where they can see everyone and leave the room if necessary. Ensure that all staff are aware of the issues relating to sensory processing difficulties and the impact on learning. Some children may seek out an adult such as an Aboriginal educator to position themselves close by and provide support, such as interpreting and reinterpreting and repeating instructions.
- Evaluate the classroom and school environment in terms of noise, light, sound, and ease of access. Particular problems are fluorescent lights, scraping chairs, air conditioning units, school bells, ticking clocks, echoes in changing rooms and toilets, chemicals and Bunsen burners in practical lessons, textiles in technology lessons, some food items and perfume aromas.
- Provide a space that represents a calmer environment than a classroom and the opportunity to visit when children become overwhelmed. Provide earphones, calming music, masks and lavender. Lavender is used as a remedy for a range of ailments from insomnia and anxiety to depression and fatigue. Research has shown that lavender can produce calming, soothing and sedative effects when its scent is inhaled.
- Place carpet or tennis balls on the legs of tables and chairs to eliminate noise when other children move furniture.

- Seat children as far as possible from distractions such as windows, doors and the movement of other students.
- Frame children’s working areas (including seat and desk) with masking tape to keep their attention focused on their work space and enable them to remember their personal space and boundaries.
- Consider colour/shape coding items that children need to access frequently, for example red triangles for maths books or yellow circles for literacy books.

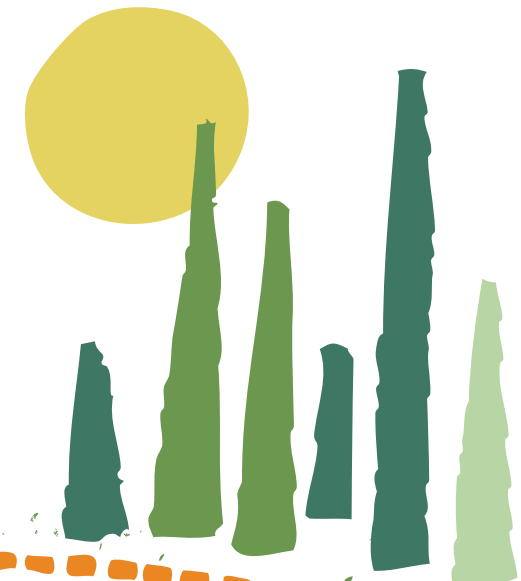


Colour-coded and task oriented trays

- For carpet work, provide individual cushions for children to remind them of their personal space.
- Provide a stress ball or fiddle toys to encourage focus and calm children.
- When children become agitated, ask them to carry an object to another person in a different room, as a special helping task. This can be calming and also builds responsibility while de-escalating situations.
- Keep tasks short and achievable and break them up with physical activity to expend energy and refocus attention.
- Gradually build up the time that children are expected to sustain attention. Make a visual chart showing progress with tasks to share with them so that they can see their own achievement in terms of sustained attention.
- Allow children to enter and leave the lunchtime facilities before or after peers in order to avoid noisy /busy corridors when moving from one classroom to another.
- Use percussion instruments for children to create rhythms and to practice following instructions to play and copy patterns. They will need to listen and sustain attention to hear patterns.
- Music therapy sessions can provide a safe space for children to explore and express emotions and feelings, reducing anxiety and hyperactivity. This can also improve listening and attention skills. Giving children time to explore instruments and providing a piece of fabric for them to cover themselves can help, as they are then less inhibited singing.



Working space designed to reduce distractions



# Strategies to support behaviour development

Behaviour management frameworks, such as Positive Behaviour Support (PBS) or Promoting Alternative Thinking Strategies (PATHS), teach all children explicitly and enable consistent language and understandings to be reinforced clearly across the whole school.

Children and young people with FASD may lack inhibition and often do not understand cause and effect and the consequences of actions. These characteristics can place them at significant risk of disengaging with education and increase the likelihood of coming into contact with the criminal justice system. Teachers can assist children and young people learn about boundaries and appropriate behaviours by providing specific and reinforced support in forming appropriate relationships and developing empathy. Children and young people with FASD may need close adult supervision throughout the day to ensure their and others' safety.

