## Teaching a Student with FASD



## **Dear Teacher**

You have a student in your classroom who has a Foetal Alcohol Spectrum Disorder (FASD) and needs your help to access education. Thank you for reading this information.

Foetal Alcohol Spectrum Disorders (FASD) is an umbrella term representing the range of effects caused by prenatal alcohol exposure. Each student with FASD is individual and their learning difficulties and disabilities will depend on the extent of damage caused to the developing organs and brain. This damage results in difficulties for students in many areas of the curriculum in the acquisition of new information, linking new information to previously learned information and the practical application of knowledge gained.



## **UNDERSTAND**

FASD is brain damage due to prenatal alcohol exposure



### RECOGNISE

Know the signs of a child with FASD



## **ACCOMMODATE**

Success is possible with supports and strategies

## **Equality Act**

"[Schools] must
make reasonable
adjustments,
including the provision
of auxiliary aids and
services, to ensure that
disabled children and
young people are not
at a substantial
disadvantage
compared with their
peers."

"This duty is anticipatory – it requires thought to be given in advance to what disabled children and young people might require and what adjustments might need to be made to prevent that disadvantage."

See: SEND Code of Practice 0-25: Statutory Guidance http://tinyurl.com/SENDCode.



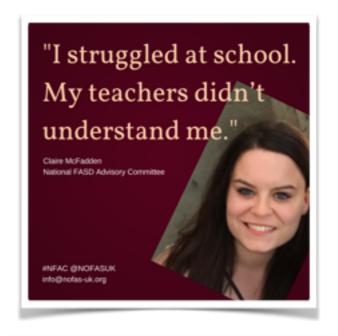
Unless otherwise noted material is excerpted from NOFAS-UK Teacher Toolkit by Project Researcher C.
Blackburn and Project Director B. Carpenter. For more information see: http://tinyurl.com/NOFASUK-TeacherToolkit. The in-depth Primary and Secondary Framework documents are widely used resources.

## Features of FASD

# Each student with FASD has a unique profile.

There are some features of FASD which may be evident in other disorders and disabilities, but these features can be so pronounced in students with FASD, depending on the severity of presentation, that it is worth highlighting them.

- \* Memory/Learning/Information Processing difficulties, including inconsistent retrieval of learned information, being slow to learn new skills, inability to learn from past experiences, problems recognising consequences of actions and problems with information processing speed and accuracy.
- \* Planning/Temporal Skills including needing considerable help to organise daily tasks, inability to organise time, not understanding the concept of time, difficulty in carrying out multi-step tasks.
- \* Behaviour Regulation/Sensory Motor Integration difficulties including poor management of anger/tantrums, mood swings, impulsivity, compulsive behaviour, perseveration, inattention, inappropriately high or low activity level, lying/stealing, unusual (high or low) reaction to sound/touch/light.
- \* Abstract Thinking/Judgement difficulties including exercising poor judgement, requiring constant supervision, poor abstract thinking, poor understanding of safety and danger.
- \* Spatial Skills/Spatial Memory difficulties, gets lost easily, has difficulty in navigating from one destination to another.
- \* Social Skills and Adaptive Behaviour including behaving at a level notably younger than their chronological age, poor social/adaptive skills.
- \* Motor/Oral Motor Control including poor/delayed motor skills, poor balance, difficulty in feeding (chewing, swallowing and sucking). A lack of clarity in speech may be compounded by cleft palate or palatal dysfunction.
- **Cognition/Academic Achievement**, including working at curriculum levels below peers, requiring constant repetition of instructions, rules and subject areas.
- \* Language/Social Communication including lack of understanding of social cues, strong expressive language coupled with poor receptive language skills, lack of empathy for others. Communication can also be affected by cleft palate (see above), hearing and hoarseness.
- \* Physical symptoms may include distinctive facial features (Foetal Alcohol Syndrome only), small head (microcephaly), small stature, organ damage and skeletal damage.





