

Fetal Alcohol Spectrum Disorder (FASD)



Group Activity



- Split into groups of 4/5
- Talk as a group what you know about FASD
- Write some of these things down on the piece paper
- Be prepared to share with the rest of the class



- **Ken Kissinger**
Aboriginal Education Assistant
Addictions Recovery Support Programs
FASD Training Facilitator (L.I.F.E. Sessions)

Ken has been involved with Whitecrow Village since 2004. As an adult living with FASD, Ken provides a unique understanding and mentorship for Whitecrow Village participants and others in the greater community (both those with and those without FASD). Ken is a sought after motivational speaker and presenter on FASD and has honoured invitations to speak throughout BC, Alberta, Manitoba, and the United States.

- http://www.cbc.ca/aboriginal/2009/03/last_call_fetal_alcohol_specia/
- http://www.whitecrowvillage.org/who_we_are.html

Is that an Elephant in the room?

Due to the stigma and negative judgment associated with FASD, it is often undiagnosed and mistreated.



FASD—What is it?

Fetal Alcohol Spectrum Disorder

- A neuro-physiological disability in which the child exhibits specific characteristics related to
 - Delayed pre-natal and/or post-natal growth (below the 10th percentile)
 - Central Nervous System
 - Distinct facial features

Disorders Associated with FASD



- Fetal Alcohol Syndrome (FAS)
- Partial Fetal Alcohol Syndrome (pFAS)
- Alcohol Related Neurodevelopmental Disorders (ARND)
- Alcohol Related Birth Defects (ARBD)

FASD Continuum

- There is a continuum from mild intellectual and behavioural issues to profound disabilities and premature death.



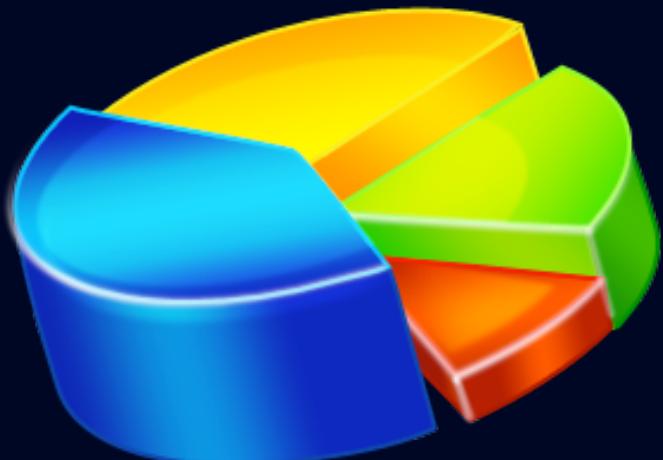
Incidences

Health Canada (2005)

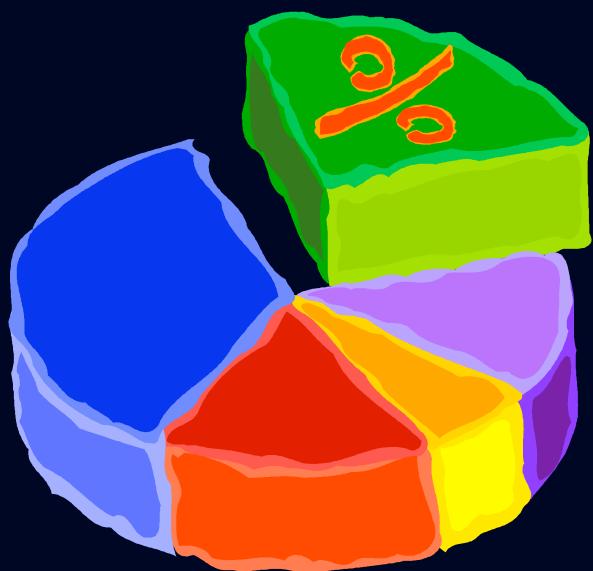
- FAS : 1 per 500 – 1000 annual live births
- FAE : 5-10 times higher than FAS

Canadian Paediatric Society (2002)

- FAS: 2.8 - 4.8/1000 live births
- FAS & ARND: 9.1/1000 live births
- FAS in British Columbia: 3.3/1000 children
- FAS in northern BC: 25/1000 live births

