

Down Syndrome



Down syndrome is a chromosomal disorder that causes delays in physical and mental development. Students with Down syndrome have a particular set of facial and other physical characteristics. The student's abilities and the severity of associated medical conditions can vary greatly, from mild to severe. Heart problems, thyroid issues and gastrointestinal (bowel) issues are common with Down syndrome. Other physical issues include hearing and visual impairments, low muscle tone, and instability in the ligaments holding the neck vertebrae together.

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 Down syndrome. This could include finding out about:
 - the student's strengths, interests and areas of need
 - specific health concerns that may affect the student at school
 - successful strategies used at home or in the community that also could be used at school.
- In collaboration with parents and health care professionals develop a written management plan that aligns with school and jurisdictional policies and protocols. This plan should include specific information, such as:
 - medical concerns that may affect the student at school
 - the role of school staff in managing the medical concerns
 - steps for treatment of associated medical concerns
 - appropriate physical activities
 - when emergency measures should be taken.
- If required, work with the parents to carry out a risk assessment before field trips to determine potential hazards, and to plan for the student's safe and successful participation.
- Collaborate with the parents and student to consider if, and how, they would like to share specific information on Down syndrome with peers. If they wish to do so, consultation with health care providers, such as school or community health nurses, may be helpful.
- Learn as much as you can about how this condition 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.
- Develop a system for sharing information with relevant staff members about the student's strengths and needs and strategies to support success.

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



- Collaborate with the school and/or jurisdictional team to identify and coordinate any needed consultation and supports.
- Work with specialists to arrange for any equipment or classroom modifications needed. Due to short stature, the student may need a special desk and chair in order to sit and work more easily in class.

Implications for Instruction

- Determine the implications of the student's delays, including cognitive, behaviour, language, attention, fine motor (e.g., cutting, colouring, printing) and gross motor (e.g., running, jumping), to plan appropriate instruction.
- Understand that skills may develop at a slower rate, so the gap between the student and peers may widen with age.
- Provide additional supports, such as individual instruction, visuals to aid understanding (e.g., sign language, picture symbols), and extra work time.
- If the student has instability in the ligaments holding the neck vertebrae together (Atlanto-Axial Instability), activities such as forward rolls, gymnastics, football and diving must be avoided. Consult with a physical therapist and/or an adaptive physical education specialist regarding appropriate supports and/or adaptations.
- Determine the student's ability and needs in terms of speech and language. Delays may be mild or severe (non-verbal). Articulation (speech sounds) can be poor, making the student difficult to understand. Consult with a speech-language pathologist regarding supports.
- Stuttering is common. The student may need picture symbols for communication. Consult with a speech-language pathologist regarding language and communication supports.
- Ensure the student has support and, possibly, assistance with gross and fine motor activities, as needed. The student may have difficulty with buttons, zippers and snaps, and may be late in toilet training. Consult with the parents and occupational therapist regarding appropriate supports.
- Seat the student in the classroom with thought given to any hearing, vision or attention difficulties.
- Be aware if the student requires a hearing aid or FM system.

Implications for Social and Emotional Well-being

- Engage the student and parents in planning for transitions between grade levels and different schools.
- If the student with Down syndrome is sometimes stubborn or socially inappropriate (e.g., overly affectionate), use visual supports and class rules to help reinforce what is acceptable in the classroom.
- Teach the student appropriate conversational skills, such as:
 - greeting people and starting a conversation
 - taking turns during conversations
 - asking and answering questions.
- Explicitly teach social skills, such as how to read body language and expressions. Use modelling, storytelling and role-plays, along with direct instruction.

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.



- Take steps to ensure the student does not feel left out during recess, intramural or other school activities. If the student has physical limitations, provide the student with:
 - an alternative role, such as equipment manager or coach during intramurals
 - alternative activities during recess, such as a friendship bench to sit on and meet with peers.

As you consider the implications for this disability, 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:

Canadian Down Syndrome Society. “Teaching Students with Down Syndrome.” http://www.cdss.ca/images/pdf/parent_information/teaching_students_with_down_syndrome.pdf

Down Syndrome Online. “Down Syndrome Issues and Information: Education.” <http://www.down-syndrome.org/information/education/>

National Down Syndrome Society. “Education, Development and Community Life.” http://www.ndss.org/index.php?option=com_content&view=category&id=37&Itemid=58

Please note:

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