## Impulsivity/lack of inhibition – flexible and responsive

- Provide specific teaching about routines and safety rules.
- Provide constant supervision and appropriate adult/student ratios in practical lessons and laboratory situations.
- Be prepared to repeat instructions/routines/rules as often as necessary to ensure understanding. This helps increase confidence and motivation.
- Provide a quiet space to discuss sensitive issues with the student.
- Where changes to timetables and schedules are necessary, ensure that the student is informed as soon as possible and given an appropriate explanation. This will help reduce anxiety and disruptive behaviour.

- Provide adult support to prepare the student and guide them through changes to timetables and arrangements.
- Provide a quiet area where the student can go to self-regulate and calm down.
- Provide weighted blankets, fabric, headphones, eye masks, dark sunglasses, lavender and calming music. Provide individual prompts for individual students, as different children have different preferences. Ensure that this is viewed by the student as a positive aid for them to regulate their own emotions in order to build confidence and self-esteem.
- Provide visual prompts showing required behaviour, preferably using photographs of the student rather than pictures or symbols.
- Record the occurrence of incidents in order to identify possible triggers that may be causing distress. Monitor to see if incidents occur at particular times, with particular peers or members of staff, and make adaptations in order to reduce occurrences.

Whole school approaches to providing appropriate spaces and visual supports can assist all students. Best practice schools consistently share what works and undertake frequent review cycles to ensure that teachers benefit from one another's knowledge. This builds strong collective understandings and a supportive environment in which to provide professional and personal supports to teachers, students and families.



# Strategies to support social and emotional development

For children and young people living with FASD, establishing, maintaining and understanding age-appropriate relationships is a challenge because of their lack of understanding of social cues and difficulty with memory, cause and effect and consequences of actions. Adolescents with FASD often suffer social isolation as a result of these challenges. Teachers and school support staff can assist with these issues by providing a mentoring or life coach role in the lives of these vulnerable students.

The single biggest factor to influence whether students try or give up, leave or stay, is their sense that somebody in school knows who they are and cares about what happens to them.

## Supporting relationships

- Use social stories and scripts to explain to students how to behave in different social situations. Provide a script for each situation, as children may not be able to generalise from one situation to another. Repetition of stories and scripts can help improve memory, engagement, confidence and understanding.
- Use puppets, role-play and drama to explore feelings and attitudes. This can help improve peer relationships through language development and conversation.
- For paired activities, pair the child with FASD with other children who are good role models, and plan groups carefully to ensure the child with FASD has good role models to observe at all times.
- Plan for turn-taking games and circle games to encourage appropriate social interaction.
- For students who interrupt or find it hard to know when it is their turn, provide a concrete object such as a small ball as a holding item to indicate when it is appropriate to talk or take a turn – when the ball is in the child's hand it is their turn.

- Provide the opportunity for supervised social situations with good role models in unstructured free time, including peer/ buddy groups for break times and lunch times to facilitate friendships.
- Provide a key worker with whom a child with FASD can discuss social and emotional difficulties related to home or school life (this could be an Aboriginal educator, teaching assistant, learning mentor or teacher) and who is well known to the child and with whom the child is able to bond.
- Discuss with the child their general state of emotional wellbeing at the beginning of each day, using a scale from one to five, and record this in their planner. This can be used as a communication aid amongst support staff about the child's mood and ability to cope with the coming day. This may help reduce anxiety throughout the day.

Teachers have shared that the act of asking students how they were feeling elicited a positive response, a sense of being acknowledged, showing they cared – and helped build positive relationships.

## Supporting relationships – Engage and enable

- Balance opportunities for children to contribute and share ideas for group work and participate in group performances, then provide sufficient praise and encouragement to support them in these situations in order to build confidence.
- Use role play, social stories and scripts, and photographs to prepare children for special events, including trips.
- Ensure parents/carers have advance notice of social events and trips so that they can prepare children adequately.
- For incursions and excursions, make a book with photographs and pictures depicting what to expect during the trip.

Teachers have shared that the act of asking students how they were feeling elicited a positive response, a sense of being acknowledged, showing they cared – and helped build positive relationships.



- Provide the child with a photographic record of their new school with members of staff, learning environments, new uniform, journey details and other important details so that they can familiarise themselves with the new setting well before they arrive.
- Discuss with the child, individually and in small groups, the many reasons why people bully others, including feelings of unhappiness, loneliness and frustration, and attempts to make themselves feel bigger and stronger. Use concrete examples and use simple language.
- A restorative justice approach across the whole school provides opportunities to hear how people feel, share feelings and build empathy.

