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Recognising a child with FASD in educational settings

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Chapter Highlights

- What does a child with FASD look like in an educational setting?
- Policy contexts to identifying FASD in the educational setting
- Wider considerations and comorbidities seen in a educational setting

Children with FASD represent an under recognised group of children in education as professional knowledge amongst the teaching profession about FASD is low. In addition not all children prenatally exposed to alcohol will be diagnosed with FASD but may be diagnosed with an alternative condition such as ADHD or Autism. This presents challenges and potential barriers to children with FASD being able to access the curriculum in a way that is meaningful to them.

This chapter will outline the policy context in which educational settings operate for children and young people with special educational needs and disabilities before discussing some of the physical and observable characteristics and behaviour that might manifest in educational settings. Although located within a UK policy and practice context, the principles discussed within the chapter will be relevant more widely in other countries and contexts.

Policy background

The UK Special Educational Needs and Disability (SEND) policy development has been influenced by international human rights agendas and the need to reduce the social cost of failing to provide sufficient support to children with SEND early enough to improve their future success and life chances.

The *Special Educational Needs and Disability Act* SENDA (HMT, 2001) provides protection for children with SEND against discrimination, and the right to education in mainstream settings. The SEN Code of Practice [CoP]¹ for education settings placed emphasis on the role of educators to support families in identifying children's needs through observation and monitoring and required schools to appoint a Special Educational Needs Co-ordinator (SENCO) with overall responsibility for children with SEND. The landmark Children and Families Act² introduced a revised Special Educational Needs Code of Practice (CoP).³

The Children and Families Act 2014 (Part 3) - Key points

Definition of SEN: a child has a special educational need if they have a learning difficulty or disability that calls for special educational provision. A learning difficulty is a significantly greater difficulty in learning than the majority of children of the same age.

In this context, disability is a disability that prevents or hinders a child from taking advantage of the facilities generally available. Special educational provision is provision that is additional to or different from that which is normally available in mainstream settings. For a child under the age of two, special educational provision means provision of any kind. A child under school age has SEN if he or she is likely to have SEN when they reach school age, or would do so if special educational provision were not made for them. The principles of the Act recognise the importance of the wishes, views and feelings of children, young people and their parents and encourage educators to:

- Promote their participation in decision-making;
- Recognise the importance of information and support;
- Focus on the best possible outcomes for children and young people with SEND

The Act:

- Requires a joint approach across education, health and social care to commission;
- Services and co-operate at a local level to meet children and young people's needs;
- Requires local authorities to publicise these services as a local offer so that parents and young people are clear what support is available locally in terms of SEN and disability in the early years
- Establishes a framework from birth to 25 years, with Education Health and Care Plans replacing statements of SEN (although there will be a period of transition allowing

Local Authorities until 2018 to transition children who have a Statement to a single EHC plan);

• Sets out a new framework for SEN and a new SEN and Disability Code of Practice.

All educational settings must:

- Have regard to the SEN and disability Code of Practice (discussed below). This means that they must take it into account whenever they make decisions about young children;
- Ensure that they have the necessary expertise to support children and families;
- Co-operate with the local authority in meeting its duties to children with SEN.

The type of support that children with SEND receive will vary. Two broad levels of support are legislated for:

- SEN support given to a child in their pre-school or school. In pre-school children under the age of five will be assessed at the age of two and again in the summer term of the first year of primary school. Reasonable adjustments will be made for disabled children.
- Education Health and Care plans (EHC) for children up to the age of 25 who need more support than is available through SEN support. They aim to provide more substantial support for children through a unified approach that integrates education, health care and social care needs.

Local Authorities have a clear duty to assess a child or young person's education, health and care needs where they may have SEN (special educational needs) and they may need special educational provision to be made for them at a level or of a kind which requires an assessment of a child or young person's education, health and care needs. This is called an EHC needs assessment. It is also sometimes called a "statutory assessment" - an assessment that a Local Authority is required to carry out in accordance with statute, in this case the Children and Families Act 2014. It has replaced the old form of statutory assessment under the Education Act 1996. If a parent, young person or a school/college asks the Local Authority (LA) to carry out an EHC needs assessment then the LA must respond to the request within 6 weeks saying if they will or will not carry out the assessment. If they refuse, the parent/young person must be informed and has the right to appeal to the Special Educational Needs and Disability Tribunal. Once an LA agrees to carry out an EHC needs assessment they must by law seek advice and information from a number of key professionals as part of the process. Based on the evidence they have gathered they must then decide whether they will issue an EHC plan for that child or young person.

