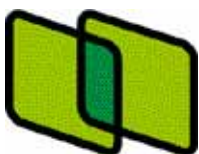


The Ontario Curriculum
Unit Planner

**Special
Education
Companion**



Teacher Companion

Special Education Companion

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Introduction

The Special Education Companion is intended to assist teachers designing instructional units using the Ontario *Curriculum Unit Planner*. It is part of the *Planner's* Teacher Companions database, which includes the following components:

- Teaching/Learning Strategies
- Assessment Companion
- ESL/ELD Companion
- Special Education Companion
- Explanatory Notes

The Teacher Companions database was compiled by Ontario educators and field-tested for use in Ontario schools. It is intended to help the collaborative and reflective practitioner plan, develop, implement, and evaluate curriculum units that:

- meet the needs of all students in the classroom;
- provide a balance in the range of learning experiences;
- recognize the interrelated phases involved in the learning process;
- provide consistent terminology to support effective teaching and learning;
- incorporate effective instructional and assessment strategies;
- support the implementation of the Ontario curriculum.

While every effort has been made to provide appropriate information for educators, this database is not intended to be a definitive treatment of the topics it includes. Its contents should be read as suggestions, not prescriptions. To help educators who find themselves in a variety of circumstances, this database includes references to supports and applications which may not be available to all practitioners.

You can use this database in the following ways:

1. Browse individual records by clicking on the Companion icon (i.e., the overlapping pages icon) found on most *Planner* screens.
2. Click on the field and use the right scroll bar to see more text. Individual records are created using field boxes that may be larger than they first appear.
3. Use the “Find” feature to search for key words/phrases according to specific criteria.
4. Copy/Paste specific sections of a Companion record into the appropriate text box (e.g., “Teaching/Learning”), making any additional notes.
5. Use the Bookmark feature to attach individual records as a resource for your unit.
6. Attach teaching/learning strategies, assessment strategies, recording devices, and bookmarked resources by clicking on the “+” in relevant fields in the subtasks.
7. Since the database contains fixed records which cannot be altered except by copying and pasting their text into another area (e.g., Scrapbook, Teaching/Learning text box, Subtask Notes), create blackline masters of additional strategies and attach them as resources in

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specific and subsequent units;

8. Print a whole Companion or individual record using the Print icon;
9. Visit the *Planner* website at www.ocup.org to download new versions of the Companions.

Overview

“Students in schools across Ontario require consistent, challenging programs that will capture their interest and prepare them for a lifetime of learning. They require knowledge and skills that will help them compete in a global economy and allow them to lead lives of integrity and satisfaction, both as citizens and as individuals.” *The Ontario Curriculum, Grades 1 – 8* (1997).

Since the early 1980s, the context of special education and the provision of special education programs and services for exceptional pupils in Canada has been evolving. Provisions included in the Canadian Charter of Rights and Freedoms and the Ontario Human Rights Code have driven some of these changes. Others have resulted from the evolution and sharing of best practices related to the teaching and assessment of exceptional pupils.

The provision of special education programs and services for the youth of this province rests within a legal framework. The Education Act and regulations related to it set out the legal responsibilities related to special education. They provide comprehensive procedures for the identification of exceptional pupils and for the placement of those students in educational settings where the special education programs and services appropriate to their needs can be delivered. Some exceptional pupils – both those who have not achieved the expectations for their age-appropriate grade and those who have exceeded the expectations – may need to be given opportunities to participate in special programs that will help them attain the highest level of achievement possible.

Under the Education Act¹ and regulations made under it, school boards² are required to implement procedures for early and ongoing identification of students’ learning abilities and needs. School boards also have a legal obligation to provide special education programs and services for their exceptional pupils, either directly or through the purchase of services from another school board.

The processes for identifying a student as exceptional and for determining an appropriate placement for the student are set out in Regulation 181/98. The ministry remains committed to its policy that exceptional pupils be integrated into regular classes when such placements meet the needs of those students and are in accordance with parents’ wishes. A range of placements should be available for students whose needs cannot be met in the regular classroom.

An Individual Education Plan (IEP) must be developed for each identified exceptional pupil, taking into consideration assessments and recommendations from the Identification, Placement,

¹ The Education Act, R.S.O. 1990, C.E.2, as amended, referred to hereafter as the Education Act or the Act.

² The terms *school board* and *board* are used in this document to refer to district school boards and school authorities.

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and Review Committee established under Regulation 181/98, parents, and support staff. An IEP may also be developed for students who are not identified as exceptional but who need special education programs and/or services. Curriculum for most exceptional pupils is the same as, or is at least based on, that set out in the Ontario curriculum, with learning accommodations and modifications made to the curriculum as needed to ensure continuous growth, development, and success. An IEP helps to ensure an effective and appropriate program for every exceptional pupil. It provides a process for accountability and assists in the continuous and ongoing assessment of student progress toward the identified expectations.

Provincial standards for IEPs are outlined in the ministry policy document *Individual Education Plans: Standards for Development, Program Planning, and Implementation* (2000). Each section of the document identifies for school boards and principals the purpose of the standard described in the section, the requirements to be met in achieving the standard, and the criteria against which compliance with the standard will be assessed by the Ministry of Education as it conducts IEP reviews and audits.

Special education is the shared responsibility of the principal, regular classroom and special education teachers, support staff, the parents, and the student. Ongoing communication among these people is particularly important for the exceptional pupil. As exceptional pupils get older, it is expected that they will become increasingly accountable for their own learning. Their success in achieving a higher level of independence can be greatly helped by close cooperation among all partners.

The Ministry of Education document *Special Education: A Guide for Educators* (2001) contains more detailed information about special education policies and procedures, including the categories and definitions of exceptionalities. The Guide can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

Legal Responsibilities

The Education Act, subsection 8(3), requires the Minister to ensure that all exceptional children in Ontario have available to them appropriate special education programs and special education services without payment of fees.

The Education Act, subsection 57.1(1), and Regulation 464/97, section 3, require district school boards and school authorities to establish special education advisory committees.

Regulation 298, section 31, defines the maximum enrolment in a special education class.

Regulation 181/98 sets out the procedures for school boards to follow in the identification and placement of exceptional pupils, as well as in reviews and appeals of identification and placement decisions. It also requires school boards to prepare a Parents' Guide to these

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procedures.

Regulation 306 requires school boards to maintain a special education plan and to ensure that it is amended from time to time to meet the current needs of the exceptional pupils of the board.

Programs and Services

Under the Education Act, subsection 1(1),

special education program is defined as:

an educational program that is based on and modified by the results of continuous assessment and evaluation and that includes a plan containing specific objectives and an outline of educational services that meets the needs of the exceptional pupil;

special education services is defined as:

facilities and resources, including support personnel and equipment, necessary for developing and implementing a special education program;

exceptional pupil is defined as:

a pupil whose behavioural, communicational, intellectual, physical or multiple exceptionalities are such that he or she is considered to need placement in a special education program by a committee, established under subparagraph iii of paragraph 5 of subsection 11(1), of the board...[that is, by an Identification, Placement, and Review Committee].

Identification, Placement, and Review Committees (IPRCs)

IPRCs are established under the authority of Regulation 181/98, which provides direction for the composition and functioning of the committees as well as for appeals and reviews of IPRC decisions.

Regulation 181/98:

- requires that every school board (district boards and school authorities) establish one or more IPRCs, determine the jurisdiction of each committee, and establish the manner of selecting the chair of each committee;
- sets out the membership of the IPRCs;
- indicates how principals refer pupils to IPRCs and how parents may request an IPRC referral;

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- determines the procedures to be used at IPRC meetings, including the material to be presented, and the rights and obligations of the parties present;
- sets out the contents of the IPRC's statement of decision as to whether the pupil is exceptional, and, if so:
 - a description of the pupils' strengths and needs
 - the categories and definitions of any exceptionalities identified
 - the placement decision
 - reasons for placement in a special education class, if that was the placement decision
 - any recommendations regarding special education programs and services;
- sets out the processes for the review and appeal of IPRC decisions;
- requires the development of Individual Education Plans (IEPs) for identified exceptional pupils;
- requires that boards develop a Parents' Guide explaining the special education process to parents.

Individual Education Plans (IEPs)

Under Regulation 181, sections 6 and 7, an IEP must be developed for each student identified as an exceptional pupil by an Identification, Placement, and Review Committee (IPRC). The IEP must include:

- descriptions of the student's strengths and needs;
- the current level of the student's achievement;
- an outline of annual goals for the student to achieve;
- specific educational expectations for the pupil;
- an outline of the special education program and services to be received by the pupil;
- a statement of the methods by which the pupil's progress will be reviewed;
- for a pupil 14 years of age or older, a plan for transition to appropriate postsecondary school activities, such as work, further education, and community living. (Pupils identified as exceptional solely on the basis of giftedness need not have a transition plan.)

In developing the IEP, the principal shall:

- consult with the parent and, where the pupil is 16 years of age or older, the pupil;
- take into consideration any recommendations made by the IPRC or the Special Education Tribunal, as the case may be, regarding special education programs or services.

In developing a transition plan, the principal shall:

- consult with such community agencies and postsecondary educational institutions as he or she considers appropriate.

The IEP must be completed within 30 school days after the pupil has been placed in the program, and a copy must be sent to the student's parent/guardian and to the student, if he or she

is 16 years of age or older.

Under subsection 23(2) of the regulations, with the parents' written permission, an IPRC conducting a review shall consider the progress a student has made with reference to his or her IEP.

Under section 8, the principal shall ensure that the IEP is included in the student's Ontario Student Record, unless a parent of the pupil has objected in writing.

Integration into Regular Classrooms

Classroom teachers play an extremely important role in the success of exceptional pupils. Teachers everywhere have successfully integrated students who experience varying degrees of challenge into the classroom. By being knowledgeable about a student's background, abilities, strengths, and educational and social needs, a teacher can set the stage for the student's success. In many cases, a teacher will be able to draw on the expertise and assistance of school and board staff who can provide support related to special education issues.

Successful integration includes the following elements:

- \$ an encouraging and supportive classroom environment where the exceptional pupil feels that he or she is a valued member of the class;
- \$ a classroom that promotes opportunities for the exceptional pupil to contribute, to participate, to cooperate, to make friends, to make choices, to take risks, and to be successful, and that promotes feelings of belonging in the exceptional pupil, and of being needed, respected, valued, useful, happy, free and confident;
- \$ planning, which involves continuous communication among teachers, parents, support staff, agencies, associations, and students, as appropriate;
- \$ ongoing assessment, as a reflective part of the Individual Education Plan (IEP) process.

When an exceptional pupil is in your classroom, consider using the following process to help ensure his or her successful integration:

1. Plan for an exceptional pupil in the classroom:
 - Plan the transition or placement in collaboration with appropriate school and board professional support staff.
 - Ensure that the student will be able to move between educational settings with feelings of safety, belonging, and support.
 - Maintain continuity of programming for the student by considering his or her social connections with peers.
 - Familiarize the student with the new environment.
 - Be aware of the student's strengths, needs (including the management of his or her health needs), and social skills, as well as instructional strategies that have been effective for the

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student in the past.

- Outline a general plan for the student for the first few weeks of school.
- Arrange for the student to visit future classrooms or schools and to meet future teachers. (Peer mentors or tutors may be set up.)
- Identify learning expectations for the student as part of the IEP process.
- Set dates for IEP development and/or review.

2. Determine the student's needs in the context of the classroom:

- Keep in mind that the first weeks of school are critical in establishing an atmosphere of acceptance and belonging for all students in the classroom community.
- Ensure that the student understands that he or she is a member of the classroom and school communities and that this membership has associated rights and responsibilities.
- Support the establishment of friendships and social connections between the student and his or her classmates.
- Ensure that the student understands that he or she is expected to participate in classroom routines and responsibilities to the best of his or her abilities.

3. Envision the student's future needs:

- Plan the various aspects of the student's school life in cooperation with the student, his or her classmates, parents, community association members, and so on, as appropriate.
- Ask, at team meetings, what has to be done, who will do it, and when will it be accomplished, and design follow-up responses.
- Anticipate the end of the school year by planning for the student's next classroom; that is, starting again at step 1.

Strategies and Suggestions Related to Working With an Educational Assistant

Teachers of students with special needs may have the support of an educational assistant for some part of the school day. Working with this person may require teachers to make some adjustments to their normal procedures, including a commitment of extra time at the onset to establish a collaborative relationship, and then an understanding that there will be a need for ongoing consultation and collaboration throughout the year.

To strengthen this collaboration, the teacher may use the following strategies:

- \$ treat the assistant with respect and consideration, communicating that he or she is an important member of the team;
- \$ take prime responsibility for the student with special needs and his or her activities;
- \$ make it clear that the teacher is responsible for program planning, assessment, and reporting to parents, as well as for the professional supervision of assistants in the classroom;
- \$ work with the assistant to ensure that any modifications and accommodations needed by the

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- student with special needs are prepared ahead of time;
- \$ make suggestions and give examples while encouraging creativity and initiative on the part of the assistant;
- \$ have the assistant work with other students, while the teacher maintains direct involvement in teaching and supporting the student with special needs;
- \$ assign a variety of duties to the assistant to allow other students in the class opportunities for greater involvement with the student with special needs;
- \$ reinforce the concept that the assistant does not belong to any individual student.

Planning for Special Education Students

All students receiving special education programs and services, including those deemed exceptional, should be given every opportunity to achieve the curriculum expectations set out in the Ontario curriculum policy documents. Some students may require accommodations such as specific teaching strategies, supports, and/or services in order to access the curriculum and demonstrate learning. They may also require accommodations that enable them to demonstrate their learning when undergoing assessments. Other students may require that the curriculum expectations be modified from the grade level expectations for a subject or course.

Both accommodations and modified expectations must be clearly outlined in the student's Individual Education Plan (IEP). Decisions about the use of accommodations and/or modifications should be made by school staff, in consultation with parents and students, during the development of the IEP.

A much smaller number of students may require a program made up of alternative expectations to those set out in the Ontario curriculum for all or part of their program. When you are planning a program for students receiving special education supports and services, keep in mind the difference between accommodations, modified expectations, and alternative expectations.

Accommodations

Accommodations refer to the teaching strategies, supports, and/or services that are required in order for a student receiving special education programs and services to access the curriculum and demonstrate learning. Accommodations do not alter the provincial learning expectations for the grade. Accommodations that are related to teaching strategies and/or the environment and accommodations that are related to assessment methods are clearest when they are listed separately.

Individual Education Plans (IEPs) should reflect accommodations, including teaching strategies, that are different from those used with other students in the class. Examples of individualized accommodations that may be identified in an IEP include the following:

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- \$ giving the student extra time to complete classroom assignments;
- \$ allowing the student to complete tasks or present information in alternative ways (e.g., through taped answers, demonstrations, dramatizations, role play);
- \$ allowing the student to tape lessons for more intensive review at a later time;
- \$ providing the student with a variety of learning tools, such as adapted computers for completing writing tasks and calculators for completing numeracy tasks;
- \$ providing for the use of scribes;
- \$ using pictorial schedules to help the student make transitions.

Modified Expectations

Modified expectations refer to the changes that are made to the grade-level expectations for a subject or course in the Ontario curriculum in order to meet the needs of the student. Modified expectations may be drawn from a different grade level, above or below the student's current grade placement. They may also include significant changes (increases or decreases) to the number and/or complexity of the grade-level learning expectations.

Where curriculum expectations are modified, the Individual Education Plan (IEP) must set out the knowledge and skills the student is expected to acquire in a particular subject or course and on which he or she will be assessed for purposes of reporting. The grade level from which the modified expectations have been drawn must also be included in the IEP.

Alternative Expectations

Alternative expectations refer to expectations that are related to skill development in areas not represented in Ontario curriculum policy documents. Examples of such areas include orientation and mobility training, life skills, and anger management. Alternative expectations should represent a specific program that has been designed for delivery to the student. A representative sample of the alternative expectations for each skill area outlined for the student must be recorded in the student's Individual Education Plan.

Behavioural Exceptionality

Characteristics

Behavioural exceptionalities are defined by the Ministry of Education as follows:

Behaviour: A learning disorder characterized by specific behaviour problems over such a period of time, and to such a marked degree, and of such a nature, as to adversely affect educational performance, and that may be accompanied by one or more of the following:

- a) an inability to build or to maintain interpersonal relationships;
- b) excessive fears or anxieties;
- c) a tendency to compulsive reaction;
- d) an inability to learn that cannot be traced to intellectual, sensory, or other health factors, or any combination thereof.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Behavioural disorders affect social relationships and academic progress. The characteristics listed below may be exhibited in varying degrees by students with behavioural/emotional disorders. It is important to note that evidence of some of these characteristics does not always indicate a behavioural exceptionality. The frequency, intensity, or duration of the behaviours must be taken into account. The behaviours will be evident and will persist in different settings and with different people. They are not primarily due to intellectual or health factors.

Students who have behavioural/emotional disorders may demonstrate behaviours that show disregard for social or cultural norms and that deviate in a significant manner from those that are normally expected. They may:

- \$ destroy their own, another person's or the school's property;

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- \$ be disobedient, defy authority, test limits, refuse to follow directions, or be domineering;
- \$ be uncooperative, resistive, inconsiderate, or disruptive;
- \$ interrupt, disturb, or cause disturbances for which others are blamed;
- \$ be apathetic, exhibiting a “don’t care” attitude;
- \$ fight, hit, or assault others;
- \$ intimidate, bully, or threaten others;
- \$ be restless, boisterous, or noisy;
- \$ be untrustworthy or dishonest, lie, or steal;
- \$ use profane or abusive language and gestures;
- \$ demonstrate delinquent behaviour or vandalism;
- \$ be truant from school.

Students who have behavioural/emotional disorders may demonstrate behaviours that tend to be impulsive or compulsive and that negatively affect learning. These students may:

- \$ speak out;
- \$ disrupt classroom activities;
- \$ display temper tantrums;
- \$ repetitively demonstrate the same behaviour;
- \$ have difficulty thinking before acting, or be impulsive;
- \$ become distracted or inattentive, or lack focus;
- \$ daydream or appear preoccupied;
- \$ demonstrate a short attention span or poor concentration;
- \$ demonstrate an extreme resistance to change (secondary consideration).

Students who have behavioural/emotional disorders may demonstrate behaviours that show poor interpersonal relationships and low self-esteem. They may:

- \$ be uncooperative in groups, argumentative, or passively noncompliant;
- \$ seek attention;
- \$ depend on others for direction and require constant reassurance;
- \$ be hypersensitive, easily hurt or embarrassed, or easily flustered;
- \$ lack self-confidence;
- \$ demonstrate inappropriate sexual activity.

Students who have behavioural/emotional disorders may demonstrate behaviours that are injurious to themselves, such as:

- \$ withdrawal;
- \$ nervousness;
- \$ hypersensitivity;
- \$ anorexia or bulimia;
- \$ self-abuse;
- \$ substance abuse.

Teaching Strategies and Suggestions

There are many approaches to program planning for students who have behavioural disorders. The strategies presented in this section may assist in maximizing these students' ability to learn and in controlling their behaviour.

It is important to note that students who have attention difficulties (e.g., attention deficit disorder or attention deficit hyperactivity disorder) are not wilfully inattentive. It takes inordinate effort for some of these students to keep themselves on task. To address the learning needs of students in specific skill areas, it is necessary to refer to strategies that are outlined in other exceptionality sections of this Companion (e.g., Learning Disability, Giftedness, Developmental Disability).