#### Inappropriate interactions – understanding consequences

- Use role-play and social stories to talk through social scenarios and demonstrate appropriate and inappropriate interactions with others. Encourage appropriate understanding of 'self' through discussion time activities.
- Provide low-impact one-to-one supervision where necessary and if possible, a separate changing room for the student. This will reduce the risk of inappropriate interactions and/or the child acting on impulse.
- Protective behaviour programs explicitly teach all children about appropriate interactions. These sessions enable children and young people to visually represent boundaries and link different interactions with different relationships.
- Allow extra time for discussions and other planned activities to ensure understanding of basic information about personal and/or private space.

- Sex education needs to highlight concrete rules that are easily understood and do not need to be generalised. For example, unprotected sex is always unsafe sex, and masturbation must always take place in private (ensuring an understanding of what private means). Consequences must be clearly and simply explained, using role-play, social stories, and repetition, and consistently applied.
- It may not be realistic to expect a child with FASD to understand that unprotected sex may or may not end in pregnancy or disease, or that there is a time delay between intercourse, pregnancy and the arrival of a baby. The delivery of these concepts may require careful planning, liaison with parents and carers, repetition and extra time for discussion and explanation.
- Engage external services to look for a community peer to support the child through social scenarios and provide positive role models.
- Invite parents/carers to sex education lessons so that discussions in the classroom can be extended at home using the same concepts and language in order to reduce any concerns parents may have about sex education. Invite health services in regularly to reinforce safe sex messages.
- Monitor and record the incidence (including time of day, type of environment, particular room, other children involved, preceding incidents) of inappropriate interactions to determine any patterns and possible reasons.





## **Section 3: Further resources**

# Powerful pedagogies and effective approaches

In developing this resource we have visited schools, talked with teachers and seen some powerful teaching and learning occurring across a range of schools and communities.

Here are links to some pedagogies and effective approaches that Kimberley educators are currently using to provide for the diversity of needs and complex challenges many of their students face. They reinforce the benefits of preparing students for learning, providing meaningful teaching and learning programs that create genuine engagement and build positive respectful relationships.

## The Alert Program

This program is being used to assist children regulate their bodies in readiness for learning. Children are given the language and strategies to determine whether their 'engine' is running low or high and provided with clear strategies to adjust. The self-monitoring process is explicitly teaching life skills and benefits all children, but particularly children with FASD.  
[www.alertprogram.com](http://www.alertprogram.com)

## Primary Movement

A combination of Primary Movement and yoga is used to prepare students as they transition from outside activities to structured learning activities.  
[www.primarymovement.org/about/index.html](http://www.primarymovement.org/about/index.html)

## The High Reliability Literacy Teaching Procedures (HRLTPs) approach

Prof John Munro from The University of Melbourne has been working with St Mary's Secondary Campus to implement a systematic approach to teaching students to read, comprehend and write text. This is done by teaching them explicitly to use a range of comprehension strategies to think about spoken and written text, to learn more about text, and to form a positive self- concept and identity as users of written text.

The set of teaching procedures teach students

- by reflecting on what they already know
- by visualising their prior knowledge and creating their own visual stories
- use their existing verbal knowledge, and
- bridge to the text, decide its topic and disposition.  
[www.eduweb.vic.gov.au/edulibrary/public/teachlearn/student/vlnsb2hrltp.pdf](http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/student/vlnsb2hrltp.pdf)

## ASDAN (secondary school learning framework)

ASDAN is being used in a number of secondary schools to create an alternative pathway that caters for diversity and enables incremental progress through engaging projects.  
[www.asdan.org.uk/home](http://www.asdan.org.uk/home)

## Inquiry Based Learning (IBL)

An inquiry based teaching, learning and assessment model takes students through a learning cycle that fosters inquiry, exploration of ideas and develops deep thinking, research and understandings. This model is being implemented across K-6 at Fitzroy Valley District High School, where they are using the Kath Murdoch Model of Inquiry.  
[www.kathmurdoch.com.au](http://www.kathmurdoch.com.au)



## TEACCH

Strategies from TEACCH Autism program are being used in a range of settings to cater to students with diverse needs.