#### FASD is a Spectrum - an "Invisible Disability"

Diagnoses include: Foetal Alcohol Syndrome (FAS) • Partial Foetal Alcohol Syndrome (pFAS) • Alcohol-related Neurodevelopmental Disorder (ARND) • Alcohol-related Birth Defects (ARBD). The brain develops throughout pregnancy. While only approximately 1/10 of those with FASD have the facial features of FAS, most with FASD have cognitive impairments.

Over 400 conditions can co-occur with FASD.

## Understand the Root Cause of FASD

# FASD impacts each person differently, students with FASD are 'complex.'

FASD can be and is often diagnosed alongside other disabilities such as Autistic Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD) Attention Deficit Disorder (ADD) Attachment Disorders and Sensory Integration Disorder (SID).

Permanent damage to developing organs and bones can occur at particular periods of pregnancy. Damage to the Central Nervous System continues throughout pregnancy and results in changes to the structure of the brain which cannot be reversed and persist throughout life.

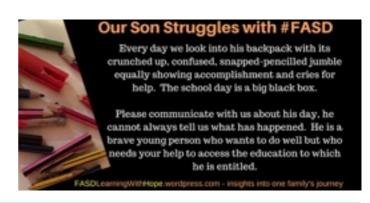
"Transition from primary to secondary education can be particularly difficult for students with FASD and needs to be carefully managed, to ensure that communication is efficient and services to families do not become disrupted. A full assessment of the students needs should be undertaken at this time."

## **Your Insight Matters**

# Students with FASD who receive diagnosis and appropriate support do better.

There are a number of secondary disabilities associated with FASD, the occurrence of which can be reduced by a range of protective factors.

Secondary disabilities include: mental health problems; disrupted school experience; trouble with the law; confinement (for mental health problems, alcohol/drug problems or crime); inappropriate sexual behaviour; alcohol/drug problems. A positive educational experience is key.



### **BEHAVIOURS ARE SYMPTOMS**

Some children will not present any obvious characteristics of FASD; their symptoms will be purely behavioural. It is important that teachers are aware of the true effects of the hidden impairments, so they can recognise and accommodate children's learning needs. Children with FASD may score within normal limits on measures of IQ, appear physically mature, and give the appearance of functioning at a level consistent with their chronological age. Their expressive language may be in advance of their actual age, and their reading skills may be chronologically appropriate. However, the academic abilities of individuals with FASD are below their IQ level; their living skills, communication skills and adaptive behaviour levels are even further below IQ levels; and in areas such as social skills and emotional maturity, they may be performing at half of their developmental age.

## FASD is Brain-Based

IT'S NOT HOW IT MIGHT LOOK

"My child may 'look' okay to you, but she tries so hard to hold it together in school all day that she has a sensory meltdown when she comes home or refuses to come to school. This is a symptom of an unmet need due to her disability, not bad parenting."



Different areas of the brain can be compromised by prenatal exposure to alcohol, affecting different areas of learning.

Area of Brain Damaged	Area of Learning Affected
Amygdyla	Ability to regulate reactions with the environment such as whether to attack of escape     Decision Making
Basal Ganglia	<ul> <li>Initiation and modulation of motor activity</li> <li>Motor timing behaviours, specifically difficulty in producing accurate and consistent motor responses when intercepting a moving target or moving through a spatial target in a specified amount of time</li> <li>Cognitive functioning</li> </ul>
Caudate Nucleus	<ul> <li>Regulation of the transmission of information regarding worrying events or ideas between the thalamus and the orbitofrontal cortex</li> <li>Effects on learning and memory as well as threshold control activities</li> </ul>
Cerebellum	<ul> <li>Postural control, gait, balance, and the coordination of bilateral movements</li> <li>Behaviour and memory</li> </ul>
Corpus Collosum	Speed of processing     Connecting two sides of the brain
Frontal Lobe	Executive function     Co-ordination     Processing and labelling/memory     Focussing and Shifting attention     Planning     Understanding consequences     Maintaining and shifting attention
Globus Pallidus , Acumberns, Thalamus, Cortex circuit	Decision Making
Hippocampus	Ability to consolidate new memories     General learning and emotional regulation
Nucleus Acumbens	<ul> <li>Links to reward, pleasure, laughter, addiction, aggression, fear, and the placebo effect</li> </ul>
Parietal Lobe	Spatial awareness     Mathematical ability     Dyspraxia