General Strategies and Suggestions

The teacher may:

- \$ acknowledge and praise or reward acceptable behaviour;
- \$ use time-outs judiciously;
- \$ seat the student in an area of the classroom that will minimize distractions;
- \$ locate the student to maximize the positive effect of role models in the class;
- \$ establish a private cueing system to remind the student to attend;
- \$ provide immediate, specific feedback on learning and behavioural progress whenever possible;
- \$ break instructional learning periods into smaller units of time with the intention of increasing on-task behaviour;
- \$ allow the restless student opportunities to change focus or tasks;
- \$ use a study carrel, if necessary;
- \$ arrange for the student to have a study buddy in each subject, when possible;
- \$ provide positive reinforcement (praise, approve, encourage, nourish), whenever possible;
- \$ build support by making sure that there is support from home, school, and support staff (e.g., resource teacher, behavioural consultant, physiological services staff, physiotherapist and/or occupational therapist);
- \$ post rules (i.e., write them down and post them in plain view);
- \$ establish and use consistent classroom routines;
- \$ keep to as predictable a schedule as possible and prepare for transitions well in advance;
- \$ establish quiet "office" areas away from others, which the student can elect to use if he or she requires privacy or quiet to concentrate, and/or a location in the school where the student can be sent if he or she is exhibiting extremely disruptive behaviour;
- \$ allow the student an escape outlet, such as being able to leave the classroom for a specified amount of time in a prearranged, supervised location;
- \$ help the student learn tools for self-observation and self-modulation;
- \$ provide opportunities for the student to practise self-monitoring, and provide positive reinforcement for effort (e.g., teach the student to use self-talk to slow down reactions to

stressors S often called the “stop-think-do” technique);

- \$ teach the student alternative behaviours to replace inappropriate ones (e.g., aggressive, self-stimulating, or self-abusive behaviours);
- \$ establish a private signal to remind the student to stop and think;
- \$ judiciously assign a “job” that requires the student to move away from the problem situation (e.g., ask the student to run an errand).

Interventions and Management Strategies

The teacher may:

- \$ establish expectations and consequences privately with the student and involve the student in goal setting;
- \$ collaborate with the student’s teacher-advisor in goal setting and monitoring;
- \$ ensure that the student understands the expectations, using role-playing situations if necessary;
- \$ involve the student and his or her parents in selecting intervention strategies, so that a consistent approach can be used at home and at school;
- \$ avoid confrontations with the student where he or she might lose face (e.g., talk to the student quietly and privately rather than in front of others);
- \$ avoid overreacting to the student’s behaviour, giving the student a quick way to correct the problem instead;
- \$ teach, and reinforce with the student, the concept of each person’s right to personal space;
- \$ confer with the student and ask how he or she learns best;
- \$ help the student to manage frustration or agitation and suggest ways that he or she can gain self-control;
- \$ approach problems with the student from a problem-solving rather than a blaming point of view;
- \$ carefully use humour to defuse problem situations wherever possible;
- \$ work at understanding the student’s behaviour and its root cause;
- \$ defuse problem situations and avoid power struggles by:
 - ignoring the challenge, withdrawing from the conflict, and discussing the issue with the student at another time that may be more conducive to resolution;
 - being aware of the tone, volume, and cadence of your voice and your body language;
 - using a calm voice and allowing the student his or her personal space;
 - anticipating the student’s response;
 - providing a different response;
- \$ establish eye contact before giving instructions.

Strategies and Suggestions Related to the Classroom Environment

The teacher may:

- \$ provide an encouraging and supportive classroom;
- \$ establish and communicate consistent behavioural expectations and consequences;
- \$ provide a structured environment (e.g., make use of lists, previews, repetition, and direction);
- \$ set limits, and boundaries consistently, predictably, promptly, and plainly;
- \$ apply consequences fairly and consistently;
- \$ ensure the student feels that he or she is a valued member of the class;
- \$ provide opportunities for the student to change to a different location or have a time-out if necessary.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ teach the student the skills necessary to manage instructional materials;
- \$ pre-teach important vocabulary;
- \$ provide a structured overview of the lesson before beginning instruction;
- \$ provide an outline of the lesson, teach the content, then review the lesson (Such a structure will help the student to assimilate ideas.);
- \$ use outlines, and teach outlining and underlining to help the student structure and shape what is being learned as it is being learned;
- \$ use visual aids, demonstrations, simulations, and manipulative materials to ensure that the student understands the concepts presented;
- \$ make use of overheads and keep each overhead for later review by the student;
- \$ provide the student with a copy of peer or teacher notes to allow the student to focus on listening;
- \$ provide opportunities for activity breaks to help develop the student's ability to focus on instruction;
- \$ make use of appropriate computer technology where possible;
- \$ include a variety of activities for the student in each lesson;
- \$ help the student enhance his or her memory by teaching specific learning strategies such as mnemonics (e.g., cues, rhymes, codes);
- \$ review with the student the process required to complete the task.

Strategies and Suggestions Related to Organization

The teacher may:

- \$ help the student set short-term goals and ensure that there are frequent opportunities to monitor the student's progress toward those goals;
- \$ encourage the student to organize materials by subject (e.g., one binder per subject);
- \$ teach the student to keep materials organized (e.g., to use bins for storage);
- \$ establish specific places for all belongings and reinforce the student's behaviour when he or she puts materials away properly;

- \$ encourage the student to develop a locker list of materials required for each class;
- \$ relate classroom activities to time management tools such as timetables, lists, agendas, homework books, etc.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ make expectations explicit;
- \$ establish time lines;
- \$ make use of contracts, as appropriate;
- \$ break down large tasks, which can quickly overwhelm the student, into small tasks, and provide reinforcement as each part is completed;
- \$ simplify instructions, choices, and schedules;
- \$ provide models of completed tasks, so that the student can visualize a completed project;
- \$ provide instructions visually and verbally;
- \$ pair students to check each other's work;
- \$ provide checklists, outlines, and advance organizers, to help the student complete assignments;
- \$ permit and enable the student to demonstrate his or her understanding by using a variety of media, including oral presentations, audio- or video-taped assignments, bulletin board displays, dramatizations, and demonstrations;
- \$ provide opportunities for the student to word-process rather than write assignments;
- \$ expect quality work from the student rather than a large quantity of work, as the student may need a reduced workload;
- \$ monitor the student's progress often, since frequent feedback will help keep the student on track, let him or her know what is expected, and help build self-esteem;
- \$ seek out and praise the student's successes as much as possible.

Assessment Accommodations

To provide accommodations for a student who has behavioural/emotional disorders, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, or a tape-recorded test);
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ allow the student additional time, when required, to complete tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or

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- providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Pervasive Developmental Disorders/ Autism Spectrum Disorders (PDD/ASD)

Characteristics

Autism is defined by the Ministry of Education as follows:

Autism: A severe learning disorder that is characterized by:

- a) disturbances in: rate of educational development; ability to relate to the environment; mobility; perception, speech, and language;
- b) lack of the representational symbolic behaviour that precedes language.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors - physical, intellectual, educational, cultural, emotional, and social - influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Pervasive developmental disorder (or autism spectrum disorder) is an umbrella term referring to a group of disorders that are characterized by deficits and impairments in multiple areas of development. These disorders include impairment in social interaction and communication and the presence of restricted and repetitive patterns of behaviours, interests, and activities. They significantly interfere with students' academic and social functioning in the educational setting.

Specific disorders under the umbrella term PDD include:

- \$ autistic disorder
- \$ Rett's disorder
- \$ childhood disintegrative disorder
- \$ Asperger's disorder
- \$ pervasive developmental disorder not otherwise specified

No matter which specific disorder is identified, specialized special education program and support services are needed to optimize the student's achievement.

Autistic Disorder

People who have this disorder have markedly abnormal or impaired development in the areas of social interaction and communication, and display a significantly restricted repertoire of activity and interest. More males than females are affected. This disorder is also sometimes referred to as *early infantile autism*, *childhood autism*, or *Kanner's autism*.

Rett's Disorder

Rett's disorder is a condition found only in females who have apparently normal pre- and perinatal development. Symptoms appear after five months of age. These include decelerated head growth, loss of purposeful hand movements (e.g., uncontrolled hand wringing), development of severe psychomotor delay, and severe impairment in expressive and receptive language development.

Childhood Disintegrative Disorder

Development in people who have this disorder proceeds normally for several years, with age-appropriate verbal and non-verbal communication, social skills, play, etc. There is a subsequent (after two years of age and before ten years) marked regression in skills in multiple areas, and the development of various autistic-like features. This disorder is also sometimes referred to as *Heller's syndrome*, *dementia infantilis*, or *disintegrative psychosis*.

Asperger's Disorder

People who have Asperger's disorder appear to demonstrate normal cognitive and language development (though the onset of speech may be slightly delayed). They are less obviously socially impaired than children with severe autism. It is with peers that the qualitative impairments in reciprocal social interaction become most apparent. People who have Asperger's disorder may also have unusual or elaborate preoccupations with objects or topics. This disorder is also sometimes referred to as *Asperger's syndrome*.

Pervasive Developmental Disorder Not Otherwise Specified (PDD NOS)

This diagnosis is used when there are impairments across all areas/characteristics of autism, but the number of characteristics needed to meet criteria for other types of PDD are not met. In some children, it is very difficult to distinguish the subtle differences between autism and PDD NOS. This disorder is also sometimes referred to as *atypical autism*.

Teaching Strategies and Suggestions

General Strategies and Suggestions

Students who have PDD/ASD benefit and learn best from being with age peers, but most require extensive modifications to the regular grade-level expectations and, in some instances, may need to use a totally alternative curriculum. Individually modified and/or alternative expectations are to be stated in the student's Individual Education Plan (IEP). Wherever possible, programming

should be age-appropriate, interactive, and practical. Like other students, these students should be given opportunities to develop skills that will prepare them to be productive community members and assist them to develop the pre-employment skills they may require.

Teachers may also find the following sections in this Companion helpful in planning for and working with students with PDD/ASD: Behavioural Exceptionality, Learning Disability, Developmental Disability, Physical Disability.

In addition to the strategies outlined in this Companion, in many cases support personnel are also available to assist the classroom teacher. Not all students need all types of support, but support personnel may include:

- \$ resource teachers
- \$ speech/language pathologists
- \$ psychologists
- \$ occupational therapists
- \$ educational assistants
- \$ special education staff
- \$ guidance counsellors
- \$ board-level consultants
- \$ parents
- \$ peer tutors

Strategies and Suggestions Related to the Classroom Environment

The teacher may:

- \$ provide a predictable and safe environment;
- \$ minimize transitions;
- \$ offer consistent daily routines;
- \$ avoid surprises (e.g., prepare the student thoroughly and in advance for special activities, altered schedules, or other changes, regardless of how minimal);
- \$ talk the student through stressful situations or remove him or her from the stressful situation;
- \$ use social scripts to prepare the student for transitions or to help the student modify his or her reactions to a particular situation;
- \$ provide the student with personal space for relaxation in a resource or other room;
- \$ reduce distractions and sensory overloads;
- \$ allow modifications as needed to deal with sensitivity-to-touch issues;
- \$ use visual supports (e.g., mapping, sequence strips, pictorial schedules) to assist the student with routines.

Strategies and Suggestions Related to Motivation

The teacher may:

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- \$ schedule opportunities for the student to share his or her experiences;
- \$ develop means to deliver information that will ensure that the student understands;
- \$ develop consistent methods of questioning and use the student's likes, interests, and strengths when introducing new tasks;
- \$ plan cooperative experiences throughout the day;
- \$ make use of naturally occurring reinforcers (i.e., those that will maintain the positive results desired);
- \$ reinforce any attempts the student makes towards achieving goals and objectives;
- \$ provide feedback immediately so that the connection between the reinforcement and the event is clear;
- \$ vary reinforcers and provide choices of reinforcers;
- \$ encourage, accept, and teach choice making;
- \$ expand the option of choice through varied and meaningful experiences;
- \$ invite and encourage the student to initiate tasks on his or her own, naturally;
- \$ use environmental and instructional cues instead of relying on constant adult verbal and physical cues;
- \$ keep familiar, acquired activities in the program as new ones are added.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ use the student's known strengths;
- \$ follow established routines;
- \$ divide instructions into small, sequential steps;
- \$ present new concepts in a concrete manner;
- \$ present material to the student in a combination of different ways (e.g., through maps, charts, videos, computers, diagrams, demonstrations);
- \$ make use of consistent expectations;
- \$ make use of peer tutoring;
- \$ provide needed prompts and cues;
- \$ provide repeated opportunities to practise/review.

Strategies and Suggestions Related to Communication

The teacher may:

- \$ provide the student with accurate prior information about changes;
- \$ provide the student with accurate prior information about expectations;
- \$ use concrete and specific terminology (e.g., avoid using vague terms like *later*, *maybe*, *why did you do that?*);
- \$ slow down the pace;

- \$ break tasks down into smaller steps, if necessary, for the student's understanding;
- \$ use gestures, modelling, and demonstrations along with verbalizations;
- \$ engage the student's attention visually, verbally, and/or physically before giving him or her information or directions;
- \$ communicate in a clear, straightforward manner (e.g., avoid idioms and double meanings);
- \$ pause, listen, and wait;
- \$ watch and listen for the student's attempts to respond;
- \$ respond positively to any attempts made by the student;
- \$ model correct formats without correcting the student;
- \$ encourage the student to provide input and make choices when possible;
- \$ consult with a speech/language pathologist about providing alternative methods of communication, if required (e.g., communication books, visual cues, augmentative communication).

Strategies and Suggestions Related to Self-Management

The teacher may:

- \$ incorporate the student's strengths and interests into the daily plan;
- \$ encourage the student to make choices and decisions, where appropriate;
- \$ analyse the purpose of the student's behaviour from the student's perspective;
- \$ use the purpose of the student's behaviour as the basis for teaching skills;
- \$ avoid punitive measures that lower self-esteem, increase anxiety, and are not understood by the student;
- \$ provide reinforcement that is individualized (e.g., immediate, delayed, concrete, as appropriate);
- \$ avoid disciplining the student for behaviours that are part of his or her disorder;
- \$ ensure that school staff outside the classroom (e.g., bus drivers, librarians, cafeteria monitors) are familiar with the student's strengths and needs and have been given adequate training in management approaches;
- \$ try to avoid escalating power struggles (These students often do not understand rigid displays of authority or anger, and will themselves become more rigid and stubborn if forcefully confronted.);
- \$ develop a personalized picture schedule for the student to follow.

Strategies and Suggestions Related to Independence

Students who have PDD/ASD usually require additional supports, which may work one-on-one with the student to facilitate the student's entry into school, provide staff with sessions on disability awareness, and assist with the student's integration into the classroom. Eventually, these students need to learn how to become independent and make their individual needs clear to others. Like other students, students who have PDD/ASD should be given opportunities to develop skills that will prepare them to be productive community members and that will help

them develop the pre-employment skills they may require. Teachers, parents, and support staff can work together to foster a positive attitude and the development of independence.

The teacher may:

- \$ focus on specific expectations that promote independent living;
- \$ work on skills for independent living as part of class activities;
- \$ teach daily-living skills explicitly;
- \$ expect the student to have responsibilities and jobs within the classroom, cooperative work group, or school (Give the student responsibilities that are real and valuable. The student should have a role in every group.);
- \$ enhance the student's dignity by providing him or her with opportunities to make choices;
- \$ teach, and focus on, the development of social skills needed in the workplace (e.g., eye contact, cooperation, punctuality, task completion);
- \$ teach and model strategies that the student can use to effectively communicate his or her strengths and needs;
- \$ encourage all staff and the student's peers to learn and use the student's communication system;
- \$ teach the student appropriate ways to request assistance and express feelings;
- \$ teach, model, and coach the student in the steps involved in problem solving;
- \$ involve the student in community awareness activities.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ provide the student with a choice of activities;
- \$ teach the student the text and format of the assessment ahead of time through rehearsal;
- \$ pose questions in a way that encourages the student to apply his or her learning to real situations;
- \$ provide visual cues as a way to teach the student how to summarize or write.

Assessment Accommodations

To provide accommodations for a student who is autistic, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, or a tape-recorded test);
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or a Bliss board;
- \$ allow the use of augmentative and alternative communication systems;

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- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$** allow the student additional time, when required, to complete tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a calculator, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Deaf and Hard-of-Hearing

Characteristics

Deafness and hearing impairments are defined by the Ministry of Education as follows:

Deaf and hard-of-hearing: an impairment characterized by deficits in language and speech development because of a diminished or non-existent auditory response to sound.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Students who are deaf or hard of hearing have varying degrees of hearing loss. The degree of hearing loss may make it difficult for the student to acquire spoken language through the auditory channel alone. Language may be made more accessible through auditory devices such as hearing aids or cochlear implants, or through the use of American Sign Language/Langue des signes québécoise (ASL/LSQ). It should not be assumed that students who are deaf or hard of hearing have developmental, intellectual, or learning disabilities unless assessment data support these additional challenges.

Students who are deaf or hard of hearing may demonstrate needs in the following areas, some of which may require the coordination of services with other service providers, professionals, and agencies:

- \$ responding to sound in the learning environment – such as the calling of their own name, spoken directions, school bells, school announcements, etc.;
- \$ articulating (speaking clearly);
- \$ expressing themselves through language (e.g., in conversation, writing, spelling);
- \$ receiving information through language (e.g., listening and reading)
- \$ developing social/emotional and interpersonal skills.

Students who are deaf or hard of hearing may:

- \$ miss key and subtle words in conversations;
- \$ have difficulty expressing ideas;
- \$ have some degree of language delay;

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- \$ follow rather than lead;
- \$ have a limited vocabulary, lack subject-specific vocabulary, and tend to use fillers (e.g., “the thing” instead of “the Bunsen burner”);
- \$ lack understanding of colloquialisms, idioms, slang expressions, multiple meanings of words, and language-based humour (puns and riddles);
- \$ be more comfortable setting the topic and controlling the conversation;
- \$ misinterpret oral information;
- \$ have articulation and other speech problems;
- \$ have difficulty hearing in noisy environments or from a distance;
- \$ turn their head towards the speaker or sound source;
- \$ have difficulty locating the speaker in a group situation;
- \$ have difficulty discriminating among similar speech sounds or words;
- \$ have a preference for visual/tactile learning environments or strategies.

Students who learn through the use of ASL or LSQ may exhibit the characteristics of a learner for whom English/French is a second language as they apply visual language to a written form. Delays in written language development should be expected; however, functional literacy in two languages (e.g., ASL and written English or LSQ and written French) is an expectation.

Social/Emotional Implications

Students who are deaf or hard of hearing may:

- \$ exhibit language delay, which may lead to a limited ability to express their feelings and needs;
- \$ need to work on developing pragmatic skills to enhance their communication effectiveness;
- \$ feel that their use of hearing aids or FM systems will lead their peers and adults to assume that they are less competent learners;
- \$ become frustrated or isolated, which may lead to misbehaviour;
- \$ be left out by peers during games or recess;
- \$ demonstrate concern about being accepted by peers, which may lead to rejection of vital supports (e.g., an FM system, itinerant support);
- \$ prefer the company of other deaf or hard-of-hearing peers;
- \$ need support, understanding, and encouragement to accomplish curriculum goals;
- \$ have parents and/or extended family members who are very anxious and in need of support, information, and guidance.