<http://teacch.com/about-us/what-is-teacch>

## Kimberley School Psychology Service

Leadership and student support teams in schools engage school psychologists to work with individual teachers and whole school staff to implement effective behaviour management programs.

Some schools are implementing a combination of

- Positive Behaviour Support  
<http://det.wa.edu.au/studentsupport/behaviourandwellbeing/detcms/navigation/positive-classrooms/positive-behaviour-support/>
- Promoting Alternative Thinking Strategies PATHS  
<https://www.kidsmatter.edu.au/primary/programs/paths-curriculum>
- You can do it  
<http://www.youcandoiteducation.com.au>
- Restorative processes such as no blame/bullying prevention  
<http://www.kidsmatter.edu.au/primary/programs/no-blame-bullying-prevention>

## Protective behaviours

Holly Ann Martin from Safe 4 Kids has been working in many Kimberley schools to run protective behaviours workshops with students, teachers, school leaders and community. She explicitly teaches children about appropriate and inappropriate interactions and gives children clear boundaries, strategies and language to keep safe. The importance of such programs in our schools is highlighted by the evidence showing how vulnerable students with complex needs can be.

[www.safe4kids.com.au](http://www.safe4kids.com.au)



## Useful resources

The following resources have been useful for our research and will provide practical information and strategies to inform teachers to understand and address the complex needs of their students living with FASD.

- ***FASD: Focus on strategies – Building Bridges with Understanding Project***

A framework and practical ideas for working with primary and secondary students. An online version can be downloaded at [http://www.eurlyaid.eu/rpool/resources/FASD\\_strategies\\_for\\_practitioners.pdf](http://www.eurlyaid.eu/rpool/resources/FASD_strategies_for_practitioners.pdf)

- ***Fetal Alcohol Spectrum Disorders: Working with students with a fetal alcohol spectrum disorder in the education system***

Published by the National Organization on Fetal Alcohol Syndrome – South Dakota Center for Disabilities, Sanford School of Medicine of The University of South Dakota. This handbook presents educational strategies for teachers working with children and young people living with FASD. An online version can be downloaded at <http://www.usd.edu/medical-school/center-for-disabilities/upload/fasdeducationalstrategies.pdf>

- ***Making a difference: Working with students who have FASD***

Published by the Yukon Department of Education, Yukon, Canada. An online version can be downloaded at [http://www.fasd.ie/documents/fasd\\_manual\\_2007.pdf](http://www.fasd.ie/documents/fasd_manual_2007.pdf)

- ***Secondary framework: Teaching and learning strategies to support secondary aged students with foetal alcohol spectrum disorders (FASD)***

Published by the National Organisation on Fetal Alcohol Syndrome, UK, as part of the Facing the challenge and shaping

the future for primary and secondary aged students with Foetal Alcohol Spectrum Disorders (FAS-eD) Project. An online version can be downloaded at

<http://www.nofas-uk.org/documents/FAS-eD%20SECONDARY%20FRAMEWORK.pdf>

- ***What educators need to know about FASD: Working together to educate children in Manitoba with Fetal Alcohol Spectrum Disorder***

Published by Healthy Child Manitoba and Manitoba Education, Citizenship and Youth, Manitoba, Canada. An online version can be downloaded at

[http://www.gov.mb.ca/healthychild/fasd/fasdeducators\\_en.pdf](http://www.gov.mb.ca/healthychild/fasd/fasdeducators_en.pdf)

## Links to Australian FASD organisations

### **Fitzroy Women’s Resource Centre**

The Marulu Unit Overcoming FASD  
<http://mwrc.net.au/the-marulu-unit-overcoming-fasd/>

### **Russell Family Fetal Alcohol Disorders Association (rffada)**

<http://rffada.org/2-uncategorised/54-0russell-family-fetal-alcohol-disorders-association>

### **Foundation for Alcohol Research and Education (FARE)**

[www.fare.org.au](http://www.fare.org.au)

### **National Organisation for Fetal Alcohol Spectrum Disorders (NOFASD)**

[www.nofasd.org.au](http://www.nofasd.org.au) (subscribe to their newsletter)  
<http://www.nofasd.org.au/resources/fact-sheets> (factsheets)

### **Telethon Kids Institute**

What is FASD?  
<http://alcoholpregnancy.telethonkids.org.au/understanding-fasd/what-is-fasd/>

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