Table 1: An overview of the cognitive effects of damage to different regions of the brain commonly compromised by FASD (Blackburn 2009 from Kellerman 2008, Blaschke et al 2009, Mukherjee 2009)

## **SUPPORTING STUDENTS WITH FASD**

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Approach •	Remember that students with FASD will be developmentally younger than their chronological age, particularly in the area of social and emotional skills. Adopt a holistic approach which builds on the student's sensory strengths. Provide sequential sensory experiences (visual, kinaesthetic or auditory) and ensure a range of sensory opportunities throughout the lesson so that the student receives a multi-sensory experience.  Demonstrate rather than describe new techniques, and be prepared to repeat demonstrations, instructions, rules and concepts often.  Prepare students for new concepts by providing them with any new vocabulary beforehand to practise and learn.  Provide opportunities for small group and 1:1 work where possible and construct a personalised learning plan based on the student's strengths and interests (usually in the areas of practical and artistic ability).
Communication • With Families •	Ensure effective communication with parents and carers to reduce anxiety and develop an ethos of partnership.  Consistent language and approaches used and at home school will provide security and predictability for students who are easily overwhelmed by change and disruption.
Environment •	Ensure that the environment is free from distractions as far as possible. This includes distraction from noise, smell, tactile and visual distractions. Constant supervision may be necessary to keep students who are developmentally younger safe from harm.
Routine and Structure  •	Ensure routine is communicated to the student to reduce anxiety and enable them to organise themselves as independently as possible.  Changes to routine should be communicated to the student soon as possible and the student supported through them.  Structure will help the student with FASD make sense of their environment. Provide frequent breaks throughout a lesson to give the student time to refocus. It may help if they can do something physical for a few minutes between activities.
Simplicity •	Ensure that instructions, directions and tasks are broken down into short achievable, easily understood steps and delivered at a level which is developmentally appropriate to the student.  Be realistic about expectations.
Understanding •	Ensure that the student has understood instructions and directions. Say their name before giving instructions and directions.  Ask them to repeat what you've said them back to you in their own words.  Ensure that language used is simple, positive, concrete and free from jargon, sarcasm or idioms.  Provide visual aids if necessary as students may not always respond to auditory input alone.  Be specific when giving directions and provide step by step instruction.

The National Organisation for Foetal Alcohol Syndrome - UK Veb: www.nofas-uk.org • Twitter: @NOFASUK • Facebook: NOFAS-UK



Source: Carolyn Blackburn, "Secondary Framework: Teaching and Learning Strategies to Support Secondary Aged Students with FASD," NOFAS-UK, 2010. (Primary Framework also available) NOFAS-UK Teacher's Toolkit: http://www.nofas-uk.org/?cat=27

## **FASD: A Checklist for Inclusion**

- Say the student's name at the beginning of an instruction or sentence. Make sure you have the student's attention before you speak. Make sure you are facing the student so that they can see your facial expressions and gestures.
- Use simple, concrete and consistent language across the curriculum and throughout the school. Share language for educational concepts with parents/carers. Think about the language used in tests/exams and whether it matches what the student is familiar with.
- Give only one instruction at a time. Keep instructions short; use the minimum number of words.
- Say exactly what you want the student to do (e.g. instead of saying "Tidy up", say "Put the scissors in the blue box"), and back this up with pictures if necessary. If you are interrupted whilst giving an instruction, go back to the beginning of your sentence.
- Ensure the student has understood by asking them to repeat an instruction back to you in their own words. Give the student time to think about what you have asked of them.
- Use positive communication; instead of saying "Don't run", say "Walk". Use exaggerated facial expressions and gestures to give the student clues as to your meaning.
  - Meinforce auditory input with visual aids and provide students with a visual timetable.
    - MBreak tasks into small steps and be realistic about expectations.
    - Use visual prompts and concrete objects such as puppets for story telling for young students and number lines for mathematics.
  - Show rather than tell; demonstrate concepts so that students know exactly what is expected.
- Provide opportunities for discussion of new concepts before they are introduced in the classroom and check understanding afterwards. Provide opportunities for new learning to be connected to existing knowledge.
- Communicate with parents/carers regularly by email/phone/home-school diary.
- Provide worksheets which have plenty of white space and do not mix mathematical concepts and operations.
- Plan around the student's strengths and interests and provide immediate, frequent praise for each achievement.
- ☑ Be flexible about how achievement is recorded, consider video, photographic evidence and provide a scriber where necessary for technical lessons such as science where the student may be overwhelmed by sensory stimulation.
- Plan multi-sensory experiences based around the students sensory strengths and needs, including activities involving movement.
- Remove as many distractions from the environment as possible to enable the student to concentrate on the teacher/task.