General Strategies and Suggestions

Strategies and Suggestions Related to Amplification and Other Equipment

Many students who are deaf or hard of hearing will make use of some form of amplification as recommended by an audiologist, and may require the use of specialized equipment.

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Amplification considerations include the following:

- \$ Personal hearing aids do not provide a student who is deaf or hard of hearing with normal hearing.
- \$ Personal hearing aids merely amplify sound. They do not correct a hearing loss or the distortion of sound that may be experienced by a person whose hearing is impaired.
- \$ Hearing aids have other limitations. In a noisy environment, they will amplify all speech and noise equally.
- \$ Personal FM systems are designed to compensate for noise, distance, and reverberation in classroom settings.
- \$ Personal FM systems have two main components, a transmitter worn by the speaker (e.g., the teacher) and a receiver worn by the student. A wireless link between the two components is essential so that the speaker's voice can always be heard by the student through his or her personal hearing aid.
- \$ Personal FM systems and portable sound field systems can be used virtually anywhere – in the classroom, auditorium, or outdoors.
- \$ A freefield sound system is similar to a personal FM system, except that students are not required to wear a receiver. The teacher wears a transmitter, but the signal is sent to speakers strategically placed in the classroom.
- \$ Cochlear implants require the use of personal speech processors, which are essentially minicomputers that digitize the incoming signal from the microphone and send that signal towards the implanted electrodes.

Teachers working with students who require amplification devices may wish to consider the following suggestions:

- \$ Check the amplification device daily to ensure that it is working properly.
- \$ Consult resource personnel to determine the proper procedures for daily listening checks.
- \$ Arrange for students to carry the transmitter/microphone from class to class for the use of the next teacher.
- \$ Make use of FM systems during assemblies by guest speakers and on field trips.

Teachers of students who are deaf or hard of hearing will also want to make use of closed-captioned materials. Here are some suggestions for working with these materials:

- \$ Most new televisions have built-in decoder chips, which produce printed subtitles across the bottom of the television screen for programs marked "CC" (closed-captioned).
- \$ Check with your media services department for a list of videos that are either closed- or open- captioned.

Teachers will also want to become aware of the options available to assist a student who is deaf or hard of hearing to use a telephone:

- \$ TTY/TDD (Telephone Device for the Deaf);
- \$ BRS (Bell Relay System) 1-800-855-0511;
- \$ telephone set with volume control.

Strategies and Suggestions Related to Classroom Acoustics

Classroom acoustics have a direct impact on the ability of a student who is deaf or hard of hearing to listen in a regular classroom environment. The following suggestions will help reduce the effects of noise, distance, and reverberation:

- \$ Shut the classroom door and windows whenever possible.
- \$ Have curtains in the class if possible.
- \$ Cover tables and activity centres with cloth.
- \$ Carpet the classroom if possible.
- \$ Cushion the bottom of chair legs by purchasing commercial products for this purpose or by slitting tennis balls and inserting each chair leg into a tennis ball.
- \$ Have acoustic tiles on the ceiling.
- \$ Use cork board, corrugated paper, etc., on walls to absorb sound.
- \$ Check with resource personnel for assistance and for more ideas about how to improve classroom acoustics.
- \$ Have reverberation checks done by professionals (e.g., school board authorities, hearing aid manufacturers, school board maintenance personnel).

Language of Instruction

There are two basic approaches to the teaching of students who are deaf or hard of hearing:

- \$ an auditory-verbal approach for oral students who acquire English/French as their primary language.
- \$ a visual approach for signing students who acquire ASL/LSQ as their primary language.

It is crucial that teachers and parents understand that no one approach or methodology is appropriate for all students who are deaf or hard of hearing. Many of these students are able to function independently and successfully in regular classrooms with few additional resources other than hearing aids, FM systems, and consultation from the itinerant teacher of the deaf or hard of hearing. Other students who are deaf or hard of hearing may require specialized resources, congregated settings, adaptive technology, and direct instruction by qualified teachers of the deaf/hard of hearing.

Auditory-Verbal Approach

This approach provides an environment that reinforces the development of the listening and speaking skills of students who are deaf or hard of hearing in order to help them acquire English/French as a foundation for their communication and learning.

The auditory verbal approach:

- \$ stresses the fundamental importance of the auditory channel for communication;

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- \$ notes the need to provide early amplification;
- \$ relies on intensive auditory stimulation and training to facilitate the development of oral language through listening skills;
- \$ stresses the natural development of spoken English/French;
- \$ requires intensive assistance from a certified auditory-verbal therapist, in addition to a speech/language pathologist, to help the student develop intelligible speech and to enhance the student's use of spoken English/French.

The amount of residual hearing and the consistent use of amplification have a significant bearing on the student's ability to develop spoken English/French. Many children with profound hearing loss now receive cochlear implants. Children with cochlear implants still require intensive developmental support in the areas of listening, speech, and oral language to build a foundation for literacy development.

Teaching Strategies and Suggestions –Auditory-Verbal Approach

Strategies and Suggestions Related to Lesson Presentation

Today's classrooms present many challenges for students who are deaf or hard of hearing. These students often miss much of the information presented by teachers and classmates. Accessing information presented in activity centres and discussion groups and through audio-visual equipment is particularly difficult.

Teachers may find the following strategies helpful:

- \$ Establish predictable routines so that the student who is deaf or hard of hearing knows what is happening or what should happen next (e.g., have students take turns; have speakers identify themselves).
- \$ Recognize that the student may require the services of an interpreter and/or note-taker. (NOTE: An interpreter is a professional with recognized credentials.)
- \$ Deliver or discuss instructions, inserting natural pauses which an interpreter can utilize and which allow the student sufficient time to process information.
- \$ Support oral instruction with print or visual aids whenever possible.
- \$ State the topic at the outset of a discussion, and let the student know when the topic changes.
- \$ Provide the student with an outline of a new topic (including vocabulary lists).
- \$ Rephrase questions or instructions if not understood by the student the first time, rather than repeating the sentence.
- \$ Avoid unnecessary movement to ensure that the teacher's face is visible to the student, and avoid communicating when the student is moving, as the visibility of the teacher's face to the student may be reduced and background sounds may distract the student from the teacher's voice.
- \$ Turn off the overhead projector when not in use as its hum can be distracting for students who are hard of hearing.

- \$ Repeat questions or statements from other students.
- \$ Ask questions that demand knowledge of content information, as opposed to “yes” or “no” answers.
- \$ Encourage the student to ask for clarification, to express opinions, and to contribute to discussions.
- \$ Plan to have the student pre-read materials before the lesson.
- \$ Establish a home-school communication/agenda book.
- \$ Consider providing the student with a buddy and a plan for emergencies (e.g., fire drills and access to PA announcements).
- \$ Use captioned media and/or provide a written summary of videos and films.

Some students who are deaf or hard of hearing may speech-read in combination with listening through amplification. Speech reading is the act of deducing what is said by watching a speaker’s lip movements, body language, facial expressions, and gestures. This is a difficult process, as many sounds are not visible on the lips and many sounds cannot be differentiated through lip reading.

The following suggestions will facilitate speech reading. The speaker should:

- \$ ensure that he or she has the attention of the student who is deaf or hard of hearing before speaking;
- \$ stand relatively still in front of the student one to three metres away, articulate clearly, and speak at a moderate rate without exaggeration;
- \$ refrain from speaking while writing on or facing the chalkboard;
- \$ stand towards the source of light, rather than with his or her back to the windows;
- \$ encourage the student to position himself or herself to have a clear view of the speaker’s face;
- \$ encourage the student to turn around to see classmates as they speak or answer questions;
- \$ provide small-group work whenever possible.

Strategies and Suggestions Related to Language Skills

For help with developing other skills, teachers should refer to the Language and Speech Impairment section and other appropriate exceptionality sections of this Companion.

Language is a critical area for students who are deaf or hard of hearing. It is the basic component of all subjects and will influence the student’s comprehension in school and social settings. Language and its impact on the learning of students who are deaf or hard of hearing is complex and far reaching. Some students will require interpreters, note-takers, or educational assistants to facilitate communication.

Teachers can facilitate language development for many students who are deaf or hard of hearing by:

- \$ encouraging the students to use journals and daily diaries;

- \$ providing ideas for vocabulary expansion, classifications, and categorization;
- \$ using approaches that incorporate story telling and conversation to develop language;
- \$ using questioning techniques that extend, clarify, and reinforce concepts and vocabulary, and, more importantly, teaching these students to pose such questions;
- \$ using games that involve language principles;
- \$ presenting ideas for developing idioms and abstract language structures;
- \$ providing students with concrete materials, picture books, and first-hand experiences designed to develop language skills;
- \$ teaching lessons that are related to the social use of language or situation-specific language (e.g., how to introduce someone, how to thank someone);
- \$ enhancing concepts with written backup and repetition.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ make allowances for a slower rate of language acquisition and a less sophisticated use of language, which can be normal results of hearing loss;
- \$ contact the local resource consultant, the local itinerant teacher of the deaf, and/or the provincial schools when administering formal assessments, to obtain further assistance;
- \$ preview the language used in the test questions (e.g., *compose, contrast, simplify, justify, and define*) and, if necessary, provide further clarification for the deaf or hard of hearing student;
- \$ provide visual materials whenever possible;
- \$ encourage the student to advocate for his or her own appropriate accommodations;
- \$ frequently assess learning so as not to overlook gaps in development.

Assessment Accommodations

To provide accommodations for a student who is deaf or hard of hearing, the teacher may:

- \$ adapt the assessment format (e.g., a practical demonstration, use of pictures and videos, a construction);
- \$ use a computer or word processor;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ allow the student additional time, when required, to complete tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis.

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ASL/LSQ Approach

This approach stresses the fundamental importance of vision through the use of American Sign Language/Langue des signes québécoise (ASL/LSQ). ASL/LSQ is the primary language taught, with English/French instruction as the secondary language. The ASL/LSQ approach is sometimes referred to as the bilingual/bicultural approach.

The bilingual/bicultural approach considers ASL/LSQ to be the most accessible, clear, and natural language for deaf children. The initial goal is to develop “first language” fluency in ASL/LSQ rather than attempt to develop receptive and expressive skills in English/French. Parents and family members need to learn and use sign language as soon as possible to capitalize on the fact that a child’s early years are optimal for language acquisition. ASL/LSQ are authentic languages which do not have spoken or written equivalents. Thus, children learn English/French as second languages, using written texts. Spoken English/French is not stressed in students’ programs.

This approach:

- \$ views deafness as a cultural/linguistic difference rather than a disability;
- \$ encourages recognition of the importance of signing deaf role models who can model ASL/LSQ;
- \$ generally requires a critical mass of students who are deaf and staff who are fluent in ASL/LSQ, in order to create natural language learning opportunities and a viable, rich, bilingual/bicultural environment;
- \$ requires, due to the nature of the approach, the congregating of students in such settings as special education classes and provincial schools, as opposed to integrated settings.

Some integrated settings may use sign-supported spoken English as a learning medium. Signing, in this form, is not a language, but is intended to offer visual support to the auditory message.

Teaching Strategies and Suggestions – ASL/LSQ Approach

Strategies and Suggestions Related to Lesson Presentation

Teachers may find the following strategies helpful:

- \$ Establish predictable routines so that the student who is deaf or hard of hearing knows what is happening or what should happen next (e.g., have students take turns; have speakers identify themselves).
- \$ Recognize that the student may require the services of an interpreter (sign or oral) and/or a note-taker. (NOTE: An interpreter is a professional with recognized credentials.)

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- \$ Deliver or discuss instructions, inserting natural pauses which an interpreter can utilize and which allow the student sufficient time to process information.
- \$ Support oral instruction with print or visual aids whenever possible.
- \$ State the topic at the outset of a discussion, and let the student know when the topic changes.
- \$ Provide the student with an outline of a new topic (including vocabulary lists).
- \$ Rephrase questions or instructions as necessary.
- \$ Ask questions that demand knowledge of content information, as opposed to “yes” or “no” answers.
- \$ Encourage the student to ask for clarification, to express opinions, and to contribute to discussions.
- \$ Plan to have the student pre-read materials before the lesson.
- \$ Establish a home-school communication/agenda book.
- \$ Consider providing the student with a buddy and a plan for emergencies (e.g., fire drills and access to PA announcements).
- \$ Use captioned media and/or provide a written summary of videos and films.

Some students who are deaf or hard of hearing may speech-read. Speech reading is the act of deducing what is said by watching a speaker’s lip movements, body language, facial expressions, and gestures. This is a difficult process, as many sounds are not visible on the lips and many different sounds appear exactly the same.

The following suggestions will facilitate speech reading. The speaker should:

- \$ ensure that he or she has the attention of the student who is deaf or hard of hearing before speaking;
- \$ stand relatively still in front of the student one to three metres away, articulate clearly, and speak at a moderate rate without exaggeration;
- \$ refrain from speaking while writing on or facing the chalkboard;
- \$ stand towards the source of light, rather than with his or her back to the windows;
- \$ encourage the student to position himself or herself to have a clear view of the speaker’s face;
- \$ encourage the student to turn around to see classmates as they speak or answer questions;
- \$ provide small-group work whenever possible.

Strategies and Suggestions Related to Language Skills

For help with developing other skills, teachers should refer to the Learning Disability section or to other appropriate exceptionality sections of this Companion.

ASL and LSQ are sophisticated language systems, which provide learners with a medium that is linguistically unique and that requires a literacy mastery all its own. Although they have no written form, they have considerable depth and strength as instructional media and cultural identifiers. Linguists and educators are rapidly developing ASL and LSQ literature and curricula, which will further entrench the characteristics of both languages.

Language is a critical area for students who are deaf or hard of hearing. It is the basic component of all subjects and will influence the student's comprehension in school and social settings. Language and its impact on the learning of students who are deaf or hard of hearing is complex and far reaching. Some students will require interpreters, note-takers, or educational assistants to facilitate communication.

Teachers can facilitate language development for many students who are deaf or hard of hearing by:

- \$ encouraging the students to use journals and daily diaries;
- \$ providing ideas for vocabulary expansion, classification, and categorization;
- \$ using approaches that incorporate story telling and conversation to develop language;
- \$ using questioning techniques that extend, clarify, and reinforce concepts and vocabulary, and, more importantly, teaching these students to pose such questions;
- \$ using games that involve language principles;
- \$ presenting ideas for developing idioms and abstract language structures;
- \$ providing students with concrete materials, picture books, and first-hand experiences designed to develop language skills;
- \$ teaching lessons that are related to the social use of language or situation-specific language (e.g., how to introduce someone, how to thank someone);
- \$ enhancing concepts with written backup and repetition.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ contact the local resource consultant, the local itinerant teacher of the deaf, and/or the provincial schools when administering formal assessments, to obtain further assistance;
- \$ preview the language used in the test questions (e.g., *compose, contrast, simplify, justify, and define*) and, if necessary, provide further clarification for the deaf or hard of hearing student;
- \$ provide visual materials whenever possible;
- \$ encourage the student to advocate for his or her own appropriate accommodations;
- \$ frequently assess learning so as not to overlook gaps in development.

Assessment Accommodations

To provide accommodations for a student who is deaf or hard of hearing, the teacher may:

- \$ adapt the assessment format (e.g., make it a practical demonstration or a construction, use pictures or videos);
- \$ use ASL/LSQ to provide verbatim reading/translation of instructions and questions;
- \$ videotape signed responses for later transcription;
- \$ use a computer or word processor;

- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ allow the student additional time, when required, to complete the tests;
- \$ sign or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis.

Language Impairment and Speech Impairment

Characteristics

Language and speech impairments are defined by the Ministry of Education as follows:

Language impairment: a learning disorder characterized by an impairment in comprehension and/or the use of verbal communication or the written or other symbol system of communication, which may be associated with neurological, psychological, physical, or sensory factors, and which may:

- a) involve one or more of the form, content, and function of language in communication; and
- b) include one or more of: language delay; dysfluency; voice and articulation development, which may or may not be organically or functionally based.

Speech impairment: a disorder in language formulation that may be associated with neurological, psychological, physical, or sensory factors; that involves perceptual motor aspects of transmitting oral messages; and that may be characterized by impairment in articulation, rhythm, and stress.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Speech and language impairments or disorders are strongly connected to learning, literacy, and social development and, as a result, can have a significant impact on the student's ability to function well in school. Speech and language disorders may exist alone or along with other exceptionalities.

Speech disorders involve difficulties with speech production that interfere with communication (e.g. articulation, fluency, and voice). Language disorders involve difficulties in understanding and in using verbal and non-verbal information for a variety of purposes (e.g. learning, academics, social interaction).

Speech and language disorders can affect listening, speaking, reading, writing, learning, and social skills. They can therefore affect all aspects of a student's school life and may be key

features of other exceptionalities. Other sections of this Companion contain many references to communication strategies and many suggestions that may be helpful to teachers of students who have speech and language disorders.

Speech/language pathologists conduct assessments that determine the nature and extent of the speech/language disorder and provide recommendations for program accommodations and teaching strategies, as well as alternative learning expectations. These assessments and recommendations are documented in the speech/language pathology report, which provides the foundation for the student's Individual Education Plan.

Assessment information may also be available from a preschool early intervention program, if the student attended one. Information from such a program, however, may not cover all aspects of the curriculum that need to be addressed. Further assessment and/or observation in the classroom setting may be required.

Teaching Strategies and Suggestions

General Strategies and Suggestions

The classroom teacher implements the student's program after consultation with other resource personnel, such as a speech/language pathologist. Communication disorder assistants or educational assistants may support the classroom teacher. Parents also play an important role in speech-language programs.

Strategies and Suggestions Related to the Classroom Environment

The teacher may:

- \$ seat the student close to the teacher or stand close to the student while giving instructions;
- \$ seat the student away from sources of noise (e.g., doorways, pencil sharpeners, open windows);
- \$ provide a "quiet spot" for the student to work;
- \$ reduce overall classroom noise as much as possible.

Specific Skill Strategies

Strategies and Suggestions Related to Listening

Students spend the majority of their time listening in the classroom and therefore, must learn to listen effectively. Listening comprehension involves hearing a question, comment or direction, understanding the meaning, and mentally organizing information to respond appropriately.

The teacher may:

- \$ secure the student’s attention (e.g., call his or her name) before giving instructions;
- \$ reduce the speaking rate and insert pauses to facilitate the student’s comprehension of instructions;
- \$ reduce the length of the instruction;
- \$ reduce the amount of information contained in an instruction;
- \$ simplify instructions by using vocabulary and sentence structures appropriate to the student’s level;
- \$ use an appropriate speaking volume, stressing key ideas;
- \$ face the student when giving instructions;
- \$ repeat and/or rephrase instructions;
- \$ use visual aids, such as photos, charts, tables, and overheads, to supplement visual information;
- \$ write instructions or key words on the chalkboard;
- \$ use “comprehension checks” (i.e., question the student about the content of the teacher’s oral message and ask the student to repeat/rephrase instructions);
- \$ assign the student a “buddy” to help him or her in the classroom;
- \$ make use of visual strategies, such as pictures, outlines, and semantic maps, to support verbal information;
- \$ demonstrate and teach good listening behaviours to all students in the class (e.g., look at the speaker, don’t interrupt);
- \$ focus the student by asking him or her to listen for a key piece of information (e.g., “Listen for the page number of the homework assignment. I will ask you to tell the class.”);
- \$ give directions in steps, pausing between each step, and in the order of the action (e.g., “Put your math work on the desk. Then, line up at the door.”);
- \$ have the student restate directions in his or her own words, to the teacher or to another student, by retelling the first step, then the second step, and, finally, the third step;
- \$ provide visual information to support an instruction, such as demonstrating an activity or pointing to the object you are talking about (e.g., hold up a journal while giving the instruction “Get your journal. Then write one sentence about your weekend.”);
- \$ when using complex sentences, summarize or paraphrase the main points;
- \$ prepare students to listen to and understand announcements (e.g., post picture symbols and key words such as *look*, *listen*, and *think* around the classroom);
- \$ use gestures to help emphasize the meaning of new words (e.g., *between*, *before*);
- \$ use visualization techniques to help the student to make mental pictures of information he or she hears.