Special Educational Needs and Disability Code of Practice: 0-25 years (2015) – Key points

This is statutory guidance for organisations who work with and support children and young people with special educational needs and disabilities. The leaders of early years settings, schools and colleges should establish and maintain a culture of high expectations that expects those working with children and young people with SEN or disabilities to include them in all the opportunities available to other children and young people so they can achieve well. The SEN and disability code of practice: 0-25 years, para 1.31 requires:

- Early identification and an early response to SEND;
- Identification of SEND with parents;
- A graduated approach to responding to SEND;
- A cycle of assess, plan, do, review;

• The involvement of specialists where a child continues to make less than expected progress.

Four broad areas of special education needs give an overview of the range of needs that should be planned for, not to fit a child into a category. The four broad areas of need that can be planned for are:

- Communication and interaction
- Cognition and learning
- Social, emotional and mental health
- Sensory and/or physical needs.

Obviously children will have SEND that overlap these areas and educators must plan for children's diverse and complex needs to ensure that their needs are met.

What to look for in educational settings

In educational settings the delays and difficulties in development and behaviour can manifest in a number of different ways and change both over time and be variable from day to day. Broadly speaking there a number of challenges for educators, namely:

 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. This can affect children in the following ways:

Children with cleft palate and FAS may have specific needs regarding their speech and resonance. If they have a cleft palate or velopharyngeal dysfunction i.e. their palate is not functioning correctly, they should be under the care of a Regional Cleft Palate Centre. There are two aspects to assessing a child with cleft palate:

- Resonance this will be determined by how effectively their palate functions. There may be normal resonance or there may be signs of increased nasality – hypernasality or audible air escape
- 2. Articulation the production of consonants and vowels.

If there are difficulties in either or both of these areas then this can impact on their intelligibility. This may lead to frustration if they are not understood resulting in inappropriate behaviour. Liaison with the Speech and Language Therapist at the Regional Cleft Palate Centre would be recommended to ensure that young people are supported in the best way possible. It may be that speech targets can be incorporated in their general language and social programme.

- 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) and the following factors:

1. Hearing - conductive hearing loss as a result of chronic otitis media (glue ear) is common. If the young person is not understanding/responding then their hearing should be checked to eliminate the compounding factor of a hearing loss.

2. Hoarseness - can be common and makes the voice sound distinctive.⁴

Commonly found co-existing problems

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A number of authors describe the incidence of one birth of a child with FASD as community or societal failure or a matter of social justice and inequality.⁵ This is because there are wider issues and concerns associated with FASD. These relate to the context in which it is acceptable and possible for women to drink alcohol in pregnancy, including price and availability of alcohol issues, but also because there are complex factors related to FASD. For example, in a study that was undertaken with aboriginal populations in Australia, the following Characteristics of children with FASD were observed: ⁶

- 35% are born pre term;
- 65% are born with low birth weight;
- Only 7% diagnosed at birth, the average age of diagnosis is 3.3 years;
- 53% have microcephaly (small head circumference associated with underdeveloped brain);
- 24% have significant birth defects;
- 85% have behavioural problems;
- 40% live with birth parent (therefore 60% lived with foster/adopted parents);
- 51% have a sibling with FASD.

As highlighted above points there is interaction between PAE and preterm birth and it is worth noting that the The World Health Organisation (WHO) defines preterm birth as babies born alive before 37 weeks of pregnancy are completed. There are sub-categories of preterm birth, based on gestational age:

extremely preterm (less than 28 weeks)

very preterm (28 to 32 weeks)

moderate to late preterm (32 to 37 weeks).