## **Additional Resources**

Understanding FASD will help you be a better teacher. Others also will benefit from your insights. Experts say FASD affects more people than autism.

Most teachers, TAs and other educational professionals have not had in-depth training (if any training at all) about Foetal Alcohol Spectrum Disorders (FASD). Below are links to strategies that are geared toward helping students with FASD access education. Please note, we are sharing some international resources here as well. Some details may not be relevant in various educational systems, but the over-riding principles are the same.

NOFAS-UK Teacher Toolkit - http://tinyurl.com/NOFASUK-TeacherToolkit contains an array of videos and resources from the earlier NOFAS-UK FASD education project, with Project Researcher Carolyn Blackburn and Project Director Barry Carpenter. This includes these two must reads from which this publication is excerpted - please check out the originals for detailed strategies and further insights:

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- Carolyn Blackburn, "Primary Framework for Teaching and Learning Strategies to Support Primary-Aged Students with FASD" - http://tinyurl.com/NOFASUK-PrimaryFramework
- Carolyn Blackburn, "Secondary Framework for Teaching and Learning Strategies to Support Secondary-Aged Students with FASD" - http:// tinyurl.com/NOFASUK-SecondaryFramework

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- \* Specialist Schools and Academies Trust (SSAT), Complex Learning Difficulties and Disabilities Research Project Prof. Barry Carpenter and colleagues have prepared extremely useful briefing packs about FASD (includes information & classroom support sheets about FASD) http://complexld.ssatrust.org.uk/project-resources/cldd-briefing-packs.html
- ➤ Supporting Students with Fetal Alcohol Spectrum

  Disorders, explains FASD, its impact on the brain, and behavioural patterns in students with FASD. Strategies for designing classroom instruction and routines to support students with FASD are also highlighted. The resource was developed by Dr. Jacqueline Pei, Stephanie Hayes and Alethea Heudes as a component of Professionals without Parachutes http://www.engagingalllearners.ca/il/supporting-students-with-fasd/#0
- \* Teaching Students with Fetal Alcohol Spectrum Disorders:

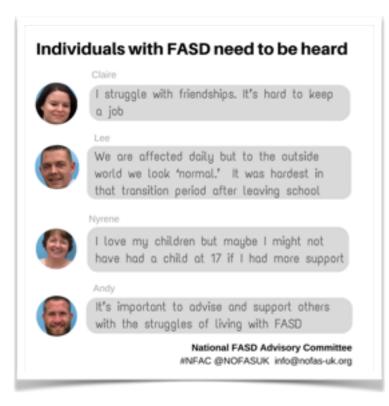
  Building Strengths, Creating Hope, Alberta Learning, 2004
   http://files.eric.ed.gov/fulltext/ED491497.pdf
- \* A Neurologist Makes the Case for Teaching Teachers
  About the Brain, Edutopia, with links to other related

- resources https://www.edutopia.org/blog/neuroscience-higher-ed-judy-willis
- Hey Teacher! A pamphlet for teachers from ww.fan.org.nz http://www.fan.org.nz/\_\_data/assets/pdf\_file/ 0004/33475/Parent\_Info\_booklet\_Hey\_Teacher.pdf
- **★ Slow Processing** A video by POPFASD, focusing on difficulties with processing and auditory pace, with suggestions for how teachers can make needed accommodations https://www.youtube.com/watch? v=GanTpcTaGWQ
- \* A Day in the Life of a Child With Executive Functioning