Strategies and Suggestions Related to Speaking

The teacher may:

- \$ model correct language structures by repeating the student’s sentence, stressing the correct grammar and word usage, and encouraging the student to repeat the model without pressuring or discouraging him or her;
- \$ expand on the student’s message by adding more information and complexity to what the student has said, in order to encourage more complex and detailed sentences (e.g., if a

student says, “I’m gonna get two books”, the teacher may say, “You are going *to the library* to get two *new* books.”);

- \$ revise the student’s utterance to make a statement more complex or clearer (e.g., adding more information);
- \$ ask open-ended questions (questions that require more than a simple “yes” or “no” response) to encourage the student to use longer and more complex language structures;
- \$ prompt self-correction (e.g., “Did you *runned* or *ran*?”);
- \$ use, or expose the student to, new words often and in different contexts (e.g., in stories, discussions, films, print);
- \$ categorize pictures/objects from thematic units to assist the student with word retrieval;
- \$ use graphic organizers to help the student organize his or her thoughts during class discussions of both narrative and expository texts;
- \$ preview vocabulary new to a theme and review previous vocabulary in context;
- \$ teach vocabulary within the context of a story, theme, or project, as students recall words more efficiently when the words are meaningfully related to each other;
- \$ explain the meaning of key words in stories or oral discussions, and have the student explain what words mean in his or her own words;
- \$ encourage the use of certain words in more than one context, and highlight words that have more than one meaning (e.g., *duck*: animal or action);
- \$ expand word knowledge by talking about associated words such as antonyms (opposites), synonyms (same meaning), homonyms (sound alike), and words that have multiple meanings;
- \$ develop word walls and word charts, keeping the words on moveable cards so that they can be classified and reclassified;
- \$ teach figurative language such as that contained in jokes and riddles.

Strategies and Suggestions Related to Speech Production

Speech production difficulties may include articulation and voice production problems. To assist students, the teacher may:

- \$ model the correct pronunciation or ways to produce the speech sound for the student, emphasizing the target sound but not insisting that the student repeat it;
- \$ reduce classroom speaking demands for the student by providing a model for the student to repeat, including a choice as part of the question (e.g., “Is it ___ or ___?”);
- \$ provide or make suggestions for advance practice for a student who finds speaking difficult (e.g., “When you go to the office, you could say ...”);
- \$ employ a slower rate of speech, using vocal inflections that the student can model;
- \$ avoid correcting the student’s speech, as this may inhibit his or her willingness to participate in the classroom;
- \$ if the student is receiving individual assistance for his or her speech development, communicate regularly with the speech/language pathologist so that concepts being taught or employed by the pathologist can be reinforced in the classroom setting.

Strategies and Suggestions Related to Social Interactions

Learning to converse in a socially appropriate manner occurs over many years. Adults in the school environment have daily opportunities to model and teach conversational skills during spontaneous conversations about real topics.

The teacher may:

- \$ instruct the student on how to obtain a conversational partner's attention, through eye contact or by calling the partner's name;
- \$ provide model questions or comments that could be used to open a conversation about a particular topic;
- \$ provide ongoing feedback to help the student select topics that are appropriate to his or her audience and varying social contexts (e.g., he or she may need to learn that it is not advisable to whisper an amusing topic to a friend during a school assembly);
- \$ model ways of sustaining a conversation through the strategies of asking and telling;
- \$ help the student stay on topic by redirecting the conversation, by identifying the student's comment or question as one that conflicts with the current topic, and by modelling a topic-appropriate response;
- \$ teach conversational rules, such as turn-taking, and consider using a hand signal to tell the interrupting student to wait until the speaker stops talking;
- \$ use modelling, drama, role play, and puppets to practise social interaction skills;
- \$ use scripts that provide words and phrases the student can use in a variety of situations;
- \$ model conversational turn-taking and body proximity rules;
- \$ model socially acceptable expressions of emotion;
- \$ role-play solutions to difficulties students may have with peers;
- \$ model verbal problem-solving techniques;
- \$ provide direct instruction about the importance of perspective, or trying to understand the other person's point of view, in the event of conflict.

Strategies and Suggestions Related to Reading

The teacher may:

- \$ create a warm atmosphere for reading activities and choose reading material related to topics the student finds interesting;
- \$ integrate reading into activities the student finds enjoyable (e.g., games, art, cooking);
- \$ after reading a story, provide the student with opportunities for repeated exposure to the story, including retelling and role-playing the story;
- \$ teach phonological awareness skills using a developmental approach by focusing on words, syllables, morphemes, and phonology (e.g., count the number of words in a sentence, lap the number of beats in a word, recognize rhyming words);
- \$ teach story structure to help the student comprehend reading material (e.g., setting, problem, action/response, outcome);
- \$ teach reading comprehension strategies, such as the directed reading-thinking strategy;
- \$ increase the student's comprehension by teaching him or her to use self-questioning strategies when reading (e.g., to ask *who*, *what*, *when*, *where*, and *why*?);

- \$ use reciprocal-question strategies (i.e., the student and the teacher take turns asking questions about a paragraph being read);
- \$ select reading material that uses simple vocabulary, at the student's level, or simplify texts for increased readability;
- \$ choose reading material that uses simple sentence structure, at the student's level (e.g., examine sentence lengths or the use of embedded clauses);
- \$ highlight important information in reading material (e.g., use colour coding, highlighting, bolding);
- \$ use cloze procedures to help the student develop prediction and inference skills;
- \$ investigate the use of technology that facilitates reading for the student (e.g., electronic books, text-to-speech software).

Strategies and Suggestions Related to Writing

The teacher may:

- \$ provide instruction in the process of writing (e.g., generating ideas, developing an outline, reviewing and revising);
- \$ model effective writing techniques;
- \$ use flow charts or tables to help the student get started on writing assignments;
- \$ use organizational devices to help the student write in an organized fashion (e.g., topic sentence, descriptive sentences, conclusion; the TOWER strategy – Think, Order, Write, Edit, Rewrite);
- \$ provide the student with a checklist for proofreading;
- \$ provide the student with a story frame for narratives to assist with writing (e.g., setting, problem, action/response, outcome);
- \$ investigate technology that facilitates writing for the student (e.g. speech-to-text software, word prediction software).

Strategies and Suggestions Related to Self-Advocacy

The teacher may:

- \$ help the student to recognize difficult listening situations and teach him or her to ask for repetition and/or clarification when needed;
- \$ help the student to take responsibility for occasions when he or she does not understand and encourage him or her to request repetition/clarification of instructions;
- \$ provide leadership opportunities for the student in the school (e.g., gym, library, delivering class messages).

Strategies and Suggestions Related to Organization

The teacher may:

- \$ encourage the student to use an agenda to remember homework, project time lines etc.;
- \$ provide the student with advance organizers for lesson content;
- \$ establish a home-school communication strategy;
- \$ provide the student with organizational strategies (e.g., colour coding, effective use of folders);
- \$ provide a summary of homework/project tasks on the chalkboard;
- \$ pair the student with a “buddy” who can help him or her with organization;
- \$ ensure that the student understands the time lines for assigned work.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ teach the student ways to prepare a study sheet;
- \$ teach the student the vocabulary necessary for test taking;
- \$ model test-taking strategies;
- \$ provide the student with a practice test;
- \$ avoid asking questions within questions and using complicated wording;
- \$ use several assessments to establish the student’s ability.

Assessment Accommodations

To provide accommodations for a student who has speech/language disorders, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, a tape-recorded test);
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, or speech-to-text software and augmentative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ allow the student additional time, when required, to complete tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a calculator, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ provide prompts for the purpose of drawing the student’s attention back to the test;
- provide periodic supervised breaks.

Learning Disability

Characteristics

Learning disabilities are defined by the Ministry of Education as follows:

Learning disability: a learning disorder evident in both academic and social situations that involves one or more of the processes necessary for the proper use of spoken language or the symbols of communication, and that is characterized by a condition that:

- a) is not primarily the result of: impairment of vision, impairment of hearing, physical disability, developmental disability, primary emotional disturbance, or cultural difference;
- b) results in a significant discrepancy between academic achievement and assessed intellectual ability, with deficits in one or more of the following: receptive language (listening, reading), language processing (thinking, conceptualizing, integrating), expressive language (talking, spelling, writing), mathematical computations; and
- c) may be associated with one or more conditions diagnosed as: a perceptual handicap, a brain injury, minimal brain dysfunction, dyslexia or developmental aphasia.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her areas of need. Understanding and responding to them is critical to appropriate program development.

Students with learning disabilities typically have average to above-average cognitive abilities, but they may require specific teaching strategies and/or accommodations to learn and to demonstrate their knowledge and skills. Many students with learning disabilities are able to successfully complete Ontario Curriculum expectations and continue their learning in postsecondary institutions. It is important for teachers to implement the teaching strategies that allow students to successfully access the curriculum. Some students may require modifications to the grade-level expectations in some subject (or in a specific strand of a subject) area.

Although the characteristics listed below may be exhibited by any student from time to time, students who have learning disabilities generally demonstrate some or all of these characteristics

with regularity over a period of time. Students who have learning disabilities may demonstrate general areas of need in:

- \$ receptive language skills (listening, reading);
- \$ language processing skills (thinking, conceptualizing, integrating);
- \$ expressive language skills (talking, spelling, writing);
- \$ socio-emotional maturity;
- \$ ability to sustain attention.

More specifically, students who have learning disabilities may have needs in the following areas:

- \$ consistent performance;
- \$ visual, auditory, motor, organizational, and/or conceptual skills;
- \$ understanding and following directions;
- \$ interpretation of language and/or extent of vocabulary;
- \$ reading, comprehension, and mathematics;
- \$ writing, spelling, grammar, and/or oral expression of language;
- \$ organizing and sequencing thoughts and ideas;
- \$ the social use of language;
- \$ strategies for reception, storage, and production of information;
- \$ long- and/or short-term memory;
- \$ focusing attention and/or initiating tasks and sustaining concentration;
- \$ generalizing learning or transferring skills/knowledge from one setting to another;
- \$ producing answers in spite of mastery of content;
- \$ solving problems and/or dealing with multiple tasks;
- \$ social skills;
- \$ self-esteem and/or anxiety.

Teaching Strategies and Suggestions

The following general strategies may help these students be more successful. Teachers of these students may also find the sections on Behavioural Exceptionality and Giftedness in this Companion of value.

Strategies and Suggestions Related to the Classroom Environment

The teacher may:

- \$ provide an encouraging and supportive classroom environment;
- \$ ensure the student feels that he or she is a valued member of the class;
- \$ establish and communicate consistent behavioural expectations and consequences;
- \$ involve the student in goal setting;
- \$ recognize and praise effort, improvement, and task completion;
- \$ check in with the student regularly;
- \$ provide preferential seating (e.g., at the front of the class) as necessary to help the student

focus and maintain attention.

- \$ allow a student with attention and concentration difficulties opportunities to alternate tasks or take short breaks;
- \$ use a study carrel to reduce distraction if necessary;
- \$ change the student to a different location to reduce distraction, if necessary;
- \$ provide opportunities for the student to use a resource room for assistance and/or to reduce distractions while he or she works.

Strategies and Suggestions Related to Social Skills

The teacher may:

- \$ teach the student to notice, interpret, and respond appropriately to body language;
- \$ facilitate, model, and encourage appropriate social skills (e.g., role-play understanding body language);
- \$ teach the student how to initiate, maintain, and conclude a conversation;
- \$ teach the student to see situations from the other person's perspective, making use of role playing and modelling;
- \$ provide as many opportunities as possible for the student to experience positive self-expression, beginning first in a small, comfortable group setting;
- \$ foster opportunities and provide strategies for the student to make and maintain friendships;
- \$ foster and provide opportunities for the student to initiate and participate in interview scenarios, making use of role playing.

Strategies and Suggestions Related to Organization

The teacher may:

- \$ attach daily schedules/timetables to the student's notebook cover;
- \$ provide extra text books (as required) for the student to use at home;
- \$ teach the use of metacognitive strategies to facilitate the student's achievement of goals and objectives;
- \$ provide advance organizers that structure content (e.g., outlines, subtitles, paragraph frames);
- \$ encourage the use of lists, advance organizers, and personal planners for personal organization;
- \$ help the student time-manage an assignment;
- \$ provide written outlines for assignments;
- \$ assist the student by "chunking" assignment components and requiring each chunk to be handed in at specifically assigned times;
- \$ facilitate the student's overall thinking about a task (e.g., encourage the student to engage in pre-planning and to review topic sentences, details, and summaries);
- \$ encourage the student to label, date, and number pages in his or her notebook;
- \$ allow the student additional time, which has been pre-established with him or her, to complete tasks;

- \$ employ verbal rehearsal and questioning strategies following instruction, to help the student focus on important information;
- \$ teach and encourage the use of highlighting main facts and ideas;
- \$ organize a notebook for the student or provide him or her with a folder to help organize work;
- \$ provide immediate reinforcement of correct responses and immediate feedback where possible;
- \$ recognize effort, improvement, and task completion;
- \$ build in opportunities for frequent progress checks with peers or teacher;
- \$ keep graphs and charts of the student's progress;
- \$ communicate regularly with the support teacher, if appropriate;
- \$ establish a home-school communication system.

Strategies and Suggestions Related to Motivation

The teacher may:

- \$ involve the student in setting goals for completion of work;
- \$ encourage risk taking;
- \$ provide opportunities for the student to choose formats for completing assignments/projects;
- \$ provide a variety of opportunities for peer and/or group interactions (e.g., cooperative learning, sharing);
- \$ use a variety of activities to encourage the student to check his or her work and/or to study for tests.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ present information using as many modalities as possible, including oral presentation, board notes, overheads, diagrams, class discussion, and activity-based learning;
- \$ explore new developments in technology, where available, that would improve a student's ability to access the curriculum;
- \$ provide overviews of lessons at the beginning of class where possible (e.g., using visual organizational tools such as maps or webs);
- \$ relate material to the student's life and real-life situations;
- \$ use experiential, concrete examples, resources, and activities to teach abstract concepts;
- \$ reinforce oral instructions with written or visual cues;
- \$ repeat important information and write it on the board or on an overhead;
- \$ clarify definitions, terms, and vocabulary in assignments, and ensure that the student understands by asking him or her to restate or paraphrase the instructions;
- \$ allow the student to tape lessons for more intense listening at a later time;
- \$ allow a significant response time when questioning to allow the student time to process the request;
- \$ avoid using figurative language unless it has been specifically taught;
- \$ teach in small, incremental steps, moving from simple to more difficult concepts;

- \$ encourage the student to ask questions for clarification and additional information;
- \$ provide instructional materials geared to the student's instructional level (e.g., use supplementary resource material, if necessary);
- \$ provide opportunities for review and reinforcement when teaching new concepts (e.g., periodically summarize main points);
- \$ tell the student the purpose of the assignment and the method of and criteria for evaluation;
- \$ give assignments both orally and visually;
- \$ encourage oral discussion prior to writing tasks, and before and after reading tasks;
- \$ provide the student with extra time to complete assignments that might otherwise be completed in class and/or reduce the quantity of work involved in the assignment;
- \$ allow the student practice opportunities before tests (e.g., provide a sample or practice test);
- \$ provide the student with a study guide before tests.

Strategies and Suggestions Related to Independence

Because exceptional students often have low self-concepts, they may believe they have little control over their future. Often, they feel that others are responsible for their future, as well as their successes and failures. Therefore, in order for these students to become independent learners, it is very important to teach them skills that will lead them to greater independence.

The teacher may:

- \$ teach the student steps for problem solving;
- \$ help the student become aware of his or her decision-making style;
- \$ teach and reassure the student that risk taking and making mistakes are part of the normal learning process;
- \$ teach and model for the student strategies for effectively communicating his or her strengths and needs;
- \$ help the student to explore the possible consequences of various solutions to the same problem;
- \$ infuse problem-solving opportunities throughout the curriculum and use role-play situations to help the student become more confident in solving problems;
- \$ teach the student how to take the initiative to ask for the accommodations he or she requires;
- \$ teach the student to select courses and career paths that capitalize on his or her strengths;
- \$ encourage the use of assistive and/or adaptive technology that could enable the student to access the curriculum independently.

Specific Skill Strategies

Strategies and Suggestions Related to Oral Communication

The teacher may:

- \$ provide the student with many formal and informal opportunities to develop his or her oral communication skills;

- \$ provide organizational strategies to help the student prepare oral presentations (e.g., speeches);
- \$ provide opportunities for the student to use technology, such as PowerPoint or other kinds of presentation software, to help organize and present information;
- \$ demonstrate and discuss ambiguity, figurative language, and irony;
- \$ provide opportunities for discussion of cause and effect, humorous situations, feelings, and characters;
- \$ use *wh* questions as prompts to help the student convey information orally;
- \$ restate key concepts in grammatically simple structures;
- \$ use visual aids consistently to support oral messages;
- \$ give the student extra time to process information;
- \$ encourage the student to ask for clarification.

Strategies and Suggestions Related to Reading

The teacher may:

- \$ provide direct instruction in areas of needs, match reading materials to the student's reading level, and teach the student to use context clues;
- \$ provide access to grade and age-appropriate literature to support literacy development;
- \$ teach the meaning of words specific to the subject area to be read, before the reading exercises;
- \$ explore and encourage the student to share his or her knowledge of the topic to be read, to provide context and background for the reading exercise;
- \$ encourage oral discussion before and after reading to increase the student's level of comprehension;
- \$ provide advance organizers to help the student structure the reading content (e.g., outlines, subtitles, paragraph frames, cause and effect, thesis and proof, main idea and supporting details);
- \$ supplement texts with a variety of motivating print materials;
- \$ provide a variety of opportunities for peer/group interactions following the reading exercise;
- \$ break tasks into smaller parts to be completed over spaced intervals;
- \$ provide a variety of alternative means of conveying information (videos, plays, graphics, tapes) to support reading comprehension;
- \$ provide, as appropriate, electronic screen readers;
- \$ allow the student additional time where necessary to complete reading activities.