Each year in England, around 10,000 children are born very preterm (at less than 32 weeks gestation) and a further 60,000 are born moderately preterm (at 32-36 weeks gestation). The number of preterm births has increased in the last two decades, and more preterm children are surviving due to improved neonatal care.⁷ However, the prevalence of cognitive, behavioural and emotional problems in preterm populations has not changed. In particular, children born preterm have been found to experience specific learning problems including difficulties with mathematics, visual-spatial skills, memory and attention. There is still much we do not know about the nature and spectrum of these learning difficulties, their long term consequences, and how to deal with them. In particular, there is controversy about whether moderately preterm children experience similar but milder learning problems than children born very preterm. This is compounded by any difficulties associated with PAE. Children born with extremely low birth weight (ELBW) of less than 1,000 g have been found to require some form of special educational support, and experience particular difficulty with either numeracy or reading.⁸⁹ Children with FASD are often born small and sometimes premature as well. Assessment is more difficult if the pregnancy dates are not known and an early pregnancy scan is not available.

It is thought that upto 80 per cent of children with FASD enter foster or adoption placement.¹⁰ Sometimes children with FASD experience multiple foster placements and can difficult to place for adoption due to their challenging behaviour¹¹. This means that may have difficulties developing and sustaining relationships with others. Furthermore, Gregory, Reddy and Young (2015) found A history of prenatal exposure has been found in 55 out of 160 health assessments for looked after children (34%) and in 34 out of 45 medicals for adoption

(75%).¹² Elliott's findings also suggest that if there is already a child with FASD in the family, this should trigger more support for the family in future pregnancies.

Given the characteristics noted by Elliott (2013) and the arguments noted above, the imperative for diagnosis can related to personal, psychological, educational and societal benefits. It could be argued that:

Exposure to alcohol before birth is the most important preventable cause of brain damage in children today affecting substantial numbers of children. Its effects range from devastating physical and learning disabilities to subtle damage leading to poor behaviour, violence and predisposition to criminality. The human cost to affected infants and their families is huge let alone the economic impact and burden on our health, education and social care services and on the family and criminal justice systems. ¹³

What differences might I notice about children with FASD when I observe them at play?

Strengths:

Children with FASD have many strengths and these should be used to identify opportunities for learning and development and interventions for children. These include:

- Often gregarious, fun loving, caring and affectionate.
- Can be sensitive, loyal, kind and trusting in relationships
- Can succeed in structured situations.
- Often enjoy repetitive work
- Strong practical skills and tend be good at drama, art, woodwork.

- Strong sense of fairness
- Strong visual memories,
- Good verbal fluency

Observable difficulties:

Some or all of the following may be observed in infants with FASD:

- Often trembling and difficult to sooth, may cry a lot;
- Weak sucking reflex;
- Little interest in food, feeding difficulties (feeding can take hours);
- Difficulties adjusting to solid food because of disinterest and poor appetite;
- Weak muscle tone;
- High susceptibility to illness;
- Unpredictable sleep patterns/cycles;
- High sensitivity to sights, sounds and touch;
- Failure to thrive (may continue to lose weight longer than normal after delivery);
- Delayed developmental milestones (for example, walking, talking);
- Problems with bonding (this may be exacerbated if Mum is also an excessive drinker and/or is depressed or finding bonding difficult herself);
- Small for age, underweight, may be have been born prematurely.

Some or all of the following may be observed in preschoolers with FASD:

- Feeding and sleeping problems;
- Poor motor coordination, and poor fine and gross motor control;
- Short attention span, flitting from one activity/area to another, exhibiting butterfly-like movements
- Demonstrates more interest in people than objects;
- Overly friendly and indiscriminate with relationships, may seek affection constantly;
- Expressive language may be delayed or children may be overly talkative (but lack richness of speech, thought or grammar complexity)
- Receptive language often delayed; even if children are talkative, they may not understand much of what is said to them. May follow other children's lead often.
- Inability to understand danger, often fearless
- Low tolerance for frustration and prone to temper tantrums
- Easily distracted or hyperactive
- Difficulty with changes and transitions, prefer routines
- Difficulty integrating sensory information, such as sound, touch, light, smells, movement, etc.)

Some or all of the following might be observed in children in compulsory education

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.

I've always wanted somebody to come along and say, 'I'm going to look this child with FAS as a child with severe medical problems.' We've had so many medical professionals involved not many of them have known enough about FASD to say this is standard procedure with a child with this problem.¹⁴

Learning Difficulties

- Understanding cause and effect.
- Speech language and communication delays/disorders including verbosity, poor understanding, poor social cognition and communication skills and a difficult using sophisticated language in social contexts.
- Cognitive difficulties, including poor short term memory, and poor concentration.
- Difficulty in understanding mathematical concepts, such as time, understanding money
- Frontal lobe damage to the brain, which is 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 daily living skills.