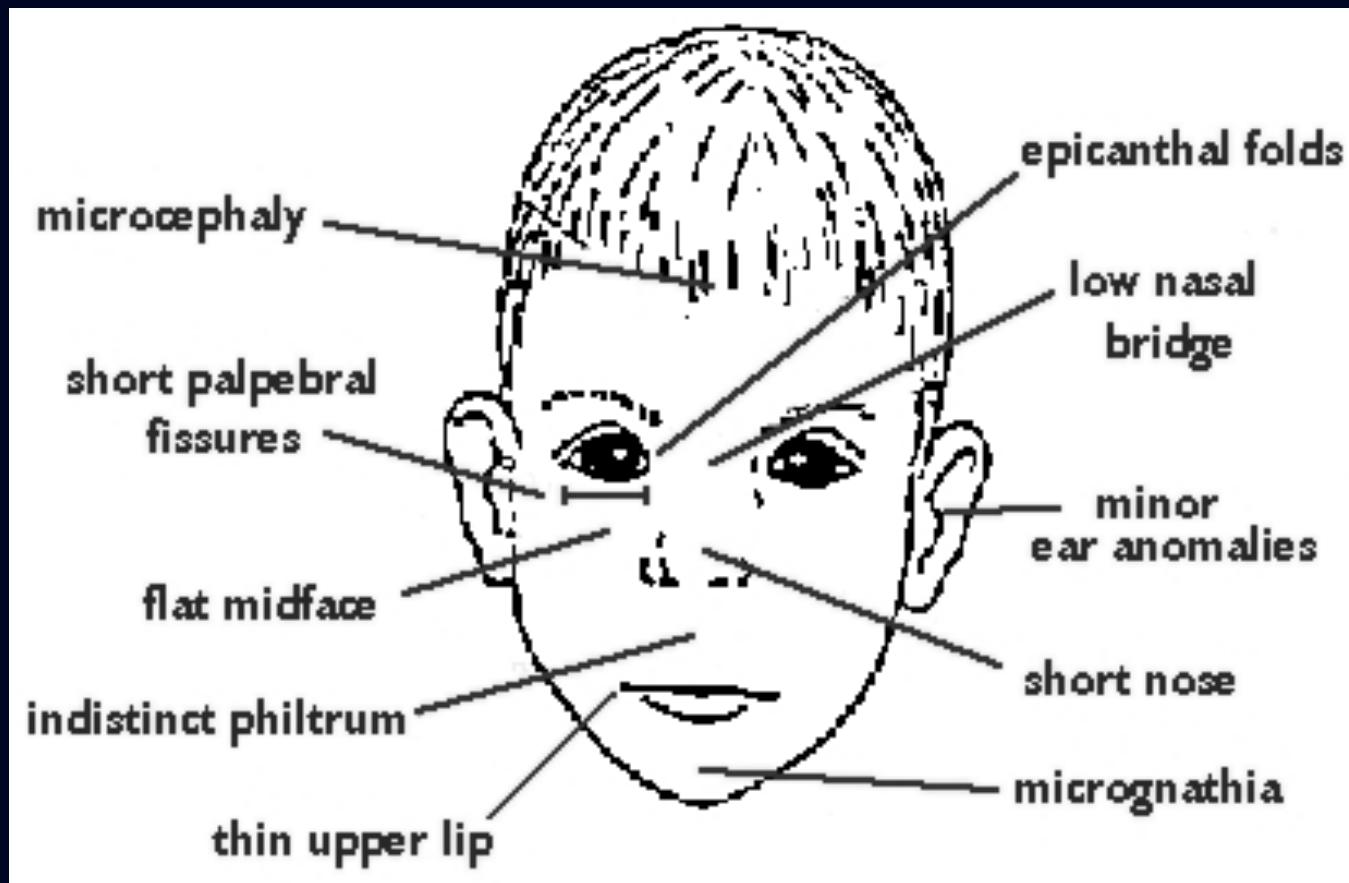


Prevalence



- **FASD affects approximately 1% of people living in Canada.**
- **About 300,000 people in Canada are effected by FASD**
- **Rates of FASD are higher than the national average in some First Nations' & Inuit communities.**