Strategies and Suggestions Related to Writing

The teacher may:

- \$ encourage oral discussion of the assignment before writing begins;
- \$ use direct instruction and modelling to encourage the use of a variety of pre-writing and organizational strategies (e.g., conferences, brainstorming, illustrating, tape recording, mapping, outlining, semantic webbing);
- \$ encourage the use of drawing or sketching as part of the planning process;

- \$ model and display examples for specific purposes in writing (e.g., letters, editorials, essays);
- \$ model and display various aspects of the writing process (e.g., mapping, outlining, revising);
- \$ develop strategies with the student that will help him or her move from the pre-writing stage to sequencing ideas for writing (e.g., TOWER – Think, Organize, Write, Edit, Rewrite; MAPS – McGill Action Planning System);
- \$ have the student use a computer for word processing, proofreading, and editing (e.g., to make use of spelling and grammar checkers);
- \$ provide, as appropriate, technology for speech recognition, word predication programs, and computerized organization tools such as Inspiration;
- \$ concentrate on teaching one writing skill at a time and assess accordingly;
- \$ encourage the student to write drafts, and suggest ways he or she can improve drafts;
- \$ provide frequent feedback on the student’s draft-writing abilities;
- \$ provide the student with opportunities for collaborative writing with peers;
- \$ have the student read his or her work aloud or on tape to help with self-editing;
- \$ teach the student to use electronic spellers, spell-checkers, dictionaries, and thesauruses, and make these available;
- \$ provide frequent opportunities for small writing assignments as an alternative to long writing assignments;
- \$ allow the student additional time to submit writing assignments and, where possible, help the student to “chunk” writing assignments for draft submissions;
- \$ negotiate the required length of appropriate deadlines for written assignments with the student;
- \$ provide the student with opportunities to submit alternatives to writing assignments (e.g., graphic representations, dramatic or media presentations, collages).

Strategies and Suggestions Related to Spelling

The teacher may:

- \$ allow the student to use a spelling reference (e.g., spell-checker, dictionary, electronic speller);
- \$ encourage students to have a peer editor help them proofread their work;
- \$ avoid taking marks off for spelling errors when marking subject content (e.g., in tests).

Strategies and Suggestions Related to Note Making

The teacher may:

- \$ encourage the student to establish a routine to title, number, and date all notes and handouts;
- \$ encourage the student to review daily or weekly, with the teacher or a peer, the completeness of his or her notebooks;
- \$ teach the student visual strategies for note making (e.g., the use of diagrams/pictures to represent content);
- \$ teach and encourage the student to use mapping techniques;
- \$ write important definitions and ideas on the board or on a handout;

- \$ allow the student plenty of time for copying;
- \$ provide the student with a print copy of chalkboard notes, if necessary (e.g., a photocopy of the teacher's or a peer's notes, a peer's notes written on NCR or carbonless copy paper);
- \$ encourage group production of summary notes;
- \$ allow the student, if necessary, to speak his or her notes into a tape recorder instead of writing them, for later review;
- \$ model and teach the highlighting of main ideas, the making of margin notes, etc.;
- \$ make use of bulletin boards to highlight key vocabulary and key concepts;
- \$ allow the student to use a scribe as appropriate;
- \$ encourage the student to use appropriate technology (e.g., software programs such as Dreamwriter, or laptop computers such as the AlphaSmart).

Strategies and Suggestions Related to Mathematics

The teacher may:

- \$ ensure that the student is familiar with the language of mathematics;
- \$ use simple language and directions for mathematical activities;
- \$** ensure that the student has the prerequisite skills to learn a new concept;
- \$ use concrete and/or manipulative materials to teach concepts;
- \$ encourage group/peer discussion when teaching new concepts or for mathematical activities;
- \$ use graphic representations wherever possible to clarify mathematical assignments/activities;
- \$ have directions read to the student;
- \$ make use of computer programs for drill and practice;
- \$ provide samples for the student to work from (e.g., on the top of worksheets);
- \$ have the student use colour coding as a method of differentiating mathematical operations (e.g., addition, subtraction, multiplication, division);
- \$ have the student paraphrase and/or rehearse the information and necessary steps required for the task;
- \$ provide and post the steps needed to solve problems;
- \$ organize worksheets and tests so that they are clear, well spaced, and easy to follow;
- \$ minimize the need for the student to copy work from the chalkboard or textbook to his or her notebook;
- \$ teach and encourage the student to use a calculator.

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ teach metacognitive strategies (e.g., making inferences, predicting, restating in own words, summarizing) to help the student process and recall oral and written information;
- \$ teach the student ways to prepare a study sheet;
- \$ teach the student the vocabulary necessary for test taking;
- \$ model test-taking strategies;
- \$ provide the student with a practice test;

- \$ avoid asking questions within questions and using extremely complicated wording;
- \$ use several assessments to establish the student's ability;
- \$ avoid penalizing the student for spelling errors, unless spelling is pertinent to the assessment.

Assessment Accommodations

To provide accommodations for a student who has learning disabilities, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, or a tape-recorded test);
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, or speech-to-text software;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$** allow the student additional time, when required, to complete the tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$** highlight key words or instructions for emphasis;
- \$ allow the student to use calculators, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Giftedness

Characteristics

Giftedness is defined by the Ministry of Education's as follows:

Giftedness: an unusually advanced degree of general intellectual ability that requires differentiated learning experiences of a depth and breadth beyond those normally provided in the regular school program to satisfy the level of educational potential indicated.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

Students who are gifted learners have the potential to achieve beyond what is expected of their same-age peers. A chief characteristic of giftedness is potential, not achievement itself. Achievement may fluctuate depending on a variety of factors: the student's immediate situation, his or her relationship with a particular teacher, the availability of courses of sufficient challenge and interest, or even the student's physical health. Giftedness may also appear in conjunction with other educational or emotional needs.

No one student manifests all of the characteristics described below; however, the student who is a gifted learner may demonstrate some of them with regularity over a period of time.

Advanced Cognitive Abilities

Gifted students generally:

- \$ conceptualize and generalize easily;
- \$ process and retain information quickly and easily;
- \$ take interest in critical and creative thinking;
- \$ take interest in abstract thought and in cause-effect relationships;
- \$ apply concepts in creative ways;
- \$ need to explore and develop personal management and research skills;
- \$ require opportunities to interact with their intellectual peers on a regular basis.

Advanced Intellectual Curiosity

Gifted students generally:

- \$ take pleasure in intellectual activities;
- \$ enjoy the pursuit of open-ended issues and problems;
- \$ are curious, questioning, and intuitive, which can lead to conflict with teachers;
- \$ have a wide range of interests;
- \$ have the ability to be fluent, flexible, original, and elaborative thinkers;
- \$ have keen powers of observation and an eagerness to examine the unusual.

Heightened Sensitivity and Creativity

Gifted students generally:

- \$ possess strong creative and imaginative abilities;
- \$ have a keen sense of humour that is often off-beat;
- \$ see unusual and diverse relationships;
- \$ dislike routine and drill;
- \$ question, or even reject, the known in order to invent for themselves.

Heightened Motivation

When their interest is sparked, gifted students generally:

- \$ show above-average ability to pay attention, to concentrate, and to retain;
- \$ are task-committed, goal-oriented, and self-directed;
- \$ become absorbed in certain topics, focusing their attention intensely on those topics to the exclusion of other demands;
- \$ work efficiently and usually independently;
- \$ express frustration with inactivity and absence of progress;
- \$ tend toward perfectionism, which may create significant internal tension or stress.

Extended Affective Capacities

Gifted students generally:

- \$ are highly motivated by interaction with their intellectual peers, and may become complacent or unmotivated when they have no opportunities for such interaction;
- \$ display evidence of uneven development of their cognitive and emotional abilities;
- \$ are unusually sensitive to the critical reactions and responses of others;
- \$ display heightened sensitivity to criticism and a high level of vulnerability to peer-group rejection or bullying;
- \$ become passionate about their beliefs.

Underachieving Gifted Students

Some students who are gifted learners will downplay their talents and abilities to gain acceptance, to appear “normal” in the classroom, and to reduce the tension that their advanced capacity and abilities often create. Students who are gifted learners may also have other exceptionalities that are often unrecognized because of the giftedness, but which need to be identified.

For example, students who are gifted learners may have learning disabilities that cause them to experience difficulty with particular expectations (e.g., written language), but their giftedness (e.g., their advanced oral abilities) may mask these learning disabilities. Poor self-concept may inhibit their learning and willingness to take risks and, in some instances, they may exhibit

compensatory behaviours, such as acting out, defiance, and over-sensitivity.

Characteristics of underachieving students who are gifted learners, in addition to those characteristics demonstrated by most students who are gifted learners, may include the following:

- \$ test performance and achievement at or below provincial standards;
- \$ frequent lack of completion, or careless completion, of daily work;
- \$ gap between quality and quantity of work;
- \$ difficulty following assigned tasks through to completion;
- \$ persistent dissatisfaction with work accomplished;
- \$ high level of self-criticism, which may reduce risk-taking behaviours and result in avoidance of new activities because the student fears that he or she might not be able to do them;
- \$ tendency to be withdrawn or aggressive in the classroom;
- \$ inability to function comfortably, collaboratively, or constructively in a group of any size;
- \$ tendency to set unrealistic expectations for self and others;
- \$ indifference, and sometimes negative attitude, towards school in general;
- \$ a tendency to be distracted easily and an inability to focus attention and concentrate on assigned tasks;
- \$ resistance to teachers' efforts to motivate or discipline behaviour in class;
- \$ difficulty in peer relationships.

Teaching Strategies and Suggestions

General Strategies and Suggestions

Students who are gifted learners have specific needs in addition to the basic needs for play, nurturing, structure, and exploration that all children have. The ability to read early in life, and a tendency to read a wide range of material, may expand their cognitive skills at a faster rate than those of their peers, and at the same time expose them to information, to the feelings, thoughts, and experiences of fictional characters, and to the imaginations and ideas of adult writers. The same can be said of early language acquisition, since language plays a part not only in activating cognitive abilities, but also in the biological organization of the brain.

As the gifted child's developmental trajectory diverges from the norm (very early in life), it takes on a unique shape that will remain outside the norm. Giftedness develops in an uneven manner; different abilities develop asynchronously. All students who are gifted learners do not exhibit the same degree of giftedness in all discipline/subject areas.

The learning styles that help define these students as gifted can lead to many complex behaviours if early needs are not recognized and met. For example, students who are gifted learners may become argumentative, apathetic, socially withdrawn, out of control, or clinically depressed, among a wide range of other behaviours, when their needs are not met. If not properly understood, certain behaviours of students who are gifted learners can easily appear to

be problems rather than strengths as the following examples indicate.

Strength	Possible Problem
Advanced verbal skills	Talks too much, talks above the heads of age peers
Long attention span	Tunnel vision, resists interruption, stubborn
Acquires/retains information easily	Inaccurate, sloppy, impatient with others, dislikes basic or repetitive routines or rote exercises
Creative, inventive	Escapes into fantasy, rejects norms, may be disruptive
Independent, prefers individualized work	Unable to accept help from peers, nonconformist
Critical thinking	Critical of others, perfectionist, sets unreasonable standards for self and others
Prefers complexity	Resists simple solutions, constructs complicated rules, bossy
Sensitive, empathetic to others	Extremely sensitive to criticism or peer rejection, extremely sensitive to perceived personal and societal injustices

Strategies and Suggestions Related to Differentiation and Program Development

To achieve success with the curriculum, students who are gifted learners may require an individual program that differs in content, process, outcomes, and evaluation strategies. Time, resources, and instruction can all be varied so that programming can be tailored to meet individual needs.

Students who are gifted learners may present other exceptionalities as well, and teachers must consider all of the gifted students' needs when developing programs.

The following principles guide program development for a student who is a gifted learner. Such programs may:

- \$ be differentiated in terms of their content, process, product, and evaluation;
- \$ be differentiated in terms of their depth, breadth, pace, and complexity;
- \$ match the learning needs of the student by building on the student's current levels of skill and knowledge;
- \$ involve the student in planning, implementing, and evaluating his or her learning experiences;
- \$ use compacting in the student's areas of strength to cover the regular grade-appropriate curriculum in a faster and/or different manner, so as to provide time for independent or group study in an area of particular interest to the student;
- \$ be flexible in providing time for and allowing students to pursue special areas of interest;
- \$ facilitate subject-specific acceleration where appropriate;
- \$ provide speakers in areas of the student's interest;
- \$ provide opportunities for the student to interact with his or her intellectual peers;
- \$ teach complex thinking, inquiry, and affective skills;
- \$ provide opportunities for acceleration where appropriate.

Strategies and Suggestions Related to Critical Thinking and Problem Solving

The teacher may assist the student to:

- \$ learn critical-thinking skills (e.g., developing questions; hypothesizing answers; evaluating alternative approaches to finding answers; constructing arguments; drawing conclusions; broadening perspective, fluency, flexibility, ability to elaborate, and originality);
- \$ apply these critical-thinking skills to his or her ongoing work;
- \$ relate content to broad-based interdisciplinary issues, problems, or themes to allow for in-depth exploration of concepts;
- \$ develop solutions/products that challenge existing ideas and use new techniques, materials, and forms;
- \$ learn problem-solving skills (e.g., identifying problems, determining core issues, generating alternative solutions, developing criteria for evaluating solutions, evaluating solutions, communicating the results of problem solving);
- \$ apply these problem-solving skills to his or her ongoing work;
- \$ identify real problems, find real solutions, and present these solutions to real audiences.

Strategies and Suggestions Related to Organization

The teacher may assist the student to:

- \$ learn personal organization skills (e.g., time management, information and resource management, study and test-taking skills);
- \$ develop personal strategies for organizing, studying, and test-taking;
- \$ apply these organizational skills to his or her ongoing work;
- \$ effectively use the quantity, quality, and diversity of materials that he or she routinely

accesses.

Strategies and Suggestions Related to Inquiry and Research

The teacher may assist the student to:

- \$ learn research skills (e.g., planning, conducting, analysing, communicating, evaluating, presenting research);
- \$ apply these research skills to his or her ongoing work;
- \$ question, experiment, and reflect;
- \$ interact with experts and professionals as well as peers;
- \$ explore self-selected topics in depth;
- \$ engage in open-ended inquiry;
- \$ incorporate primary and secondary sources of information into his or her work;
- \$ effectively locate, analyse, organize, and communicate credible high-level information that will support the presentation of his or her ideas.

Strategies and Suggestions Related to Technology

The teacher may assist the student to:

- \$ learn digital technology skills (e.g., electronic publishing, using the Internet, telecommunicating, designing multimedia);
- \$ apply these digital technology skills to his or her ongoing work;
- \$ acquire and sustain a high level of competency in using these tools wisely and effectively in the global community.

Strategies and Suggestions Related to Interpersonal Affective Skills

The teacher may assist the student to:

- \$ learn interpersonal skills (e.g., communicating, collaborating, mentoring, leading);
- \$ apply these interpersonal skills to his or her ongoing interactions;
- \$ assume leadership roles in small and large group situations, if desired;
- \$ organize events in the school;
- \$ interact with a mentor;
- \$ assume a peer mentorship role, if desired;
- \$ effectively interact with teachers, peers, and a range of community members to experience healthy growth and development in all areas and to realize his or her learning potential.

Strategies and Suggestions Related to Intrapersonal Affective Skills

The teacher may assist the student to:

- \$ learn intrapersonal skills (e.g., self-awareness, stress management, self-advocacy);
- \$ apply these intrapersonal skills to his or her ongoing interactions;
- \$ employ self-awareness in making effective personal choices;
- \$ implement strategies to cope with, and minimize, stress and pressure.

Strategies and Suggestions Related to Compacting and/or Acceleration

The teacher may:

- \$ use compacting to cover the regular grade-appropriate curriculum in a faster and/or different manner so as to allow time for the student to study advanced and related subject matter;
- \$ employ prior learning assessment strategies to identify the degree of the student's need to reach ahead;
- \$ allow the student to move into the curriculum of subsequent grades, if he or she has demonstrated achievement of the expectations for the current grade;
- \$ investigate and provide access to enrolment of a student in secondary and/or postsecondary courses while he or she is still in elementary or secondary school;
- \$ consider the effect of acceleration on the student both academically and socially.

Teachers should recognize that acceleration can be a useful strategy for some gifted children, but may not be appropriate for others. Acceleration alone is not a substitute for differentiated programming for students who are gifted learners.

Specific Skill Strategies

Strategies and Suggestions Related to Language

The teacher may:

- \$ pre-test the student, and differentiate the programming based on the student's level of achievement;
- \$ group the student with his or her intellectual peers for activities that extend the curriculum;
- \$ provide opportunities for the student to develop and present speeches, commercials, radio programs, improvisations, and PA announcements;
- \$ provide the student with opportunities to be master of ceremonies;
- \$ teach discussion skills and allow the student to lead discussions;
- \$ teach specific communication skills and knowledge explicitly (e.g., debating skills; story-telling skills; interview and survey skills, vocabulary-building exercises) to encourage independent learning and reflection;
- \$ investigate the language of humour and satire;
- \$ encourage the student to participate in plays (e.g., to write scripts, act, and produce);

- \$ arrange for the student to make presentations to groups outside of the class/school;
- \$ involve the student in school, district, or provincial events (e.g., debating teams, Science Olympics, Think Bowl, Classics Conference, public speaking).

Strategies and Suggestions Related to Literature Studies and Reading

The teacher may:

- \$ pre-test the student, and differentiate the programming based on the student's level of achievement;
- \$ group the student with his or her intellectual peers for activities that extend the curriculum;
- \$ introduce the student to a variety of reading genres;
- \$ teach specific creative- and critical-thinking skills and knowledge explicitly (e.g., how to critique literary works, how to use metacognitive analysis, how to apply the work of Edward de Bono) to encourage independent learning and reflection;
- \$ provide the student with opportunities to contribute book reviews to the school and community newspapers;
- \$ engage the student in close analyses of various elements of written form and style;
- \$ allow the student to negotiate for the selection of alternative reading materials/selections;
- \$ allow the student to focus on a collection of works by one author, identifying patterns of change, recurring themes, context, form, and possible causes of change in style;
- \$ allow the student to develop alternative products that reflect his or her skills/interests as responses to reading assignments;
- \$ provide the student with extra time to complete tests/exams, if appropriate.

Strategies and Suggestions Related to Writing

The teacher may:

- \$ pre-test the student and differentiate the programming based on the student's level of achievement;
- \$ group the student with his or her intellectual peers for activities that extend the curriculum;
- \$ provide the student with opportunities to write for a variety of purposes (e.g., class plays, school newspaper, school pamphlets, advertising, media scripts);
- \$ provide the student with more time for in-depth completion of writing projects (compacting in another subject area may be considered);
- \$ engage the student in real-life writing situations (e.g., letters to the editor, opinion pieces, essays for publication);
- \$ engage the student in reviews or critiques of various written pieces or products;
- \$ organize opportunities for the student to work with professionals in media (e.g., mentorship with staff at the local newspaper or TV stations or on film productions);
- \$ teach specific advanced writing skills and figures of speech explicitly (e.g., simile,

- alliteration, flashback, foreshadowing, metaphor) to encourage independent learning;
- \$ compact lessons about the mechanics of writing and teach advanced writing/editing skills;
- \$ teach advanced word-processing, desktop publishing, and Web page development skills;
- \$ provide the student with extra time for writing tests/exams, as appropriate.

Strategies and Suggestions Related to Spelling

The teacher may:

- \$ pre-test the student, and differentiate the programming based on the student's level of achievement;
- \$ group the student with his or her intellectual peers for activities that extend the curriculum;
- \$ make use of challenging spelling activities and games (e.g., cryptograms, crossword puzzles, commercial word games);
- \$ teach the student to examine and analyse spelling patterns and rules;
- \$ give the student opportunities to generate spelling lists based on specific rules and patterns.