Behavioural Difficulties

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

She's not always aware of the impact of her behaviours on others and that upsets her, because after the event when people explain to her, she's very apologetic. She doesn't like to be like that but at the same time, she really cannot control it. This is the paradox, she's aware that she can't control herself and that's frustrating for her. In Science we're hitting difficulties because of her impulsivity around behaviour, she's very drawn to the apparatus, she likes anything that's very pretty and sparkly and if you've got colourful flames and splints and nice things bubbling in jars that's a temptation for her, she wants to get in there with her hands.¹⁵

Social Difficulties

- Difficulty acquiring appropriate social and emotional skills, which impacts on relationships, friendships, and any activity which requires an understanding of the state of mind of others and predicting how this might affect their actions.
- Understanding boundaries: children can be frustrated by their own behaviour, but seemingly unable to control it, leading to challenges in self esteem and peer relationships:

It's almost as if he peaked in year 4 and hasn't developed much since then. The others in his class are now just as verbal as him but their understanding of things is much higher. The other students are now almost anti-Collin now because he's so immature compared to them and what they're expecting of their peers he's not reaching, so they have shunned him, we have to have sessions to deal with this as they are now bullying him.¹⁶

Emotional Difficulties

- The need to rely on external prompts from adults can result in low self esteem and frustration
- Children begin to identify the differences between themselves and peers (and vice versa) even in special school settings, again 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 employment can result from a lack of identification/support when children are at primary age.

Transition

Parents and educators share concern over the social and emotional vulnerability as children with FASD move through the education system and into adult life due to their difficulties with relationships and change to routines, need for constant supervision and difficulties acquiring key life skills.

- children with FASD will continue to need provision and support throughout their adult life, which ideally include:
 - Ongoing multi-disciplinary assessment leading to appropriate and sensitive support packages
 - A commitment to maximising appropriate levels of independence

- The provision of supported/sheltered living accommodation with access to assistance with daily living skills
- Supported work and leisure opportunities.
- Schools can support families in finding appropriate and suitable placement for children and providing information to future placement about how best to support the child.

The overall implications for learning are that there is a necessity for extrinsic motivation to learn skills or complete tasks such as life skills, hygiene routines, and school based tasks, particularly in secondary aged children, requiring repetitive reminders and re-focussing from adults. In addition social communication difficulties mean that inappropriate interactions with others can leave children with FASD vulnerable to bullying and other forms of abuse, or they may intimidate others with their over friendly or over powering behaviour.

These challenges can be compounded by other co-existing disorders, such as ASD and ADHD. Linked to this, many children will experience Sensory Processing Disorders (SPD) and may present with sensory seeking behaviour such as inattention, hyperactivity, distractibility. Children's early family experiences may imply that attachment difficulties (AD) are also a consideration for educators to be aware of, particularly where children have been placed in foster or adoptive families, as is most often the case for children with FASD.

Sensory Processing Disorders

Sensory Processing Disorder (SPD) relates to the inability to use information received through the senses in order to function smoothly in daily life. SPD is an umbrella term to cover a variety of neurological disabilities. Included in this are:

Sensory Modulation Problems which pertain to how a child regulates his responses to sensations. This may result in a child being over responsive (hypersensitive), under responsive (hyposensitive) or sensory seeking and some children may fluctuate between these positions.

Sensory Discrimination Difficulties pertain to children who may have difficulty in distinguishing one sensation from another. We each have 8 senses, including 5 external senses: Visual, Auditory, Olfactory, Tactile, Gustatory, and 3 internal: Proprioceptive, Vestibular, 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, sound

Sensory-Based Motor Problems relate to children who may position their body in unusual ways and difficulty in conceiving of an action to do, planning how to organise and move their body and carrying out the plan.¹⁷

SPD can result in a range of symptoms from mild to severe which can impact on interaction with others, functioning in daily life, the ability to learn and general success throughout life. General strategies for including children and young people with SPD in an educational setting are included in the chapter on Teaching and Learning.