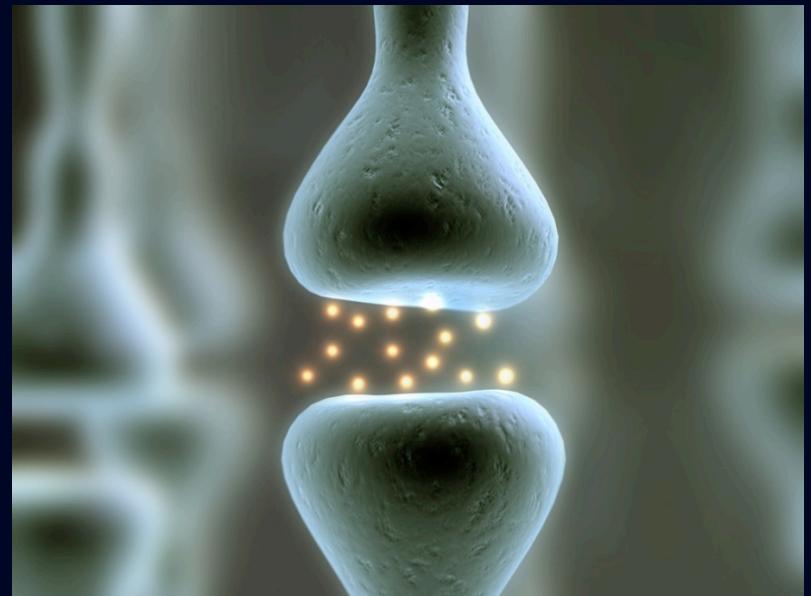
Facial Features



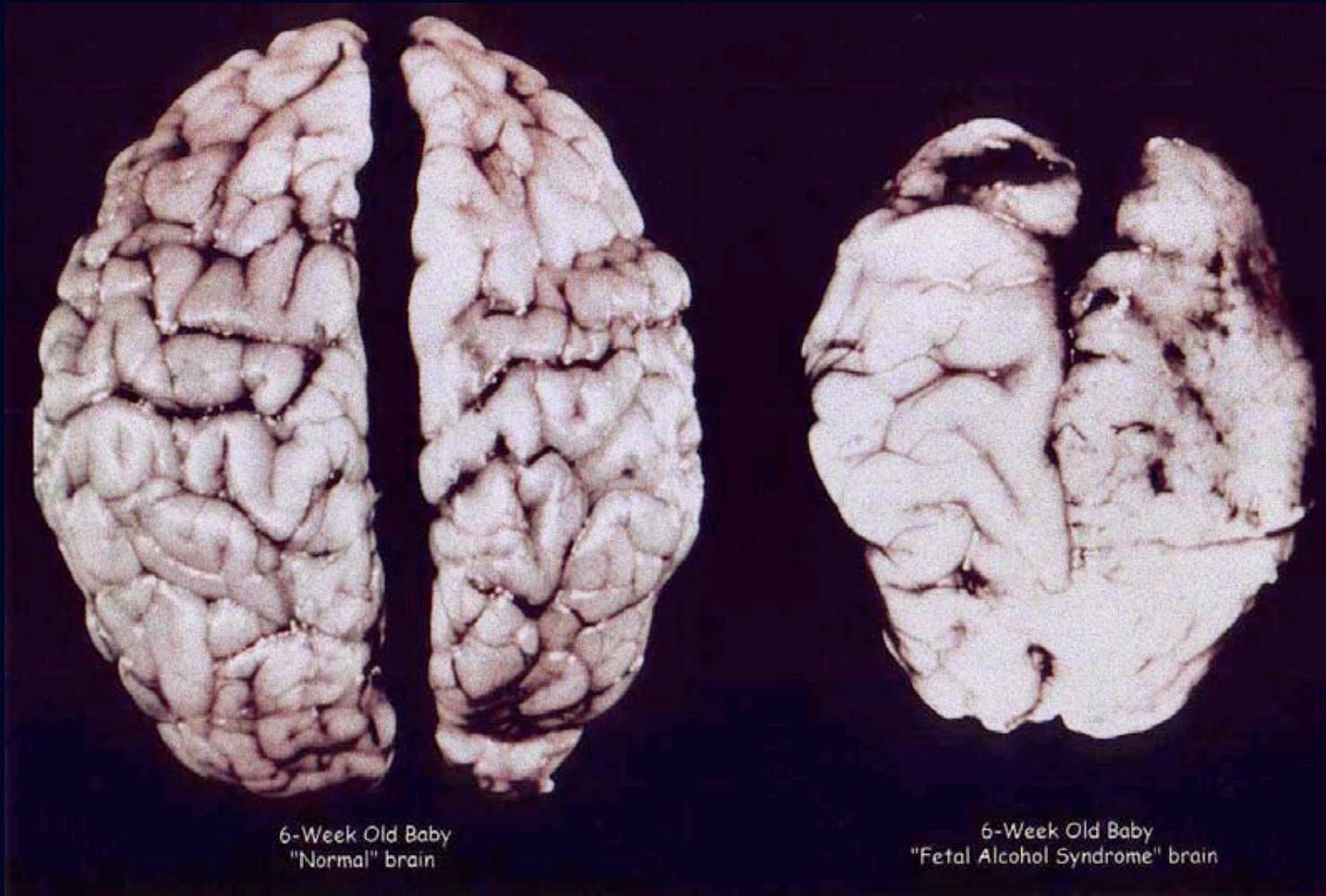
http://web.unbc.ca/~kitchena/EDUC_436/FASD.pdf and
<http://www.faslink.org/Probabilityofprenatalalcoholexposure.pdf>