Strategies and Suggestions Related to Mathematics

The teacher may:

- \$ pre-test the student, and differentiate the programming based on the student's level of achievement;
- \$ group the student with his or her intellectual peers for activities that extend the curriculum;
- \$ provide a math program that allows the student to progress through math skills at his or her own rate (e.g., develop learning contracts, accelerate);
- \$ provide challenging computer-math programs and experiences;
- \$ allow the student to solve math problems in many ways;
- \$ negotiate with the student about homework assignments, relieving him or her of the requirement to complete all assigned questions if appropriate, based on the student's and teacher's analyses of the student's skills;
- \$ encourage the student to create and publish a book of mathematical problems, either as part of a group or independently;
- \$ facilitate opportunities for the student to have advanced mathematical experiences (e.g., through contact with university faculty or through websites such as <http://www.math.uwaterloo.ca>);
- \$ make use of challenging math games;
- \$ provide opportunities for the student to pursue independent learning in a related area (e.g., computer programming, electronics, economics);
- \$ provide opportunities for the student to apply mathematical concepts to both theoretical and practical situations;
- \$ provide the student with extra time for writing tests/exams, as appropriate.

Strategies and Suggestions Related to Other Subjects

The teacher may:

- \$ pre-test the student, and differentiate the programming based on the student's level of achievement;
- \$ provide opportunities for the student to learn content at a faster rate;
- \$ group the student with his or her intellectual peers for activities that go beyond the curriculum;
- \$ teach thinking, inquiry, and affective skills, and provide opportunities for the student to apply these skills across discipline/subject areas;
- \$ differentiate curriculum units by allowing for more depth, breadth, and complexity in the study of the units;
- \$ differentiate curriculum units by pace, allowing more time for the study of units of particular interest to the student and less time for units that the student has already learned;
- \$ allow the student to develop alternative products that reflect his or her skills/interests as responses to assignments;
- \$ facilitate opportunities for the student to study/work with a mentor in the private sector, in a secondary school, or at a postsecondary institution;
- \$ provide opportunities for the student to deal with real-life problems and real-life solutions and to present his or her findings to real audiences;
- \$ use prior learning assessment and recognition strategies to identify what the student already knows and then allow the student to work at appropriate levels;
- \$ reduce the number of assignments the student is required to submit and encourage the student to conduct in-depth research in an area of interest;
- \$ negotiate alternatives (e.g., in the areas of content, process, product, assessment) with the student;
- \$ provide the student with extra time for writing tests/exams, as appropriate.

Assessment Accommodations

To provide accommodations for a student who is gifted, the teacher may:

- \$ provide the student with a quiet location, free from distractions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ allow the student to use a computer or word processor, as appropriate;
- \$ provide periodic supervised breaks.

Students who are gifted learners may also have other identified needs that may require the use of additional accommodations. To address these needs, refer to the assessment accommodations outlined in other exceptionality sections of this Companion (e.g., Learning Disability, Behavioural Exceptionality, Deaf and Hard-of-Hearing).

Mild Intellectual Disability

Characteristics

Mild intellectual disabilities are defined by the Ministry of Education as follows:

Mild intellectual disability: a learning disorder characterized by:

- a) an ability to profit educationally within a regular class with the aid of considerable curriculum modification and supportive service;
- b) an inability to profit educationally within a regular class because of slow intellectual development;
- c) a potential for academic learning, independent social adjustment, and economic self-support.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Many factors associated with mild intellectual disabilities correlate with learning difficulties. Education jurisdictions typically use a variety of assessment methods to identify mild intellectual disabilities. Some of these methods include IQ scores or percentiles, adaptive skills tests, skills-based assessments, and levels of academic achievement.

Current approaches for helping students who have learning disabilities, as well as current theories of intelligence, including the multiple intelligence and emotional intelligence theories, also suggest alternative instructional strategies and accommodations that teachers can use to meet a wide range of student needs.

Students who have mild intellectual disabilities demonstrate a significant range of strengths and needs. It is important to remember that not all students will demonstrate all characteristics. The strategies in this section may also be useful for students who have not been identified as having mild intellectual disabilities but who are experiencing similar difficulties.

With appropriate support, students who have mild intellectual disabilities have the potential to:

- \$ live independently;
- \$ achieve sustained employment;
- \$ use their local community's facilities and services;
- \$** participate in meaningful family and social relationships;
- \$ participate in leisure and recreational activities.

While not all of these students will demonstrate all characteristics simultaneously, they will usually all demonstrate an increasing gap between their abilities and the typical abilities of same-age peers. As the demands of the curriculum and daily living become more complex and abstract, the potential for these students to experience failure increases.

Delays in Cognitive Development

Students who have mild intellectual disabilities may demonstrate:

- \$ literacy and numeracy levels that are typically three or more years below their age-appropriate placement;
- \$ a tendency to be distracted easily
- \$ short attention and interest spans;
- \$ difficulty with all academic subjects;
- delays in speech and/or language acquisition;
- \$ difficulty remembering.

Difficulties with Appropriate Social Relationships

Students who have mild intellectual disabilities may demonstrate:

- \$ difficulty understanding non-verbal cues (e.g., body language, gestures);
- \$ difficulty with social language and behaviour;
- \$ difficulty understanding and expressing a range of emotions;
- \$ immature behaviour;
- \$ obsessive/compulsive behaviour.

Delays in Adaptive Skill Areas

Students who have mild intellectual disabilities may:

- \$ appear clumsy;
- \$ require support with personal care/hygiene skills;
- \$ use simplistic, vague, or colloquial language;
- \$ require consistency in routines;
- \$ frequently "lose" pencils, pens, books, and assignments.

Low Self-Esteem

Students who have mild intellectual disabilities may:

- \$ be afraid to take risks or to try new things;
- \$ use avoidance or misbehaviour to divert attention from their lack of ability;
- \$ demonstrate withdrawal as a response to feeling overwhelmed or to fear of failure;
- \$ require help or significant support to establish a positive self-image;
- \$ lack independent work habits;
- \$ be easily frustrated;
- \$ be vulnerable to peer pressure, teasing, and embarrassment.

Difficulties Understanding Abstract Concepts

Students who have mild intellectual disabilities may:

- \$ be easily confused by abstract and figurative language;
- \$ interpret language literally;
- \$ require support to generalize and to apply learned concepts to other situations;
- \$ enjoy routine and repetitive tasks.

To help students who have mild intellectual disabilities live and work in the community and/or proceed to postsecondary learning, teachers may need to arrange to space these students' courses out over a longer time. Alternative expectations based on each student's unique strengths and needs as identified in his or her Individual Education Plan (IEP) may need to form part of the programming for these students.

These alternative expectations may include, as appropriate, those related to the following areas:

- \$ personal life management (social interaction, budget management, meal planning and preparation, use of public transit, self-control);
- \$ self-care skills (personal health care, grooming, safety);
- \$ employability skills (attendance, punctuality, work ethic, task completion);
- \$ vocational skills, apprentice-like jobs and experiences;
- \$ leisure and recreation (sports, fitness, hobbies, use of the library, use of community facilities);
- \$ self-advocacy skills (getting help, assertiveness training);
- \$ social skills (social language, turn-taking, negotiation, conflict resolution, bullying prevention and avoidance);
- \$ skills for building and maintaining friendships and relationships;
- \$ development of personal values.

Teaching Strategies and Suggestions

General Strategies and Suggestions

Students who have mild intellectual disabilities benefit from being part of a heterogeneous group of students their own age. As the curriculum becomes increasingly more conceptual, however, and as the pace of the introduction of new concepts increases, these students may experience considerable failure or show high levels of frustration. To support the building of self-esteem in these students, teachers should ensure that they are provided with and use materials that look similar to what the rest of the class is using. In addition, classroom resources and materials should reflect the chronological age of the student, regardless of the expectations set out in them or being addressed.

Appropriate program interventions should be implemented as soon as the student is identified, to build and foster a sense of success in the student and to meet his or her strengths and needs.

Some students, in addition to their cognitive disabilities, have physical and sensory disabilities that further challenge their abilities to learn and to exercise control in their environment. For this reason, teachers may also find the following sections of this Companion helpful in planning for and working with students who have mild intellectual disabilities: Behavioural Exceptionality, Learning Disability, and Developmental Disability.

Strategies and Suggestions Related to the Classroom Environment

Students who have mild intellectual disabilities, like all students, require a supportive and encouraging learning environment that highlights and celebrates their strengths. The optimum learning environment for all students is predictable and safe from situations that may humiliate or embarrass them.

The teacher may:

- \$ provide a supportive and encouraging learning environment;
- \$ set expectations for the student that are similar to those for all students in the class;
- \$ model and foster a climate of acceptance for all students;
- \$ arrange the student's timetable to enable him or her to access the courses and/or resource groups that are appropriate to his or her special needs;
- \$ provide forewarning and opportunities for the student to practise in simulated situations to help the student successfully cope with transition and change;
- \$ minimize the number of transitions that occur in the school day and as the student moves from the primary to the junior and intermediate divisions;
- \$ reduce distractions in the classroom;
- \$ provide the student with preferential seating or seating that is appropriate to his or her sensory needs (e.g., away from doors and windows and near the blackboard);

- \$ use study carrels or room dividers;
- \$ provide the student with a headset to muffle noise;
- \$ arrange seating to place a student at risk of being isolated next to supportive peers.

Strategies and Suggestions Related to Behaviour

Students who have mild intellectual disabilities may demonstrate a tendency to be distracted easily and may exhibit behaviours that are inappropriate in the school setting. It is important to acknowledge that all behaviour is communication. By structuring a learning environment that discourages inappropriate behaviours, teachers can minimize disruption, increase learning time, and help all students develop self-awareness and self-control.

The teacher may:

- \$ implement support programs for the student such as peer tutoring, “circle of friends”, co-curricular coaches, buddy systems, and recess support;
- \$ teach the student self-advocacy skills (e.g., asking for help, explaining his or her strengths and needs);
- \$ provide frequent opportunities for the student to learn and practise appropriate behaviour in social situations;
- \$ establish and maintain consistent routines and classroom rules;
- \$ reinforce positive behaviour.

Strategies and Suggestions Related to Organization

Among the most important skills needed by students who have mild intellectual disabilities are those required to become independent learners: the abilities to manage time, organize their workspace, and learn study and test preparation skills.

The teacher may:

- \$ teach the student the use of personal organizers (e.g., a personal timetable that colour-codes or highlights important information, a checklist for supplies and for readiness behaviour, a homework journal or communication book);
- \$ teach the student time-management strategies (e.g., to use a watch or a clock to follow a schedule);
- \$ record up-coming assignments and events on a calendar for the student;
- \$ teach simplified note-taking techniques (e.g., using a highlighter to identify main ideas or facts, outlining);
- \$ provide advance organizers to demonstrate the key and subsidiary parts of lessons;
- \$ teach the student to use folders for finished and unfinished work;
- \$ teach the student to use graphic organizers, mapping, and semantic webbing techniques;

- \$ teach the student to use “self talk”, and model different study techniques;
- \$ teach test-taking skills for multiple-choice, fill-in-the-blank, and essay-type tests;
- \$ simultaneously give the student instructions orally, visually, and pictorially.

Strategies and Suggestions Related to Motivation

All students require opportunities to demonstrate their strengths, to experience success, and to participate in learning opportunities that are similar to those of their peers. Learning can be enhanced through a variety of teacher-directed, self-directed, and collaborative group situations, as well as highly motivational instructional materials. In addition, teachers should provide students with learning opportunities in the context of real-life situations.

The teacher may:

- \$ offer the student hands-on learning opportunities (e.g., teach science by conducting experiments);
- \$ use real-life experiences as learning opportunities (e.g., catering lunch, setting up audio-visual equipment, landscaping, providing office help);
- \$ use technology and software as tools for instruction, additional practice, or to demonstrate learning;
- \$ provide the student with frequent opportunities for large- and small-group learning, peer assistance, and/or peer tutoring;
- \$ encourage the student to use tools that make automatic corrections (e.g., word-processing software with automatic spellers);
- \$ offer incentives and rewards for effort and good work;
- \$ focus on the student’s strengths and abilities.

Strategies and Suggestions Related to Lesson Presentation

It is essential that the focus of teaching the Ontario curriculum to students who have mild intellectual disabilities be on real-life applications of functional literacy and numeracy skills at the appropriate level. In general, these students do not learn efficiently. Because it may take some students longer to learn all the material in the curriculum, it is essential to maximize time on task and to provide students with extended and multiple opportunities for practice.

The teacher may:

- \$ “chunk” the skill or instruction into smaller steps;
- \$ sequence the steps involved in learning a skill or concept or in completing a project (e.g., label them first, second, etc.);
- \$ use a number of instruction methods (e.g., make use of concrete materials, visual aids, tactile/kinesthetic aids, captioned videos, and software; read material aloud);

- \$ teach the same concepts and skills in many situations, so that the student will learn to perceive them as generalized;
- \$ point out the relationships between ideas/concepts and vocabulary;
- \$ provide opportunities for the student to work in pairs, collaborative learning groups, and small instructional groups, and with a peer tutor;
- \$ provide extended time for the student to complete assignments;
- \$ provide the student with many opportunities for practice, using techniques such as verbal rehearsal, mnemonic devices, graphic organizers, and rote memorization;
- \$ keep homework to a minimum and ensure that it has a real-life application;
- \$ schedule in “wait time” to allow the student to provide oral answers to questions;
- \$ speak at a slower rate during instructional time;
- \$ call the student’s name before asking him or her a question;
- \$ teach the student the meaning of key directional words;
- \$ reproduce instructional material instead of requiring the student to copy it;
- \$ colour-code material by subject.

Strategies and Suggestions Related to Independence

As part of their classroom experience, students who have mild intellectual disabilities need to be provided with opportunities to acquire skills to become independent, to self-advocate, and to live and work in the community.

The teacher may:

- \$ use hand signals as cues and reinforcers for behaviour (e.g., for getting the student’s attention, to let the student know that he or she has given an appropriate response);
- \$ use both direct instruction and support to help the student move towards self-assessment, goal-setting, self-monitoring, and self-reflection;
- \$ develop partnerships with community agencies and/or articulation programs with businesses to assist the student in achieving an appropriate level of independence for community living;
- \$ provide a “job coach” to help the student learn how to apply employability skills in a job context.

Specific Skill Strategies

Strategies and Suggestions Related to Speaking

To develop speaking skills, the teacher may encourage students to:

- \$ practise speaking for different purposes (e.g., asking for clarification, using the telephone, initiating conversations, taking turns in conversations);
- \$ learn the meaning of idioms, metaphors, and similes;
- \$ learn appropriate ways to express his or her needs and frustrations;

- \$ use correct pronunciation in everyday speech;
- \$ use language that elaborates and clarifies as much as possible;
- \$ practise speaking to a partner, then to a small group, then to a larger group;
- \$ develop self-talk or thinking-out-loud strategies;
- \$ repeat directions;
- \$ repeat or summarize important information frequently;
- \$ make presentations using slides, pictures, or concrete materials instead of text.

Strategies and Suggestions Related to Reading

To develop reading skills, the teacher may encourage students to:

- \$ demonstrate reading-like behaviour;
- \$ develop a picture booklet of new vocabulary;
- \$ keep a booklet of new words classified into categories (e.g., hobby words, special subject words);
- \$ build a sight vocabulary of words and phrases used for survival, found in the environment, and used frequently in everyday life;
- \$ read using both print and non-print sources (e.g., read-aloud programs, stories on tape).

Strategies and Suggestions Related to Writing and Spelling

To develop writing and spelling skills, the teacher may encourage students to:

- \$ write for a specific real-life purpose (e.g., shopping list, to-do list, business letters, résumés, job applications, class newsletters);
- \$ use one editing strategy at a time (e.g., peer editing);
- \$ use a variety of writing organizers (e.g., TOWER – Think, Organize, Write, Edit, Rewrite; Fishbone; Mind Mapping), one at a time, for note taking and creative writing;
- \$ use a scribe;
- \$ use speech-to-text software;
- \$ use a one-minute-blitz strategy, where a student writes for a minute, then counts and charts words, with the goal of increasing, with continued practise, the number of words written in a minute;
- \$ use a multi-sensory approach to word study;
- \$ use phonemic patterning strategies to improve spelling (e.g., distinguish root words, suffixes, prefixes, word families);
- \$ use a pencil grip.

Strategies and Suggestions Related to Mathematics

The Ontario Curriculum includes many mathematics expectations that can be used by students to learn personal life-management and employment skills such as the following: budgeting as it

relates to employment and family life, managing time, making purchases, managing day-to-day and long-term costs, establishing and managing credit, establishing an affordable household, becoming involved in the community, maintaining nutrition and physical fitness, taking medications as needed for personal health.

To develop mathematics skills, the teacher may encourage students to:

- \$ use real-life situations to learn and practise concepts, computations, and skills;
- \$ use an abacus, concrete materials, number lines, manipulatives, charts, and calculators as aids;
- \$ use drill-and-practise software;
- \$ use pictorial clues;
- \$ use dotted lines or graph paper to line up math problems, to determine place value, or when adding and subtracting two-digit numbers;
- \$** colour-code numbers in place value tasks;
- \$ use sample sheets that illustrate problem types and that explain difficult words;
- \$ keep and use the assignment instructions handed out by the teacher rather than any version the student may have taken during the teacher's verbal discussion of the assignment.

Strategies and Suggestions Related to Assessment

Students who have mild intellectual disabilities require frequent opportunities to demonstrate their learning using methods that reflect their strengths.

The teacher may:

- \$ help a student who is leaving the school system create an individualized portfolio;
- \$ use alternative forms of assessment (e.g., oral tests, demonstrations, tape recording);
- \$ extend the time allowed the student for completion of assignments or tests;
- \$ provide the student with word processors, calculators, and other learning aids during tests;
- \$ allow the students to give an oral report or answer orally;
- \$ use pictorial cues for instructions;
- \$ highlight key words in questions;
- \$ give the student frequent short quizzes in lieu of long tests that cover a broad base of content;
- \$ change question types from essay to fill-in-the-blank, multiple-choice, short-answer, etc.;
- \$ give the student practice questions;
- \$ simplify the wording of test questions, without changing the intent of the expectations;
- \$ read test questions aloud.

Assessment Accommodations

To provide accommodations for a student who mild intellectual disabilities, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, a tape-recorded test);
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software; or a Bliss board;
- \$ allow the use of augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ allow the student additional time, when required, to complete the tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a calculator where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Developmental Disability

Characteristics

Developmental disabilities are defined by the Ministry of Education as follows:

Developmental disability: a severe learning disorder characterized by:

- a) an inability to profit from a special education program for students with mild intellectual disabilities because of slow intellectual development;
- b) an ability to profit from a special education program that is designed to accommodate slow intellectual development;
- c) a limited potential for academic learning, independent social adjustment, and economic self-support.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Students who have developmental disabilities are a highly heterogeneous group with a wide range of learning strengths, needs, and abilities. They may exhibit one or more of the following characteristics: significant impairment of general cognitive functioning; severe delay in academic skills in all areas when compared to skills of their chronological peers; significant impairment of adaptive functioning (e.g., self-help, social interaction).