Attachment Difficulties

A solid and healthy attachment with a primary caregiver appears to be associated with a high probability of healthy relationships with others while poor attachment with the mother or primary caregiver appears to be associated with a host of emotional and behavioral problems later in life.¹⁸ Studies have shown that children who have positive early attachment experiences do well as pre-school children.^{19 20} achieving high scores on ego-resilience and self esteem, less dependency on the educator and more positive affect toward the educator. Securely attached children demonstrate a capacity to adapt to school and respond to the demands of academic and social setting in which learning takes place.²¹ Fundamentally, appropriate attachment with a primary caregiver is viewed as a foundation for optimal language, cognitive and emotional development²² highlighting the interconnectedness between attachment and children's holistic development.

Children's ability to adapt to a new caregiver is thought to be easier in the first six months of life than afterwards and children under six months old are less rejecting and more accepting of new adoptive or foster parents than older infants. However, the more caregivers a CYP is required to interact with , the ability to securely attach to others diminishes ²³, which has implications for the attachment style of CYP who are exposed to multiple foster placements. In addition there is a general feeling amongst clinicians working with children who are adopted that such children have the same issues whether they were adopted at birth or as teenagers. These issues relate to separation and loss, trust, rejection, guilt and shame, identity, intimacy, loyalty and mastery or power and control.

As infants, children develop a reflective sense of what others are likely to do in response to their own behaviour.²⁴ This allows them to build mental representations or internal working models of expectations based on past experiences, allowing them

to regulate the negative emotions of fear, distress and anxiety when insecurity is felt. The formation of attachment relationships serves an important function as an emotional and physiological regulator for all humans as a social species.²⁵ Self-regulation in children the developmental integration of emotion and cognition in early childhood²⁶ and has been found to account for variance in academic outcomes among three to five year-old children, indicating that success in self-regulation helps prepare children for being successful in school.

Thus through the development of internal working models with sensitive attachment figures, children will begin to predict what might happen when feelings are expressed or needs displayed. A child's internal working model of their relationship with a caregiver will include concepts of:

- The self
- Others
- Expectations of the relationship and how the self and others are likely to behave and react

The consistent availability of a sensitive caregiver in the development a CYP's internal working model, therefore, is important as children begin to organise their attachment behaviour to increase the availability, proximity and responsivity of their carers to meet their needs. Adverse experience of early attachment, such as the inconsistent, unpredictable or unavailability of a primary caregiver, which is not relieved by more positive relationships with others later on, is very likely to have negative implications for both behaviour and learning. The educator can act as the specific attachment person in schools, particularly for anxious children.²⁷ Educators

can represent a 'secure base' in a school setting by providing sensitive, predictable responses to behaviour and learning needs for children with attachment difficulties.

Mental Health

Children with FASD are at risk of developing secondary disabilities if sensitive and appropriate support packages are not received in their early years and primary education, one aspect of which is mental health problems. Mental health problems affect 30 – 40% of all CYP at some time during childhood.²⁸ The Mental Health Foundation estimates that 20% of children up to the age of 16 years experience a mental health problem at some point during their development and 10% present with a 'clinically recognisable' mental health disorder (including emotional disorders such as anxiety, phobias and depression, self harm and suicide, conduct disorders, hyperkinetic disorders, autistic spectrum disorders, psychotic disorders, eating disorders and substance and drug abuse). Two per cent of children are diagnosed with two or more of these disorders.

For individuals affected by FASD, the figure for the number affected by poor mental health rises to 87% of individuals with FASD experiencing poor mental health in adolescence and adult life, leading to the risk of suicide (23%).²⁹ Mental health problems can have a significant effect on engagement with the curriculum and learning. If a child is depressed, for example, this impacts on their ability to pay attention and access memories, allocate sufficient resources to tasks because they are distracted by negative thoughts³⁰, and demonstrate enthusiasm for learning and socialising. Generally children who are depressed engage less effectively than those who are not depressed.³¹ Anxious children on the other hand may display a range of attention problems, such as narrow attention span and distractibility. Anxiety and

worry can have a negative impact on information processing, motivation and memory.^{32 33} Educators supporting children with FASD, therefore, will need to be aware of mental health issues, how these may manifest in children and how best to support a child with organic brain damage and compounding mental health difficulties.