Physical Characteristics

- **Low birth weight**
- **Growth deficiencies**
- **Small head
(microcephaly)**
- **Underdeveloped
fingernails or toenails**
- **Short neck**



How does prenatal alcohol exposure effect a baby's brain?



Damage to Prefrontal Cortex

- Most noteworthy damage to the brain occurs in the prefrontal cortex which controls the **Executive Functions**:



- Inhibition
- Problem Solving
- Sexual Urges
- Planning
- Time Perception
- Internal ordering
- Working memory
- Self-monitoring
- Verbal self-regulation
- Motor Control
- Regulation of emotions
- Motivations
- Judgment

Behavioural and Cognitive Abnormalities Resulting from Prenatal Brain Damage

- Learning difficulties
- Deficits in school performance
- Poor impulse control
- Problems in social perception
- Deficits in receptive & expressive language
- Poor capacity for abstraction or Metacognition
- Specific deficits in mathematical skills
- Problems in memory, attention, or judgment



Other common problems for people with FASD:

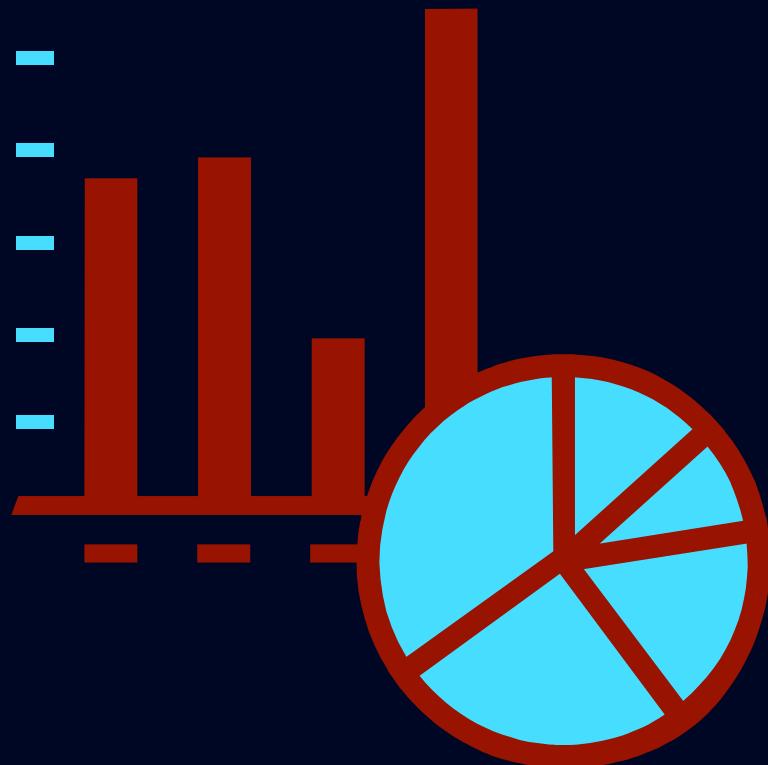


- Adding, subtracting, handling money
- Thinking things through, reasoning
- Learning from experience and changing their behaviours accordingly
- Understanding consequences of their actions (cause and effect)
- Remembering things
- Getting along well with others

Results of prenatal alcohol exposure can include both primary and secondary disabilities:

Attention Deficit Disorders - ADD	Attention Deficit Hyperactivity Disorder - ADHD	Mental Retardation
Developmental delay	Failure to thrive syndrome	Swallowing/Feeding disorders
Little or no retained memory	Severe loss of intellectual potential	Loss of intellectual functioning (IQ)
Poor adaptive skills transferring learning to new situations (AQ)	Severely compromised life skills development	Emotional maturity far below chronological age
Behavioural problems	Inability to predict consequences of actions	Extreme impulsiveness
Poor Judgment	Little or no capacity for Interpersonal empathy – social cues	Little or no capacity for moral judgment
Highly concrete. Inability to understand abstract concepts	Tourette's traits	Reactive outbursts
Autistic traits / Asperger syndrome	Cognitive perseveration	Echolalia
Bi-polar disorder / Manic Depression	Depression	Suicide
Sociopathic behaviour	Sleep disorders / Night terrors	Sensory integration problems
Higher than normal to dangerously high pain tolerance for major insults	Extreme sensitivity to touch, food and clothing texture and minor injuries	Developmental coordination disorder – Fine and gross motor skills problems
Microcephaly	Height and weight deficiencies	Cerebral palsy
Heart defects	Heart failure	Death
Deafness / Hearing problems	Central auditory processing disorder	Developmental speech and language disorder
Mild to severe vision problems	Esotropia	Dyslexia
Facial anomalies	Serious maxillo-facial deformities	Cleft palate
Dental abnormalities	Immune system malfunctioning	Asthma
Complex seizure disorder	Epilepsy	Tremors
Tight hamstrings	Rigidity	Slack muscles
Genital deformities	Hemia	Precocious puberty
Renal (liver) failure	Kidney defects	Hip deformities
Underdeveloped fingers	Shortened and bent little finger	Spinal dimple

Of FAE (Fetal Alcohol Effected) Individuals between the ages of 12 and 51:



- 95% will have mental health problems
- 60% will have “disrupted school experiences”
- 60% will experience trouble with the law
- 55% will be confined in prison, drug or alcohol treatment centres or mental institutions
- 52% will exhibit inappropriate sexual behaviour
- 70% will have problems with employment
- 82% will not be able to live independently

FASD Prevention

- FASD is 100% preventable
- Many children with FASD are born to multi-generational drinkers. Children with FASD produce babies with FASD.
- Educating the public is key.
- There is no safe amount of alcohol to consume during pregnancy.



Early Intervention is Key

- FASD is under-reported and many doctors prefer to diagnose these children with 'non-judgmental' disorders such as ADD, ADHD, LD, MR, RAD, ODD, Bi-polar, Tourettes
- FASD results in countless primary & secondary challenges that vary between individuals
- Identification of FAS as a disability will allow parents & teachers to get help and support their children need
- The earlier intervention is provided, the less chance that secondary disabilities will develop
- Early diagnosis and intensive intervention results in an enormous difference in the lifetime prognosis



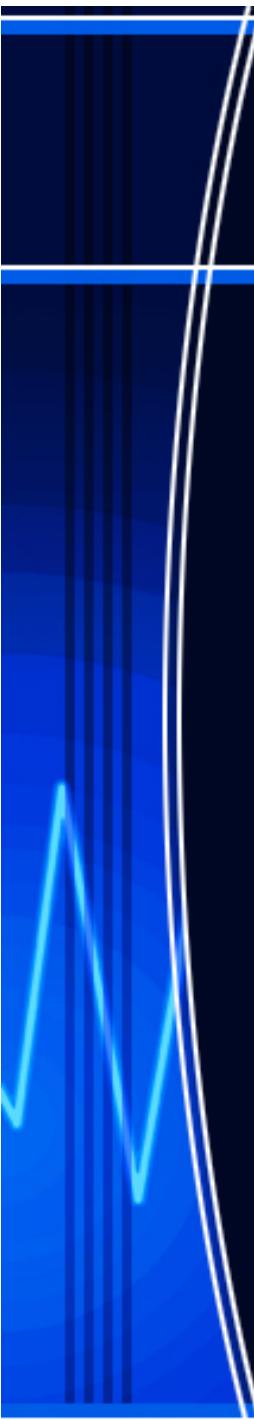
Last serny, Fingledobe and Pribin were in the
nerd-link treppering gloopy caples and cleaming
burly greps.