Observable characteristics may be demonstrated by one or more of the following:

- \$ delay in acquiring speech and/or language, and non-verbal skills;
- \$ delay in gross and/or fine motor coordination;
- \$ associated physical/medical conditions;
- \$ short attention and interest spans;
- \$ confusion with abstract and figurative language;
- \$ tendency to interpret language literally;
- \$ need for support with personal care skills;
- \$ need for support with socially acceptable behaviour;

- \$ need for support with changes in routine;
- \$ need for support to establish a positive self-image.

Teaching Strategies and Suggestions

The instructional needs of students identified as having a developmental disability will not necessarily be the same for every student. While these students may have difficulty attaining the academic skills associated with their grade level, their disability should not be seen as a prediction of their potential.

General Strategies and Suggestions

Students who have developmental disabilities benefit and learn best from being with age-appropriate peers, from having equitable access to learning, and from achieving in all aspects of their education, but they may require extensive modifications to the complexity and rate of delivery of regular grade-level expectations, and in some exceptional instances they may need to have a totally alternative curriculum.

Individually modified and alternative expectations must be stated in the student's Individual Education Plan. Programming should be age-appropriate, interactive, and functional. A focus on literacy and numeracy is essential. Like all students, students who have developmental disabilities should be given opportunities to develop skills that will prepare them to be productive community members, including those skills that facilitate participation, friendship, and interaction.

Some students, in addition to their cognitive disabilities, have physical and sensory disabilities that further challenge their abilities to learn and to exercise control in their environment. For this reason, teachers may also find the following sections of this guide helpful in planning for and working with students who have developmental disabilities: Behavioural Exceptionality, Learning Disability, and Physical Disability.

Teachers should be aware that only some of the strategies suggested below will be appropriate for any one student, while others will be appropriate not just for students with special needs, but for all students.

Working collaboratively with others is essential when planning and implementing programming for students with developmental disabilities. These others may include:

- \$ the student's previous teachers;
- \$ a resource teacher;
- \$ an educational assistant;
- \$ other professionals, such as a school psychologist or speech/language pathologist;
- \$ parents/guardians and siblings;
- \$ the student's classmates;

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\$ volunteers.

Strategies and Suggestions Related to the Classroom Environment

The teacher may:

- \$ build an encouraging and supportive classroom environment;
- \$ model and foster a climate of acceptance through your own interactions, comments, and actions;
- \$ establish expectations for the students that are similar to those for all students;
- \$ ensure the student feels that he or she is a valued member of the class;
- \$ make physical adaptations to each environment as required (e.g., provide desks that accommodate a wheelchair);
- \$ alter physical arrangements to reduce distraction;
- \$ include the student in school/community activities;
- \$ use inclusive language and facilitate group achievement;
- \$ collect and read to the class literature that demonstrates and values diversity;
- \$ facilitate opportunities for supportive relationships and provide strategies for the student to make and maintain friendships (e.g. by seating the student next to a supportive peer; by facilitating a support system for the student at lunch, at recess and during extracurricular time; by establishing a Circle of Friends);
- \$ notice, interpret, and respond appropriately to the student's body language;
- \$ facilitate, model, and encourage appropriate social skill development (e.g., role-play an understanding of body language);
- \$ help the student refine his or her ability to initiate, maintain, and conclude conversations;
- \$ encourage students to notice each other's accomplishments;
- \$ encourage independence in the student as much as possible;
- \$ provide all students with opportunities to make choices.

Strategies and Suggestions Related to Organization

The teacher may:

- \$ ensure that the student's Individual Education Plan is developed in collaboration with his or her parents and all those involved with teaching the student, and that it includes all modified (or alternative) expectations and responsibilities;
- \$ make arrangements to accommodate the student's physical and personal care needs (to maintain the student's dignity, privacy, and independence);
- \$ maintain communication links with all those involved in supporting the student.

The teacher may also:

- \$ make use of program planning systems (e.g., MAPS – McGill Action Planning System) to

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- assist with program planning;
- \$ arrange a schedule for support-staff services and share goals and approaches;
- \$ work collaboratively with the student's home to ensure continuity and reinforcement of expectations;
- \$ make use of peers, volunteers, and aides to assist with daily management of routines;
- \$ establish schedules for and a collaborative working style with other support personnel;
- \$ use pictorial schedules, where appropriate, to help the student move to new activities;
- \$ manage time for task completion, where appropriate (i.e., set time limits of some tasks or allow extra time for others);
- \$ help the student to make use of organizational tools (e.g., a timetable and/or assignment list attached to the student's desk, shelves, baskets, colour coding).

Strategies and Suggestions Related to Motivation

The teacher may:

- \$ provide opportunities and choices for the student to select activities related to his or her strengths and interests (i.e., offer choices);
- \$ use cooperative learning, peer tutoring, and buddy situations to assist the students with task completion and social skill development;
- \$ focus on the student's abilities rather than his or her disabilities;
- \$ build in opportunities for the student to experience success;
- \$ encourage risk taking;
- \$ provide positive reinforcement for small gains;
- \$ recognize and praise effort and improvement as well as task completion, providing both verbal and non-verbal reinforcements;
- \$ provide immediate feedback when the student gives a correct response;
- \$ reinforce the student's initiation of tasks and activities;
- \$ reward the student's communication attempts immediately to demonstrate that the message was received;
- \$ encourage the student to develop greater independence and leadership skills whenever possible;
- \$ use charts and graphs to track the student's success;
- \$ allow the student to self-monitor;
- \$ engage the student's prior knowledge.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ inform the class about the range of accommodations and modifications to the curriculum that are being employed for the student and why they are being used, while instructing class members about how they can be supportive by modelling, scribing, answering questions, clarifying instructions, etc.;

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- \$ use a structured and predictable program, where possible;
- \$ link new information to something already known or of interest;
- \$ relate instructional material to the student's life and to other real-life situations (e.g., reading material about the student's environment);
- \$ use a multi-sensory approach to the teaching of new concepts (e.g., present information visually using demonstrations, pictures, objects, calendars, maps, charts, diagrams, computers, videos);
- \$ use multi-level instruction;
- \$ overlap material from various parts of the curriculum;
- \$ engage the student's attention visually, verbally, and physically;
- \$ employ verbal rehearsal and questioning strategies, often giving instructions;
- \$ use a task-analysis approach to planning and instruction (i.e., break up the task into its smallest, sequential teachable units; establish a baseline of the student's ability to perform the steps; model the desired performance; coach and reinforce correct responses at each step until each step can be completed successfully);
- \$ integrate methods and technologies that promote a positive and effective learning environment, including repeating instructions, simplifying instructions, demonstrating with concrete examples, and providing tape recorded or videotaped instructions;
- \$ provide instructional prompts during the teaching of a task as necessary;
- \$ provide repeated opportunities for the student to practise;
- \$ use drill and repetition when teaching concepts;
- \$ use appropriate technology and software when teaching concepts (e.g., Inspiration);
- \$ use adaptive equipment where necessary;
- \$ enlarge print where necessary.

Strategies and Suggestions Related to Independence

Students who have developmental disabilities may require advocates who can facilitate the students' entry into school, provide staff with sessions on disability awareness, and assist with the students' integration into the classroom. Eventually, these students need to learn how to become as independent or interdependent as possible, by being able to make their individual needs clear to others.

Like other students, students who have developmental disabilities should be given opportunities to develop skills that will prepare them to be productive community members. Factors that will affect their success in the community and the workplace – such as good personal hygiene, the ability to interact socially with others, physical stamina, motivation, and task-oriented behaviour – need to be consistently addressed throughout the grades as part of the curriculum. Consistent attention to these areas will help these students develop positive behaviours and values. Teachers, parents, and support staff can work together to foster a positive attitude in, and the development of independence skills by, these students.

The teacher may:

- \$ focus on specific expectations that promote independence;
- \$ work on skills for independent living as part of class activities that relate to the curriculum;
- \$ teach daily living skills explicitly within the context of a student's day (e.g. money-management skills while purchasing lunch, time-management skills related to the student's daily timetable);
- \$ expect the student to have responsibilities and jobs within the classroom, cooperative work group, or school (Give the student responsibilities that are real and valuable. The student should have a role in every group, including those focused on academic knowledge and skills);
- \$ enhance the student's dignity by providing him or her with opportunities to make choices;
- \$ teach the development of, and focus on, social skills needed in the workplace (e.g., eye contact, cooperation, punctuality, task completion);
- \$ teach and model strategies that the student can use to effectively communicate his or her strengths and needs;
- \$ encourage all staff and the student's peers to learn and use the student's communication system (e.g. verbal and non-verbal signals and/or assistive technology);
- \$ coach and encourage the student in the use of appropriate ways to request assistance and express feelings;
- \$ teach, model, and coach the student in the steps involved in problem solving;
- \$ involve the student in community awareness activities;
- \$ provide the student with direct instruction in and/or counselling about sexuality issues.

Strategies and Suggestions Related to Communication

Some students who have developmental disabilities require an individualized communication system. In selecting the appropriate communication system for these students, it is important to consider their individual needs, the classroom implementation needs, and the support that the technology may require. Support staff such as speech/language pathologists, resource teachers, and occupational therapists can assist in determining the most appropriate system.

To address the needs of a student who uses or is learning to use an individualized communication system, the teacher may consider using some of the following strategies. However, before implementing any strategies, it is important that the teacher consult with the student's parents and other support personnel they may identify to ensure that the strategies are appropriate and that they complement those used in the student's other environments.

The teacher may:

- \$ make use of augmentative communication devices (e.g., communication boards, pictogram programs such as Board Maker, electronic picture communication books with or without voice output, pointing and typing aids such as headsticks) and alternative keyboards as appropriate;
- \$ make use of computer technology and assistive devices as appropriate, or use them as alternative communication tools to help the student participate more effectively in his or her

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- educational program;
- \$ consider the use of electronic and computer switches for students with severe needs;
- \$ support verbal communication with natural (i.e., not overly dramatic) gestures and facial expressions and non-verbal cues (e.g., pictures);
- \$ give only one command at a time;
- \$ use short clear phrases and few complex terms;
- \$ restate key concepts in grammatically simple structures;
- \$ prompt the student before asking a question to allow him or her an opportunity to participate in class discussions;
- \$ build wait time into lesson plans to accommodate responses from the student;
- \$ provide ongoing training for staff using technology.

Strategies and Suggestions Related to Behaviour

It is important to keep in mind that all behaviour is communication. Students with developmental disabilities frequently have difficulty communicating, and in communicating they may expend a great deal of energy. When they are unable to adequately communicate their needs and desires, they may display anger, frustration, pain, or boredom. Understanding *how* a student communicates is essential to understanding *what* the student is attempting to communicate.

The teacher may:

- \$ establish and use consistent classroom routines;
- \$ observe the communication skills of the student in order to develop an understanding of how and what the student may be trying to communicate in varying circumstances and social situations;
- \$ try to discern precipitating factors related to why a student communicates in behaviourally inappropriate ways, and develop a plan that responds to these factors;
- \$ try to determine the need the student is trying to communicate (e.g., a drink of water, a chance to stretch and move around the room for a while, a move to a different spot in the classroom) when he or she is demonstrating his or her frustration;
- \$ talk to the student’s parents about how the student communicates and behaves in the home and about effective and successful strategies used in that environment;
- \$ teach the student alternative ways to communicate by modelling alternative behaviours;
- \$ identify a location in the school to use if the student needs to change his environment;
- \$ encourage classmates to clearly tell the student that they don’t like certain behaviours, rather than teasing the student (e.g., students could be encouraged to say “I don’t like it when you bang the table.”);
- \$ model the behaviours that are expected and provide the student with opportunities to be part of a class/group that models appropriate behaviour;
- \$ expose the student to and help him or her analyse stories that depict social skills and acceptable ways for the student to communicate;

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- \$ use pictorial symbols, pictures, and simple words in schedules, if the student finds them helpful;
- \$ maintain as predictable a schedule as possible and prepare for transitions well in advance;
- \$ provide the student with positive reinforcement whenever possible (e.g., praise, approval, encouragement, nurture);
- \$ build a network of support that includes the student's home, the rest of the school, and support staff (e.g., resource teacher, behavioural consultant, psychological services staff, physiotherapist, and/or occupational therapist).

Specific Skill Strategies

Strategies and Suggestions Related to Speaking

The teacher may:

- \$ provide the student with a variety of opportunities to develop his or her oral language skills (e.g., encourage the student to retell stories, relate experiences, interpret pictures, engage in group discussions/interactions);
- \$ use *wh* questions as prompts to help the student relate information orally;
- \$ provide the student with extra time to process information;
- \$ facilitate and support the student's use of augmentative communication devices (consult with support staff);
- \$ help other students understand the student's augmentative communication system and teach them how to use the system to communicate with the student;
- \$ accept word approximations from the student and shape his or her vocalizations into word approximations;
- \$ weave language strategies provided by the speech/language pathologist into the regular school day.

Strategies and Suggestions Related to Reading

The teacher may:

- \$ provide direct instruction in areas of the student's reading needs;
- \$ create vocabulary files or banks;
- \$ make use of alternative methods of sharing information (e.g., video- and/or audiotapes);
- \$ read aloud to students;
- \$ use environmental reading material (e.g., signs, grocery ads, recipes) where appropriate;
- \$ colour-code types of words to help the student recognize them;
- \$ provide the student with audiotapes and computer software for independent reading;
- \$ use cue words with pictures and concrete materials;
- \$ require the student to read only highlighted key points in a textbook.

Strategies and Suggestions Related to Writing and Spelling

The teacher may:

- \$ have the student use a computer for word processing, if appropriate;
- \$ provide the student with opportunities for collaborative writing;
- \$ provide pictures before asking the student to write a story to help him or her organize his or her thoughts;
- \$ have the student begin by overprinting stories and then progress to copying them, where appropriate;
- \$ have the student begin to develop story content using simple ideas (e.g., the weather, a TV program);
- \$ colour-code words with a highlighter or develop word banks on coloured cue cards;
- \$ provide oral discussion before the student begins a writing assignment;
- \$ provide a visual checklist of each step involved in completing a writing assignment;
- \$ use a peripheral alternative keyboard for students with limited fine-motor ability.

Strategies and Suggestions Related to Mathematics

The teacher may:

- \$ develop the student's understanding of the language of mathematics through the use of concrete and manipulative materials;
- \$ teach and encourage the student to use a calculator;
- \$ use colour-coding as a method of differentiating math operations;
- \$ use computer software for repetition and rehearsal of skills;
- \$ teach the functional mathematics concepts the student will require in daily living;
- \$ link math to life skills;
- \$ provide easier questions on the same concept or assign similar materials on another concept (e.g. addition rather than multiplication).

Strategies and Suggestions Related to Assessment

The teacher may:

- \$ continuously assess the appropriateness of the level of difficulty of each task, to ensure that the student is challenged to learn but does not become frustrated;
- \$ develop daily observation performance checklists;
- \$ use performance-based assessment on an ongoing basis;
- \$ provide a menu of options through which the student can demonstrate knowledge and performance;
- \$ keep the student's work samples to build a portfolio of assessment material;
- \$ enlist teacher assistants, volunteers, and peer tutors to conduct spot checks of the student's

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- work;
- \$ use several assessments to establish the student's achievement level;
- \$ use a variety of strategies to assess progress (e.g., demonstrations, videotaping, student's self-assessment, peer assessment, objective observer assessment);
- \$ provide the student with a practice test before asking him or her to write a test;
- \$ assign easier questions on the same concept;
- \$ have the student make use of concept maps or webbing to demonstrate his or her level of learning;
- \$ provide the student with more space to record responses;
- \$ enlarge the print on the test;
- \$ give the student extra time to complete an assignment, or assess only on what the student can finish;
- \$ reduce the number of tasks the student is required to complete;
- \$ give shorter tests, covering less material, more frequently.

Assessment Accommodations

To provide accommodations for a student who has developmental disabilities, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, a tape-recorded test);
- \$ allow the student to write down the main points and expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or a Bliss board;
- \$ allow the use of augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$** allow the student additional time, when required, to complete the tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a calculator, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Physical Disability

Characteristics

Physical disabilities are defined by the Ministry of Education as follows:

Physical disability: a condition of such severe physical limitation or deficiency as to require special assistance in learning situations to provide the opportunity for educational achievement equivalent to that of pupils without exceptionalities who are of the same age or development level.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Students who have physical disabilities exhibit a wide range of conditions. These conditions generally fall under the categories of nervous system disorders, musculoskeletal conditions, and/or chronic health conditions. Students with these conditions may experience limitations to their strength, speed, endurance, and motor function. Some students may have a combination of conditions. Students with physical disabilities must be given opportunities to integrate into the whole school environment.

While no list is complete, the following conditions and traits may be found in varying degrees in a student identified as having physical disabilities:

- \$ nervous system disorders
- \$ musculoskeletal conditions
- \$ chronic health conditions
- \$ hydrocephalus
- \$ speech impairments
- \$ visual impairments
- \$ spasticity
- \$ seizures

These conditions and traits may affect the student's:

- \$ strength
- \$ energy

- \$ endurance/stamina
- \$ motor functioning
- \$ balance and coordination
- \$ reflexes
- \$ dexterity
- \$ speech
- \$ sensation and sensory skills
- \$ regular attendance at school

The student's needs and strengths can be affected by changes in both the environment and his or her physical condition. If such changes are identified, then a review of the student's Individual Education Plan is warranted. This review would be in addition to the regular reviews.

Teaching Strategies and Suggestions

It is hoped that the suggestions offered in this section will help the teacher, support team, parents and student to discuss and share important information about meeting the individual needs of the student who has physical disabilities. It is important for teachers to recognize that a team may already have been helping the student and that his or her family recognize and implement solutions that work. The strategies and suggestions listed here are intended to help the classroom teacher to understand the implications for instruction and management. They are meant to be a practical support, used in conjunction with the Individual Education Plan, the recommendations made by special education and support service personnel who may assist the student, and the student's parents.

Strategies and Suggestions Related to Safety

Consideration must be given to providing physical access to classrooms and other school locations for a student who uses braces, crutches, canes, prostheses, a walker, or a wheelchair and for a student who tires easily. In creating barrier-free access or universal designs usable by all persons, staff should consider:

- \$ the amount of time provided for changing classes and the scheduling of various activities;
- \$ the distance the student must travel between classes;
- \$ the accessibility of classes;
- \$ the proximity of classes, which should be reasonable for the student;
- \$ hallway clearance, locker accessibility, and availability of personal care rooms;
- \$ timely removal of snow and ice;
- \$ wheelchair loading zones and permit-parking areas;
- \$ opportunities for the student to arrive and depart with fellow students.

Some situations require advance planning. The school-based team and support personnel should discuss safety issues in the following areas for students who have physical disabilities :

- \$ working with the fire department to develop a comprehensive evacuation plan for the school;

- \$ developing, posting, and sharing emergency, fire-drill, and evacuation procedures with all staff;
- \$ managing and providing required supports for students with mobility impairments to ensure their safety;
- \$ being aware of medical issues that may need specialized attention;
- \$ being aware of the possibility of the students being bullied (Students with disabilities may be targets of verbal and physical abuse.).

Strategies and Suggestions Related to Materials and Equipment

Students who have physical disabilities may need specialized materials and/or equipment. Technology may enable these students to participate more fully in the regular class program. Support staff, such as speech/language pathologists, resource teachers, occupational or physiotherapists, and other health support professionals, can help determine the need for, and the most appropriate use of, specialized materials and equipment.

