

Fragile X Syndrome



Fragile X syndrome, also known as Martin-Bell syndrome, is the most common inherited form of mental disability. Impairments can range from mild to severe cognitive disabilities with a range of symptoms. Those diagnosed with Fragile X syndrome often have attention deficit/hyperactivity disorder, as well, and approximately 5% of these students also have an autism spectrum disorder.

Implications for Planning and Awareness

- Meet with the student and parents early in the school year to discuss how the school can support this student's needs related to Fragile X syndrome. This could include finding:
 - the student's strengths, interests and areas of need
 - the student's specific symptoms
 - if the student has any other associated disorders that need to be considered at school
 - successful strategies used at home or in the community that could also be used at school.
- Collaborate with the parents and student to consider if, and how, they would like to share specific information about Fragile X syndrome with peers. If they wish to do this, consultation with health care providers, such as a psychologist or disability specialist, may be helpful.
- Learn as much as you can about how Fragile X syndrome may affect learning and social and emotional well-being. Reading, asking questions and talking to qualified professionals will build your understanding and help you make decisions to support the student's success at school.
- Collaborate with the school and/or jurisdictional team to identify and coordinate any needed consultation and services.
- Develop a system for sharing information with relevant staff members about the student's condition and successful strategies.

Your awareness needs to begin with conversations with the student's parents.

Implications for Instruction

- Determine the student's individual learning style, strengths and needs. Students with Fragile X syndrome typically learn best when they can:
 - use simultaneous processing activities, such as whole-word method, when learning to read and spell
 - make mental comparisons when they read new things
 - compare new concepts with concepts they already know
 - use mental pictures, similes or analogies to understand learning.



- Consider using the following learning strategies, such as:
 - modelling and role-playing
 - concrete examples of finished activities or assignments
 - visuals (e.g., pictures, models, diagrams)
 - visual cues for schedules
 - hands-on activities (e.g., cooking, role-playing real-life situations)
 - small group work
 - gross motor skill learning activities.
- Provide additional time for the student to understand and respond to instructions.
- Seat the student toward the back of the room, near the door, to give the student room to move and not distract other students.
- Provide physical breaks from activities and from the classroom.
- Reduce the level of noise and visual clutter in the student's workspace.
- Place the student first or last in a line, rather than in the middle.

Implications for Social and Emotional Well-being

- Engage the student and parents in planning for transitions between grade levels and different schools.
- Watch for signs of anxiety and consult with the parents and school/ jurisdictional team to develop specific strategies for helping the student manage this anxiety.
- Support the development of self-advocacy skills, such as asking for what they need.
- When appropriate, involve the student in monitoring the success of supports and strategies used in the classroom.
- Maintain a predictable classroom and school routine. Give the student advance notice when there will be a change in the schedule or routine (e.g., school assembly, fire drill).
- Provide structured social activities that allow the student to get to know others and to begin building appropriate social relationships; for example:
 - buddy systems
 - mentoring
 - role-playing
 - structured games.
- Be aware of possible sensory issues the student may have, including:
 - sensitivity to sound or light
 - aversion to touch or being touched
 - avoidance of different tastes or textures
 - shyness and sensitive personality
 - concern about how people feel toward him or her, which can lead to anxiety or acting out behaviour.
- Teach and encourage the student to remove himself or herself from stressful events and situations by walking away or going to a quiet space away from others.

Parents know their children well and can offer insights on how to support their social and emotional well-being. There is strength in collaborating on strategies that could be used at home, at school and in the community.



- Identify environments that may be very stressful (e.g., music class, gymnasium, noisy lunchroom) and develop strategies for reducing stress in these environments (e.g., use of earplugs, assigned seating in the lunchroom, etc.).
- Watch for signs of anxiety and consult with the parents and school/ jurisdictional team to develop specific strategies for helping the student manage this anxiety.

As you consider the implications for this medical condition, think about the following questions:

1. Do I need further conversations with the parents to better understand this student's strengths and needs? Yes No
2. Do I need targeted professional learning? Yes No
If yes, what specific topics and strategies would I explore?
3. Is consultation with jurisdictional staff required? Yes No
If yes, what issues and questions would we explore?
4. Is consultation with external service providers required (e.g., Regional Educational Consulting Services, Student Health Partnership, Alberta Children's Hospital, Glenrose Hospital)? Yes No
If yes, what issues and questions would we explore?
5. Are further assessments required to assist with planning for this student? Yes No
If yes, what questions do I need answered?
6. Is service to the student from an external provider required? Yes No
If yes, what outcomes would be anticipated?

Links for further information:

National Fragile X Foundation. "Education Resources."
<https://fragilex.org/?s=Education+resources>

Please note:

These websites are for information only and the user is responsible for evaluating the content and appropriate uses of the information.