Educators and the professionals who support children with FASD in the classroom will require an understanding of the compounding factors associated with the condition, and ensure continuing multidisciplinary assessment that is necessary to allow identification of secondary disabilities so proactive action can be taken to ameliorate the effects. The importance of working closely with families and putting families at the centre of their child's educational journey in these circumstances cannot be overestimated. ³⁴

Conclusion

This chapter has discussed the policy context in which educational settings must provide inclusive practice children and young people with FASD and some of the ways in which FASD can be identified in educational settings. The overlap with attachment and relational issues as well as hyperactivity and inattention linked to sensory integration problems has been raised.

The chapter has discussed transitions as a particularly challenging time and this includes transition between activities during the school day and between key education phases such as Nursery Education to Primary School and Primary School to Secondary school. These are times when underlying difficulties may be more obvious as the structure and routine needed to enable children to regulate their emotions and predict the environment are in a state of flux. Transitions will need careful management and communication between agencies and with families.

The effects of the recent changes to legislation for children with SEND remain to be seen especially in relation to children with FASD as there is no research or evaluation of this currently.

Glossary

Act - for example Act of Parliament - the method of making law in the UK

A Local Authority (LA) - an organization that is officially responsible for all the public

services and facilities in a particular area.

SEN / SEND – special educational needs/special educational needs and disabilities - Special educational needs and disabilities (SEND) can affect a child or young person's ability to learn.

Statement of SEN - A statement of special educational needs sets out a child's needs and the help they should have. It is reviewed every year to make sure that any extra support given meets a child's needs.

EHCP - An education, health and care (EHC) plan is for children and young people aged up to 25 who need more support than is available through special educational needs support. EHC plans identify educational, health and social needs and set out the additional support to meet those needs.

SEN support – a system for identifying and meeting a child's needs if they need additional support for learning in school.

DfES – Department for Education and Skills

DWP - Department for Work and Pensions

DOH – Department of Health

DfBIS - Department for Business Industry and Skills

CoP - Code of Practice for Special Educational Needs and Disabilities

Tribunal – a collection of individuals responsible for handling appeals against local authority

decisions regarding special educational needs.

References

¹ Department for Education and Skills (DfES) Special Educational Needs Code of Practice. Nottingham: DfES Publications 2001

² Department for Education (DfE)/Department for Business, Innovation and Skills/Department for Work and Pensions (DWP)/Department of Health (DOH)/ Ministry of Justice Children and Families Act

http://www.legislation.gov.uk/ukpga/2014/6/contents/enacted accessed 31 March 2020

³ Department for Education (DfE)/Department of Health (DOH) Special Educational Needs (SEN) Code of Practice: Statutory guidance for organisations who work with and support children and young people with SEN 2015

⁴ Astley, S.J, The 4-Digit Diagnostic Code, Diagnostic Guide for Fetal Alcohol Spectrum Disorders Centre on Human Development and Disability, University of Washington, Seattle, Washington. 2004

⁵ Karr-Morse, R. and Wiley, M.S. Ghosts from the Nursery: Tracing the Roots of Violence New York: Atlantic Monthly Press 1997

⁶ Elliott, E. Australian Perspectives on Fetal Alcohol Spectrum Disorders. In Carpenter, Blackburn and Egerton (Eds) Interdisciplinary Approaches to FASD. London: Routledge. 2013

⁷ National Neonatal Audit Programme *Annual Reporton 2014 data*. 2015 Available online: http://www.rcpch.ac.uk/ improving-child-health/qualityimprovement-and-clinicalaudit/ national-neonatal-audit-programme-nnap [Accessed April 11, 2016] ⁸ Bowen, J, Gibson, F and Hand, P Educational outcome at 8 years for children who were born extremely prematurely: a controlled study, *Journal of Paediatric and Child Health*, *2002 38* (5), 438–44.

⁹ Wolke, D., Strauss, V. Y.-C., Johnson, S., Gilmore, C., Marlow, N., & Jaekel, J. Universal Gestational Age Effects on Cognitive and Basic Mathematic Processing: 2 Cohorts in 2 Countries. The Journal of Pediatrics, 2015 166(6), 1410-1416.e1412.

doi:10.1016/j.jpeds.2015.02.065

¹⁰ Streissguth, A., Clarren, S and Jones, K. Natural history of the fetal alcohol syndrome: a 10 year follow-up of eleven patients, *Lancet*, 1985 2: 85-91

¹¹ Blackburn, C., Carpenter, B. and Egerton, J. Educating children and young people with Foetal Alcohol Spectrum Disorders. London: Routledge 2012