Suddenly a ditty strezzle boofed into
Fingledobe's tesk.

Pribin glaped and glaped.

"Oh Fingledobel" He chifed, "That ditty
strezzle is tunning in your grep!"

When did it happen?
Who are the characters in the story?
What happened to Fingledobe's tesk?
What did Pribin do?



**“Don’t teach them
fast, teach them
slow.”**

— A Student With FASD

Teaching Students with FASD

Cause and Effect/ Impulsivity

- Students with FASD can have trouble thinking before acting.
- This affects their ability to make predictions and to learn from their mistakes
- Compensate by setting routines and teaching with consistency



Memory Difficulties

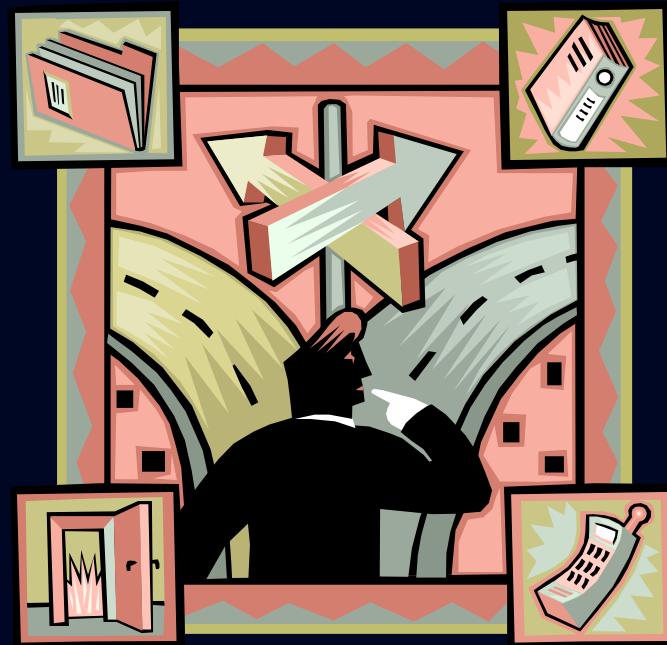


- Students with FASD can have difficulties remembering where they put things, accessing previous knowledge, and/or carrying out specific tasks.
- These difficulties can be misunderstood as laziness or an unwillingness to participate.

Compensate For Memory Difficulties

By...

- Using visual reminders of daily routine and/or planned activities (i.e. posters of morning routines, time tables, transition activities)
- Give one direction at a time
- Review lesson material often
- Teach memory strategies (i.e. rehearsal, clustering, association, mnemonic devices, songs, rhymes, etc.)



Slow Processing Pace



- Students with FASD can take longer than the average student to process information
- Can display as slower speech
- When processing time moves too fast, student will mask the difficulty by responding “I don’t know”
- Compensate by using wait time effectively, repeating frequently, and reducing the number of words/directions spoken

Dysmaturity

- Students with FASD can have a discrepancy between chronological age expectations and the ability to perform them
- Compensate by setting clear expectations for the students (these may have to be adapted based on the students level)



Other Things To Remember

- Teach to the students strengths
- Teach skills needed for daily life
- Create a calm, quiet and safe environment
- Enhance the teacher-student relationship
- Provide students the opportunity to develop skills in their weak areas
- Use the Student's IEP to create your teaching plan



Resources

- Teaching Students with Fetal Alcohol Syndrome/Effect: A Resource Guide for Classroom Teachers, 1996 BC Ministry of Education, Skills and Training

- Teaching Students with Fetal Alcohol Spectrum Disorder, Alberta Learning Special Programs Branch

- <http://www.fasdoutreach.ca/>

- <http://www.knowledgenetwork.ca/findinghope/index.html>

Ritchie, B. (2007) *Fetal Alcohol Spectrum Disorders (FASD) Exposure Rates, Primary and Cascade Results of In Utero Alcohol Exposure, and Incidence Markers.* Internet Resource:

<http://www.faslink.org/Probabilityofprenatalalcoholexposure.pdf>

Kellerman, T. *Prenatal Alcohol Exposure and the Brain, FAS Community Resource Center*,

<http://www.come-over.to/FAS/FASbrain.htm>

Fetal Alcohol Spectrum Disorder. Internet Resource:

http://web.unbc.ca/~kitchenai/EDUC_436/FASD.pdf