These items may include:

- \$ electronic reading systems, which allow printed material/text to be scanned and, through a voice synthesizer, spoken aloud;
- \$ voice amplifiers, calling devices, or voice output technologies;
- \$ alternatives to mouse and keyboard input such as scanning keyboards, overlays, single-switch access, a head mouse, sip-and-puff technologies, voice-recognition software, peripherals, and a virtual reality mouse;
- \$ alternative devices for note taking, such as a tape recorder, buddy, or scribe;
- \$ tilt-top or raised desks and work areas to accommodate wheelchair access;
- \$ adapted materials, such as pencil holders, book holders, page turners;
- \$ larger game pieces;
- \$ alternative writing tools as appropriate (e.g., light touch rollerball pens).

In addition, classroom materials and supplies should be placed so as to promote independent access (i.e., within easy reach of the student). The student must also be able to access the teacher's work area.

Strategies and Suggestions Related to the Classroom Environment

The school and school yard should be as accessible as possible for all students. It is important that the teacher work with support staff and the multidisciplinary team involved with the student who has physical disabilities to understand the nature of the student's physical condition and the accommodations that are necessary. The following should be considered:

- \$ the accessibility of the classroom and all areas of the school for a student who uses mobility aids (e.g., canes, crutches, walkers, wheelchairs);
- \$ walkways, ramps, and door entrance-ways that provide barrier-free universal design access to the building and classrooms;
- \$ non-slip hallway floor coverings for a student who has balance and coordination difficulties;

- \$ hallways kept free of obstacles that may narrow the passageways;
- \$ walkways and entrances kept free of snow and ice for safe entry and exit;
- \$ adaptations to the physical environment of the classroom (Support staff such as a physical or occupational therapist should be consulted for individual recommendations.);
- \$ location and height of fountains, lockers, light switches, elevator buttons, and storage areas;
- \$ depth and pile of carpeted areas to ensure ease of movement;
- \$ height of desks and work-area tables for a student who uses a wheelchair;
- \$ placement of furniture to allow a student using a wheelchair, crutches, or mobility device to move around freely (e.g., placing desks together to make larger aisles);
- \$ access to multiple-storey buildings;
- \$ accessible washroom facilities and adaptations to washrooms;
- \$ private space for medical procedures;
- \$ arrangements for field trips that ensure appropriate accommodations, so that the student can participate;
- \$ appropriate assistance for boarding and exiting buses.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ orient the student to the school, especially ramps, washrooms, and access to elevators;
- \$ work closely with the parents to share information so that a consistent approach is used by both home and school on matters related to independence and learning;
- \$ make sure, in a way that maintains the dignity of the physically disabled student, that others in the school are familiar with and respect the student's routines and requirements;
- \$ ensure that the student has appropriate seating (e.g., near the board, near the front, near the door, or at a desk or table suitable for use by someone in a wheelchair);
- \$ provide the student with more time to complete class work and assignments;
- \$ provide visual and/or tactile cues;
- \$ include wait time in lesson plans, to allow the student to respond to oral questions;
- \$ break down assignments into smaller tasks;
- \$ provide the student with a photocopy of blackboard or overhead notes;
- \$ communicate with the student in alternative ways;
- \$ expect the same standard of work, but consider reducing the quantity;
- \$ make arrangements with the student, if necessary, for alternative ways of being recognized in class;
- \$ consider alternatives to oral presentations, if needed;
- \$ permit the student to use a note-taker, scribe, or tape recorder;
- \$ team the student with a peer, and encourage peer interaction;
- \$ when appropriate, encourage the student to use computers and other aids to increase speed and to overcome motor difficulties;
- \$ help the student develop organizational skills by keeping books and materials within easy reach, and by providing organizational strategies;
- \$ accommodate absences from school for medical purposes;
- \$ use wide-lined workbooks and graph/grid paper.

Assessment Accommodations

To provide accommodations for a student who physical disabilities, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, a tape-recorded test);
- \$ allow the student to write down the main points and expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or a Bliss board;
- \$ allow the use of augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ provide special lighting;
- \$ allow the student additional time, when required, to complete the tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a computer or word processor;
- \$ allow the student to use a calculator, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered relating to the same skill;
- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Blind and Low Vision

Characteristics

Blindness and low vision are defined by the Ministry of Education as follows:

Blind and low vision: a condition of partial or total impairment of sight or vision that even with correction affects educational performance adversely.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

All students, including exceptional students, have their own unique set of learning strengths and needs. It is as important to identify a student's strengths as it is to determine his or her needs. Many factors – physical, intellectual, educational, cultural, emotional, and social – influence a student's ability to learn. The student's strengths can be used to address his or her weaknesses. Understanding and noting them is critical to appropriate program development.

Identifying a student's visual problems at an early age is important. The assessment should begin with a report from an ophthalmologist or optometrist. An assessment by a fully qualified eye specialist will describe the nature and extent of the student's visual impairment. It is important to obtain as much information from the eye specialist as possible. The eye report should include:

- \$ near and distant acuity, with and without best possible correction;
- \$ field of vision, including peripheral field;
- \$ etiology and prognosis of the visual impairment;
- \$ eye specialist's recommendation for when the student should be re-examined.

If the teacher understands the nature and degree of the student's impairment and the implications for their work together in the classroom, then the teacher will be in a better position to help the student's learning process. This work may involve support from other professionals, the student's parents, and, where appropriate, the student.

Blindness

Blindness is usually defined as:

- \$ having a distance visual acuity of 20/200 or less in the better eye with the best possible correction (The measurement 20/200 indicates that a child or student who is legally blind can see at 20 feet what a person with normal vision can see at a distance of 200 feet.); and
- \$ a restriction in visual fields (A student could have a 20/20 acuity but a field of vision of less than 20 degrees.).

Low Vision or Partial Sight

Low vision or partial sight is usually defined as:

- \$ having a distance visual acuity of 20/70 or less in the better eye with the best possible correction.

In addition, visual impairments are classified as:

- \$ congenital, which refers to vision loss that is present at birth; or
- \$ adventitious, which refers to vision loss that occurred after birth and that is a result of an illness or an accident.

The age of onset of sight loss and the student's level of development before sight loss occurred are critical factors in the student's ability to acquire skills and concepts. Although two students with visual impairment may be assessed as having the same visual acuity, they may learn and function in very different ways. In addition, vision may fluctuate or be temporarily influenced by such factors as medication, fatigue, glare, or inappropriate lighting, to name a few.

As vision can be affected by both the environment and a changing physical condition, regular updating of the student's status should be a component of the student's Individual Education Plan (IEP) review.

Orientation and Mobility

Visual impairment usually affects how students learn about and function within various environments. Students who are blind or have low vision, therefore, need special skills to understand and become oriented to these environments and to move, travel, and play independently and safely within them.

Orientation and mobility (O&M) training needs to be an integral part of the Individual Education Plan of all students who are blind or have low vision. It is taught by an O&M instructor who is trained in a discrete body of knowledge: assessing and teaching independent travel.

The constantly changing needs of students who are blind or have low vision, and the environments in which they travel, determine when and where O&M instruction should begin. Preschool students need to learn about space at home and in preschool; elementary school students may need to learn how to cross streets safely; secondary school students may need to be able to locate a store in a shopping mall.

Throughout the school years, being able to move about the environment safely is as important as academic learning and literacy skills. Providing O&M instruction throughout these years will help students who are blind or have low vision make transitions from grade to grade, school to school, and school to postsecondary settings more easily.

Teaching Strategies and Suggestions

Students who are blind or have low vision are a heterogeneous group, but they have one thing in common – their learning and their daily lives are affected by a visual impairment. As a result, they have common educational needs. For many students who are blind or have low vision, the content of their learning will be the same as for all students, but the methodology (i.e., the presentation of instructional material) will be vastly different. Educators must provide an educational environment that offers equality of opportunity for learning to every student who is blind or has low vision, while recognizing and providing for the unique learning needs of each student. The vision resource/itinerant teacher for students with visual impairments can assist in making the appropriate accommodations.

Strategies and Suggestions Related to Safety

Students who are blind or have low vision have the same need for balance in their educational, leisure, and social lives as do all students. Educational systems have a fundamental responsibility to make available those activities and events that occur under school sponsorship (e.g., assemblies, field trips, work experience, special events) to all students, including those who are blind or have low vision.

A student with a visual impairment may face extra challenges when getting used to the physical environment of a school. Everything from attending gym class to visiting the washroom can present possible difficulties. Emergency procedures, such as fire drills, can also create situations that require special handling. A schools-based team, including the vision resource/itinerant teacher and the orientation and mobility specialist, should discuss the following safety issues with students who are blind or have low vision:

- \$ emergency procedures and fire drills;
- \$ class changes and exits (i.e., the movement of students between the classrooms and the library, washrooms, change rooms, and exits);
- \$ the location of the school office, telephones, and speciality areas (e.g., gym, science labs, cafeteria, lunch room, playground, outdoor areas, bus stop).

The fire department should know about the presence of students with mobility impairments in the school.

Strategies and Suggestions Related to Materials and Equipment

Modern technology has revolutionized the lives of students who are blind or have low vision. Every student who is blind or has low vision needs access to appropriate technology. Technological devices, for example, can enable someone to read and write in Braille, or can be used to produce materials in large print or to convert text to speech and/or large print. Not only is this equipment useful for students who are blind or have low vision, but it also enables teachers to convert most learning materials into a format that is accessible to the student.

The vision resource/itinerant teacher must be consulted about the use of specialized equipment such as the following:

- \$ Braille-writers, Braille display computer systems or portable electronic Braille notetakers, such as Braille Mate, Type'n Speak, or Braille Lite 40;
- \$ enlarged print and graphic materials;
- \$ magnifying devices, used to enhance the size of print on a page or blackboard;
- \$ audiotapes, used to provide students with an alternative learning mode when Braille is not available;
- \$ closed-circuit TV (CCTV), which electronically enlarges print material on a TV screen (Magnification, contrast, and illumination can be adjusted as needed to view various sizes of print and handwriting.);
- \$ screen-reader/speech-synthesis software (ASAP for DOS, JAWS for Windows), which provides auditory feedback to students with limited or no reading vision when they are using the keyboard, as well as auditory access to information displayed on the monitor when using such hardware as Doubletalk, Dectalk or Accent Speech;
- \$ screen-enlarging software, such as Zoomtext, MAGic, and Mac inLARGE1, which displays information on a computer screen in a variety of magnifications;
- \$ electronic reading systems, which allow printed material to be scanned and, with the use of a voice synthesizer, the scanned text to be spoken aloud;
- \$ Braille translation and printing software, such as Duxbury or Mega Dots, which allow for the production of Braille documents from print or electronic data;
- \$ alternative devices for notetaking, such as Braille Lite Refreshable Braille display;
- \$ tilt-top desks and book stands, which bring work closer to the eyes for optimum reading angles and lighting;
- \$ enhanced lighting, set up on the student's desk.

Strategies and Suggestions Related to the Classroom Environment

Each student who is blind or has low vision comes to the classroom with different visual abilities and, as a result, may require a specific type of lighting. For example, a student living with albinism requires low lighting and a student with retinitis pigmentosa requires bright overhead lights. Students with retinitis pigmentosa may have tunnel vision, although their acuity may not be affected. Therefore, it is important for the teacher to become familiar with the needs of each student. It is also important to work with the vision resource/itinerant teacher and the multi-disciplinary team who are involved with the student to understand the nature of the student's visual condition.

The teacher may:

- \$ encourage good posture and consult with the vision resource/itinerant teacher about dealing with mannerisms that the student may exhibit (e.g., putting or poking fingers in the eyes, rocking or other unusual movements);
- \$ encourage the student's active involvement in the community through school, club programs, sports, and other group activities;
- \$ assure appropriate illumination when the student is required to complete desk activities;

- \$ provide the student with access to a slant-top desk or book stand, which may help reduce glare and alleviate fatigue caused by having to maintain an unnatural sitting position (This will also promote good body posture.);
- \$ provide additional space for the storage of devices the student needs (e.g., Braille, computer, printer, VersaBraille/Braille and Speak, Optacon, tape recorder, large-print books, Braille books, slate and stylus, abacus, closed-circuit television, talking calculators), ensure the space is accessible to the student at all times, and help the student acquire the organizational skills necessary to locate the devices as required.

Strategies and Suggestions Related to Lesson Presentation

The teacher may:

- \$ expect the same standard of work, but reduce the quantity required and/or provide additional time (Students who are blind or have low vision often work under a great deal of pressure. Reducing the workload or increasing the time for completing tasks will help to minimize this pressure without compromising the quality of work expected.);
- \$ vary periods of close work with periods of physical activity (Allowing a short break or change of focus will alleviate the eye fatigue that is often experienced by students with low vision.);
- \$ encourage students to use the sight they have to maximize their total sensory input (The use of remaining sight does not contribute to its degeneration.);
- \$ read aloud when writing on the board (This allows students with visual impairments to use their auditory abilities in attending to classroom activities and promotes further independence in this area. These students miss most visual cues and many written instructions. Talking while you teach and during classroom activities – for example, describing non-verbal messages and responses – will assist the student.);
- \$ when using the blackboard, experiment with the size of print, the colour of chalk (for the preferred level of contrast), and the most desirable distance between the student’s seat and the blackboard (As a cautionary measure, the student may be asked questions that will minimize the attention drawn to his or her disability: “Do you prefer this colour?” rather than “Can you see this?” This should be done in consultation with a specialist teacher of the blind.);
- \$ address students by name so that the student who is blind or has low vision knows who is being addressed;
- \$ consider making notes for the student in advance and providing the student with a buddy for obtaining blackboard notes;
- \$ make use of hands-on materials where possible (for Braille users) (Concrete material can help the student form relationships between abstract learning and his or her own experiences.);
- \$ make use of good-quality, non-glare paper, and experiment as well with the width of lines (Felt-tip markers are useful as they allow for a greater contrast than pencils. This should be done in consultation with a specialist teacher of the blind.);
- \$ provide the vision resource/itinerant teacher well in advance with copies of assignments and handouts that need to be Brailled, converted using software conversion programs, enlarged, or taped.

Strategies and Suggestions Related to Reading and Writing

The teacher may:

- \$ provide information orally (Students with a visual impairment often rely on their auditory abilities to glean important information.);
- \$ provide appropriate computers and appropriate software (See the Strategies and Suggestions Related to Materials and Equipment.);
- \$ use a multi-media approach (e.g., essay work or student-prepared tapes to replace detailed diagrams, drawings, or maps);
- \$ provide enlarged, taped, or Brailled versions of books, in consultation with the vision resource/itinerant teacher;
- \$ Braille or enhance (e.g., enlarge, darken) class handouts and short readings, if time permits;
- \$ provide professionally taped talking-book versions of texts and novels when appropriate for the lesson;
- \$ provide the student with more time for assigned reading and, if possible, a tape of the material, particularly for long passages;
- \$ provide bold-lined paper with darkened lines and enlarged spaces, which can be generated on a computer and which is also commercially available, for students who have difficulty with regular paper, as well as thin black markers or pens that may make it easier for students to read their own notes.

Assessment Accommodations

To provide accommodations for a student who is blind or has low vision, the teacher may:

- \$ adapt the assessment format (e.g., make it an oral test, a practical demonstration, an interview, a construction, a tape-recorded test);
- \$ use large print, coloured paper, covered overlays, Braille, or audiotapes, as required;
- \$ allow the student to write down the main points and to expand on them verbally;
- \$ allow the student to use assistive devices and technology resources, such as a Kurzweil reader, a speech synthesizer, speech-to-text software, or a Brailleur;
- \$ allow the use of augmentative and alternative communication systems;
- \$ divide the test into parts and give it to the student one section at a time or over a period of days;
- \$ provide the student with a quiet location, free from distractions;
- \$ provide special lighting as required;
- \$ allow the student additional time, when required, to complete the tests;
- \$ read or clarify questions for the student and encourage the student, without assisting or providing the response, to rephrase questions in his or her own words;
- \$ highlight key words or instructions for emphasis;
- \$ allow the student to use a computer or word processor;
- \$ allow the student to use a calculator, where appropriate;
- \$ allow the student flexibility, as appropriate, in the number of questions to be answered

relating to the same skill;

- \$ allow audiotaped responses or verbatim scribing of responses to test questions;
- \$ provide prompts for the purpose of drawing the student's attention back to the test;
- \$ provide periodic supervised breaks.

Multiple Exceptionalities

Characteristics

Multiple exceptionalities are defined by the Ministry of Education as follows.

Multiple exceptionalities: a combination of learning or other disorders, impairments, or physical disabilities that is of such a nature as to require, for educational achievement, the services of one or more teachers holding qualifications in special education and the provision of support services appropriate for such disorders, impairments, or disabilities.

A complete list of categories and definitions of exceptionalities can be found in the ministry document *Special Education: A Guide for Educators* (2001), which can be accessed at <http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide.html>.

Teaching Strategies and Suggestions

To effectively program for students with multiple exceptionalities, educators need to utilize teaching strategies that address the demonstrated characteristics of each of the student's identified exceptionalities. Please consult the appropriate section of this Companion for suggested teaching strategies for each exceptionality.

Special Education Companion

A Selected Bibliography

This bibliography presents selected English-language resources regarding special education practices and principles in schools. This list is intended to assist teachers designing instructional units using the *Ontario Curriculum Unit Planner*. While every effort has been made to provide appropriate information for educators, this list is not intended to be a definitive treatment of the topic. For additional online information, please check the Planner website www.ocup.org.

General Special Education

Books and Articles

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info@ala.ca

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Weber, Ken and Sheila Bennett. *Special Education in Ontario Schools*, 4th ed. Concord, ON: Highland Press, Irwin Publishing, 1999.

Journals

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Exceptionality Education Canada. Faculty of Education, University of Prince Edward Island. 550 University Avenue, Charlottetown, PEI, C1A 4P3, (902) 566-0330.

Teaching Exceptional Children. Council for Exceptional Children. 1110 North Glebe Rd. Arlington, VA 22201-5704, 888-232-7733

Behavioural Exceptionality

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Vermeulen, P. *I Am Special: Introducing Children and Young People to their Autistic Spectrum Disorder*. London, UK: Jessica Kingsley Publishers, 2000.

Journals

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Journal of Autism and Developmental Disorders. Kluwer Academic/Plenum Publishers, PO Box 358, Accord Station, Hingham, MA 02018-0358, 866-269-9527.

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Greenbaum, Judith and Geraldine Markel. *Helping Adolescents with ADHD & Learning Disabilities: Ready-to-use Tips, Techniques and Checklists for School Success*. Paramus, NJ: The Center for Applied Research in Education, 2001.

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Gifted Child Today. Prufrock Press. PO Box 8813, Waco, TX 76714-8813, 800-998-2208

Gifted Education Review. email: pkeducre2@aol.com

Imagine...Opportunities and Resources for Academically Talented Youth.
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Mild Intellectual

Books and Articles

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Reading and writing solutions for struggling students and students with disabilities from Don Johnston Inc., including such products as *Co:Writer 4000*, *Write: OutLoud*, *Draft:Builder*, *BuildAbility*, *Start-to-Finish*. <http://www.donjohnston.com/>

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