  Issues, by The Understood Team https://
  www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/a-day-in-the-life-of-a-child-with-executive-functioning-issues
- \* At a Glance: 8 Key Executive Functions, by Amanda Morin, Understood https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/key-executive-functioning-skills-explained
- ★ Fetal Alcohol Spectrum Disorders Education Strategies: Working with Students with a Fetal Alcohol Spectrum Disorder in the Education System, by Kristen Blaschke, Marcia Maltaverne, Judy Struck, National Organization on Fetal Alcohol Syndrome - South Dakota (NOFAS-SD) Fetal Alcohol Spectrum Disorders Institute, Center for Disabilities, Department of Pediatrics, Sanford School of Medicine of The University of South Dakota - http:// www.usd.edu/~/media/files/medicine/center-fordisabilities/fasd-educational-strategies-handbook.ashx? la=en
- ★ Understanding Fetal Alcohol Spectrum Disorders (FASD): A Comprehensive Guide for Pre-K- 8 Educators, Chandra D. Zieff, M.Ed. Rochelle D. Schwartz-Bloom, Ph.D., Mark Williams, Ph.D., Chapter Five: Effective Strategies for Information-Processing & Memory Difficulties (focuses on students with FASD as multi-sensory learners) - https:// sites.duke.edu/fasd/chapter-5-the-fasd- student-andlearning-issues/
- \* FASD UK YouTube Channel educational videos playlist http://tinyurl.com/FASDUK-EducationPlaylist
- ★ Oregon Behavior Consultation Cognitive Support Series Videos (excellent short videos feature Nate Sheets explaining FASD/brain processing): https:// www.youtube.com/channel/UCQ6qtxeMCZvgC9tG7LokNw
- ★ 6 Things Educators and School Staff Should Know About FASD, a video on cognitive support by Oregon Behavior Consultation https://www.youtube.com/watch? v=fSsCXnsYKRI
- Thank You Teachers! But Did You Really Understand Me & My FASD? A blog post by parents of a child with FASD after receiving his end of year report http://wp.me/p5Xwzi-JB

# Finding Strategies & Hope Together

- \* FASD UK Professionals Facebook Support Group an FASD UK Alliance forum for multi-disciplinary practitioners and community champions working with families with Foetal Alcohol Spectrum Disorders https://www.facebook.com/groups/1025725344110624/
- \* FASD UK Facebook Support Group an FASD UK Alliance online support for people with FASD and those who care for them the most vibrant online FASD support community in the UK https://www.facebook.com/groups/FASDUK/



## **FASD Role Models**

Adults and young adults with FASD provide insights into living with FASD – this list of <u>FASD</u>
Role Models (http://bit.ly/2k7Wcvx.) includes just a few, there are many, many more amongst us, living lives of courage every day. They give voice to the younger kids who are unable to explain what it's like for them. Many adults with FASD feel they weren't understood in school. The brain-based issues central to FASD are life-long. In the UK, a new <u>National FASD Advisory Committee</u> of adults with FASD is informing NOFAS-UK on issues related to transitions to adulthood.

# Educational Strengths of Students with FASD

It is important to set the learning difficulties of children with FASD in the context of their strengths. These strengths will become the foundations on which to develop personalised curricula, to encourage and develop further strengths, and build emotional resilience.

- ★ Students with FASD are often ambitious and have a range of practical strengths which are useful in their educational careers and throughout life.
- ★ Many are articulate and have engaging personalities. They enjoy being with other people.
- ★ Many have learning strengths around Literacy and practical subjects, such as Art, Performing Arts, Sport, and Technologies, although they often have difficulties with comprehension,
- ★ While they have working/short-term memory difficulties, rote learning and long-term memory can be strengths.

## "My child can learn!"

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For more information: National Organisation for Foetal Alcohol Syndrome-UK (NOFAS-UK)
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Member of the FASD UK Alliance - www.fasd-uk.net



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Check out her new book:

<u>Developing Inclusive Practice for</u>

Young Children with FASD (2017)