¹² Gregory G, Reddy, V and Young C Identifying children who are at risk of FASD in Peterborough: working in a community clinic without access to gold standard diagnosis Adoption and Fostering 2015 Volume: 39 issue: 3, page(s): 225-234

¹³ Aynsley-Green, A. Foreword in British Medical Association Alcohol and

pregnancy Preventing and managing fetal alcohol spectrum disorders London:

British Medical Association 2016 pp ix

¹⁴ Blackburn, C., Facing the Challenge and Shaping the Future for Primary and Secondary aged Students with Fetal Alcohol Spectrum Disorders (FAS-eD Project, Project Toolkit including project report, literature review, case studies, podcasts and primary and secondary learning and teaching frameworks) 2012

¹⁵ Blackburn, 2012 Personal communication from Secondary Education Teacher

¹⁶ Blackburn 2011 Personal Communication with Specialist teacher in a special school for children with Severe Learning Difficulties

¹⁷ Kranowitz The Out of Sync Child: Recognizing and Coping with Sensory ProcessingDisorder. London: Penguin Group 2005

¹⁸ Perry, B., Childhood Experience and the Expression of Genetic Potential: What Childhood Neglect Tells Us About Nature and Nurture Brain and Mind 2002 **3:** 79–100, 2002

¹⁹ Sroufe, L.A., Infant –caregiver attachment patterns of adaptation in pre-school: the roots of maladaptation and competence in Permutter M. (Ed) Minnesota Symposium of Child Psychology 1983 Vol. 16 pp. 41-81

²⁰ Sroufe, A. Appraisal: Bowlby's contribution to psychoanalytic theory and developmental psychology; attachment: separation: loss. Journal of Child Psychology and Psychiatry 1986 Vol. 27, No. 6 pp. 841-849

²¹ Geddes Attachment in the Classroom: The Links Between Children's Early Experience, Emotional Well-Being and Performance in School. London: Worth Publishing 2006

²² Blackburn, C. Walking through a moonless night: FASD and Early Childhood Intervention in Carpenter, Blackburn and Egerton FASD and Interdisciplinary Perspectives. London: Routledge 2013 pp 102-122

²³ Newton Verrier, N. The Primal Wound Understanding the Adopted Child Baltimore, Maryland: Gateway Press 1993

²⁴ Howe, D. Child Abuse and Neglect: Attachment, Development and Intervention.Hampshire: Palgrave Macmillan 2005

²⁵ Chesney, A. R. and Champion, P. Understanding the dynamics between preterm infants and their families. Support for Learning, Volume 23 Number 3 2008 p. 144 - 151 ²⁶ Blair, C. and Razza, R. P. Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. Child Development, 2007 78, 647–663.

²⁷ Barrett and Trevitt, J. Attachment Behaviour and the Schoolchild. London: Routledge 1991

²⁸ Carpenter, B., Coughlan, B., and Fotheringham, J., Mental health and emotional wellbeing: The new dimension in the curriculum for children and young people with special educational needs. Complex Needs Series No.4, Specialist Schools and Academies Trust: London. 2010

²⁹ Streissguth, A. and Kanter, J. Eds The Challenge of Fetal Alcohol Syndrome: Overcoming Secondary Disabilities. Seattle, WA: University of Washington Press 1997

³⁰ Ellis, H.C. and Ashbrook, P.W. Resource Allocation Model of the Effects of Depressed Mood States on Memory In K. Fielder and J. Forgas (eds) Affect, Cognition, and Social Behaviour.Toronto: Hogrefe. 1998

³¹ Cooper, P., and Tiknaz, Y., (2007) Nurture Groups in School and at Home. Connecting with Children with Social, Emotional and Behavioural Difficulties. London. Jessica Kingsley.
³² Eysenck, M.W., and Calvo, M.G. Anxiety and Peformance: the processing efficiency *theory*. Cognition and Emotion 1992 6, 409-434.

³³ Eysenck, M.W., and Keane, M.T. Cognitive Psychology: A Student's Handbook. East Sussex: Psychology Press. 1995

³⁴ Blackburn, C. (2017) Developing inclusive practice for young children with Fetal Alcohol Spectrum Disorders: A framework of knowledge and understanding for the early childhood workforce, London: Routledge